

# FUJITSU Software

## PowerCOBOL V11.0

# Reference

Windows

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# Preface

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PowerCOBOL is a development and execution environment for creating GUI Windows applications that conform to the Common Object Model (COM). COBOL is used for all procedure code and data definitions. PowerCOBOL can also use ActiveX controls created using other languages or development tools.

## Audience

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This manual is directed at COBOL programmers who are using PowerCOBOL to develop GUI applications.

## Supported Environments

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PowerCOBOL supports the following environments:

- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows 8.1
- Windows 8
- Windows 7

## How this Manual is Organized

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This manual consists of the following chapters and appendices:

Chapter	Contents
Chapter 1. Introduction	Describes PowerCOBOL and the PowerCOBOL Reference. Information on upgrading from earlier versions of PowerCOBOL.
Chapter 2. Objects	Defines PowerCOBOL objects, and provides descriptions of all the PowerCOBOL objects.
Chapter 3. Controls	Defines PowerCOBOL controls, and provides descriptions of all the PowerCOBOL controls.
Chapter 4. Properties	Defines PowerCOBOL properties, and provides descriptions of all the PowerCOBOL properties.
Chapter 5. Methods	Defines PowerCOBOL methods, and provides descriptions of all the PowerCOBOL methods.
Chapter 6. Events	Defines PowerCOBOL events, and provides descriptions of all the PowerCOBOL events.
Appendix A. Color Constants	Lists the constants defined within the PowerCOBOL system for the standard and system colors.
Appendix B. Key Constants	Lists the constants defined within the PowerCOBOL system for the keystroke values passed in the KeyCode parameter.
Appendix C. Data Types	Describes the OLE data types supported by PowerCOBOL.
Appendix D. Boolean Constants	Describes the constants available to test VT_BOOL data types.
Appendix E. Property and Parameter Constants	Lists the constants defined within the PowerCOBOL system for property values and the values of method and event parameters.
Appendix F. Shortcut Keys	Lists the shortcut keys available in the different parts of the development environment.

# How to Use This Manual

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If you have worked with earlier versions of PowerCOBOL you should read chapter 1 or the online help system's section on "Upgrading from Earlier Versions" first so that you are aware of the changes made in this release.

All readers would do well to read the short Introduction chapter and the Introduction sections to chapters 2 through 6. These should ensure that you understand the various items documented in the manual. Thereafter dip into the manual for the definitions of items you are using.

## Conventions Used in this Manual

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This manual uses the following typographic conventions.

Example of Convention	Description
<b>Setup</b>	Characters you enter appear in bold.
<u>Program-name</u>	Underlined text indicates a place holder for information you supply.
ENTER	Small capital letters are used for the name of keys and key sequences such as ENTER and CTRL+R. A plus sign (+) indicates a combination of keys.
...	Ellipses indicate the item immediately preceding can be specified repeatedly.
Edit, Literal	Names of pulldown menus and options appear with the initial letter capitalized.
[def]	Indicates that the enclosed item may be omitted.
{ABC DEF}	Indicates that one of the enclosed items delimited by   is to be selected.
CHECK WITH PASCAL LINKAGE ALL PARAGRAPH-ID COBOL <u>ALL</u>	Commands, statements, clauses, and options you enter or select appear in uppercase. Program section names and some proper names also appear in uppercase. Defaults are underlined.
PROCEDURE DIVISION  ADD 1 TO POW-FONTSIZE OF LABEL1.  IF POW-FONTSIZE OF LABEL1 > 70 THEN  MOVE 1 TOW POW-FONTSIZE OF LABEL1.  END-IF.	This font is used for examples of program code.
The <i>sheet</i> acts as an application creation form.	Italics are occasionally used for emphasis.
"NetCOBOL User's Guide"	References to other publications or sections within publications are in quotation marks.

## Related Manuals

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PowerCOBOL Getting Started

## Trademarks

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## Product Names

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The following product names are abbreviated in this manual as follows:

Product Name	Abbreviation
Microsoft(R) Windows Server(R) 2012 R2 Datacenter Microsoft(R) Windows Server(R) 2012 R2 Standard Microsoft(R) Windows Server(R) 2012 R2 Essentials Microsoft(R) Windows Server(R) 2012 R2 Foundation	Windows Server 2012 R2
Microsoft(R) Windows Server(R) 2012 Datacenter Microsoft(R) Windows Server(R) 2012 Standard Microsoft(R) Windows Server(R) 2012 Essentials Microsoft(R) Windows Server(R) 2012 Foundation	Windows Server 2012
Microsoft(R) Windows Server(R) 2008 R2 Foundation Microsoft(R) Windows Server(R) 2008 R2 Standard Microsoft(R) Windows Server(R) 2008 R2 Enterprise Microsoft(R) Windows Server(R) 2008 R2 Datacenter	Windows Server 2008 R2
Windows(R) 8.1 Windows(R) 8.1 Pro Windows(R) 8.1 Enterprise	Windows 8.1
Windows(R) 8 Windows(R) 8 Pro Windows(R) 8 Enterprise	Windows 8
Windows(R) 7 Home Premium Windows(R) 7 Professional Windows(R) 7 Enterprise Windows(R) 7 Ultimate	Windows 7

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# Contents

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Chapter 1 Introduction.....	1
1.1 Overview of PowerCOBOL.....	1
1.2 Introduction to the PowerCOBOL Reference.....	1
1.3 Upgrading from Earlier Releases.....	1
1.3.1 Updates to Terminology.....	2
1.3.2 Operating the Product.....	3
1.3.3 Relationship to Component Object Model (COM).....	3
1.3.4 Naming Attributes.....	3
1.3.5 Invoking Methods.....	4
1.3.6 PowerCOBOL Project Files.....	4
Chapter 2 Objects.....	5
2.1 Introduction to the PowerCOBOL Objects.....	5
2.2 Button Object.....	5
2.3 Column Object.....	6
2.4 Controls Collection Object.....	6
2.5 DataBinding Object.....	6
2.6 DataBindings Collection Object.....	7
2.7 Font Object.....	8
2.8 Form Object.....	8
2.9 ListItem Object.....	9
2.10 Menu Object.....	10
2.11 MenuItem Object.....	10
2.12 Node Object.....	10
2.13 RenderText Object.....	11
2.14 TableCell Object.....	11
2.15 TableColumn Object.....	12
Chapter 3 Controls.....	13
3.1 Introduction to the PowerCOBOL Controls.....	13
3.2 ADODataSource Control.....	13
3.3 Animation Control.....	14
3.4 CheckBox Control.....	14
3.5 ComboBox Control.....	15
3.6 CommandButton Control.....	17
3.7 Custom Control.....	18
3.8 DBAccess Control.....	18
3.8.1 Accessing Table Data.....	19
3.8.2 Executing Procedures.....	20
3.9 DDE (Dynamic Data Exchange) Control.....	21
3.10 DriveList Control.....	21
3.11 Edit Control.....	22
3.12 ExcelConnection Control.....	23
3.13 FileList Control.....	23
3.14 FolderList Control.....	24
3.15 Frame Control.....	25
3.16 Graph Control.....	26
3.17 GroupBox Control.....	27
3.18 Image Control.....	27
3.19 Label Control.....	28
3.20 ListBox Control.....	29
3.21 ListView Control.....	30
3.22 MCI (Media Control Interface) Control.....	31
3.23 MTS Support Control.....	31
3.24 OptionButton Control.....	32

3.25 Print Control.....	32
3.26 ProgressIndicator Control.....	33
3.27 ScrollBar Control.....	34
3.28 Shape Control.....	34
3.29 Slider Control.....	35
3.30 StaticText Control.....	35
3.31 Tab Control.....	36
3.32 Table Control.....	37
3.33 TextBox Control.....	39
3.34 Timer Control.....	40
3.35 Toolbar Control.....	40
3.36 TreeView Control.....	42
<b>Chapter 4 Properties.....</b>	<b>43</b>
4.1 Introduction to the PowerCOBOL Properties.....	43
4.1.1 Editing Properties.....	43
4.1.2 Using Properties in PowerCOBOL Procedures.....	43
4.2 AccessMode Property.....	43
4.3 Active Property.....	44
4.4 ActiveControl Property.....	44
4.4.1 Example of Using the ActiveControl Property.....	45
4.5 Align Property.....	45
4.6 Alignment Property.....	46
4.7 Appearance Property.....	47
4.8 Archive Property.....	48
4.9 Arrange Property.....	48
4.10 Array property.....	48
4.11 AutoChange Property.....	49
4.12 AutoEdit Property.....	49
4.13 AutoHScroll Property.....	50
4.14 AutoLoadFile Property.....	50
4.15 AutoOpen Property.....	50
4.16 AutoPlay Property.....	51
4.17 AutoRowHeight Property.....	51
4.18 AutoSize Property.....	51
4.19 AutoTick Property.....	52
4.20 BackColor Property.....	52
4.21 BackStyle Property.....	53
4.22 BlankSuppress Property.....	54
4.23 Bold Property.....	54
4.24 BookName Property.....	54
4.25 BorderColor Property.....	55
4.26 BorderRound Property.....	55
4.27 BorderStyle Property.....	56
4.28 BorderWidth Property.....	56
4.29 BottomMargin Property.....	57
4.30 Buttons Property.....	57
4.31 Cancel Property.....	58
4.32 Caption Property.....	58
4.33 CaptionBackGray Property.....	59
4.34 CellLines Property.....	59
4.35 Charset Property.....	59
4.36 Check Property.....	60
4.37 Child Property (Array).....	60
4.38 CHVisible Property.....	61
4.39 ClassMajorVersion Property.....	61
4.40 ClassMinorVersion Property.....	61

4.41 ClassProgID Property.....	62
4.42 ClickColumn Property.....	62
4.43 ClickRow Property.....	62
4.44 ClientHeight Property.....	63
4.45 ClientLeft Property.....	63
4.46 ClientTop Property.....	63
4.47 ClientWidth Property.....	64
4.48 ColorMap Property.....	64
4.49 Column Property.....	65
4.50 ColumnCaption Property.....	65
4.51 ColumnCount Property.....	65
4.52 Columns Property (Array).....	66
4.53 Command Property.....	66
4.54 CommandButtonFunctionKeyMode Property.....	66
4.55 CommandLine Property.....	67
4.56 CommandText Property.....	67
4.57 CommandType Property.....	67
4.58 CommitMode Property.....	68
4.59 ConcurrencyCursor Property.....	68
4.60 Condition Property.....	69
4.61 Connection Property.....	69
4.62 ConnectionString Property.....	70
4.63 ConnectionTimeout Property.....	70
4.64 ConnectMode Property.....	70
4.65 Container Property.....	71
4.66 ControlBox Property.....	71
4.67 Controls Property.....	72
4.68 Count Property.....	72
4.69 CurFieldNo Property.....	72
4.70 CurrencySign Property.....	73
4.71 CurrentPage Property.....	73
4.72 CursorLocation Property.....	73
4.73 CursorType Property.....	74
4.74 DataBase Property.....	75
4.75 DataBindings Property.....	75
4.76 DataColor Property (Array).....	75
4.77 DataCount Property.....	76
4.78 DataField Property.....	76
4.79 DataMember Property.....	77
4.80 DataSource Property.....	77
4.81 DateFormat Property.....	78
4.82 DateStyle Property.....	79
4.83 DDEData Property.....	79
4.84 DDEDataLength Property.....	80
4.85 DDEDataOffset Property.....	80
4.86 DDEDataStyle Property.....	80
4.87 DDEFormat Property.....	81
4.88 DDEItem Property.....	81
4.89 DDELinkStyle Property.....	82
4.90 DDEService Property.....	82
4.91 DDETimeOut Property.....	82
4.92 DDETopic Property.....	83
4.93 DecimalPointIsComma Property.....	83
4.94 DecisionMaxString Property.....	83
4.95 Default Property.....	84
4.96 DefaultRowHeight Property.....	84
4.97 DelayedFocusEvent Property.....	85

4.98 Device Property.....	85
4.99 Diffuse Property.....	85
4.100 DisabledFocusAction Property.....	86
4.101 DisabledImageList Property.....	86
4.102 DisabledImageType Property.....	87
4.103 DisplayRate Property.....	87
4.104 DisplayText Property.....	88
4.105 DisplayText Property (ListItem).....	88
4.106 Divider Property.....	88
4.107 Driver Property.....	89
4.108 DropEnabled Property.....	89
4.109 EdgeStyle Property.....	89
4.110 EditableLabel Property.....	90
4.111 EditWhenGotFocus Property.....	90
4.112 Element Property.....	91
4.113 Enabled Property.....	91
4.114 EnableOwnerName Property.....	92
4.115 Expanded Property.....	92
4.116 ExpandedImageIndex Property.....	92
4.117 FileName Property.....	93
4.118 FileType Property.....	93
4.119 FillColor Property.....	93
4.120 FillStyle Property.....	94
4.121 Font Property.....	94
4.122 ForeColor Property.....	95
4.123 FramePath Property.....	96
4.124 FrameStyle Property.....	96
4.125 Ghosted Property.....	96
4.126 GraphStyle Property.....	97
4.127 HeaderText Property.....	97
4.128 HeadText Property.....	97
4.129 Height Property.....	98
4.130 Hidden Property.....	98
4.131 HideSelection Property.....	99
4.132 Highlight Property.....	99
4.133 HighlightColor Property.....	100
4.134 HotImageList Property.....	100
4.135 HScrollBar Property.....	101
4.136 Icon Property.....	101
4.137 IconIndex Property.....	102
4.138 IconName Property.....	102
4.139 Icons Property.....	102
4.140 ImageCount Property.....	103
4.141 ImageHeight Property.....	103
4.142 ImageIndex Property.....	103
4.143 ImageLeft Property.....	104
4.144 ImageList Property.....	104
4.145 ImageMode Property.....	105
4.146 ImageName Property.....	105
4.147 ImageTop Property.....	106
4.148 ImageWidth Property.....	106
4.149 IMEMode Property.....	106
4.150 Indentation Property.....	107
4.151 Index Property.....	107
4.152 InputFormat Property.....	108
4.153 Interval Property.....	109
4.154 IsCheckBtn Property.....	109



4.155 IsChecked Property.....	110
4.156 IsQuery Property.....	110
4.157 IsSelected Property (Array).....	110
4.158 Italic Property.....	111
4.159 Item Property (Array or object name).....	111
4.160 KeysetSize Property.....	112
4.161 LabelEdit Property.....	112
4.162 LabelWrap Property.....	112
4.163 LargeStep Property.....	113
4.164 Layout Property.....	113
4.165 Left Property.....	113
4.166 LeftMargin Property.....	114
4.167 ListCount Property.....	114
4.168 ListIndex Property.....	115
4.169 ListItems Property (Array).....	115
4.170 ListString Property (Array).....	115
4.171 LockType Property.....	116
4.172 Lower Property.....	116
4.173 LVStyle Property.....	117
4.174 Max Property.....	117
4.175 MaxButton Property.....	118
4.176 MaxLength Property.....	118
4.177 MediaLength Property.....	118
4.178 MediaLength Sample Code.....	119
4.179 MediaPosition Property.....	119
4.180 MenuBarName Property.....	120
4.181 MenuBreak Property.....	120
4.182 Min Property.....	120
4.183 MinButton Property.....	121
4.184 MouseIconName Property.....	121
4.185 MousePointer Property.....	122
4.186 Moveable Property.....	122
4.187 MultiLine Property.....	123
4.188 MultipleInstance Property.....	123
4.189 MultiSelect Property.....	124
4.190 Name Property.....	124
4.191 Normal Property.....	125
4.192 Numeric Property (ExcelConnection).....	125
4.193 Numeric Property (ListItem).....	125
4.194 OptionButtonClickMode Property.....	126
4.195 Orientation Property.....	126
4.196 PageCaption Property (Array).....	127
4.197 PageCount Property.....	127
4.198 PageNoFormat Property.....	127
4.199 PageTooltip Property (Array).....	128
4.200 PaperOrientation Property.....	128
4.201 PaperScaleUnit Property.....	128
4.202 PaperType Property.....	129
4.203 Parent Property.....	129
4.204 Password Property.....	130
4.205 PasswordChar Property.....	130
4.206 Path Property.....	131
4.207 PathSeparator Property.....	131
4.208 Pattern Property.....	132
4.209 PcdColorType Property.....	132
4.210 PcdResolution Property.....	132
4.211 PictureString Property.....	133

4.212 Printable Property.....	133
4.213 PrintDate Property.....	134
4.214 PrinterName Property.....	134
4.215 PrintTitle Property.....	134
4.216 PropertyName Property.....	135
4.217 PunchMargin Property.....	135
4.218 QueryString Property.....	135
4.219 RangeSelect Property.....	136
4.220 Rate Property.....	136
4.221 ReadOnly Property.....	136
4.222 Receive Property.....	137
4.223 RecordForm Property.....	137
4.224 Recordset Property.....	137
4.225 RenderStyle Property.....	138
4.226 RenderText Property.....	138
4.227 Repeat Property.....	139
4.228 Resource Property.....	139
4.229 RestoreFocusWhenEnablingForm Property.....	140
4.230 RestrictInputChar Property.....	140
4.231 RestrictInputCharBehavior Property.....	141
4.232 ReturnWhenEnterKey Property.....	141
4.233 ReturnWhenLostFocus Property.....	142
4.234 ReturnWhenMaxText Property.....	142
4.235 RightMargin Property.....	142
4.236 Root Property (Array).....	142
4.237 Row Property.....	143
4.238 RowCaption Property.....	143
4.239 RowCount Property.....	143
4.240 Scalable Property.....	144
4.241 Scale Property.....	144
4.242 ScaleMode Property.....	145
4.243 ScalingStyle Property.....	145
4.244 ScrollLock Property.....	146
4.245 ScrollPage Property.....	146
4.246 Selected Property.....	147
4.247 SelectedImageIndex Property.....	147
4.248 SelectEnd Property.....	147
4.249 SelectStart Property.....	148
4.250 SelectText Property.....	148
4.251 SelField Property (Array).....	149
4.252 SelItem Property.....	149
4.253 SelItemIndex Property.....	149
4.254 SelNode Property.....	150
4.255 SelString Property.....	150
4.256 ShapeStyle Property.....	150
4.257 ShowExcel Property.....	151
4.258 ShowInTaskbar Property.....	151
4.259 ShowStatusbar Property.....	151
4.260 ShowToolTips Property.....	152
4.261 Size Property.....	152
4.262 SmallIconIndex Property.....	152
4.263 SmallIcons Property.....	153
4.264 SmallStep Property.....	153
4.265 Smooth Property.....	153
4.266 SortColumn Property.....	154
4.267 Sorted Property.....	154
4.268 SortKind Property.....	155

4.269 SortOrder Property.....	155
4.270 Source Property.....	156
4.271 StartUpPosition Property.....	156
4.272 StatusText Property.....	156
4.273 Step Property.....	157
4.274 Strikethrough Property.....	157
4.275 Style Property.....	158
4.276 System Property.....	159
4.277 TabFixedHeight Property.....	159
4.278 TabFixedWidth Property.....	159
4.279 TabGroup Property.....	160
4.280 TabIndex Property.....	160
4.281 TableCells Property (Two-Dimensional-Array).....	161
4.282 TableColumns Property (Array).....	161
4.283 TabStop Property.....	162
4.284 TabWidthStyle Property.....	162
4.285 TargetName Property.....	163
4.286 TargetType Property.....	163
4.287 Text Property.....	163
4.288 Text Property (ExcelConnection).....	164
4.289 Text Property (ListItem).....	164
4.290 TextCase Property.....	165
4.291 ThreeStates Property.....	165
4.292 ThumbVisible Property.....	166
4.293 TickCount Property.....	166
4.294 TickFrequency Property.....	166
4.295 TickPosition Property (Array).....	167
4.296 TickStyle Property.....	167
4.297 TimeFormat Property.....	168
4.298 TitleBar Property.....	168
4.299 ToolboxBitmap Property.....	169
4.300 TooltipText Property.....	169
4.301 Top Property.....	170
4.302 TopMargin Property.....	170
4.303 Topmost Property.....	171
4.304 TotalCount Property.....	171
4.305 TVLineStyle Property.....	171
4.306 TVStyle Property.....	172
4.307 UnacceptableDefault Property.....	172
4.308 Underline Property.....	172
4.309 Upper Property.....	173
4.310 UseCaption Property.....	173
4.311 UseControlWindow Property.....	173
4.312 UseDefaultDate Property.....	174
4.313 UseMnemonic Property.....	174
4.314 UsePalette Property.....	175
4.315 UserID Property.....	175
4.316 UserName Property.....	175
4.317 UseSystemColor Property.....	176
4.318 Value Property.....	176
4.319 Value Property (Graph).....	178
4.320 ValueTips Property.....	178
4.321 Visible Property.....	178
4.322 VScrollBar Property.....	179
4.323 Weight Property.....	179
4.324 Width Property.....	179
4.325 WindowAdjustment Property.....	180

4.326 WindowState Property.....	181
4.327 WordWrap Property.....	181
4.328 Wrapable Property.....	181
4.329 Writable Property.....	182
<b>Chapter 5 Methods.....</b>	<b>183</b>
5.1 Introduction to the PowerCOBOL Methods.....	183
5.2 How Information is Presented on Each Method.....	183
5.3 How to Use Methods.....	183
5.4 Activate Method.....	183
5.5 Add Method.....	184
5.6 AddString Method.....	185
5.7 AddTick Method.....	185
5.8 AdviseDDE Method.....	186
5.9 Alarm Method.....	187
5.10 CallForm Method.....	187
5.11 CallForm2 Method.....	189
5.12 ChangeDDEItem Method.....	189
5.13 Clear Method.....	190
5.14 ClearList Method.....	191
5.15 ClearSelect Method.....	191
5.16 ClearTable Method.....	191
5.17 ClearTicks Method.....	192
5.18 CloseBook Method.....	192
5.19 CloseCursor Method.....	192
5.20 CloseDB Method.....	193
5.21 CloseDDE Method.....	193
5.22 CloseDevice Method.....	193
5.23 CloseForm Method.....	194
5.24 CommitDB Method.....	195
5.25 Connect Method.....	195
5.26 ConvertScale Method.....	195
5.27 Deactivate Method.....	196
5.28 Delete Method.....	196
5.29 DeleteCurRecord Method.....	197
5.30 DeleteRecord Method.....	198
5.31 DeleteString Method.....	198
5.32 DeleteTick Method.....	198
5.33 DisableCommit Method.....	199
5.34 Disconnect Method.....	199
5.35 DisplayMessage Method.....	199
5.36 DoModal Method.....	201
5.37 DoModal2 Method.....	202
5.38 EnableCommit Method.....	203
5.39 End Method.....	203
5.40 EnsureVisible Method.....	203
5.41 Execute Method.....	204
5.41.1 Examples of the Execute Method.....	205
5.42 ExecuteDDECommand Method.....	205
5.42.1 Example of the ExecuteDDECommand Method.....	206
5.43 ExecuteSync Method.....	207
5.44 GetFileName Method.....	208
5.44.1 Example of the GetFileName Method.....	209
5.45 GetFolderName Method.....	209
5.46 GetHotData Method.....	210
5.47 GetScreenSize Method.....	211
5.48 GetWorkArea Method.....	212

5.49 InitiateDDE Method.....	213
5.50 Insert Method.....	213
5.51 InsertListItem Method.....	214
5.52 InsertString Method.....	215
5.53 IsCallerInRole Method.....	215
5.54 IsInTransaction Method.....	216
5.55 IsSecurityEnabled Method.....	216
5.56 LoadFile Method.....	216
5.57 Move Method.....	217
5.58 MoveForm Method.....	218
5.59 NewBook Method.....	219
5.60 OpenBook Method.....	220
5.61 OpenDB Method.....	221
5.62 OpenDDE Method.....	221
5.63 OpenDevice Method.....	221
5.64 OpenForm Method.....	222
5.65 PauseAnimation Method.....	223
5.66 PauseDevice Method.....	223
5.67 PlayAnimation Method.....	224
5.68 PlayDevice Method.....	224
5.69 PlaySound Method.....	224
5.70 PokeData Method.....	225
5.71 PopupMenu Method.....	226
5.72 PrintForm Method.....	227
5.73 ProgressStep Method.....	227
5.74 ReadFirstRecord Method.....	227
5.75 ReadLastRecord Method.....	228
5.76 ReadNextRecord Method.....	228
5.77 ReadPreviousRecord Method.....	228
5.78 Refresh Method.....	229
5.79 RequestData Method.....	229
5.80 ResumeDevice Method.....	230
5.81 RewriteCurRecord Method.....	231
5.82 RewriteRecord Method.....	231
5.82.1 Example of the RewriteRecord Method.....	231
5.83 RollbackDB Method.....	232
5.84 SaveAsBook Method.....	232
5.85 SaveBook Method.....	233
5.86 SaveFile Method.....	233
5.87 SelectCell Method.....	234
5.88 SelectRecords Method.....	234
5.89 SetAbort Method.....	235
5.90 SetComplete Method.....	236
5.91 SetFocus Method.....	236
5.92 SetMCICommand Method.....	236
5.93 SetPage Method.....	237
5.94 SetPrinter Method.....	238
5.95 ShowForm Method.....	238
5.96 Start Method.....	239
5.97 StartEdit Method.....	239
5.98 StopDevice Method.....	239
5.99 TerminateDDE Method.....	239
5.100 ThruEvents Method.....	240
5.100.1 Unexpected Results when using the ThruEvents Method.....	241
5.101 UnadviseDDE Method.....	242
5.102 UpdateRecord Method.....	243
5.103 Examples of the UpdateRecord Method.....	243

5.104 WriteRecord Method.....	244
5.105 ZOrder Method.....	244
<b>Chapter 6 Events.....</b>	<b>246</b>
6.1 Introduction to PowerCOBOL Events.....	246
6.2 How Information is Presented on Each Event.....	246
6.3 How to Use Events.....	246
6.4 BeforeClick Event.....	246
6.4.1 BeforeClick Sample Code.....	247
6.5 ButtonClick Event.....	247
6.6 Change Event.....	247
6.7 Click Event.....	248
6.8 CloseChild Event.....	249
6.9 Closed Event.....	249
6.10 Collapse Event.....	249
6.11 ColumnClick Event.....	250
6.12 DblClick Event.....	250
6.13 DDEChange Event.....	250
6.14 DropDown Event.....	251
6.15 Edit Event.....	251
6.16 EndAnimation Event.....	251
6.17 EndOfRecordset Event.....	252
6.18 EndScroll Event.....	252
6.19 Expand Event.....	252
6.20 FieldChangeComplete Event.....	253
6.21 GotFocus Event.....	253
6.22 ItemClick Event.....	253
6.23 KeyDown Event.....	254
6.24 KeyPress Event.....	255
6.25 KeyUp Event.....	256
6.26 LostFocus Event.....	257
6.27 MouseDown Event.....	257
6.28 MouseMove Event.....	258
6.29 MouseUp Event.....	260
6.30 MoveComplete Event.....	261
6.31 NodeClick Event.....	262
6.32 Opened Event.....	262
6.33 PathChange Event.....	262
6.34 PatternChange Event.....	262
6.35 PowerBroadcast Event.....	262
6.36 PreKeyDown Event.....	264
6.37 PreKeyPress Event.....	265
6.38 PreKeyUp Event.....	265
6.39 QueryClose Event.....	266
6.40 RecordChangeComplete Event.....	266
6.41 RecordsetChangeComplete Event.....	267
6.42 Resized Event.....	268
6.43 Return Event.....	268
6.44 SelChange Event.....	269
6.45 Select Event.....	270
6.46 SelectClose Event.....	270
6.47 StartAnimation Event.....	270
6.48 Stepped Event.....	270
6.49 Timer Event.....	270
6.50 WillChangeField Event.....	271
6.51 WillChangeRecord Event.....	271
6.52 WillChangeRecordset Event.....	272

6.53 WillMove Event.....	273
Appendix A Color Constants.....	274
Appendix B Key Code Constants.....	276
Appendix C Data Types.....	278
Appendix D Constants for VT_BOOL.....	281
Appendix E Property and Parameter Constants.....	282
E.1 AccessMode Property.....	283
E.2 adReason Parameter (Events of the ADODataSource Control).....	283
E.3 adStatus Parameter (Events of the ADODataSource Control).....	283
E.4 Align Property .....	284
E.5 Alignment Property (CheckBox, OptionButton) .....	284
E.6 Alignment Property (Column, TextBox) .....	284
E.7 Alignment Property (Frame) .....	284
E.8 Alignment Property (Frame, StaticText, TableColumn) .....	284
E.9 Appearance Property .....	285
E.10 Arrange Property .....	285
E.11 BackStyle Property (Shape) .....	285
E.12 BackStyle Property (Shape, TextBox, Others) .....	285
E.13 BorderStyle Property (Form) .....	285
E.14 BorderStyle Property (Frame/Shape/Others) .....	286
E.15 BorderStyle Property (Shape) .....	286
E.16 ColorMap Property .....	286
E.17 CommandButtonFunctionKeyMode .....	286
E.18 CommandType Property .....	286
E.19 CommitMode Property .....	286
E.20 ConcurrencyCursor Property .....	287
E.21 ConnectMode Property .....	287
E.22 CursorLocation Property .....	287
E.23 CursorType Property (ADODataSource) .....	287
E.24 CursorType Property (DBAccess) .....	287
E.25 DateStyle Property .....	287
E.26 DDEDataStyle Property .....	288
E.27 DDELinkStyle Property .....	288
E.28 DisabledFocusAction Property .....	288
E.29 DisabledImageType Property .....	288
E.30 EdgeStyle Property .....	288
E.31 FileType Property .....	289
E.32 FillStyle Property .....	289
E.33 FrameStyle Property .....	289
E.34 GraphStyle Property .....	289
E.35 Icon Property .....	289
E.36 ImageMode Property .....	290
E.37 IMEMode Property .....	290
E.38 Layout Property .....	290
E.39 LockType Property .....	290
E.40 LVStyle Property .....	291
E.41 MenuBreak Property .....	291
E.42 MouseButton Parameter (MouseDown, MouseMove, MouseUp events).....	291
E.43 MousePointer Property .....	291
E.44 MultiSelect Property (FileList/ListBox) .....	292
E.45 OptionButtonClickMode Property .....	292
E.46 Orientation Property (Others) .....	292
E.47 Orientation Property (Tab) .....	292

E.48 PageNoFormat Property .....	292
E.49 PaperOrientation Property .....	292
E.50 PaperScaleUnit Property .....	293
E.51 PaperType Property .....	293
E.52 PcdColorType Property .....	293
E.53 PcdResolution Property .....	293
E.54 RenderStyle Property.....	294
E.55 ScaleMode PropertyScaleModeIn/ScaleModeOut Parameters (ConvertScale method), ScaleMode Parameters (GetScreenSize/ GetWorkArea methods).....	294
E.56 ScalingStyle Property.....	294
E.57 ShapeStyle Property .....	294
E.58 ShiftState Parameter (KeyDown, KeyUp, PreKeyDown, PreKeyUp, MouseDown, MouseMove, MouseUp events).....	294
E.59 SortKind Property .....	295
E.60 SortOrder Property .....	295
E.61 Source Property .....	295
E.62 StartUpPosition Property .....	295
E.63 Style Property (Button) .....	295
E.64 Style Property (ComboBox) .....	295
E.65 Style Property (Tab) .....	296
E.66 Style Property (Toolbar) .....	296
E.67 TabWidthStyle Property .....	296
E.68 TargetType Property .....	296
E.69 TextCase Property .....	296
E.70 TickStyle Property .....	296
E.71 TimeFormat Property .....	297
E.72 TVLineStyle Property .....	297
E.73 TVStyle Property .....	297
E.74 Value Property (CheckBox) .....	297
E.75 Weight Property .....	297
E.76 WindowAdjustment Property .....	298
E.77 WindowState Property .....	298
E.78 Zorder Method .....	298
<b>Appendix F Shortcut Keys.....</b>	<b>299</b>
F.1 Common Keyboard Operations of the Project window.....	299
F.2 Object Tree Keys in the Design View of the Project Window.....	299
F.3 Property List Keys in the Design View of the Project Window.....	300
F.4 Build View Keys of the Project Window.....	300
F.5 Debug View Keys of the Project Window.....	300
F.6 Keyboard Operation of the Form Edit Window.....	300
F.7 Keyboard Operation of the Tab Order Setting Window.....	301
F.8 Keyboard Operation of the PowerCOBOL Editor Window.....	301
<b>Index.....</b>	<b>304</b>



# Chapter 1 Introduction

This chapter gives an introduction to PowerCOBOL and this reference manual. It covers:

- Overview of PowerCOBOL
- An overview of this manual
- Upgrading from earlier releases

## 1.1 Overview of PowerCOBOL

PowerCOBOL is a graphical application development tool for COBOL programmers. The PowerCOBOL development environment allows programmers to use their existing COBOL knowledge to build and execute complex graphical user interface (GUI) applications in the Microsoft Windows environment.

PowerCOBOL simplifies the process of programming for event-driven object-oriented applications and abstracts Windows APIs to a higher level. It enables programmers to perform all of the steps associated with developing complex, graphical, client/server, Windows applications.

With PowerCOBOL, you can:

- Develop graphical user interface (GUI) applications
- Include event-driven programming objects
- Enhance applications with standard COBOL syntax
- Connect to other tools
- Develop multimedia applications
- Develop client/server applications
- Develop applications that interact with other open object environments
- Create OLE, ActiveX and COM components

## 1.2 Introduction to the PowerCOBOL Reference

The PowerCOBOL Reference defines all the programming elements of the PowerCOBOL product.

PowerCOBOL applications are made up of forms (windows) that contain controls.

The forms and controls are defined by:

- Properties that define the appearance, behavior and supporting data of the control
- Methods which are procedures that can be invoked to manipulate the control
- Events that can be generated by the control and for which you can write code to act on the event

Some common, or repeated, groups of properties/methods/events have been gathered into PowerCOBOL objects. These are accessed as properties of the containing controls.

The PowerCOBOL Reference provides all the information you need to understand the purpose and function of all the properties, methods, events and objects in the PowerCOBOL system.

## 1.3 Upgrading from Earlier Releases

PowerCOBOL V11 is built on the significant design enhancements introduced to the PowerCOBOL V4.0 product. The key architectural development in 4.0 was to make PowerCOBOL applications comply to the Component Object Model (COM). This means that PowerCOBOL programs can be mixed and matched with other COM compliant code.

For those who have used earlier versions of PowerCOBOL here is a review of the development stages:

PowerCOBOL 1.0: GUI development for COBOL

PowerCOBOL 2.0:Increased features over V1

PowerCOBOL 3.0:32 bit product

PowerCOBOL 4.0:COM compliant product.

PowerCOBOL 5.0:Increased features over V4

PowerCOBOL 6.0:Increased features over V5

PowerCOBOL 7.0:Minor enhancements over V6

PowerCOBOL 8.0:Minor enhancements over V7

PowerCOBOL 9.0: Minor enhancements over V8

PowerCOBOL 10.0:Minor enhancements over V9

PowerCOBOL 11.0:Minor enhancements over V10

In order to take advantage of the COM features a number of elements of PowerCOBOL have been changed between versions 3.0 (or earlier) and 4.0 (and later). The following sections describe these changes.

### 1.3.1 Updates to Terminology

---

The following terms have been changed between earlier versions and PowerCOBOL 4.0 and later.

Earlier Term	PowerCOBOL 4.0 (and later) Term
Attribute	Property
Bitmap Button	Merged into the CommandButton Control
Check Button Item	CheckBox Control
Combo Box Item	ComboBox Control
Date Item	Merged into the StaticText Control
DB Access Item	DBAccess Control
DDE Item	DDE (Dynamic Data Exchange) Control
Directory List Item	FolderList Control
Drive List Item	DriveList Control
Edit Item	TextBox Control
EXCEL Connection Item	ExcelConnection Control
Extend Image Item	Merged into the Image Control
File List Item	FileList Control
Function Key Item	Merged into the CommandButton Control
Graph Item	Graph Control
Group Box Item	GroupBox Control or Frame Control
Horizontal Scroll Bar Item	ScrollBar Control
Image Item	Image Control
Item	Control
Label Item	StaticText Control
List Box Item	ListBox Control
MCI Item	MCI (Multimedia Control Interface) Control
Menu Item	Menu Object
Metafile Item	Merged into the Image Control

Earlier Term	PowerCOBOL 4.0 (and later) Term
OLE Item	None
PICTURE Edit Item	Merged into the StaticText Control
Print Item	Print Control
Push Button Item	CommandButton Control
Radio Button Item	OptionButton Control
Rectangle Item	Shape Control
Selection Box Item	Merged into the ComboBox Control
Sheet	Form
Simple Animation Item	Animation Control
Sound Item	Merged into the MCI Control
Table Item	Table Control
Timer Item	Timer Control
Vertical Scroll Bar Item	ScrollBar Control

### 1.3.2 Operating the Product

---

PowerCOBOL provides access to most commonly used functions through pop-up menus. Select an object and click the right mouse button to see the pop-up menu. For the easiest operation of the product, check what is available on the pop-up menus.

### 1.3.3 Relationship to Component Object Model (COM)

---

PowerCOBOL conforms to COM design guidelines.

This means that:

- You can include ActiveX controls designed in other development systems and can create ActiveX controls for use with other applications.
- You can interact with OLE automation servers from PowerCOBOL event procedures by using COBOL programs in a similar way to using Visual Basic for Applications (VBA).
- You can develop OLE automation server applications with PowerCOBOL that are driven from VBA.

Working with COM has greater memory requirements than earlier versions of PowerCOBOL. Therefore ensure that your target machines have sufficient memory to support the new COM-compliant systems.

### 1.3.4 Naming Attributes

---

In earlier versions of PowerCOBOL, attributes used PowerCOBOL-specific names like "POW-TEXT". Because they were specific to PowerCOBOL, the designers could ensure that there was no conflict with COBOL reserved words. Attributes (or properties) were referred to using syntax of the style:

```
MOVE value TO POW-attribute-name OF control-name
```

However, with the introduction of support for ActiveX controls that can be created outside the COBOL "world", there is now no way to ensure there is no conflict with COBOL reserved words. PowerCOBOL therefore uses the following style of syntax for referring to properties:

```
MOVE value TO "property-name" OF control-name
```

where the property is enclosed in quotes.

Check each control for the new property names that have replaced the "POW-XXXX" style names. A few of the most common attribute names are listed below with their new property name.

Attribute Name	Property Name (4.0 onward)
POW-BACKCOLOR	"BackColor"
POW-FONTSIZE	"Size" OF "Font"
POW-ITALIC	"Italic" OF "Font"
POW-TEXT	"Caption "

### 1.3.5 Invoking Methods

---

In earlier versions of PowerCOBOL methods were CALLED using syntax of the style:

```
CALL method-name OF control-name USING parameter-list.
```

PowerCOBOL 4.0 and later use the object-oriented COBOL syntax for invoking methods, namely:

```
INVOKE control-name "method-name" USING parameter-list
      RETURNING ReturnValue.
```

### 1.3.6 PowerCOBOL Project Files

---

PowerCOBOL V3 and later used three files to store the information about a PowerCOBOL project, namely the .prj, .win, and .wcp files.

PowerCOBOL V4 and later combine these 3 files into a single file with the extension .ppj. This simplifies backing up and moving application development.

Check the on-line version of the PowerCOBOL Reference for detailed instructions on converting project files from earlier versions of PowerCOBOL to the 4.0 and later format.

# Chapter 2 Objects

This chapter describes all of the PowerCOBOL objects:

- Button
- Column
- Controls
- DataBinding
- DataBindings Collection
- Font
- Form
- ListItem
- Menu
- MenuItem
- Node
- RenderText
- TableCell
- TableColumn

## 2.1 Introduction to the PowerCOBOL Objects

PowerCOBOL objects are used to gather properties, methods and events for elements that are either common to many controls, such as the RenderText and Font objects, or that are repeated many times within a control, such as the Column and ListItem objects. The one exception is the Form object that has a single instance and can be used and referenced much like any of the controls.

The objects are usually referred to as a property of the containing control. The syntax for referring to a property of an object is:

```
"Property-name" OF "Object-name" OF Control-name
```

The topics defining the objects describe the purpose of the object, and list the object's properties, methods, and events.

### Forms

The form itself is essentially a control. However, because it cannot be placed directly on another form (you have to create an OCX control containing the form) and is not one of the controls in the Form Editor Toolbox, it is described in this reference as the Form "object". Otherwise there is nothing significant that makes the form an "object" rather than a "control".

### Containers

There are two container objects - the Form object and the GroupBox control - in which controls are placed. Some properties and method arguments may change depending on the properties of the containing object. For example, the current Font property of the Form object defines the initial value of the Font property of a new control placed on the form.

Note that, although the Frame, Tab and Toolbar controls can contain other controls, the other controls do not inherit default properties or method arguments from them.

## 2.2 Button Object

### Description:

Button objects contain information about Toolbar buttons.

The objects are referenced by using the Buttons property - an array of pointers to the button objects. For example, to set the Caption property of the second button on a toolbar called "Toolbar1" you would code:

```
MOVE BUTTON-CAPTION(2)
  TO "Caption" OF BUTTONS(2) OF Toolbar1
```

<b>Properties:</b>	Caption	ImageIndex	ToolTipText	Visible
	Enabled	Style	Value	
<b>Methods:</b>	None			
<b>Events:</b>	None			
<b>Corresponding Object in PowerCOBOL V3.0 or earlier:</b>	None			

## 2.3 Column Object

---

**Description:** The Column object is used to contain information about columns in the detail view of the ListView control.

The Column object contains the width of the column, the header text, and the editing and alignment characteristics of the items listed in the column.

<b>Properties:</b>	Alignment	HeaderText	RenderText	Width
<b>Methods:</b>	None			
<b>Events:</b>	None			
<b>Corresponding Object in PowerCOBOL V3.0 or earlier:</b>	None			

## 2.4 Controls Collection Object

---

**Description:** A Controls Collection Object contains all the objects corresponding to each control on the form.

**Details:** A pointer to the Controls Collection Object is contained in the Controls property of the Form object. You can operate each control using the Item(index or control-name) property. And you can refer to the number of controls using the Count property.

<b>Properties:</b>	Count	Item
<b>Methods:</b>	None.	
<b>Events:</b>	None.	
<b>Corresponding PowerCOBOL V3.0 Items:</b>	None.	

## 2.5 DataBinding Object

---

**Description:** DataBinding objects define the data binding properties for Custom controls that can bind data.

A DataBinding object corresponds to a property of the custom control. The property has to be set up by the creators of the custom control to support data binding. There is one DataBinding object for each property that can have data binding.

**Details:** A DataBinding object is pointed at by the Item property of the DataBindings collection object. The DataBindings collection object is itself defined by a pointer contained in the DataBindings property of the Custom control. It is only present in custom controls that can bind data.

<b>Properties:</b>	DataField	DataMember	DataSource	PropertyName
<b>Methods:</b>	UpdateRecord			
<b>Events:</b>	None.			
<b>Corresponding PowerCOBOL V3.0 Items:</b>	None.			

## 2.6 DataBindings Collection Object

---

**Description:** A DataBindings collection object contains the DataBinding objects for Custom controls that can bind data.

**Details:** The DataBindings collection object is pointed at by the DataBindings property of the Custom control. The DataBindings property only exists in custom controls that support data binding (this is determined by the creators of the custom control).

You refer to the DataBinding objects by using the Item property of the DataBindings collection object.

For example, if you want to connect the ListText property of a custom control (called DataList1 which, of course, must support data binding) to the "Product" data field, code as follows:

```
MOVE "Product" TO "DataField"
      OF "Item"("ListText")
      OF "DataBindings" OF DataList1
```

In this code, the part {OF "DataBindings" OF DataList1} defines the DataBindings collection object. And the part {"Item"("ListText") OF "DataBindings" OF DataList1} defines the DataBinding object.

If you know the ordinal position of the DataBinding object within the DataBindings collection object, for example if the desired property corresponds to the third DataBinding object, you could code:

```
MOVE "Product" TO "DataField"
      OF "Item"(3)
      OF "DataBindings" OF DataList1
```

The total number of DataBinding objects is contained in the Count property.

For example, you can obtain the number of DataBinding objects by coding:

```
MOVE "Count" OF "DataBindings" OF DataList1
      TO ...
```

**Notes** The operation of the DataBindings collection object is different from that of other objects such as ListItem, Node, etc. The pointer to the DataBinding object must be obtained using the Item property. So, you CANNOT write:

```
MOVE "Product" TO "DataField"
      OF "DataBindings"("BoundText") << WRONG!!
      OF DataList1
```

```
MOVE "Product" TO "DataField"
      OF "DataBindings"(3) << WRONG!!
      OF DataList1
```

<b>Properties:</b>	Count	Item
<b>Methods:</b>	None.	
<b>Events:</b>	None.	

**Corresponding** None.  
**PowerCOBOL V3.0**  
**Items:**

## 2.7 Font Object

---

**Description:** Font objects contain the properties of the font to be used for character strings in controls.  
 Font objects have the font name, point size, and related attributes such as bold, underscore etc.

**Details:**

Using font objects: You access a Font object as if it is one of the properties of the control.  
 For example to set the font size of a StaticText control to 20 you code the following:

```
MOVE 20 TO "Size" OF "Font" OF StaticText1.
```

If you attempt to set a value that is not supported, for example a font size less than 8 points, the system substitutes a correct value.

And if you attempt to set a property that is not supported by the current font, for example the Bold property, the system substitutes a font that does support Bold.

**Properties:**

Bold	Italic	Size	Underline
Charset	Name	Strikethrough	Weight

**Methods:** None

**Events:** None

**Corresponding Element in PowerCOBOL V3.0 or earlier:** The attributes related to fonts, for example POW-FONTSIZE and POW-ITALIC, associated with each item.

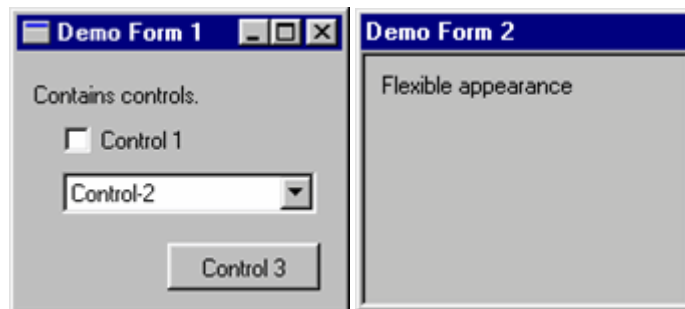
## 2.8 Form Object

---

**Description:** Form objects define the windows of PowerCOBOL applications. They are the containers in which you place controls. They define default properties, support window-related methods and receive window-directed events.

**Notes:** You close forms using the CloseForm or Deactivate method. Do not invoke other methods after invoking these methods.

**Sample images:**



**Properties:**

ActiveControl	DelayedFocusEvent	MouseIconName	ShowStatusBar
Appearance	Enabled	MousePointer	StartUpPosition
BackColor	Font	Moveable	StatusText
BorderStyle	ForeColor	MultipleInstance	TitleBar
Caption	Height	Name	ToolboxBitmap



	ClientHeight	Highlight	OptionButton-ClickMode	Top
	ClientWidth	HighlightColor	Printable	Topmost
	CommandButton-	Icon	RestoreFocus-WhenEnabling-Form	Visible
	FunctionKeyMode	IconName	Scalable	Width
	CommandLine	Left	ScaleMode	WindowState
	ControlBox	MaxButton		
	Controls	MenuBarName		
	DisabledFocusAction	MinButton		
<b>Methods:</b>	Activate	Deactivate	GetFileName	PopupMenu
	Alarm	DisplayMessage	GetFolderName	Refresh
	CallForm	DoModal	GetScreenSize	ShowForm
	CallForm2	DoModal2	GetWorkArea	ThruEvents
	CloseForm	Execute	MoveForm	
	ConvertScale	ExecuteSync	OpenForm	
<b>Events:</b>	Click	KeyPress	Opened	PreKeyUp
	CloseChild	KeyUp	PowerBroadcast	QueryClose
	Closed	MouseDown	PreKeyDown	Resized
	DblClick	MouseMove	PreKeyPress	
	KeyDown	MouseUp		
<b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b>	Sheet			

## 2.9 ListItem Object

---

**Description:** The ListItem object contains the information relating to a line in the detail view of the ListView control, when the LVStyle property is "3 - Report".

It specifies the icon, text strings, selected status and icon appearance.

**Details:** ListItem objects are referenced using the ListItems of the ListView control.

For example to get the text string of the first line, you code the following:

```
MOVE "Text" OF "ListItems" (1)
      OF ListView1 TO ...
```

**Properties:**

Ghosted	Numeric (ListItem)	SmallIconIndex
IconIndex	Selected	Text (ListItem)

**Methods:** EnsureVisible

**Events:** None

**Corresponding Element in PowerCOBOL V3.0 or earlier:** None

## 2.10 Menu Object

---

**Description:** Menu objects are containers for the MenuItem objects that make up menubars and popup menus.

**Details:** You refer to MenuItem objects as properties of the Menu object.

For example to update the Caption property, you code the following:

```
MOVE ... TO "Caption" OF "MenuItem1" OF Menu1
```

Menu1 is the Name property of the Menu object, and MenuItem1 is the Name property of the MenuItem object.

Menu objects can be displayed by the PopupMenu method whether or not they are designed as popup menus. However, this is not recommended because menubars and popup menus generally have different structures. For example, the menubar properties of Kind and ShortcutKey have no effect in popup menus.

Similarly, using Menu objects designed as popup menus for menubars is not recommended. For example, separators and check marks in the top level of popup menus have no effect when the menu is displayed as a menubar.

**Properties:** Name

**Methods:** None

**Events:** SelectClose

**Corresponding** None

**Element in**

**PowerCOBOL V3.0**

**or earlier:**

## 2.11 MenuItem Object

---

**Description:** Each MenuItem object defines an entry in a menu. This can be a top-level menu, a dropdown menu, a cascaded menu or a popup menu.

**Details:** MenuItem objects are treated as properties of the parent Menu or MenuItem object.

To set the Caption property, you code the following:

```
MOVE ... TO "Caption" OF "MenuItem1" OF Menu1
```

**Note:** If you set the MenuItem Kind to "0 - Frame Left Menu", "2 - Frame Center Menu" or "4 - Frame Right Menu" in the MenuItem property page, you cannot change the Visible property of the MenuItem object and its child MenuItem objects at execution time.

**Properties:**

Caption	Enabled	Name
Check	MenuBreak	Visible

**Methods:** None

**Events:** Click                      Select

**Corresponding** Menu item.

**Element in**

**PowerCOBOL V3.0**

**or earlier:**

## 2.12 Node Object

---

**Description:** The Node object contains information relating to an item in the detail view of the TreeView control. This includes a pointer to the image to be used, the text string to be displayed, and pointers to related Node objects.

**Details:** You access a Node object as if it is one of the properties of a TreeView control or a parent Node object.

For example to get the text string of the first root node object, you code the following:

```
MOVE "Text" OF "Root" (1) OF TreeView1
    TO ...
```

<b>Properties:</b>	Child	ExpandedImageIndex	Path	Text
	Count	ImageIndex	Selected	
	Expanded	Parent	SelectedImageIndex	
<b>Methods:</b>	Add	Clear	Delete	Insert
			EnsureVisible	
<b>Events:</b>	None			
<b>Corresponding Element in PowerCOBOL V3.0 or earlier:</b>	None			

## 2.13 RenderText Object

---

**Description:** The RenderText object provides editing of character strings in certain controls where text is entered or displayed.

**Details:**

Using RenderText objects: RenderText objects take the character string for the control and edit it according to a COBOL picture or date format. You can also select that no editing is performed.

You treat RenderText objects as properties of the containing control. For example, to refer to the CurrencySign for the RenderText object in a TextBox control, you code the following:

```
MOVE "CurrencySign" OF "RenderText"
    OF TextBox1
    TO ...
```

<b>Properties:</b>	BlankSuppress	DateStyle	PictureString	UseDefaultDate
	CurrencySign	DecimalPoint-IsComma	RenderStyle	
	DateFormat	InputFormat		
<b>Methods:</b>	None			
<b>Events:</b>	None			
<b>Corresponding Element in PowerCOBOL V3.0 or earlier:</b>	The COBOL-PICTURE attribute of PICTURE Edit Item.			
	The Date Style of the Date Item.			

## 2.14 TableCell Object

---

**Description:** TableCell objects contain the properties for cells in Table control objects.

**Details:**

Using TableCell objects: TableCell objects are always referred to using the TableCells property (a pointer to the TableCell object, held in a two-dimensional array). For example to set the text in the cell at row 3, column 5 code:

```
MOVE "999" TO "Text" OF "TableCells" (3, 5)
OF Table1
```

**Properties:** BackColor Highlight Text  
ForeColor HighlightColor

**Methods:** None

**Events:** None

**Corresponding Element in** The attributes of Table item cells.

**PowerCOBOL V3.0 or earlier:**

## 2.15 TableColumn Object

---

**Description:** The TableColumn object defines the framework of the Table control. For example: the width of the columns and how the text should be displayed.

**Details:**

Using TableColumn objects: TableColumn objects are always referred to using the TableColumns property (a pointer to the TableColumn object, held in an array). For example to set the width of column 3 code to 1500 (assuming ScaleMode is set to 3 - 1/20 points):

```
MOVE "1500" TO "Width" OF "TableColumns" (3)
OF Table1
```

**Properties:** Alignment RenderText Width Writable  
AutoEdit ScrollLock WordWrap  
IMEMode

**Methods:** None

**Events:** None

**Corresponding Element in** The attributes of Table Item Column.

**PowerCOBOL V3.0 or earlier:**

# Chapter 3 Controls

This chapter describes all of the PowerCOBOL controls.

## 3.1 Introduction to the PowerCOBOL Controls

PowerCOBOL controls provide the key elements of your PowerCOBOL application. They include all the common elements used in designing graphical interfaces as well as giving access to databases.

A control is a collection of:

- Properties that define the appearance, behavior and supporting data of the control,
- Methods that are procedures that can be invoked to manipulate the control,
- Events that can be generated by the control and for which you can write code to respond to the event.

Depending on the function of the control it may or may not be visible to the application user.

Because a control is defined by its appearance, properties, methods and events, the topics describing the controls describe the function of the control, then list its properties, methods and events.

## 3.2 ADODataSource Control

**Description:** ADODataSource control gives access to database using ADO (Microsoft ActiveX Data Objects).

**Sample Image:**



This image is only visible at design time. The ADODataSource control is invisible at execution time.

<b>Properties:</b>	Array	Connection	CursorType	Password
	ClassMajorVersion	ConnectionString	Index	Recordset
	ClassMinorVersion	ConnectionTimeout	Left	ScaleMode
	ClassProgID	ConnectMode	LockType	Top
	CommandText	Container	Name	UserName
	CommandType	CursorLocation	Parent	

In addition to the above properties, you can also use the properties of the ADO connection object and ADO recordset object. These are documented in Microsoft's MSDN Library, available online at <http://msdn.microsoft.com>.

**Methods:** None.

But, you can use the methods of the ADO connection object and ADO recordset object. These are documented in Microsoft's MSDN Library, available online at <http://msdn.microsoft.com>.

For example, the syntax for invoking the XXXX method of the ADO recordset object~is:

```
INVOKE "Recordset" OF ADODataSource "XXXX" USING ..
```

<b>Events:</b>	EndOfRecordset	RecordsetChangeComplete	WillChangeRecord
	FieldChangeComplete	WillChangeRecordset	WillMove
	MoveComplete	WillChangeField	
	RecordChangeComplete		

**Class ProgID name:** Fujitsu.PcobADODataSource.4

**Corresponding Controls in** None.

### 3.3 Animation Control

---

**Description:** The Animation control displays a series of bitmap images at preset intervals. By using slightly different bitmaps you can obtain the appearance of movement ("animation").

Notes:

1. Using many large images in an animation or shortening the intervals can affect performance.
2. When the Animation control is printed by the Print control, it can only be printed at an enlargement Rate of 100%.

**Sample image:**



Animation displays one bitmap, followed by another, and another ...

<b>Properties:</b>	Appearance	ClassMinorVersion	Left	ScalingStyle
	Array	ClassProgID	Name	ToolTipText
	AutoPlay	Container	Parent	Top
	BackColor	Enabled	Printable	UsePalette
	BackStyle	FramePath	Repeat	Visible
	BorderStyle	Height	Resource	Width
	ClassMajorVersion	Index	ScaleMode	
	Interval			
<b>Methods:</b>	Move	PlayAnimation	ZOrder	
	PauseAnimation	Refresh		
<b>Events:</b>	Click	EndAnimation	MouseMove	StartAnimation
	DbtClick	MouseDown	MouseUp	
<b>Class ProgID name:</b>	Fujitsu.PcobAnimation.4			
<b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b>	Simple Animation Item.			

### 3.4 CheckBox Control

---

**Description:** CheckBoxes are used for selections. They can either be on (selected) or off (not selected). Use CheckBoxes for independent or nonexclusive choices; use OptionButtons for exclusive choices.

PowerCOBOL lets you specify a third state in which the CheckBox is checked with a grayed check mark.

**Sample image:**



<b>Properties:</b>	Alignment	Enabled	Name	TabStop
	Array	Font	Parent	ThreeStates
	BackColor	ForeColor	Printable	ToolTipText

	Caption	Height	RenderText	Top
	ClassMajorVersion	Highlight	ScaleMode	Value
	ClassMinorVersion	HighlightColor	ScalingStyle	Visible
	ClassProgID	Index	TabGroup	Width
	Container	Left	TabIndex	
<b>Methods:</b>	Move	SetFocus	ZOrder	
	Refresh			
<b>Events:</b>	Click	KeyPress	LostFocus	MouseMove
	GotFocus	KeyUp	MouseDown	MouseUp
	KeyDown			
<b>Class ProgID name:</b>	Fujitsu.PcobCheckBox.4			
<b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b>	CheckBox Item.			

### 3.5 ComboBox Control

**Description:** A ComboBox combines a text box with a list box. Text can be entered in the text box part or selected from the list box part.

There are three styles of ComboBoxes:

Simple

DropDown

DropDownList

**Sample images:**

Simple style:



A text box with a list box.

List always visible.

DropDown style:



A text box with a drop-down list box.

List only visible when drop down button pressed.



Text can be entered that is not contained in the list.

Control when list not selected.

Control with drop down list selected and arbitrary text entered.

DropDownList style:



A read-only text box with a drop-down list box.

List only visible when drop down button pressed.

Values in text box limited to values in the list.

Control when list not selected.

Control with drop down list selected.



**Details:**

**File formats:** Data for the lists can be loaded from text files, CSV (Comma Separated Values) files, and fixed text format files.

Text files - As created with text editors like Notepad. Records are separated by carriage return, line feed bytes.

CSV files - Text files with fields separated by commas.

Fixed Length format files - Files with fixed length records not separated by any special characters.

**Fields:** CSV and Fixed Length formats allow you to select a particular field from the records to display in the list. Define the fields for Fixed Text format files using the RecordForm property.

Only one field can be displayed at a time. Specify the field to be displayed using the CurFieldNo property.

**Records:** For Simple and DropDown styles you can access the whole of the record, whose field value is selected in the list box part.

**Filtered list:** For Simple and DropDown styles the values in the list box can be limited to match the characters in the text box part. When the IsQuery property is set to True, the list box part only displays items that start with the characters entered in the text box part.

When users want to display all the items in the list (i.e. clear the filter), they should delete all the text in the text box part and press the ENTER key.

**Properties:**

Array	FileType	ListString	Sorted
AutoLoadFile	Font	Name	Style
AutoSize	ForeColor	Parent	TabGroup
BackColor	Height	Printable	TabIndex
ClassMajorVersion	Highlight	QueryString	TabStop
ClassMinorVersion	HighlightColor	RecordForm	Text
ClassProgID	IMEMode	RenderText	ToolTipText
Container	Index	ScaleMode	Top
CurFieldNo	IsQuery	ScalingStyle	Visible
Enabled	Left	SelField	Width
FileName	ListCount	SelString	
	ListIndex		

**Methods:**

AddString	InsertString	Refresh	SetFocus
ClearList	LoadFile	SaveFile	ZOrder
DeleteString	Move		

**Events:**

Change	GotFocus	LostFocus	Return
Click	KeyDown	MouseDown	SelChange
DbtClick	KeyPress	MouseMove	
Edit	KeyUp	MouseUp	



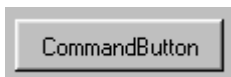
**Class ProgID name:** Fujitsu.PcobComboBox.4  
**Corresponding Controls in PowerCOBOL V3.0 or earlier:** Combo Box Item  
 Selection Box Item

## 3.6 CommandButton Control

---

**Description:** A CommandButton is a push button control displaying text and/or an image. It is depressed using the left mouse button, or can be activated by an assigned function key.

**Sample image:**



**Details:**

**Shortcut keys:** PowerCOBOL lets you assign function keys to CommandButtons as shortcut keys. Note: You need to be careful not to use function keys already assigned by the Windows system. That the focus does not move to the CommandButton when the shortcut key is used.

**Default Button** You can set a CommandButton to be the default button. The default button is the one that receives a Click event when you push the Enter key. For example, it is often helpful to make the OK button the default button.

A CommandButton becomes the default button when one of the following is the case:

- The Default property is True.
- The CommandButton has the focus.

Note: If the UnacceptableDefault property is True, you cannot change the Default property to True - so the CommandButton cannot become the default button.

Refer to the descriptions of the Default property and the Click event for details.

**Cancel Button** You can set a CommandButton to be the cancel button. The cancel button is the one that receives a Click event when you push the Esc key. For example, it is usually helpful to make the CommandButton with the text "Cancel" the cancel button.

Refer to the descriptions of the Cancel property and the Click event for details.

<b>Properties:</b>	Array	DisabledImage-	Layout	TabIndex	
	BackColor	Type	Left	TabStop	
	Cancel	Enabled	Name	ToolTipText	
	Caption	Font	Parent	Top	
	ClassMajorVersion	ForeColor	Printable	UnacceptableDefault	
	ClassMinorVersion	Height	RenderText	UseSystemColor	
	ClassProgID	Highlight	Resource	Visible	
	ColorMap	HighlightColor	ScaleMode	Width	
	Container	ImageName	ScalingStyle		
	Default	Index	TabGroup		
	<b>Methods:</b>	Move	Refresh	SetFocus	ZOrder
		<b>Events:</b>	Click	KeyPress	MouseDown
			GotFocus	KeyUp	MouseMove
	KeyDown		LostFocus	MouseUp	

**Class ProgID name:** Fujitsu.PcobCommandButton.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** Push Button Item    Bitmap Button Item    Function Key Item

## 3.7 Custom Control

---

**Description:** A Custom control is an OLE (ActiveX) control from a third party, or an ActiveX control created by PowerCOBOL.

PowerCOBOL makes the control's properties, methods and events accessible to PowerCOBOL procedures.

Refer to the manuals supplied with your custom control for specific details.

**Sample image:** Depends on the control.

**Properties:**

Align	DataField (*2)	Left	TabIndex
Array	DataMember (*2)	Name	TabStop
Cancel	DataSource (*2)	Parent	ToolTipText
ClassMajorVersion	Default	Printable	Top
ClassMinorVersion	Height	ScaleMode	Visible
ClassProgID	IMEMode	ScalingStyle	Width
Container	Index	TabGroup	
DataBindings (*1)			

**Methods:** Move    SetFocus    UpdateRecord (\*3)    ZOrder

**Events:** GotFocus    LostFocus

\*1, \*2, \*3 are only for controls that can bind data. You need to check the documentation of the custom control for details. A control may support \*1 properties and not \*2 properties and vice versa.

**Class ProgID name:** Depends on the custom control.

**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

## 3.8 DBAccess Control

---

**Description:** The DBAccess control gives access to ODBC (Open Database Connectivity) databases.

**Sample image:**



This image is only visible at design time.

The DBAccess control is invisible at execution time.

**Details:**

**Setting up database access:** See "Developing Your First ODBC Application" in the "PowerCOBOL User's Guide" for information on setting up the DBAccess control.

**Notes:**

1. Currently the field names can be referenced by using "Title" OF CmDb1. The are case sensitive.
2. Fields can only be referenced and set while connected to the database.
3. Fields must be in the ODBC catalog to be selected.

4. Make sure that you initialize all fields, including fields that are NULL. The NULL value for strings is spaces, and for numeric items is zero.
5. Floating point and binary fields cannot be extracted.
6. Numeric fields containing more than 14 integer digits or more than 4 decimal digits cannot be extracted.
7. Alphanumeric fields with more than 64770 bytes cannot be extracted.
8. No more than 64 fields can be selected.
9. If you have problems with the cursor type or record locking options, check the documentation of your ODBC database for details of supported behaviors.
10. When the DBAccess control sets data to a fixed-length field, the DBAccess control pads the character string with spaces to match the field length on the server side. However, when the character-code and encoding are converted by an ODBC driver, the result is incorrect. In this case, the execution mode of the DBAccess control can be modified as follows:  
 To remove spaces at the end of a character string use:  
 ~~~ F5DDSTEV.EXE /DBCHARBLANKREMOVE:ON  
 To add spaces to the end of a character string use:  
 ~~~ F5DDSTEV.EXE /DBCHARBLANKREMOVE:OFF

|   |                        |                  |                  |               |               |
|---|------------------------|------------------|------------------|---------------|---------------|
| <b>Properties:</b>  | AccessMode             | Condition        | EnableOwner-     | Password      |               |
|   | Array                  | ConnectionString | Name             | ScaleMode     |               |
|   | ClassMajorVersion      | Container        | Index            | TargetName    |               |
|   | ClassMinorVersion      | CursorType       | KeysetSize       | TargetType    |               |
|   | ClassProgID            | DataBase         | Left             | Top           |               |
|   | CommitMode             | DataSource       | Name             | UserID        |               |
|   | Concurrency-           | Driver           | Parent           |               |               |
|   | Cursor                 |                  |                  |               |               |
|   | <b>Methods:</b>        | CloseCursor      | ExecuteProcedure | ReadPrevious- | RollbackDB    |
|   |                        | CloseDB          | OpenDB           | Record        | SelectRecords |
| CommitDB  |                        | ReadFirstRecord  | RewriteCurRecord | WriteRecord   |               |
| DeleteCurRecord   |                        | ReadLastRecord   | RewriteRecord    |               |               |
| DeleteRecord  |                        | ReadNextRecord   |                  |               |               |
| <b>Events:</b>  | None                   |                  |                  |               |               |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobDBAccess.4 |                  |                  |               |               |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | DB Access Item         |                  |                  |               |               |

### 3.8.1 Accessing Table Data

---

The DBAccess control can be connected to a data source that supports ODBC functions.

Data in tables can be referenced, added, updated and deleted by using the SelectRecords and RewriteRecord methods.

You can specify the target to be processed in the DBAccess property page by following these steps:

1. Set Target Type.  
 Select "Table or View".
2. Select the Data Source to connect to.  
 Select the "Connect" button and enter the requested information such as data source name and database.

3. Select the target table or view.  
Select the "Target" button and input a table name (or a view name) to be processed.
4. Select the Fields to be used.  
Select the "Fields" button and set the fields to be processed. The records to be read are limited by entering a condition conforming to the ODBC SQL grammar in the Condition field.
5. Set other information  
Select the "Others" button and set the following information:
  - Key field  
To mark a field as a key field, select "Key field" in "Set record attributes". Double-click the field in the "Selected field list". This sets the field as a key.  
To release the setting, double-click the field again.  
Multiple fields can be set as keys.
  - Sort on input  
To indicate that a field is to be sorted, select "Sort on input" in "Set record attributes". Double-click the field in "Selected field list". This sets the field as an ascending key. Double-clicking again sets the fields as a descending key.  
If you double-click the field once again, the setting is released.  
Multiple fields can be set as sort fields.
  - Setting cursor type  
Select the appropriate setting in the "Cursor type" group box. The choices other than FORWARD\_ONLY also enable reading forward. Some options may not operate correctly because of the manner in which the ODBC driver functions.
  - Selecting commit mode  
Select the appropriate setting in the "Commit mode" group box.
  - Lock Records  
If you select "Lock Records", the record selected when the SelectRecords method is invoked is locked (FOR UPDATE clause is used in SELECT statement). This option may not operate correctly because of the manner in which the ODBC driver functions.
  - Read only  
If the data does not need to be updated, select Read only.
  - Cursor Concurrency  
Specifying a value other than READONLY enables updating and deleting the current data using the cursor. Some options may not operate correctly because of the manner in which the ODBC driver functions.
6. Apply your changes  
Select the "Apply" button to save the information you have set.
7. Close the Property page  
Select the "OK" button and close the property page.

## 3.8.2 Executing Procedures

---

You can execute procedures in the data source by using the ExecuteProcedure method.

Specify procedures and fields to be processed in the DBAccess property page by following the steps outlined below:

1. Set TargetType  
Select "Procedure".
2. Select the Data Source to connect to.  
Select the "Connect" button and set the requested information such as data source name and database.
3. Select the target procedure.  
Select the "Target" button and select the procedure name to be processed.
4. Select Fields  
Select the "Fields" button and the result field name to be processed (in the case of the procedure to create the result set). The parameter field and return value field are selected automatically. Fields shown with an arrow pointing right are input parameters, fields shown with an arrow pointing left are output parameters and fields shown with an arrow pointing right and left are input/output parameters.

5. Set other information

Select the "Others" button and set the following information:

- Setting cursor type

Select the appropriate setting in the "Cursor type" group box. The choices other than FORWARD\_ONLY also enable reading forward. Some options may not operate correctly because of the manner in which the ODBC driver functions.

- Selecting commit mode

Select the appropriate setting in the "Commit mode" group box.

6. Apply your changes

Select the "Apply" button to save the information you have set.

7. Close the Property page

Select the "OK" button and close the property page.

### 3.9 DDE (Dynamic Data Exchange) Control

---

**Description:** The DDE control gives support for the DDE (Dynamic Data Exchange) client functions of the Windows system.

**Sample image:**



This image is only visible at design time.

The DDE control is invisible at execution time.

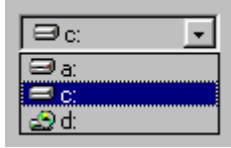
|   |                   |               |             |              |
|---|-------------------|---------------|-------------|--------------|
| <b>Properties:</b>  | Array             | DDEDataLength | DDEService  | Name         |
|   | ClassMajorVersion | DDEDataOffset | DDETimeOut  | Parent       |
|   | ClassMinorVersion | DDEDataStyle  | DDETopic    | ScaleMode    |
|   | ClassProgID       | DDEFormat     | Index       | Top          |
|   | Container         | DDEItem       | Left        |              |
|   | DDEData           | DDELinkStyle  |             |              |
| <b>Methods:</b>   | AdviseDDE         | ExecuteDDE-   | OpenDDE     | TerminateDDE |
|   | ChangeDDEItem     | Command       | PokeData    | UnadviseDDE  |
|   | CloseDDE          | GetHotData    | RequestData |              |
|   | Execute           | InitiateDDE   |             |              |
| <b>Events:</b>  | DDEChange         |               |             |              |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobDDE.4 |               |             |              |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | DDE Item          |               |             |              |

### 3.10 DriveList Control

---

**Description:** DriveList is a combo box containing a list of the available drives.  
It can be used with the FolderList and FileList controls.

Sample image:



|   |                         |                |              |             |  |
|---|-------------------------|----------------|--------------|-------------|--|
| <b>Properties:</b>  | Array                   | Font           | ListIndex    | TabGroup    |  |
|   | AutoSize                | ForeColor      | ListString   | TabIndex    |  |
|   | BackColor               | Height         | Name         | TabStop     |  |
|   | ClassMajorVersion       | Highlight      | Parent       | ToolTipText |  |
|   | ClassMinorVersion       | HighlightColor | Printable    | Top         |  |
|   | ClassProgID             | Index          | ScaleMode    | Visible     |  |
|   | Container               | Left           | ScalingStyle | Width       |  |
|   | Enabled                 | ListCount      | SelString    |             |  |
|   | <b>Methods:</b>         | Move           | SetFocus     | ZOrder      |  |
|   |                         | Refresh        |              |             |  |
| <b>Events:</b>  | GotFocus                | KeyUp          | MouseMove    | SelChange   |  |
|   | KeyDown                 | LostFocus      | MouseUp      |             |  |
|   | KeyPress                | MouseDown      |              |             |  |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobDriveList.4 |                |              |             |  |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | DriveList Item.         |                |              |             |  |

### 3.11 Edit Control

**Description:** The Edit control provides text entry and editing functions. It offers only single line entry. The Edit control is a lightweight version of the TextBox control, and does not provide the RenderText property for formatting the entered character string. It does, however, support some features not supported by the TextBox control, namely being able to bind the control to an ADODataSource control (using the DataSource, DataMember and DataField properties, and UpdateRecord method) and has the ReturnWhen... properties. See the ADODataSource.ppj sample in the Edit subfolder of the PowerCOBOL samples folder for an example of connecting the Edit control to the data of an ADODataSource control.

Sample image:



|                    |                   |                  |                     |              |
|--------------------|-------------------|------------------|---------------------|--------------|
| <b>Properties:</b> | Appearance        | EditWhenGotFocus | Name                | ScalingStyle |
|                    | Array             | Enabled          | Parent              | SelectText   |
|                    | BackColor         | Font             | Password            | TabGroup     |
|                    | BorderStyle       | ForeColor        | PasswordChar        | TabIndex     |
|                    | ClassMajorVersion | Height           | Printable           | TabStop      |
|                    | ClassMinorVersion | Highlight        | ReadOnly            | Text         |
|                    | ClassProgID       | HighlightColor   | ReturnWhenEnterKey  | ToolTipText  |
|                    | Container         | IMEMode          | ReturnWhenLostFocus | Top          |
|                    | DataField         | Index            | ReturnWhenMaxText   | Visible      |

|   |                    |              |           |           |
|---|--------------------|--------------|-----------|-----------|
|   | DataMember         | Left         | ScaleMode | Width     |
|   | DataSource         | MaxLength    |           |           |
| <b>Methods:</b>   | Move               | SetFocus     | ZOrder    |           |
|   | Refresh            | UpdateRecord |           |           |
| <b>Events:</b>  | Change             | GotFocus     | KeyPress  | LostFocus |
|   | Edit               | KeyDown      | KeyUp     | Return    |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobEdit.4 |              |           |           |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | None.              |              |           |           |

## 3.12 ExcelConnection Control

---

**Description:** The ExcelConnection control provides functions for exchanging data with Microsoft Excel.  
NOTE: Excel should not be used while configuring the properties of the ExcelConnection Control.

**Sample image:**



This image is only visible at design time.  
The ExcelConnection control is invisible at execution time.

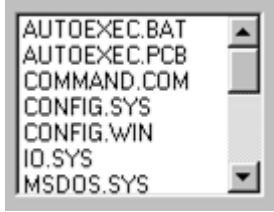
|   |                               |             |                               |                            |
|---|-------------------------------|-------------|-------------------------------|----------------------------|
| <b>Properties:</b>  | Array                         | ClassProgID | Name                          | ShowExcel                  |
|   | BookName                      | Container   | Numeric-<br>(ExcelConnection) | Text-<br>(ExcelConnection) |
|   | ClassMajorVersion             | Index       | Parent                        | Top                        |
|   | ClassMinorVersion             | Left        | ScaleMode                     |                            |
| <b>Methods:</b>   | CloseBook                     | End         | SaveAsBook                    | Start                      |
|   | Connect                       | NewBook     | SaveBook                      |                            |
|   | Disconnect                    | OpenBook    |                               |                            |
| <b>Events:</b>  | None                          |             |                               |                            |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobExcelConnection.4 |             |                               |                            |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Excel Connection Item.        |             |                               |                            |

## 3.13 FileList Control

---

**Description:** The FileList control is a list box containing a list of the files in the current folder.  
It can be used in conjunction with the DriveList and FolderList controls to help users select a file.

Sample image:



|   |                        |                |              |               |
|---|------------------------|----------------|--------------|---------------|
| <b>Properties:</b>  | Appearance             | ForeColor      | MultiSelect  | SelString     |
|   | Archive                | Height         | Name         | System        |
|   | Array                  | Hidden         | Normal       | TabGroup      |
|   | BackColor              | Highlight      | Parent       | TabIndex      |
|   | BorderStyle            | HighlightColor | Path         | TabStop       |
|   | ClassMajorVersion      | Index          | Pattern      | ToolTipText   |
|   | ClassMinorVersion      | IsSelected     | Printable    | Top           |
|   | ClassProgID            | Left           | ReadOnly     | Visible       |
|   | Container              | ListCount      | ScaleMode    | Width         |
|   | Enabled                | ListIndex      | ScalingStyle |               |
| <b>Methods:</b>   | Font                   | ListString     |              |               |
|   | Move                   | SetFocus       | ZOrder       |               |
| <b>Events:</b>  | Refresh                |                |              |               |
|   | Click                  | KeyPress       | MouseMove    | PatternChange |
|   | DblClick               | KeyUp          | MouseUp      | SelChange     |
|   | GotFocus               | LostFocus      | PathChange   |               |
|   | KeyDown                | MouseDown      |              |               |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobFileList.4 |                |              |               |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | FileList Item.         |                |              |               |

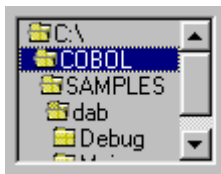
### 3.14 FolderList Control

**Description:** The FolderList control is a list box containing the folders on the current drive. It can be used in conjunction with the DriveList and FileList controls to help users select files. The SelString property contains the selected folder.

The Path property contains the path (relative to the current folder) of the currently selected current folder.

A double click changes the current folder as well as the selected folder.

Sample image:



|                    |            |         |            |          |
|--------------------|------------|---------|------------|----------|
| <b>Properties:</b> | Appearance | Enabled | ListIndex  | TabGroup |
|                    | Array      | Font    | ListString | TabIndex |



|   |                          |                |              |             |
|---|--------------------------|----------------|--------------|-------------|
|   | AutoChange               | ForeColor      | Name         | TabStop     |
|   | BackColor                | Height         | Parent       | ToolTipText |
|   | BorderStyle              | Highlight      | Path         | Top         |
|   | ClassMajorVersion        | HighlightColor | Printable    | Visible     |
|   | ClassMinorVersion        | Index          | ScaleMode    | Width       |
|   | ClassProgID              | Left           | ScalingStyle |             |
|   | Container                | ListCount      | SelString    |             |
| <b>Methods:</b>   | Move                     | Refresh        | SetFocus     | ZOrder      |
| <b>Events:</b>  | Change                   | KeyDown        | LostFocus    | MouseUp     |
|   | Click                    | KeyPress       | MouseDown    | SelChange   |
|   | GotFocus                 | KeyUp          | MouseMove    |             |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobFolderList.4 |                |              |             |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Directory List Item.     |                |              |             |

### 3.15 Frame Control

---

**Description:** The Frame control consists of a rectangular border and text. It is used for visually collecting controls (such as OptionButton controls) into a logical group.

**Sample image:**



**Details:** The Frame control is similar to the GroupBox control; you place controls in it, but it does not become the parent of those controls. The Frame control is a peer of the controls in it. (Whereas the GroupBox control is a parent object for the controls in it.)

For example, to set the Value property for a CheckBox control within a Frame control, you code as follows:

```
MOVE 1 TO "Value" OF CheckBox1.
```

You do NOT code:

```
MOVE 1 TO "Value" OF CheckBox1 OF Frame1.
```

|                    |             |             |                |              |
|--------------------|-------------|-------------|----------------|--------------|
| <b>Properties:</b> | Alignment   | ClassProgID | Highlight      | ScaleMode    |
|                    | Appearance  | Container   | HighlightColor | ScalingStyle |
|                    | Array       | EdgeStyle   | Index          | TabGroup     |
|                    | BackColor   | Enabled     | Left           | TabIndex     |
|                    | BorderStyle | Font        | Name           | ToolTipText  |

|   |                     |            |            |         |
|---|---------------------|------------|------------|---------|
|   | Caption             | ForeColor  | Parent     | Top     |
|   | ClassMajorVersion   | FrameStyle | Printable  | Visible |
|   | ClassMinorVersion   | Height     | RenderText | Width   |
| <b>Methods:</b>   | Move                | Refresh    | ZOrder     |         |
| <b>Events:</b>  | Click               | MouseDown  | MouseUp    |         |
|   | DblClick            | MouseMove  |            |         |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobFrame.4 |            |            |         |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | GroupBox Item.      |            |            |         |

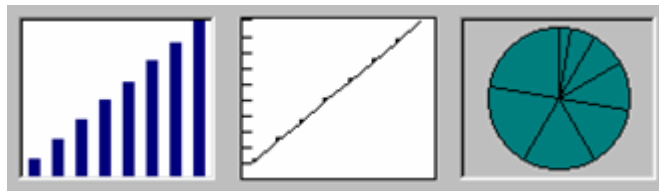
## 3.16 Graph Control

**Description:** The Graph control displays numeric data in graph form. There are four graph styles available:

- Vertical bar chart
- Horizontal bar chart
- Line graph
- Pie chart

Use the DataColor property to configure different colors for different data.

**Sample image:**



Some sample graphs.

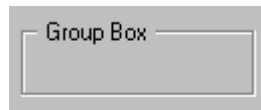
|   |                     |             |           |               |
|---|---------------------|-------------|-----------|---------------|
| <b>Properties:</b>  | Appearance          | Container   | Index     | ScalingStyle  |
|   | Array               | DataColor   | Left      | ToolTipText   |
|   | BackColor           | DataCount   | Lower     | Top           |
|   | BackStyle           | DisplayRate | Name      | Upper         |
|   | BorderStyle         | Enabled     | Parent    | Value (Graph) |
|   | ClassMajorVersion   | ForeColor   | Printable | Visible       |
|   | ClassMinorVersion   | GraphStyle  | Scale     | Width         |
|   | ClassProgID         | Height      | ScaleMode |               |
| <b>Methods:</b>   | Move                | Refresh     | ZOrder    |               |
| <b>Events:</b>  | Click               | MouseDown   | MouseUp   |               |
|   | DblClick            | MouseMove   |           |               |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobGraph.4 |             |           |               |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Graph Item.         |             |           |               |

## 3.17 GroupBox Control

---

**Description:** A GroupBox consists of a rectangular border and text. It is used for visually collecting controls (e.g. OptionButton controls) into logical groups.

**Sample image:**



**Details:** The GroupBox control is a container for controls placed within it.

The controls are child objects of the GroupBox control.

For example, to refer to the Caption property of the StaticText control (Static1) placed in the GroupBox control (Group1):

```
MOVE "Caption" OF Static1 OF Group1 TO ...
```

GroupBox controls cannot be part of an array.

**Properties:**

|                   |                |              |             |
|-------------------|----------------|--------------|-------------|
| Appearance        | Container      | Left         | TabIndex    |
| BackColor         | EdgeStyle      | Name         | ToolTipText |
| BorderStyle       | Enabled        | Parent       | Top         |
| Caption           | Font           | Printable    | UseCaption  |
| ClassMajorVersion | ForeColor      | ScaleMode    | Visible     |
| ClassMinorVersion | Height         | ScalingStyle | Width       |
| ClassProgID       | Highlight      | TabGroup     |             |
|                   | HighlightColor |              |             |

**Methods:**

Move Refresh Zorder

**Events:**

Click MouseDown MouseUp  
DbClick MouseMove

**Class ProgID name:** Fujitsu.PcobGroupBox.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** Group Box Item.

## 3.18 Image Control

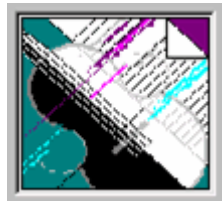
---

**Description:** The Image control displays picture images from a variety of file types such as bitmaps, Photo CD images, and Jpeg images.

The type of image file is determined by the extension.

Bitmap and Icon files can be built into the application as resources.

**Sample image:**



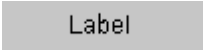
**Details:**

|                 |                  |              |
|-----------------|------------------|--------------|
| Supported image | File description | Extension(s) |
|-----------------|------------------|--------------|

|   |  |               |               |              |
|---|--|---------------|---------------|--------------|
| formats:  | Bitmap files (Can be built into the application as resources)  | BMP, DIB, RLE |               |              |
|   | Icon files (Can be built into the application as resources)  | ICO, CUR      |               |              |
|   | Metafiles (Supports standard metafiles and Aldus placeable metafiles)  | WMF, EMF, CLP |               |              |
|   | JPEG files (Can be copied to the clipboard as .CLP files)  | JPG, JIF      |               |              |
|   | Photo CD image files (Must be in the \Photo_cd\ folder, or in the \Photo_cd \Images folder on a Photo CD. Files must be named "Imgnnnn.pcd", where nnnn is any number, or "Overview.pcd".) | PCD           |               |              |
| <b>Notes:</b>   | Large images require large quantities of memory to be displayed. If there is insufficient memory it may not be possible to display the image.  |               |               |              |
|   | On a 256 color Windows system, displaying multiple images that have 256 colors or more on the same form may result in incorrect color displays.  |               |               |              |
|   | Windows format meta files cannot have long file names.   |               |               |              |
| <b>Properties:</b>  | Appearance   | Diffuse       | ImageName     | Printable    |
|   | Array  | DropEnabled   | ImageTop      | Resource     |
|   | BackColor  | Enabled       | ImageWidth    | ScaleMode    |
|   | BackStyle  | Height        | Index         | ScalingStyle |
|   | BorderStyle  | ImageCount    | Left          | ToolTipText  |
|   | ClassMajorVersion  | ImageHeight   | Name          | Top          |
|   | ClassMinorVersion  | ImageIndex    | Parent        | Visible      |
|   | ClassProgID  | ImageLeft     | PcdColorType  | Width        |
|   | Container  | ImageMode     | PcdResolution |              |
| <b>Methods:</b>   | Move   | Refresh       | ZOrder        |              |
| <b>Events:</b>  | Change   | DbtClick      | MouseMove     |              |
|   | Click  | MouseDown     | MouseUp       |              |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobImage.4  |               |               |              |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Image Item<br>ExtendedImage Item<br>Metafile Item  |               |               |              |

### 3.19 Label Control

---

|                      |  |             |              |             |
|----------------------|--|-------------|--------------|-------------|
| <b>Description:</b>  | The Label control displays text that the user cannot edit.   |             |              |             |
|                      | The Label control is a lightweight version of the StaticText control, and does not provide the RenderText property to format the character string. |             |              |             |
| <b>Sample image:</b> |   |             |              |             |
| <b>Properties:</b>   | Alignment  | ClassProgID | Left         | TabGroup    |
|                      | Array  | Container   | Name         | TabIndex    |
|                      | BackColor  | Font        | Parent       | Top         |
|                      | BackStyle  | ForeColor   | Printable    | UseMnemonic |
|                      | Caption  | Height      | ScaleMode    | Visible     |
|                      | ClassMajorVersion  | Index       | ScalingStyle | Width       |
|                      | ClassMinorVersion  |             |              |             |

**Methods:** Move Refresh ZOrder  
**Events:** None  
**Class ProgID name:** Fujitsu.PcobLabel.4  
**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

## 3.20 ListBox Control

**Description:** The ListBox control presents a list of items from which the user can select one or more items.

There are three styles:

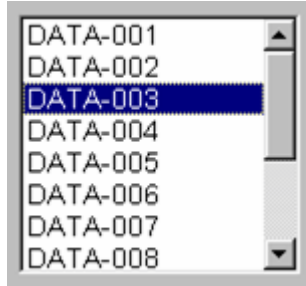
Single Select: Only one item can be selected at a time.

Multiple Select: Several contiguous items can be selected.

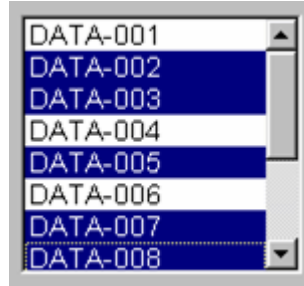
Extended Select: Several contiguous and non-contiguous items can be selected.

You can also choose to include check boxes to the left of each item in the list.

**Sample image:**



Shows Single Select



Shows Extended Select

**Properties:**

|                   |                |             |             |
|-------------------|----------------|-------------|-------------|
| Appearance        | ForeColor      | ListIndex   | Sorted      |
| Array             | Height         | ListString  | TabGroup    |
| BackColor         | Highlight      | MultiSelect | TabIndex    |
| BorderStyle       | HighlightColor | Name        | TabStop     |
| ClassMajorVersion | Index          | Parent      | ToolTipText |
| ClassMinorVersion | IsCheckBtn     | Printable   | Top         |
| ClassProgID       | IsChecked      | RenderText  | Visible     |
| Container         | IsSelected     | ScaleMode   | Width       |

**Methods:**

|              |              |          |          |
|--------------|--------------|----------|----------|
| AddString    | InsertString | Refresh  | SetFocus |
| ClearList    | LoadFile     | SaveFile | ZOrder   |
| DeleteString | Move         |          |          |

**Events:**

|          |          |           |           |
|----------|----------|-----------|-----------|
| Click    | KeyDown  | LostFocus | MouseUp   |
| DbClick  | KeyPress | MouseDown | SelChange |
| GotFocus | KeyUp    | MouseMove |           |

**Class ProgID name:** Fujitsu.PcobListBox.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** ListBox Item.

## 3.21 ListView Control

---

**Description:** The ListView control displays lists of items. It offers four styles of display that can be selected:

Large icons

Small icons left to right

Small icons top to bottom

Detail view offering several columns of information.

Column objects are used to describe the columns. ListItem objects contain the data of the items to be listed.

**Sample image:**

| Name        | Salary  | Last Month | Year-to-Date |
|-------------|---------|------------|--------------|
| Fred Bloggs | \$1,000 | \$1,000    | \$5,000      |
| John Doe    | \$1,500 | \$1,500    | \$7,500      |
| Joe Soap    | \$2,000 | \$2,000    | \$6,000      |

ListView Detail View

**Details:**

Styles: See the LVStyle property for details of the different styles.

ListItem objects contain the data for each item to be listed.

In the Detail view, Column objects are used to describe each column and ListItem objects contain the data for each row.

**Properties:**

|                   |                |              |             |
|-------------------|----------------|--------------|-------------|
| Appearance        | Count          | LabelWrap    | SmallIcons  |
| Arrange           | Enabled        | Left         | SortColumn  |
| Array             | Font           | ListItems    | SortKind    |
| BackColor         | ForeColor      | LVStyle      | SortOrder   |
| BorderStyle       | Height         | MultiSelect  | TabGroup    |
| CHVisible         | HideSelection  | Name         | TabIndex    |
| ClassMajorVersion | Highlight      | Parent       | TabStop     |
| ClassMinorVersion | HighlightColor | Printable    | ToolTipText |
| ClassProgID       | Icons          | ScaleMode    | Top         |
| ColumnCount       | IMEMode        | ScalingStyle | Visible     |
| Columns           | Index          | SelItem      | Width       |
| Container         | LabelEdit      | SelItemIndex |             |

**Methods:**

|        |                |           |        |
|--------|----------------|-----------|--------|
| Add    | InsertListItem | SetFocus  | ZOrder |
| Clear  | Move           | StartEdit |        |
| Delete | Refresh        |           |        |

**Events:**

|             |           |           |           |
|-------------|-----------|-----------|-----------|
| Click       | GotFocus  | KeyUp     | MouseDown |
| ColumnClick | ItemClick | LostFocus | Return    |

|         |          |           |
|---------|----------|-----------|
| DbClick | KeyDown  | MouseDown |
| Edit    | KeyPress | MouseMove |

**Class ProgID name:** Fujitsu.PcobListView.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

## 3.22 MCI (Media Control Interface) Control

---

**Description:** The MCI control provides functions for playing various media such as CD music and Microsoft Video for Windows (.AVI files).

You can omit opening the device when playing sound files (.WAV).

The methods that you can invoke depend on the MCI driver.

**Sample image:**



This image is only visible at design time.

Precisely what is displayed at execution time depends on the MCI device.

|                    |                   |             |               |               |
|--------------------|-------------------|-------------|---------------|---------------|
| <b>Properties:</b> | Appearance        | ClassProgID | MediaLength   | ToolTipText   |
|                    | Array             | Command     | MediaPosition | Top           |
|                    | AutoOpen          | Container   | Name          | UseControl-   |
|                    | AutoPlay          | Device      | Parent        | Window        |
|                    | BackColor         | Element     | Printable     | Visible       |
|                    | BackStyle         | Enabled     | Receive       | Width         |
|                    | BorderStyle       | Height      | ScaleMode     | WindowAdjust- |
|                    | ClassMajorVersion | Index       | ScalingStyle  | ment          |
|                    | ClassMinorVersion | Left        | TimeFormat    |               |

|                 |             |             |               |            |
|-----------------|-------------|-------------|---------------|------------|
| <b>Methods:</b> | CloseDevice | PauseDevice | Refresh       | StopDevice |
|                 | Move        | PlayDevice  | ResumeDevice  | ZOrder     |
|                 | OpenDevice  | PlaySound   | SetMCICommand |            |

|                |         |           |         |
|----------------|---------|-----------|---------|
| <b>Events:</b> | Click   | MouseDown | MouseUp |
|                | DbClick | MouseMove |         |

**Class ProgID name:** Fujitsu.PcobMCI.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** MCI Item.  
Sound Item.

## 3.23 MTS Support Control

---

**Description:** The Microsoft Transaction Server (MTS) Support control provides access to MTS.

**Sample image:**




This image is only visible at design time.

|   |                   |                 |                   |           |
|---|-------------------|-----------------|-------------------|-----------|
| <b>Properties:</b>  | Array             | ClassProgID     | Left              | ScaleMode |
|   | ClassMajorVersion | Container       | Name              | Top       |
|   | ClassMinorVersion | Index           | Parent            |           |
| <b>Methods:</b>   | DisableCommit     | IsCallerInRole  | IsSecurityEnabled | SetAbort  |
|   | EnableCommit      | IsInTransaction | SetComplete       |           |
| <b>Events:</b>  | None              |                 |                   |           |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobMTS.4 |                 |                   |           |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | None              |                 |                   |           |


### 3.24 OptionButton Control

---

|   |  |                |              |             |
|---|--|----------------|--------------|-------------|
| <b>Description:</b>   | Option buttons are used for exclusive selections - where only one of a group of choices can be selected at a time. |                |              |             |
| <b>Sample image:</b>  |                                   |                |              |             |
| <b>Properties:</b>  | Alignment  | Enabled        | Name         | TabStop     |
|   | Array  | Font           | Parent       | ToolTipText |
|   | BackColor  | ForeColor      | Printable    | Top         |
|   | Caption  | Height         | RenderText   | Value       |
|   | ClassMajorVersion  | Highlight      | ScaleMode    | Visible     |
|   | ClassMinorVersion  | HighlightColor | ScalingStyle | Width       |
|   | ClassProgID  | Index          | TabGroup     |             |
|   | Container  | Left           | TabIndex     |             |
| <b>Methods:</b>   | Move   | SetFocus       | ZOrder       |             |
|   | Refresh  |                |              |             |
| <b>Events:</b>  | Click  | KeyDown        | LostFocus    | MouseUp     |
|   | DblClick   | KeyPress       | MouseDown    |             |
|   | GotFocus   | KeyUp          | MouseMove    |             |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobOptionButton.4   |                |              |             |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Radio Button Item.   |                |              |             |

### 3.25 Print Control

---

|                      |   |  |  |  |
|----------------------|---|--|--|--|
| <b>Description:</b>  | The Print control enables printing of the form at execution time.                   |  |  |  |
| <b>Sample image:</b> |  |  |  |  |
|                      | This image is only visible at design time.  |  |  |  |



The Print control is invisible at execution time.

**Details:**

Screen vs. print images:

ListBox and multi-line TextBox controls are expanded vertically to print the entire list. Note that if the IsCheckBtn property is true, the check box area in the ListBox control is not printed.

Table controls are expanded in both the vertical and horizontal directions to print all the contents of the table.

Other controls (including general ActiveX controls) are printed as they appear on the screen.

Objects that can take a 3D appearance are printed ignoring the 3D setting.

**Properties:**

|                   |              |                  |             |
|-------------------|--------------|------------------|-------------|
| Array             | DateStyle    | PaperOrientation | Rate        |
| BottomMargin      | HeadText     | PaperScaleUnit   | RightMargin |
| ClassMajorVersion | Index        | PaperType        | ScaleMode   |
| ClassMinorVersion | Left         | Parent           | Source      |
| ClassProgID       | LeftMargin   | PrintDate        | Top         |
| Container         | Name         | PrinterName      | TopMargin   |
| DateFormat        | PageNoFormat | PrintTitle       |             |
|                   |              | PunchMargin      |             |

**Methods:**

|           |         |            |
|-----------|---------|------------|
| PrintForm | SetPage | SetPrinter |
|-----------|---------|------------|

**Events:**

None

**Class ProgID name:**

Fujitsu.PcobPrint.4

**Corresponding Control in**

**PowerCOBOL V3.0 or earlier:**

Print Item.

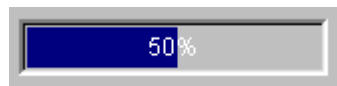
## 3.26 ProgressIndicator Control

**Description:**

The ProgressIndicator control displays a bar indicating the progress of an operation such as copying large files.

The progress bar can be made up of several blocks or be a continuous "smooth" bar.

**Sample image:**



**Properties:**

|                   |                |              |             |
|-------------------|----------------|--------------|-------------|
| Appearance        | DisplayRate    | Left         | Smooth      |
| Array             | Enabled        | Max          | Step        |
| BackColor         | Font           | Min          | ToolTipText |
| BorderStyle       | ForeColor      | Name         | Top         |
| ClassMajorVersion | Height         | Orientation  | Value       |
| ClassMinorVersion | Highlight      | Parent       | Visible     |
| ClassProgID       | HighlightColor | Printable    | Width       |
| Container         | Index          | ScaleMode    |             |
|                   |                | ScalingStyle |             |

**Methods:**

|              |         |        |
|--------------|---------|--------|
| Move         | Refresh | ZOrder |
| ProgressStep |         |        |

**Events:**

|        |           |         |
|--------|-----------|---------|
| Change | MouseDown | MouseUp |
|--------|-----------|---------|

Click                      MouseMove                      Stepped

**Class ProgID name:** Fujitsu.PcobProgressIndicator.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

### 3.27 ScrollBar Control

---

**Description:** The ScrollBar control consists of a scroll box that slides within the scroll bar. Arrows at either end allow for small step movement, and clicking in the scroll bar provides large step movement.

Use ScrollBar controls to provide variable positioning within items too large to display in the available space.



|                    |                   |             |              |             |
|--------------------|-------------------|-------------|--------------|-------------|
| <b>Properties:</b> | Array             | Index       | Printable    | TabStop     |
|                    | BackColor         | LargeStep   | ScaleMode    | ToolTipText |
|                    | ClassMajorVersion | Left        | ScalingStyle | Top         |
|                    | ClassMinorVersion | Max         | ScrollPage   | Value       |
|                    | ClassProgID       | Min         | SmallStep    | Visible     |
|                    | Container         | Name        | TabGroup     | Width       |
|                    | Enabled           | Orientation | TabIndex     |             |
|                    | Height            | Parent      |              |             |
| <b>Methods:</b>    | Move              | Refresh     | SetFocus     | ZOrder      |
| <b>Events:</b>     | Change            | KeyDown     | LostFocus    | MouseUp     |
|                    | EndScroll         | KeyPress    | MouseDown    |             |
|                    | GotFocus          | KeyUp       | MouseMove    |             |

**Class ProgID name:** Fujitsu.PcobScrollBar.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** HorizontalScrollBar Item.  
VerticalScrollBar Item.

### 3.28 Shape Control

---

**Description:** The Shape control provides rectangular and elliptical shapes with a variety of border and fill styles.



Some sample shapes.

|                    |            |                   |        |              |
|--------------------|------------|-------------------|--------|--------------|
| <b>Properties:</b> | Appearance | BorderWidth       | Height | ScalingStyle |
|                    | Array      | ClassMajorVersion | Index  | ShapeStyle   |
|                    | BackColor  | ClassMinorVersion | Left   | ToolTipText  |
|                    | BackStyle  | ClassProgID       | Name   | Top          |

|   |                     |           |           |         |
|---|---------------------|-----------|-----------|---------|
|   | BorderColor         | Container | Parent    | Visible |
|   | BorderRound         | FillColor | Printable | Width   |
|   | BorderStyle         | FillStyle | ScaleMode |         |
| <b>Methods:</b>   | Move                | Refresh   | ZOrder    |         |
| <b>Events:</b>  | None                |           |           |         |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobShape.4 |           |           |         |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Rectangle Item.     |           |           |         |

## 3.29 Slider Control

---

**Description:** The Slider control provides a sliding "thumb" for convenient input of variable numbers. The Slider control can display graduation marks ("ticks") and display a colored range bar within the control.

**Sample image:**



|   |                      |             |              |               |
|---|----------------------|-------------|--------------|---------------|
| <b>Properties:</b>  | Appearance           | Index       | ScaleMode    | TickFrequency |
|   | Array                | LargeStep   | ScalingStyle | TickPosition  |
|   | AutoTick             | Left        | SelectEnd    | TickStyle     |
|   | BorderStyle          | Max         | SelectStart  | ToolTipText   |
|   | ClassMajorVersion    | Min         | SmallStep    | Top           |
|   | ClassMinorVersion    | Name        | TabGroup     | Value         |
|   | ClassProgID          | Orientation | TabIndex     | ValueTips     |
|   | Container            | Parent      | TabStop      | Visible       |
|   | Enabled              | Printable   | ThumbVisible | Width         |
|   | Height               | RangeSelect | TickCount    |               |
| <b>Methods:</b>   | AddTick              | ClearTicks  | Move         | SetFocus      |
|   | ClearSelect          | DeleteTick  | Refresh      | ZOrder        |
| <b>Events:</b>  | Change               | GotFocus    | KeyUp        | MouseMove     |
|   | Click                | KeyDown     | LostFocus    | MouseUp       |
|   | EndScroll            | KeyPress    | MouseDown    |               |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobSlider.4 |             |              |               |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | None                 |             |              |               |

## 3.30 StaticText Control

---

**Description:** The StaticText control displays text that the user cannot edit. PowerCOBOL provides the ability to format the text according to standard COBOL PICTUREs and date formats.

**Sample image:**



**Properties:**

|                   |                   |              |             |
|-------------------|-------------------|--------------|-------------|
| Alignment         | ClassMinorVersion | Index        | TabGroup    |
| Appearance        | ClassProgID       | Left         | TabIndex    |
| Array             | Container         | Name         | ToolTipText |
| BackColor         | Enabled           | Parent       | Top         |
| BackStyle         | Font              | Printable    | UseMnemonic |
| BorderRound       | ForeColor         | RenderText   | Visible     |
| BorderStyle       | Height            | ScaleMode    | Width       |
| Caption           | Highlight         | ScalingStyle |             |
| ClassMajorVersion | HighlightColor    |              |             |

**Methods:**

|      |         |        |
|------|---------|--------|
| Move | Refresh | ZOrder |
|------|---------|--------|

**Events:**

|        |           |           |
|--------|-----------|-----------|
| Change | DbtClick  | MouseMove |
| Click  | MouseDown | MouseUp   |

**Class ProgID name:** Fujitsu.PcobStaticText.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** Label Item  
Date Item

### 3.31 Tab Control

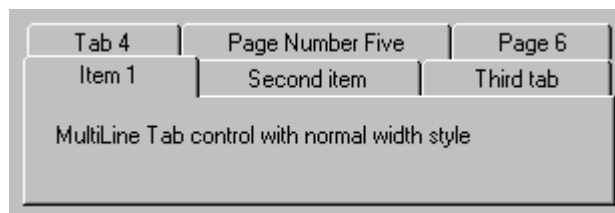
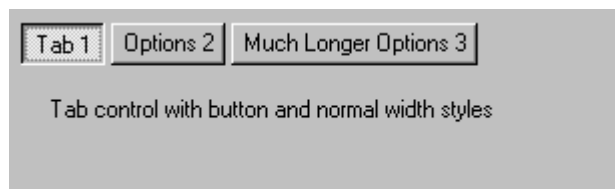
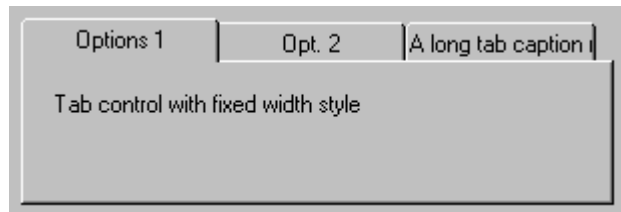
---

**Description:**

The Tab control provides multiple pages on which other controls can be placed. The user switches between pages by clicking on file-folder style tabs or "latching" buttons (buttons that stay depressed to indicate an item is selected).

You can select a number of styles in the Tab control including: location of tabs, fixed or variable width tabs, and single or multiple lines of tabs.

**Sample images:**



**Details:** Controls placed on the Tab control are at the same level as the Tab control i.e. they are referenced by their names, not as sub-controls of the Tab control. For example to set the Text property of a TextBox placed on the Tab control code:

```
MOVE "Bananas" TO "Text" OF TextBoxName
```

(NOT "Text" OF TextBoxName OF TabControlName)

|                    |                   |             |                |               |
|--------------------|-------------------|-------------|----------------|---------------|
| <b>Properties:</b> | Array             | CurrentPage | PageCount      | TabGroup      |
|                    | Caption           | Enabled     | PageTooltip    | TabIndex      |
|                    | ClassMajorVersion | Font        | Parent         | TabStop       |
|                    | ClassMinorVersion | Height      | Printable      | TabWidthStyle |
|                    | ClassProgID       | Index       | ScaleMode      | TooltipText   |
|                    | ClientHeight      | Left        | ScalingStyle   | Top           |
|                    | ClientLeft        | MultiLine   | Style          | Visible       |
|                    | ClientTop         | Name        | TabFixedHeight | Width         |
|                    | ClientWidth       | Orientation | TabFixedWidth  |               |
|                    | Container         | PageCaption |                |               |
| <b>Methods:</b>    | Move              | Refresh     | SetFocus       | ZOrder        |
| <b>Events:</b>     | BeforeClick       | KeyDown     | LostFocus      | MouseUp       |
|                    | Click             | KeyPress    | MouseDown      |               |
|                    | GotFocus          | KeyUp       | MouseMove      |               |

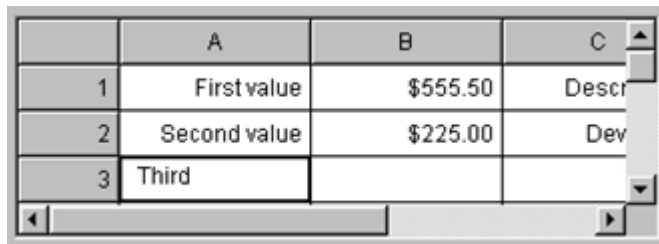
**Class ProgID name:** Fujitsu.PcobTabControl.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

### 3.32 Table Control

**Description:** The Table control presents data for display and editing in a table.

**Sample image:**



**Details:** The data of individual cells is handled in TableCell objects. You can access these using the TableCells property.

For example to set a cell in the second row of the third column to "ABC":

```
MOVE "ABC" TO "Text" OF "TableCells" (2 3)
OF TABLE1
```

The properties of each column are handled in TableColumn objects. You can access these using the TableColumns property.

For example to set the width of the third column to 500 units:

```
MOVE 500 TO "Width" OF "TableColumns" (3)
      OF Table1
```

**Editing the TableColumns list:** You can use the following key strokes when editing the TableColumns list in the Columns property page of the Table control:

[Alt + Up Arrow] : Move the selected elements upward.

[Alt + Down Arrow] : Move the selected elements downward.

**Input:** You can control which columns can be edited by setting the Writable property to True or False at execution time.

Data can be entered to writable table cells when:

- The AutoEdit property of the TableColumn object is set to True and the cell gains focus.
- The cell has focus and a character key is pressed.
- The cell has focus and the ENTER key is pressed.
- The cell has focus and a double click is executed over the cell.

Data entry is concluded when:

- The ENTER key is pressed.
- The focus is lost by using one of the direction keys.
- The DecisionMaxString property is True and the input data reaches the effective maximum string length.

|                    |                   |                  |                |              |
|--------------------|-------------------|------------------|----------------|--------------|
| <b>Properties:</b> | Appearance        | Column           | Highlight      | ScalingStyle |
|                    | AutoRowHeight     | ColumnCaption    | HighlightColor | SelectText   |
|                    | Array             | ColumnCount      | IMEMode        | TabGroup     |
|                    | BackColor         | Container        | Index          | TabIndex     |
|                    | BackStyle         | DecisionMax-     | Left           | TableCells   |
|                    | BorderStyle       | String           | Name           | TableColumns |
|                    | CaptionBackGray   | DefaultRowHeight | Parent         | TabStop      |
|                    | CellLines         | Enabled          | Printable      | ToolTipText  |
|                    | ClassMajorVersion | Font             | Row            | Top          |
|                    | ClassMinorVersion | ForeColor        | RowCaption     | Visible      |
|                    | ClassProgID       | Height           | RowCount       | Width        |
|                    | ClickColumn       | HideSelection    | ScaleMode      |              |
|                    | ClickRow          |                  |                |              |
| <b>Methods:</b>    | ClearTable        | Refresh          | SetFocus       | ZOrder       |
|                    | Move              | SelectCell       |                |              |
| <b>Events:</b>     | Click             | GotFocus         | KeyUp          | MouseMove    |
|                    | DbClick           | KeyDown          | LostFocus      | MouseUp      |
|                    | Edit              | KeyPress         | MouseDown      | Return       |

**Class ProgID name:** Fujitsu.PcobTable.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** Table Item.

### 3.33 TextBox Control

---

**Description:** The TextBox control provides text entry and editing functions. It offers single and multiple line entry and formatting of entered character strings.

**Sample images:**

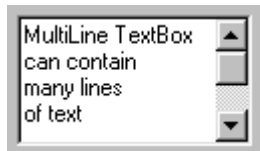
TextBox:



TextBox with Edit Window:



Multi-line TextBox:



**Details:** The RenderText property enables formatting of the text using COBOL PICTURE string or date formats.

You can input the text string into an "edit window" by setting the EditableLabel property to True.

Data can be entered when:

- The AutoEdit property (which can be set in the EditableLabel group of the SingleLine property page) is True and the TextBox receives focus.
- A character key is pressed.
- The ENTER key is pressed.
- A doubleclick is executed over the TextBox control.

Data entry is concluded when:

- The ENTER key is pressed.
- The focus is lost and moved to another control.
- The DecisionMaxString property (which can be set in the EditableLabel group of the SingleLine property page) is True and the input data reaches the effective maximum string length.
- The EditableLabel property is True and you are entering text strings to the "edit window", the "edit window" disappears when you press the ESC key.

**Properties:**

|                   |                   |              |             |
|-------------------|-------------------|--------------|-------------|
| Alignment         | DecisionMaxString | MaxLength    | TabGroup    |
| Appearance        | EditableLabel     | MultiLine    | TabIndex    |
| Array             | Enabled           | Name         | TabStop     |
| AutoEdit          | Font              | Parent       | Text        |
| AutoHScroll       | ForeColor         | Password     | TextCase    |
| BackColor         | Height            | PasswordChar | ToolTipText |
| BackStyle         | Highlight         | Printable    | Top         |
| BorderStyle       | HighlightColor    | ReadOnly     | Visible     |
| ClassMajorVersion | HScrollBar        | RenderText   | VScrollBar  |
| ClassMinorVersion | IMEMode           | ScaleMode    | Width       |
| ClassProgID       | Index             | ScalingStyle |             |
|                   | Left              | SelectText   |             |

|   |                                 |          |           |         |
|---|---------------------------------|----------|-----------|---------|
|   | Container                       |          |           |         |
| <b>Methods:</b>   | LoadFile                        | Refresh  | SetFocus  |         |
|   | Move                            | SaveFile | ZOrder    |         |
| <b>Events:</b>  | Change                          | GotFocus | LostFocus | MouseUp |
|   | Click                           | KeyDown  | MouseDown | Return  |
|   | DblClick                        | KeyPress | MouseMove |         |
|   | Edit                            | KeyUp    |           |         |
| <b>Class ProgID name:</b>                                   | Fujitsu.PcobTextBox.4           |          |           |         |
| <b>Corresponding Control in PowerCOBOL V3.0 or earlier:</b> | Edit Item.<br>PictureEdit Item. |          |           |         |

### 3.34 Timer Control

---

**Description:** The Timer control receives events that are generated at the interval specified in the Interval property. Use it to control functions that must take place at preset time intervals.

**Sample image:**



This image is only visible at design time.

The Timer control is invisible at execution time.

|                    |                   |             |        |           |
|--------------------|-------------------|-------------|--------|-----------|
| <b>Properties:</b> | Active            | ClassProgID | Left   | ScaleMode |
|                    | Array             | Container   | Name   | Top       |
|                    | ClassMajorVersion | Index       | Parent |           |
|                    | ClassMinorVersion | Interval    |        |           |

**Methods:** None

**Events:** Timer

**Class ProgID name:** Fujitsu.PcobTimer.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** Timer Item.

### 3.35 Toolbar Control

---

**Description:** The Toolbar control can have single or multiple buttons.

Other controls can also be placed on the Toolbar control.

**Sample image:**



**Details:** Details of the buttons are contained in Button objects.



For example, to refer to the title string (Caption property) of the second button of the Toolbar control, whose name is "Toolbar1", code:

```
MOVE "Caption" OF Buttons (2) OF Toolbar1
    TO ...
```

However, other controls placed on toolbars are not referred to as part of the toolbar. For example, if the StaticText control whose name is "CmStatic1" is on the Toolbar control and you want to set its Caption property to "ABC", code:

```
MOVE "ABC" TO "Caption" OF CmStatic1
```

**(NOT: MOVE "ABC" TO "Caption" OF CmStatic1 OF Toolbar1)**

For each button that has an image, set the ImageIndex property to the index of the image within the image list containing the button images.

**Image Lists:**

The images for the toolbar buttons are held in image list files. The normal, enabled image is held in the file defined in the ImageList property. The disabled image is held in the file defined in the DisabledImageList property. If you want a different image when the mouse pointer is over the button (the typical behavior when you are using flat toolbar buttons) then you put those images in the file defined in the HotImageList property.

The general size of toolbar button bitmaps is 16x15 pixels. Therefore the width of the image list(s) should be a multiple of 16 and the height should be 15. For this type of image, set the ImageWidth of the image list (that you add to the module) to 16.

If the Align property is set to "3 - Left" or "4 - Right", the height of the control (the value of Height property) is the same as the value of the ClientHeight property of the Form object. Otherwise, the height of the control is set automatically depending on the size of the image list and Caption property of the Button objects on the Toolbar control. This means that you are not able to set the height of the control.

If the DisabledImageList or HotImageList property is not set, PowerCOBOL uses the image list defined in the ImageList property when the button is disabled or "hot".

The values of the ImageWidth property for the ImageList , DisabledImageList and HotImageList properties should be the same.

**Properties:**

|            |                   |                   |                    |                |
|------------|-------------------|-------------------|--------------------|----------------|
|            | Align             | Divider           | Index              | TabGroup       |
|            | Array             | DisabledImageList | Left               | TabIndex       |
|            | BackColor         | ForeColor         | Name               | ToolTipText    |
|            | Buttons(a)        | Height            | Parent             | Top            |
|            | ClassMajorVersion | Highlight         | Printable          | UseSystemColor |
|            | ClassMinorVersion | HighlightColor    | ScaleMode          | Visible        |
|            | ClassProgID       | HotImageList      | ScalingStyle       | Width          |
|            | Container         | ImageList         | ShowToolTips Style | Wrapable       |
|            | Count             |                   |                    |                |
| - Methods: | Move              | Refresh           | ZOrder             |                |
| - Events:  | ButtonClick       | MouseDown         | MouseMove          | MouseUp        |
|            | DropDown          |                   |                    |                |

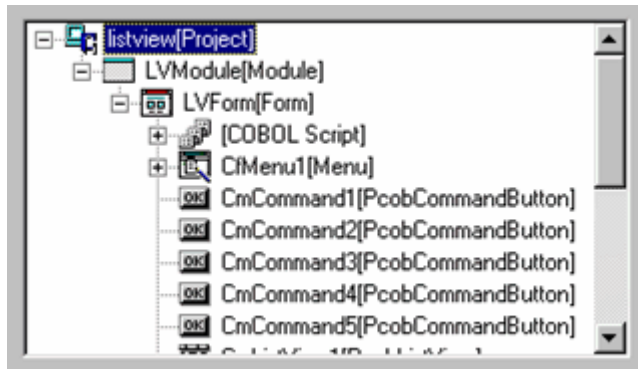
**Class ProgID name:** Fujitsu.PcobToolbarControl.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

## 3.36 TreeView Control

**Description:** The TreeView control is a special list box that enables hierarchical relationships to be displayed.

**Sample image:**



A TreeView control

**Details**

Each item in the hierarchy is defined using a Node object. First define root Node objects, then define child Node objects which can have their own children.

For example to refer to the text string of the third child node defined in the second root node:

```
MOVE "Text" OF "Child" (3) OF Root (2) OF
TreeView1 TO ...
```

**Properties:**

|                   |               |               |             |
|-------------------|---------------|---------------|-------------|
| Appearance        | Font          | Name          | TabIndex    |
| Array             | Height        | Parent        | TabStop     |
| BorderStyle       | HideSelection | PathSeparator | ToolTipText |
| ClassMajorVersion | ImageList     | Root          | Top         |
| ClassMinorVersion | IMEMode       | ScaleMode     | TotalCount  |
| ClassProgID       | Indentation   | ScalingStyle  | TVLineStyle |
| Container         | Index         | SelNode       | TVStyle     |
| Count             | LabelEdit     | Sorted        | Visible     |
| Enabled           | Left          | TabGroup      | Width       |

**Methods:**

|        |        |          |           |
|--------|--------|----------|-----------|
| Add    | Insert | Refresh  | StartEdit |
| Clear  | Move   | SetFocus | ZOrder    |
| Delete |        |          |           |

**Events:**

|          |          |           |           |
|----------|----------|-----------|-----------|
| Click    | Expand   | KeyUp     | MouseUp   |
| Collapse | GotFocus | LostFocus | NodeClick |
| DbClick  | KeyDown  | MouseDown | Return    |
| Edit     | KeyPress | MouseMove |           |

**Class ProgID name:** Fujitsu.PcobTreeView.4

**Corresponding Control in PowerCOBOL V3.0 or earlier:** None

# Chapter 4 Properties

This chapter describes all the PowerCOBOL properties.

## 4.1 Introduction to the PowerCOBOL Properties

Properties are attributes of PowerCOBOL objects and controls. They determine behavior and appearance.

This section describes the make up of all the PowerCOBOL properties. The following information is provided on each property:

|                                 |   |
|---------------------------------|---|
| <b>Property name:</b>           | The name of the property is the string used in the topic title.   |
| <b>Description:</b>             | Describes the purpose of the property.  |
| <b>Used in control(s):</b>      | Lists the controls or objects that have the property.   |
| <b>Values (with constants):</b> | Lists and describes the possible values for the property.<br><br>Where relevant, the PowerCOBOL constants that can be used for the values are provided in parentheses beside the applicable value. For example for the AccessMode property:<br><br>0 - Read-Write access (POW-DB-READWRITE)<br><br>This means you can use POW-DB-READWRITE instead of the numeric literal 0 in your code: |

```
IF "AccessMode" OF CmDb1  
= POW-DB-READWRITE . . .
```

|   |   |
|---|---|
| <b>Default value:</b>                     | Gives the default value for the property.   |
| <b>COBOL picture:</b>                     | Provides the COBOL picture description for the property.  |
| <b>OLE data type:</b>                     | Gives the OLE data type of the property.  |
| <b>Design time access:</b>                | Whether the property can be set and/or referenced at design time.   |
| <b>Execution time access:</b>             | Whether the property can be set and/or referenced at execution time.  |
| <b>Backward compatibility attributes:</b> | The equivalent attributes (if any) from earlier releases of PowerCOBOL. Use the "Property name" rather than these attribute names when creating new applications. |

### 4.1.1 Editing Properties

You edit properties by using either the Properties dialog in the Edit Form window or the Property Value list in the PowerCOBOL Project Manager window.

Properties that can only be set at execution time and ones whose OLE data types are VT\_DISPATCH are not displayed in the Property Value list.

### 4.1.2 Using Properties in PowerCOBOL Procedures

The syntax for using properties in PowerCOBOL procedures is:

```
"Property-name" OF Control-name
```

For example to change the Caption property of the static text control "StaticText1" to the value in data item WORK-1 you code:

```
MOVE WORK-1 TO "Caption" OF StaticText1.
```

Where WORK-1 is an alphanumeric item.

## 4.2 AccessMode Property

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether or not the database can be updated.                            |
| <b>Used in control(s):</b>               | DBAccess  |
| <b>Values (with constants):</b>          | 0 - Read-Write access (POW-DB-READWRITE)<br>1 - Read-Only access(POW-DB-READONLY) |
| <b>Default value:</b>                    | 1 - Read-Only access(POW-DB-READONLY)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | POW-DBREADONLY PIC S9(4) COMP-5   |

## 4.3 Active Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Controls whether the timer starts or stops.   |
| <b>Used in control(s):</b>               | Timer   |
| <b>Values (with constants):</b>          | True:Start(POW-TRUE)<br>False:Stop(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)                              |
| <b>COBOL picture:</b>                    | S9(4) COMP-5                                  |
| <b>OLE data type:</b>                    | VT_BOOL                                       |
| <b>Design time access:</b>               | Set and reference.                            |
| <b>Execution time access:</b>            | Set and reference.                            |
| <b>Backward compatibility attribute:</b> | POW-ACTIVATEPIC S9(4) COMP-5                  |

## 4.4 ActiveControl Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Contains a pointer to the control that has the focus.  |
| <b>Used in controls:</b>                  | None.  |
| <b>Used in objects:</b>                   | Form   |
| <b>Value:</b>                             | A pointer to the control, which has focus on the form.<br><br>If no control has focus the value is NULL. Use the constant POW-NULL to check if the value is set.<br><br>The value can be accessed using the NetCOBOL *COM class.<br><br>Note: it cannot be accessed like other properties. See the Example of Using the ActiveControl Property on the next page. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | OBJECT REFERENCE POW-COBJECT   |
| <b>OLE data type:</b>                     | VT_DISPATCH  |
| <b>Design time access:</b>                | Not accessible.  |
| <b>Execution time access:</b>             | Reference only.  |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.4.1 Example of Using the ActiveControl Property

The following program retrieves and displays the control that has the focus. Note that although ActiveControl is a property of the Form it is not accessed like other properties. You have to use the \*COM class. Also notice that POW-NULL is used to set and test PowerCOBOL POW-COBJECT items, such as the ActiveControl property, while the OOCOBOL NULL object is used to set and test the \*COM objects.

```
DATA          DIVISION.
WORKING-STORAGE SECTION.
01 COM-FORM   OBJECT REFERENCE COM.
01 COM-ACT-CTL OBJECT REFERENCE COM.
01 CTL-NAME   PIC X(14).
PROCEDURE     DIVISION.
* OBJECT REFERENCE POW-COBJECT is compared with POW-NULL.
  IF "ActiveControl" OF POW-SELF = POW-NULL THEN
    DISPLAY "No control has the focus."
    EXIT PROGRAM
  ELSE
    CALL "POWERCONVTOCOM" USING POW-SELF
      RETURNING COM-FORM
    INVOKE COM-FORM "GET-ACTIVECONTROL"
      RETURNING COM-ACT-CTL
* OBJECT REFERENCE COM is compared with NULL object.
  IF COM-ACT-CTL NOT = NULL THEN
    INVOKE COM-ACT-CTL "GET-NAME" RETURNING CTL-NAME
    DISPLAY CTL-NAME " has the focus."
    SET COM-ACT-CTL TO NULL
  ELSE
    DISPLAY "Error"
  END-IF
  SET COM-FORM TO NULL
END-IF
```

## 4.5 Align Property

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Indicates the alignment of the control within the container.  |
| <b>Used in control(s):</b>      | Custom                      Toolbar   |
| <b>Values (with constants):</b> | 0 - None(POW-ALIGNNONE)<br>1 - Top(POW-ALIGNTOP)<br>2 - Bottom(POW-ALIGNBOTTOM)<br>3 - Left(POW-ALIGNLEFT)<br>4 - Right(POW-ALIGNRIGHT) |
| <b>Default value:</b>           |   |
| <i>Toolbar</i>                  | 1 - Top(POW-ALIGNTOP)   |
| <i>Custom</i>                   | 0 - None(POW-ALIGNNONE)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |
| <b>OLE data type:</b>           | VT_I2   |
| <b>Design time access:</b>      |   |
| <i>Toolbar</i>                  | Set and reference.  |
| <i>Custom</i>                   | Reference only.   |
|                                 | Note that Custom controls that can be justified can be set.   |
| <b>Execution time access:</b>   |   |
| <i>Toolbar</i>                  | Set and reference.  |
| <i>Custom</i>                   | Reference only.   |

**Backward compatibility attribute:** Note that Custom controls that can be justified can be set. None.

## 4.6 Alignment Property

---

**Description:** Gives the alignment of the character string(s), specified in the Caption property, within the control or object.

**Used in:**

|                 |          |              |            |         |
|-----------------|----------|--------------|------------|---------|
| <i>Controls</i> | CheckBox | Label        | StaticText | TextBox |
|                 | Frame    | OptionButton |            |         |
| <i>Objects</i>  | Column   | TableColumn  |            |         |

**Values (with constants):**

*CheckBox and OptionButton* 0 - Left(POW-CAPTIONALIGNMENT-LEFT)  
1 - Right(POW-CAPTIONALIGNMENT-RIGHT)

*TextBox and Column* 0 - Left(POW-TEXTALIGNMENT-LEFT)  
1 - Center(POW-TEXTALIGNMENT-CENTER)  
2 - Right(POW-TEXTALIGNMENT-RIGHT)

For the TextBox control, it is only effective when the EditableLabel property is True and the MultiLine property is False.

When the text is being edited the alignment is left justified regardless of the value of the Alignment property.

*Frame* 1 - Top/HCenter(POW-ALIGNMENT-TOPHCENTER)  
2 - Top/Right(POW-ALIGNMENT-TOPRIGHT)  
4 - VCenter/Left(POW-ALIGNMENT-VCENTERLEFT)  
5 - VCenter/HCenter (POW-ALIGNMENT-VCENTERHCENTER)  
6 - VCenter/Right (POW-ALIGNMENT-VCENTERRIGHT)  
8 - Bottom/Left(POW-ALIGNMENT-BOTTOMLEFT)  
9 - Bottom/HCenter (POW-ALIGNMENT-BOTTOMHCENTER)  
10 - Bottom/Right (POW-ALIGNMENT-BOTTOMRIGHT)  
99 - Auto(POW-ALIGNMENT-AUTO)

Note that:

If the FrameStyle property is "0 - GroupBox",  
the values 0, 4 or 8 are Top/Left,  
the values 1, 5 or 9 are Top/HCenter,  
the values 2, 6 or 10 are Top/Right.

If the value is "99 - Auto" and the FrameStyle property is "0 - GroupBox" the alignment becomes Top/Left.

If the value is "99 - Auto" and the FrameStyle property is "1 - Panel", the alignment becomes VCenter/HCenter.

*StaticText and TableColumn* 0 - Top/Left(POW-ALIGNMENT-TOPLEFT)  
1 - Top/HCenter (POW-ALIGNMENT-TOPHCENTER)  
2 - Top/Right(POW-ALIGNMENT-TOPRIGHT)  
4 - VCenter/Left(POW-ALIGNMENT-VCENTERLEFT)  
5 - VCenter/HCenter (POW-ALIGNMENT-VCENTERHCENTER)

- 6 - VCenter/Right (POW-ALIGNMENT-VCENTERRIGHT)
- 8 - Bottom/Left(POW-ALIGNMENT-BOTTOMLEFT)
- 9 - Bottom/HCenter(POW-ALIGNMENT-BOTTOMHCENTER)
- 10 - Bottom/Right (POW-ALIGNMENT-BOTTOMRIGHT)

For the Table control, when a cell is being edited, the alignment is left justified regardless of the value of the Alignment property.

**Default values:**

- CheckBox* 1 - Right(POW-CAPTIONALIGNMENT-RIGHT)
- Column* 0 - Left(POW-TEXTALIGNMENT-LEFT)
- Frame* 99 - Auto(POW-ALIGNMENT-AUTO)
- OptionButton* 1 - Right(POW-CAPTIONALIGNMENT-RIGHT)
- StaticText* 0 - Top/Left(POW-ALIGNMENT-TOPLEFT)
- TableColumn* 6 - VCenter/Right(POW-ALIGNMENT-VCENTERBOTTOM)
- TextBox* 2 - Right(POW-TEXTALIGNMENT-RIGHT)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:**

*For CheckBox, OptionButton, and StaticText* POW-TEXTPOSPIC S9(4) COMP-5

## 4.7 Appearance Property

---

**Description:** Indicates whether the object or control has a flat or 3D appearance.

**Used in:**

|                 |            |          |                   |            |
|-----------------|------------|----------|-------------------|------------|
| <i>Controls</i> | Animation  | Graph    | MCI               | StaticText |
|                 | Edit       | GroupBox | ProgressIndicator | Table      |
|                 | FileList   | Image    | Shape             | TextBox    |
|                 | FolderList | Listbox  | Slider            | TreeView   |
|                 | Frame      | ListView |                   |            |

*Object* Form

**Values (with constants):** 0 - Flat(POW-APPEARANCE-FLAT)  
1 - 3D(POW-APPEARANCE-3D)

**Specific Details:**

*Form* Makes the border to the client area 3D or flat.

*Frame* It is not effective when the FrameStyle is "1-Panel" and the BorderStyle is "0-None".

*Shape* It is only effective when:  
ShapeStyle property is "0-Rectangle" or "1 - Square"  
and  
BorderStyle property is "1 - Solid" or "6-InsideFrame"  
and  
BorderRound property is 0.

*Others* It is only effective when BorderStyle property is "1 - Solid".

|  |                               |
|--|-------------------------------|
| <b>Default values:</b>                   |                               |
| <i>Form and Shape</i>                    | 0 - Flat(POW-APPEARANCE-FLAT) |
| <i>Others</i>                            | 1 - 3D(POW-APPEARANCE-3D)     |
| <b>COBOL picture:</b>                    | S9(4) COMP-5                  |
| <b>OLE data type:</b>                    | VT_I2                         |
| <b>Design time access:</b>               | Set and reference.            |
| <b>Execution time access:</b>            | Set and reference.            |
| <b>Backward compatibility attribute:</b> | None.                         |

## 4.8 Archive Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the list box shows files with the archive attribute set.  |
| <b>Used in control(s):</b>               | FileList   |
| <b>Values (with constants):</b>          | True:Files with the archive attribute are listed. (POW-TRUE)<br>False:Files with the archive attribute are not listed. (POW-FALSE) |
| <b>Default value:</b>                    | False: (POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-ARCHPIC S9(4) COMP-5   |

## 4.9 Arrange Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the position of icons in the ListView control, small and large icon modes.  |
| <b>Used in control(s):</b>               | ListView  |
| <b>Values (with constants):</b>          | 0 - None: (POW-LVICON-AUTO)<br>Arranges the items automatically.<br>1 - Left:(POW-LVICON-LEFT)<br>Arranges the items from top to bottom, left to right.<br>2 - Top:(POW-LVICON-TOP)<br>Arranges the items from left to right, top to bottom.<br>It is only effective when the LVStyle property is "0 - Large icon" or "1 - Small icon". |
| <b>Default value:</b>                    | 0 - None: (POW-LVICON-AUTO)   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.10 Array property

---



|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether or not the control is part of an array.  |
| <b>Used in control(s):</b>               | All controls except the GroupBox control.  |
| <b>Values (with constants):</b>          | True: The control is part of an array.(POW-TRUE)<br>False: The control is not part of an array.(POW-FALSE) |
| <b>Default value:</b>                    | False: (POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Not accessible.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.11 AutoChange Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether double click makes the double-clicked folder the current folder.   |
| <b>Used in control(s):</b>               | FolderList  |
| <b>Values (with constants):</b>          | True - Makes the folder the current folder.(POW-TRUE)<br>False - Does not make the folder the current folder.(POW-FALSE)<br><br>If you set the property to True and double-click a folder, the current folder is changed but the change is not notified to other controls. Therefore you need to add code like that shown below in the Change event or other events.<br><br>For example in the FolderControlName-Change event:<br><b>ENVIRONMENT DIVISION.</b><br><b>DATA DIVISION.</b><br><b>WORKING-STORAGE SECTION.</b><br><b>PATH PIC X(260).</b><br><b>PROCEDURE DIVISION.</b><br><b>MOVE "Path" OF FolderControlName</b><br><b>TO PATH</b><br><b>MOVE PATH</b><br><b>TO "Path" OF FileControlName</b> |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.12 AutoEdit Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Determines whether the TextBox control or cells are put into edit mode as soon as they receive the focus. |
| <b>Used in controls:</b>        | TextBox   |
| <b>Used in object:</b>          | TableColumn   |
| <b>Values (with constants):</b> | True:Cells are put into edit mode when they receive the focus.(POW-TRUE)                                  |

|  |  |
|--|--|
|  | False:Cells do not enter edit mode when they receive the focus.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.13 AutoHScroll Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether text scrolls horizontally or wraps to the next line in a TextBox.   |
| <b>Used in control(s):</b>               | TextBox   |
| <b>Values (with constants):</b>          | True - Text scrolls horizontally automatically. When the text reaches the end of the textbox a scroll bar is displayed and input continues on the same line.(POW-TRUE)<br>False - Text wraps to the next line.(POW-FALSE) |
| <b>Default value:</b>                    | True (POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.14 AutoLoadFile Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether to load the new file automatically when either the FileType or RecordForm property is changed.  |
| <b>Used in control(s):</b>               | ComboBox  |
| <b>Values (with constants):</b>          | True - Loads the file automatically.(POW-TRUE)<br>False - Does not load the file automatically.(POW-FALSE)<br>If it is False the control only loads the file when the FileName property is set.<br>Note that, if the AutoLoadFile property is set to False you cannot change the field when the CurFieldNo property is changed. |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.15 AutoOpen Property

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Determines whether to open the device automatically at execution time. |
|---------------------|--|

|  |   |
|--|---|
| <b>Used in control(s):</b>               | MCI   |
| <b>Values (with constants):</b>          | True:Opens automatically. (POW-TRUE)<br>False:Does not open automatically.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.16 AutoPlay Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether the animation or media is started automatically.                     |
| <b>Used in control(s):</b>               | Animation            MCI   |
| <b>Values (with constants):</b>          | True:Starts automatically.(POW-TRUE)<br>False:Does not start automatically.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.17 AutoRowHeight Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether the height is adjusted automatically according to the font size, or if the value specified in the DefaultRowHeight property is used. |
| <b>Used in control(s):</b>               | Table  |
| <b>Values (with constants):</b>          | True - The height is adjusted automatically.(POW-TRUE)<br>False - The DefaultRowHeight value is used.(POW-FALSE)                                       |
| <b>Default value:</b>                    | True (POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.18 AutoSize Property

---

|                            |  |
|----------------------------|--|
| <b>Description:</b>        | Indicates whether the length of the list box should be determined by the number of items to be listed. |
| <b>Used in control(s):</b> | ComboBox            DriveList  |

|  |  |
|--|--|
| <b>Values (with constants):</b>          | True:The length is set automatically.(POW-TRUE)<br>False:The length of the list is set at design time.(POW-FALSE)<br><br>When AutoSize is set to True, the maximum number of items displayed in the list box is from four to six. The number of items depends on the value of the Size property of the Font object.<br><br>For the ComboBox control, it is only effective when the Style property is "1 - DropDown" or "2 - DropDownList". |
| <b>Default value:</b>                    | False (POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.19 AutoTick Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether graduation marks ("ticks") are displayed at intervals determined by the TickFrequency property.   |
| <b>Used in control(s):</b>               | Slider  |
| <b>Values (with constants):</b>          | True:Slider displays ticks.(POW-TRUE)<br>False:Does not display ticks.(POW-FALSE)<br><br>Note: You can add ticks using the AddTick method only when the AutoTick property is False. |
| <b>Default value:</b>                    | True(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.20 BackColor Property

---

|                     |   |            |                   |            |
|---------------------|---|------------|-------------------|------------|
| <b>Description:</b> | Defines the background color of the control or object.  |            |                   |            |
| <b>Used in:</b>     |   |            |                   |            |
| <i>Control(s)</i>   | Animation   | FileList   | Label             | ScrollBar  |
|                     | CheckBox  | FolderList | ListBox           | Shape      |
|                     | ComboBox  | Frame      | ListView          | StaticText |
|                     | CommandButton   | Graph      | MCI               | Table      |
|                     | DriveList   | GroupBox   | OptionButton      | TextBox    |
|                     | Edit  | Image      | ProgressIndicator | ToolBar    |
| <i>Objects</i>      | Form  | TableCell  |                   |            |
| <b>Values:</b>      | Refer to "Appendix A, Color Constants" and OLE_COLOR described in "Appendix C, Data Types" for details of color values. |            |                   |            |

|  |  |
|--|--|
|  | It is only effective when the Hilight property is True.  |
| <i>CommandButton</i>                     | It is only effective when the UseSystemColor property is False.  |
| <i>TableCell</i>                         | If the BackColor property is set to a different value from the Table control's BackColor property, the cell is painted in the value of the TableCell object's BackColor property.<br><br>If the BackColor property is set to the same value as the Table control's BackColor property, the cell's BackColor property is initialized and painted in the value of the Table control 's BackColor property. |
| <i>Table</i>                             | Column header cells are only painted when the Appearance property is "0-Flat" and the CaptionBackColor property is False.<br><br>If the BackColor property of a TableCell object is set, the cell is not painted with the Table control's BackColor but uses the TableCell object's BackColor.   |
| <i>Toolbar</i>                           | It is only effective when the UseSystemColor property is False.<br><br>When the Style property is "1-Flat" or "2-FlatList", buttons on the Toolbar Control take on a transparent style and their backcolor becomes the Toolbar's backcolor.  |
| <b>Default value:</b>                    |  |
| <i>Form</i>                              | System's Window Background color   |
| <i>TableCell</i>                         | Table control's BackColor property.  |
| <i>Others</i>                            | Container's BackColor property   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | OLE_COLOR  |
| <b>Design time access:</b>               |  |
| <i>TableCell</i>                         | Not accessible.  |
| <i>Others</i>                            | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-BACKCOLORPIC X(4)  |

## 4.21 BackStyle Property

---

|                                 |   |       |            |         |
|---------------------------------|---|-------|------------|---------|
| <b>Description:</b>             | Indicates whether the background is visible through the control.                                  |       |            |         |
| <b>Used in control(s):</b>      | Animation   | Label | StaticText | TextBox |
|                                 | Graph   | MCI   | Table      |         |
|                                 | Image   | Shape |            |         |
| <b>Values (with constants):</b> | 0 - Transparent(POW-BACKSTYLE-TRANSPARENT)<br>1 - Opaque (POW-BACKSTYLE-OPAQUE)                   |       |            |         |
| <i>Shape</i>                    | Additional value:<br><br>2 - Half transparent(POW-BACKSTYLE-TRANSLUCENT)                          |       |            |         |
| <i>TextBox</i>                  | It is only effective when the EditableLabel property is True and the MultiLine property is False. |       |            |         |
| <b>Default value:</b>           |   |       |            |         |
| <i>Shape</i>                    | 0 - Transparent (POW-BACKSTYLE-TRANSPARENT)   |       |            |         |
| <i>Others</i>                   | 1 - Opaque (POW-BACKSTYLE-OPAQUE)   |       |            |         |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |       |            |         |
| <b>OLE data type:</b>           | VT_I2   |       |            |         |
| <b>Design time access:</b>      | Set and reference.  |       |            |         |

|  |                                 |
|--|---------------------------------|
| <b>Execution time access:</b>            | Set and reference.              |
| <b>Backward compatibility attribute:</b> |                                 |
| <i>For the StaticText</i>                | POW-TRANSPARENTPIC S9(4) COMP-5 |

## 4.22 BlankSuppress Property

---

|   |  |
|---|--|
| <b>Description:</b>   | Determines whether blanks are suppressed in strings derived from the COBOL-PICTURE string.   |
| <b>Used in object:</b>  | RenderText   |
| <b>Values (with constants):</b>                                 | True - Blanks are suppressed.(POW-TRUE)<br>False - String is taken as is, including blanks.(POW-FALSE)<br><br>It is only effective when the RenderStyle property is "1 - COBOL-PICTURE". |
| <b>Blanks affected:</b>   |  |
| <i>Figure and Edited Numeric</i>                                | Leading blank(s)   |
| <i>Alphabet, Alphanumeric Character and Alphanumeric Edited</i> | Trailing blank(s)  |
| <i>Japanese and Japanese Edit</i>                               | Trailing em-size blank(s).   |
| <b>Default value:</b>   | False(POW-FALSE)   |
| <b>COBOL picture:</b>   | S9(4) COMP-5   |
| <b>OLE data type:</b>   | VT_BOOL  |
| <b>Design time access:</b>                                      | Set and reference.   |
| <b>Execution time access:</b>                                   | Reference only.  |
| <b>Backward compatibility attribute:</b>                        | None.  |

## 4.23 Bold Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the style of the font is a boldface type. |
| <b>Used in object:</b>                   | Font   |
| <b>Values (with constants):</b>          | True - Bold.(POW-TRUE)<br>False - Not bold.(POW-FALSE)       |
| <b>Default value:</b>                    | Container's Bold property                                    |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-WEIGHTPIC S9(4) COMP-5                                   |

## 4.24 BookName Property

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>Description:</b>        | Contains the Excel book name. |
| <b>Used in control(s):</b> | ExcelConnection               |

|  |                         |
|--|-------------------------|
| <b>Value:</b>                            | The Excel book name.    |
| <b>Default value:</b>                    | None.                   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes     |
| <b>OLE data type:</b>                    | VT_BSTR                 |
| <b>Design time access:</b>               | Set and reference.      |
| <b>Execution time access:</b>            | Set and reference.      |
| <b>Backward compatibility attribute:</b> | POW-SHEETNAMEPIC X(260) |

## 4.25 BorderColor Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines the color of the borderline.   |
| <b>Used in control(s):</b>               | Shape   |
| <b>Value:</b>                            | Color for border line.<br><br>Refer to "Appendix A, Color Constants" and OLE_COLOR described in "Appendix C, Data Types" for details of color values.<br><br>It is only effective when the Appearance property is "0-Flat". |
| <b>Default value:</b>                    | System's Window Text color.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | OLE_COLOR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.26 BorderRound Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the extent of corner rounding for the border.   |
| <b>Used in control(s):</b>               | Shape<br><br>StaticText   |
| <b>Value:</b>                            | 0 to 100<br><br>A value of 0 gives sharp, rectangular corners.<br><br>A value of 100 makes the border into a circle or oval.<br><br>It is only effective when the ShapeStyle property is "0-Rectangular" or "1 - Square".<br><br>Note that if the value of the BorderRound property is not zero and the value of Appearance property is "1 - 3D", the Appearance property is ignored. |
| <b>Default value:</b>                    | 0 - No rounding.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> |   |
| <i>For StaticText</i>                    | POW-ROUNDPIC S9(4) COMP-5   |

## 4.27 BorderStyle Property

---

|   |   |          |                   |          |
|---|---|----------|-------------------|----------|
| <b>Description:</b>                             | Determines the style of the frame.  |          |                   |          |
| <b>Used in:</b>                                 |   |          |                   |          |
| <i>Controls</i>                                 | Animation   | Graph    | MCI               | Table    |
|   | Edit  | GroupBox | ProgressIndicator | TextBox  |
|   | FileList  | Image    | Shape             | TreeView |
|   | FolderList  | ListBox  | Slider            |          |
|   | Frame   | ListView | StaticText        |          |
| <i>Object</i>                                   | Form  |          |                   |          |
| <b>Values (with constants):</b>                 |   |          |                   |          |
| <i>Form</i>                                     | 0 - Variable(POW-BORDER-VARIABLE)<br>1 - Fixed(POW-BORDER-FIXED)<br>2 - Dialog Frame(POW-BORDER-DIALOG)<br>3 - Variable Tool(POW-BORDER-VARIABLETOOL)<br>4 - Fixed Tool(POW-BORDER-FIXEDTOOL)<br>5 - No Frame(POW-BORDER-NOFRAME)   |          |                   |          |
| <i>Shape</i>                                    | 0 - None(POW-BORDER-NONE)<br>1 - Solid(POW-BORDER-SOLID)<br>2 - Dash(POW-BORDER-DASH)<br>3 - Dot(POW-BORDER-DOT)<br>4 - Dash dot(POW-BORDER-DASHDOT)<br>5 - Dash double dot(POW-BORDER-DASHDOTDOT)<br>6 - Inside frame - a solid line within the frame<br>(POW-BORDER-INSIDEFAME) |          |                   |          |
|   | If the value of the BorderWidth property is over 1 pixel and the value of the BorderStyle property is 2 to 5, the value of the BorderStyle property is ignored and the frame is solid.  |          |                   |          |
| <i>Others</i>                                   | 0 - Off (None)(POW-BORDER-NONE)<br>1 - Solid(POW-BORDER-SOLID)  |          |                   |          |
| <b>Default values:</b>                          |   |          |                   |          |
| <i>Form</i>                                     | 0 - Variable(POW-BORDER-VARIABLE)   |          |                   |          |
| <i>StaticText and Slider</i>                    | 0 - Off (None)(POW-BORDER-NONE)   |          |                   |          |
| <i>Others</i>                                   | 1 - Solid(POW-BORDER-SOLID)   |          |                   |          |
| <b>COBOL picture:</b>                           | S9(4) COMP-5  |          |                   |          |
| <b>OLE data type:</b>                           | VT_I2   |          |                   |          |
| <b>Design time access:</b>                      | Set and reference.  |          |                   |          |
| <b>Execution time access:</b>                   |   |          |                   |          |
| <i>Form</i>                                     | Not accessible  |          |                   |          |
| <i>Controls</i>                                 | Set and reference.  |          |                   |          |
| <b>Backward compatibility attribute:</b>        |   |          |                   |          |
| <i>For Image, Shape, StaticText and TextBox</i> | POW-BORDER PIC S9(4) COMP-5   |          |                   |          |

## 4.28 BorderWidth Property

---

**Description:** Defines the thickness of the borderline.



|  |  |
|--|--|
| <b>Used in control(s):</b>               | Shape  |
| <b>Value:</b>                            | Width of the border in the units specified in the ScaleMode property.<br><br>This value should be less than half the size of the Width and Height properties.<br><br>If the specified width is equivalent to 2 pixels or more, PowerCOBOL uses a solid line for the border, overriding the BorderStyle property. |
| <b>Default value:</b>                    | 1 pixel.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.29 BottomMargin Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the depth of the margin at the bottom of the page when the form is printed. |
| <b>Used in control(s):</b>               | Print   |
| <b>Value:</b>                            | The margin depth in the units defined in the PaperScaleUnit property.               |
| <b>Default value:</b>                    | 0.6 inch  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-BOTTOMMARGINPIC S9(9) COMP-5  |

## 4.30 Buttons Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a pointer to a Button object of the Toolbar control. The pointers are contained in an array, so always use an index when referencing the Buttons property.   |
| <b>Used in control(s):</b>               | Toolbar   |
| <b>Value:</b>                            | A pointer to a Button object<br><br>The index can be set from 1 to the value of the Count property.<br><br>For example to refer to the Caption property of button 5 of the Toolbar1 control, you code:<br><br><b>"Caption" OF Buttons (5)<br/>OF Toolbar1</b> |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-COBJECT  |
| <b>OLE data type:</b>                    | VT_DISPATCH   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.31 Cancel Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the control is the default cancel button (i.e. the button activated by the ESC key).  |
| <b>Used in control(s):</b>               | CommandButton      Custom   |
| <b>Values (with constants):</b>          | True - This is the default cancel button.(POW-TRUE)<br>False - Not the default cancel button.(POW-FALSE)  |
|  | When it is True, the Click event is generated when the ESC key is pressed. The focus, however, does not move.   |
|  | Only one control in a form can be the default cancel button. When the Cancel property is set to True for a control, PowerCOBOL sets the Cancel properties of all other controls to False. |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.32 Caption Property

---

|                       |   |
|-----------------------|---|
| <b>Description:</b>   | Contains the label or title string for the control or object.   |
| <b>Used in:</b>       |   |
| <i>Controls</i>       | CheckBox              Frame              Label              StaticText<br>CommandButton      GroupBox              OptionButton      Tab  |
| <i>Objects</i>        | Button              Form              MenuItem  |
| <b>Values:</b>        |   |
| <i>Form</i>           | The title string for the form.  |
| <i>Button</i>         | The label string for a button on the Toolbar control. The string is displayed below or to the right of the button.<br><br>Although you can use "&" to indicate that the following character is underlined, it has no effect as an access key.   |
| <i>Tab</i>            | The title string of the currently selected tab page.<br><br>You can use "&" to indicate that the following character should be underlined as a mnemonic (access key).<br><br>Use "&&" to include the "&" character in the string.   |
| <i>Others</i>         | The label or title string for the control or object.<br><br>You can use "&" to indicate that the following character should be underlined as a mnemonic (access key).<br><br>Use "&&" to include the "&" character in the string.<br><br>If the RenderStyle property is set, you can only set the Caption property to a string that conforms to the RenderStyle property. |
| <b>Default value:</b> |   |
| <i>Tab</i>            | None.   |

|   |                           |
|---|---------------------------|
| <i>Others</i>                             | Same as the Name property |
| <b>COBOL picture:</b>                     | X, up to 8192 bytes       |
| <b>OLE data type:</b>                     | VT_BSTR                   |
| <b>Design time access:</b>                | Set and reference.        |
| <b>Execution time access:</b>             | Set and reference.        |
| <b>Backward compatibility attributes:</b> |                           |
| <i>For the StaticText</i>                 | POW-TEXTPIC X(256)        |
|   | POW-DATEPIC X(8)          |
| <i>Tab and Toolbar</i>                    | None.                     |
| <i>For all other</i>                      | POW-TEXTPIC X(256)        |

### 4.33 CaptionBackGray Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the row and column headings have a background color of Gray or the color defined in the BackColor property.                        |
| <b>Used in control(s):</b>               | Table   |
| <b>Values (with constants):</b>          | True - Gray background.(POW-TRUE)<br>False - Same as BackColor property.(POW-FALSE)<br>It is only effective when the Appearance property is "0-Flat". |
| <b>Default value:</b>                    | True(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

### 4.34 CellLines Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether cell borderlines are displayed.  |
| <b>Used in control(s):</b>               | Table   |
| <b>Values (with constants):</b>          | True:Display cell borderlines.(POW-TRUE)<br>False:Does not display cell borderlines.(POW-FALSE) |
| <b>Default value:</b>                    | True(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

### 4.35 Charset Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the character setting for the font.                              |
| <b>Used in object:</b>                   | Font  |
| <b>Values (with constants):</b>          | 0 - Western (POW-FONTCHARSET-ANSI)<br>Windows standard character setting. |
|  | 2 - Symbol(POW-FONTCHARSET-SYMBOL)<br>Special character setting. (Symbol) |
|  | 255 - System dependent (POW-FONTCHARSET-OEM)<br>OEM character setting     |
|  | The value depends on the font.  |
|  | There are fonts that have other character settings.                       |
| <b>Default value:</b>                    | Depends on the containing control.  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.36 Check Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether a check mark is displayed to the left of the menu item.                |
| <b>Used in object:</b>                   | MenuItem .   |
| <b>Values (with constants):</b>          | True:Displays a check mark.(POW-TRUE)<br>False:Does not display a check mark.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-CHECKPIC S9(4) COMP-5  |

## 4.37 Child Property (Array)

---

|                        |   |
|------------------------|---|
| <b>Description:</b>    | Contains a pointer to a Node object that is a child of a node. The pointers are contained in an array, so always use an index to reference the Child property.  |
| <b>Used in object:</b> | Node  |
| <b>Value:</b>          | A pointer to a Node object.<br><br>You can set the index from 1 to the value of the Count property.<br><br>For example, to ensure that the third child of the second root node is visible you would code: |

```
01 NODE-RF1 OBJECT REFERENCE
      POW-CNODE .
01 NODE-RF2 OBJECT REFERENCE
      POW-CNODE .
```

```

MOVE "Root"(2) OF TreeView1
  TO NODE-RF1
MOVE "Child"(3) OF NODE-RF1
  TO NODE-RF2
INVOKE NODE-RF2 "EnsureVisible"

```

Where POW-CNODE is a PowerCOBOL object class for nodes.

**Default value:** None.

**COBOL picture:** OBJECT REFERENCE POW-CNODE

**OLE data type:** VT\_DISPATCH

**Design time access:** Not accessible.

**Execution time access:** Reference only.

**Backward compatibility attribute:** None.

## 4.38 CHVisible Property

---

**Description:** Determines whether headings of Column objects are displayed when the LVStyle property is "3 - Report".

**Used in control(s):** ListView

**Values (with constants):** True - Displays headings.(POW-TRUE)  
False - Does not display headings.(POW-FALSE)

**Default value:** True(POW-TRUE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_BOOL

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.39 ClassMajorVersion Property

---

**Description:** Indicates the major version of each control.

**Used in controls:** All controls.

**Value:** The number of major version for the control.

**Default value:** None.

**COBOL PICTURE:** S9(9) COMP-5

**OLE data type:** VT\_I4

**Design time access:** Not accessible.

**Execution time access:** Reference only.

**Backward compatibility attributes:** None.

## 4.40 ClassMinorVersion Property

---

**Description:** Indicates the minor version of each control.

**Used in controls:** All controls.

|   |  |
|---|--|
| <b>Value:</b>                             | The number of minor version for the control. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | S9(9) COMP-5                                 |
| <b>OLE data type:</b>                     | VT_I4  |
| <b>Design time access:</b>                | Not accessible.                              |
| <b>Execution time access:</b>             | Reference only.                              |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.41 ClassProgID Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Indicates the ProgID name of each control. |
| <b>Used in controls:</b>                  | All controls.                              |
| <b>Used in objects:</b>                   | None.                                      |
| <b>Value:</b>                             | The name of the ProgID indicating class.   |
| <b>Default value:</b>                     | None.                                      |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.                       |
| <b>OLE data type:</b>                     | VT_BSTR                                    |
| <b>Design time access:</b>                | Not accessible.                            |
| <b>Execution time access:</b>             | Reference only.                            |
| <b>Backward compatibility attributes:</b> | None.                                      |

## 4.42 ClickColumn Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the column number in which the mouse is clicked. |
| <b>Used in control(s):</b>               | Table   |
| <b>Value:</b>                            | The column number in which the mouse was clicked.         |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | POW-CLICKCOLPIC S9(4) COMP-5                              |

## 4.43 ClickRow Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the row in which the mouse is clicked. |
| <b>Used in control(s):</b> | Table   |
| <b>Value:</b>              | The row number in which the mouse was clicked.  |
| <b>Default value:</b>      | None.   |
| <b>COBOL picture:</b>      | S9(9) COMP-5                                    |
| <b>OLE data type:</b>      | VT_I4   |

|  |                              |
|--|------------------------------|
| <b>Design time access:</b>               | Not accessible.              |
| <b>Execution time access:</b>            | Reference only.              |
| <b>Backward compatibility attribute:</b> | POW-CLICKROWPIC S9(4) COMP-5 |

## 4.44 ClientHeight Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the height of the client area.  |
| <b>Used in control(s):</b>               | Form object          Tab  |
| <b>Value:</b>                            | The height of the client area expressed in the units defined in the ScaleMode property. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               |   |
| <i>Form</i>                              | Set and reference.  |
| <i>Tab</i>                               | Not accessible.   |
| <b>Execution time access:</b>            |   |
| <i>Form</i>                              | Set and reference.  |
| <i>Tab</i>                               | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.45 ClientLeft Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the X coordinate of the tab client area.   |
| <b>Used in control:</b>                  | Tab  |
| <b>Value:</b>                            | The X coordinate of the client area - relative to the top left corner of the container - expressed in the units defined in the ScaleMode property. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.46 ClientTop Property

---

|                         |  |
|-------------------------|--|
| <b>Description:</b>     | Contains the Y coordinate of the client area.  |
| <b>Used in control:</b> | Tab  |
| <b>Value:</b>           | Contains the Y coordinate of the client area - relative to the top left corner of the container - expressed in the units determined by the ScaleMode property. |
| <b>Default value:</b>   | None.  |
| <b>COBOL picture</b>    | S9(9) COMP-5   |
| <b>OLE data type:</b>   | VT_I4  |

|  |                 |
|--|-----------------|
| <b>Design time access:</b>               | Not accessible. |
| <b>Execution time access:</b>            | Reference only. |
| <b>Backward compatibility attribute:</b> | None.           |

## 4.47 ClientWidth Property

---

|  |  |     |
|--|--|-----|
| <b>Description:</b>                      | Contains the width of the client area.                                       |     |
| <b>Used in control(s):</b>               | Form object  | Tab |
| <b>Value:</b>                            | The width of the client area in the units defined in the ScaleMode property. |     |
| <b>Default value:</b>                    | None.  |     |
| <b>COBOL picture</b>                     | S9(9) COMP-5   |     |
| <b>OLE data type:</b>                    | VT_I4  |     |
| <b>Design time access:</b>               |  |     |
| <i>Form</i>                              | Set and reference.   |     |
| <i>Tab</i>                               | Not accessible.  |     |
| <b>Execution time access:</b>            |  |     |
| <i>Form</i>                              | Set and reference.   |     |
| <i>Tab</i>                               | Reference only.  |     |
| <b>Backward compatibility attribute:</b> | None.  |     |

## 4.48 ColorMap Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Defines the color mapping for the image.  |
| <b>Used in control(s):</b>      | CommandButton   |
| <b>Values (with constants):</b> | <p>0 - No:(POW-COLORMAP-NO)<br/>No color mapping.</p> <p>1 - Back:(POW-COLORMAP-BACK)<br/>Only maps the background using the color specified in Mapped Face Color in the ImageImage_CommandButton_page property page.</p> <p>2 - All:(POW-COLORMAP-ALL)<br/>Maps Black to the Button Text color,<br/>Light Gray to the Button Face color,<br/>White to the Button Highlight color and<br/>Gray to the Button Shadow color.</p> <p>The image is mapped only when the ColorMap property is "1 - Back" or "2 - All" regardless of the value of the UseSystemColor property.</p> <p>PowerCOBOL maps the color of the ForeColor property to the Button Text color, and the color of the BackColor to the Button Background color if the UseSystemColor property is False. The system color always maps to the Button Highlight color and Shadow color.</p> |
| <b>Default value:</b>           | 0 - No:(POW-COLORMAP-NO)  |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |
| <b>OLE data type:</b>           | VT_I2   |
| <b>Design time access:</b>      | Set and reference.  |
| <b>Execution time access:</b>   | Not accessible.   |



**Backward compatibility attribute:** None.

## 4.49 Column Property

---

**Description:** Contains the column number of the cell that has the focus.

**Used in control(s):** Table

**Value:** The column number of the cell that has the focus.  
Only cells in which the Writable property of the TableColumn object is True can get the focus.

**Default value:** The column number of the leftmost cell in which the Writable property of the TableColumn object is True.

**COBOL picture:** S9(9) COMP-5

**OLE data type:** VT\_I4

**Design time access:** Not accessible.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-COLPIC S9(9) COMP-5

## 4.50 ColumnCaption Property

---

**Description:** Determines whether to display column headings.

**Used in control(s):** Table

**Values (with constants):** True - Displays the column headings.(POW-TRUE)  
False - Does not display the column headings.(POW-FALSE)

**Default value:** True(POW-TRUE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_BOOL

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-COLCAPTIONPIC S9(4) COMP-5

## 4.51 ColumnCount Property

---

**Description:** Contains the number of columns in the control.

**Used in control(s):** ListView          Table

**Value:** The number of columns in the control.  
For the Table control, the maximum number is 255.

**Default value:**

*ListView*                                  0

*Table*    2

**COBOL picture:** S9(9) COMP-5

**OLE data type:** VT\_I4

**Design time access:**

|  |                          |
|--|--------------------------|
| <i>ListView</i>                          | Set and reference.       |
| <i>Table</i>                             | Set and reference.       |
| <b>Execution time access:</b>            |                          |
| <i>ListView</i>                          | Reference only.          |
| <i>Table</i>                             | Set and reference.       |
| <b>Backward compatibility attribute:</b> |                          |
| <i>Table</i>                             | POW-COLSPIC S9(4) COMP-5 |

## 4.52 Columns Property (Array)

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a pointer to a Column object of the ListView control. The Columns property is used for accessing the properties of Column objects. The pointers are held in an array so always use an index when referencing the Columns property. |
| <b>Used in control(s):</b>               | ListView  |
| <b>Value:</b>                            | A pointer to a Column object.<br><br>The index can contain values from 1 to the value of the ColumnCount property.  |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-CCOLUMN  |
| <b>OLE data type:</b>                    | VT_DISPATCH   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.53 Command Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains a command string to be passed to the MCI driver.<br><br>Consult the MCI driver documentation for details. |
| <b>Used in control(s):</b>               | MCI  |
| <b>Value:</b>                            | A command string to be passed to the MCI driver.<br><br>The return information is placed in the Receive property.  |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-MCISTRINGPIC X(256)  |

## 4.54 CommandButtonFunctionKeyMode Property

---

|                          |   |
|--------------------------|---|
| <b>Description:</b>      | Determines whether to set focus to the CommandButton control when the assigned function key is pressed. |
| <b>Used in controls:</b> | None.   |

|   |   |
|---|---|
| <b>Used in objects:</b>                   | Form  |
| <b>Value (with constants):</b>            | 0 : Normal(POW-FUNCTIONKEYMODE-NORMAL)<br>1 : Set focus to CommandButton control<br>(POW-FUNCTIONKEYMODE-FOCUS) |
| <b>Default value:</b>                     | 0 : Normal(POW-FUNCTIONKEYMODE-NORMAL)<br>Note : For projects created using V4.0L10 the default value is 1.     |
| <b>COBOL PICTURE:</b>                     | S9(4) COMP-5  |
| <b>OLE data type:</b>                     | VT_I2   |
| <b>Design time access:</b>                | Set and reference.  |
| <b>Execution time access:</b>             | Set and reference.  |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.55 CommandLine Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the command line parameters passed to the application.<br><br>It is only effective when the form is contained in a module that makes an EXE file.<br><br>NOTE: The string of -CBR and -CBL specified for the start option of the application is included in this property. |
| <b>Used in object:</b>                   | Form  |
| <b>Value:</b>                            | The string of command line parameters specified when the application was started.   |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | POW-COMMANDLINEPIC X(260)   |

## 4.56 CommandText Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Contains the text of the command to open the record set.   |
| <b>Used in controls:</b>                  | ADODataSource  |
| <b>Value:</b>                             | Command text string to open the record set.<br><br>Consult the ADO documentation for details about command text. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.   |
| <b>OLE data type:</b>                     | VT_BSTR  |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.57 CommandType Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Indicates the type of text specified in the CommandText property.  |
| <b>Used in controls:</b>                  | ADODDataSource   |
| <b>Values (with constants):</b>           | 1 - adCmdText:(POW-ADODB-ADCMDTEXT)<br>SQL statement.<br><br>2 - adCmdTable:(POW-ADODB-ADCMDTABLE)<br>Table name returned from SQL query, in which columns are created.<br><br>4 - adCmdStoredProc:(POW-ADODB-ADCMDSTOREDPROC)<br>Stored procedure.<br><br>8 - adCmdUnknown:(POW-ADODB-ADCMDUNKNOWN)<br>Distinguish automatically, when the command type is unknown.<br><br>Consult the ADO documentation for details about command types. |
| <b>Default value:</b>                     | 8 - adCmdUnknown:(POW-ADODB-ADCMDUNKNOWN)  |
| <b>COBOL PICTURE:</b>                     | S9(4) COMP-5   |
| <b>OLE data type:</b>                     | VT_I2  |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.58 CommitMode Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates the commit mode for data base updates.                        |
| <b>Used in control(s):</b>               | DBAccess  |
| <b>Values (with constants):</b>          | 0 - Automatic(POW-DBCOMMIT-AUTO)<br><br>1 - Manual(POW-DBCOMMIT-MANUAL) |
| <b>Default value:</b>                    | 0 - Automatic(POW-DBCOMMIT-AUTO)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | POW-DBMANUALCOMMITPIC S9(4) COMP-5                                      |

## 4.59 ConcurrencyCursor Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Indicates the cursor mode for concurrent updates.<br><br>It is only effective when the target is a table.  |
| <b>Used in control(s):</b>      | DBAccess   |
| <b>Values (with constants):</b> | 1 - SQL_CONCUR_READ_ONLY: (POW-DBCONCUR-READONLY)<br>No updates are permitted using the cursor.<br><br>2 - SQL_CONCUR_LOCK: (POW-DBCONCUR-LOCK)<br>The cursor locks the row for update.<br><br>3 - SQL_CONCUR_OPT_ROWVER: (POW-DBCONCUR-OPTROWVER)<br>Row versions are compared before update using the optimization concurrent control. |

4 - SQL\_CONCUR\_OPT\_VALUES: (POW-DBCONCUR-OPTVALUES)  
Values are compared before update using the optimization concurrent control.  
The current record can be updated or deleted unless ConcurrencyCursor is set to 1.

**Default value:** 1 - SQL\_CONCUR\_READ\_ONLY: (POW-DBCONCUR-READONLY)  
No updates are permitted using the cursor.

**COBOL picture:** S9(9) COMP-5

**OLE data type:** VT\_I4

**Design time access:** Set and reference.

**Execution time access:** Reference only.

**Backward compatibility attribute:** None.

## 4.60 Condition Property

---

**Description:** Defines the extraction condition for the SelectRecords method.

**Used in control(s):** DBAccess

**Value:** A string defining the condition to be used in the SelectRecords method. The string must conform to the supported ODBC syntax.  
It is only effective when the TargetType property is "0-Table/View".

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-DBCONDITIONPIC X(512)

## 4.61 Connection Property

---

**Description:** Contains a pointer to the ADO connection object.

**Used in controls:** ADODataSource

**Value:** A pointer to the ADO connection object.  
Consult the ADO documentation for details about connection objects.

**Notes** The following properties of the ADODataSource control cannot be set if the ADO connection object is created dynamically and set to this property.  
ConnectionString  
ConnectionTimeout  
ConnectMode  
And, you must open the connection by using the Open method of the ADO connection object if the connection is not opened.  
Consult the ADO documentation for details about connection object.

**Default value:** None.

**COBOL PICTURE:** OBJECT REFERENCE POW-COBJECT

**OLE data type:** VT\_DISPATCH

**Design time access:** Not accessible.

|   |                    |
|---|--------------------|
| <b>Execution time access:</b>             | Set and reference. |
| <b>Backward compatibility attributes:</b> | None.              |

## 4.62 ConnectionString Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the string to use to connect to a database.   |
| <b>Used in controls:</b>                 | ADODataSource    DBAccess  |
| <b>Value:</b>                            | The string to connect to a database.   |
| <i>ADODataSource</i>                     | Consult the ADO documentation for details about connection strings.  |
| <i>DBAccess</i>                          | Consult the ODBC documentation for details about connection strings.<br><br>It is only effective when connected to a common file database. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes.   |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.63 ConnectionTimeout Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Indicates how long to wait while establishing a connection before terminating the attempt and generating an error.                               |
| <b>Used in controls:</b>                  | ADODataSource  |
| <b>Value:</b>                             | The time, in seconds, of how long to wait for the connection to open.<br><br>Consult the ADO documentation for details about connection timeout. |
| <b>Default value:</b>                     | 15 seconds   |
| <b>COBOL PICTURE:</b>                     | S9(9) COMP-5   |
| <b>OLE data type:</b>                     | VT_I4  |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.64 ConnectMode Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Indicates the available permissions for modifying data in a Connection.   |
| <b>Used in controls:</b>        | ADODataSource   |
| <b>Used in Objects:</b>         | None.   |
| <b>Values (with constants):</b> | 0 - adModeUnknown:(POW-ADODB-ADMODEUNKNOWN)<br>Mode is unknown or the permissions have not yet been set or cannot be determined.<br><br>1 - adModeRead:(POW-ADODB-ADMODEREAD)<br>Read-only permissions. |

2 - adModeWrite:(POW-ADODB-ADMODEWRITE)  
Write-only permissions.

3 - adModeReadWrite: (POW-ADODB-ADMODEREADWRITE)  
Read/write permissions.

4 - adModeShareDenyRead: (POW-ADODB-ADMODESHAREDENYREAD)  
Prevents others from opening a connection with read permissions.

8 - adModeShareDenyWrite: (POW-ADODB-ADMODESHAREDENYWRITE)  
Prevents others from opening a connection with write permissions.

12 - adModeShareExclusive: (POW-ADODB-ADMODESHAREEXCLUSIVE)  
Prevents others from opening a connection.

16 - adModeShareDenyNone: (POW-ADODB-ADMODESHAREDENYNONE)  
Allows others to open a connection with any permissions. Neither read nor write access can be denied to others.

Consult the ADO documentation for details about connect mode.

**Default value:** 0 - adModeUnknown:(POW-ADODB-ADMODEUNKNOWN)

**COBOL PICTURE:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attributes:** None.

## 4.65 Container Property

---

**Description:** Contains a pointer to the container object.

**Used in controls:** All controls.

**Value:** A pointer to the Form object if the control is pasted on the Form object directly. In the other cases, it's a pointer to the container control, which can paste controls on it. The container controls are GroupBox control, Frame control, Tab control and Toolbar control.

**Default value:** None.

**COBOL PICTURE:** OBJECT REFERENCE POW-COBJECT

**OLE data type:** VT\_DISPATCH

**Design time access:** Not accessible.

**Execution time access:** Reference only.

**Backward compatibility attributes:** None.

## 4.66 ControlBox Property

---

**Description:** Determines whether the title bar contains the application icon (control box at the top-left of the form).

**Used in object:** Form

**Values (with constants):** True - Includes the control box(POW-TRUE)  
False - Does not include the control box(POW-FALSE)

|  |   |
|--|---|
|  | When it is True, the title bar includes the close, resize, minimize and maximize buttons depending on the form style. |
| <b>Default value:</b>                    | True(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Not accessible.   |
| <b>Backward compatibility attribute:</b> | None  |

## 4.67 Controls Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Contains a pointer to the Controls collection object of the Form object. |
| <b>Used in object:</b>                    | Form   |
| <b>Value:</b>                             | A pointer to the Controls collection object.                             |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | OBJECT REFERENCE POW-COBJECT   |
| <b>OLE data type:</b>                     | VT_DISPATCH  |
| <b>Design time access:</b>                | Not accessible.  |
| <b>Execution time access:</b>             | Reference only.  |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.68 Count Property

---

|  |   |              |          |
|--|---|--------------|----------|
| <b>Description:</b>                      | Indicates the number of objects in the control or object.                           |              |          |
| <b>Used in:</b>                          |   |              |          |
| <i>Controls</i>                          | ListView  | Toolbar      | TreeView |
| <i>Objects</i>                           | Controls  | DataBindings | Node     |
| <b>Values:</b>                           |   |              |          |
| <i>Controls</i>                          | The number of controls contained in the Form object.                                |              |          |
| <i>DataBindings</i>                      | The number of DataBinding objects contained in a Custom control that can bind data. |              |          |
| <i>ListView</i>                          | The number of ListItem objects contained in the control.                            |              |          |
| <i>Toolbar</i>                           | The number of Button objects contained in the control.                              |              |          |
| <i>TreeView, Node</i>                    | The number of child nodes immediately under the control or object.                  |              |          |
| <b>Default value:</b>                    | None.   |              |          |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |              |          |
| <b>OLE data type:</b>                    | VT_I4   |              |          |
| <b>Design time access:</b>               | Not accessible.   |              |          |
| <b>Execution time access:</b>            | Reference only.   |              |          |
| <b>Backward compatibility attribute:</b> | None.   |              |          |

## 4.69 CurFieldNo Property

---



|  |   |
|--|---|
| <b>Description:</b>                      | Contains the number of the field displayed in the list box.<br>Only valid when data is loaded from CSV or Fixed Text format files.  |
| <b>Used in control(s):</b>               | ComboBox  |
| <b>Value:</b>                            | The number of the field to be displayed.<br><br>Records from CSV or Fixed Text format files can contain several fields. The ComboBox control displays the values from only one of these fields at a time.<br><br>It is only effective when the AutoLoadFile property is True. |
| <b>Default value:</b>                    | 1   |
| <b>Data type:</b>                        | VT_14   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-CURFIELDNOPIC S9(4) COMP-5  |

## 4.70 CurrencySign Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the currency edit character used by the PictureString property.  |
| <b>Used in object:</b>                   | RenderText  |
| <b>Value:</b>                            | The currency edit character - \$, \ etc. It is only effective when the RenderStyle property is "1 - COBOL PICTURE". |
| <b>Default value:</b>                    | Depends on the system.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.71 CurrentPage Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the page number of the currently selected page.  |
| <b>Used in control:</b>                  | Tab   |
| <b>Value:</b>                            | The page number of the currently selected page. The CurrentPage property can be from 1 to the value of the PageCount property |
| <b>Default value:</b>                    | 1   |
| <b>COBOL picture</b>                     | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.72 CursorLocation Property

---

|                     |   |
|---------------------|---|
| <b>Description:</b> | Indicates the location of the cursor service. |
|---------------------|---|

|   |  |
|---|--|
| <b>Used in controls:</b>                  | ADODataSource  |
| <b>Used in Objects:</b>                   | None.  |
| <b>Values (with constants):</b>           | 2 - adUserServer: Uses server-side cursors. (POW-ADODB-ADUSERSERVER)<br>3 - adUserClient: Uses client-side cursors. (POW-ADODB-ADUSERCLIENT)<br>Consult the ADO documentation for details about cursor locations.<br>Note: The value may be ignored depending on the kind of OLE DB Provider to which you connected. |
| <b>Default value:</b>                     | 3 - adUserClient: Uses client-side cursors. (POW-ADODB-ADUSERSERVER)   |
| <b>COBOL PICTURE:</b>                     | S9(4) COMP-5   |
| <b>OLE data type:</b>                     | VT_I2  |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.73 CursorType Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Defines the type of cursor to be used.  |
| <b>Used in control(s):</b>      | ADODataSource      DBAccess   |
| <b>Values (with constants):</b> |   |
| <i>ADODataSource</i>            | Defines the type of cursor to be used in record set.<br>1 - adOpenKeyset: Uses the keyset cursor. (POW-ADODB-ADOPENKEYSET)<br>2 - adOpenDynamic: Uses the dynamic cursor. (POW-ADODB-ADOPENDYNAMIC)<br>3 - adOpenStatic: Uses the static cursor. (POW-ADODB-ADOPENSTATIC)<br>Consult the ADO documentation for details about cursor types.<br>Note: The value may be ignored depending on the kind of OLE DB Provider to which you connected.                                       |
| <i>DBAccess</i>                 | 0 - SQL_CURSOR_FORWARD_ONLY: (POW-DBCURSOR-FORWARDONLY)<br>The cursor only advances forward through the rows.<br>1 - SQL_CURSOR_KEYSET_DRIVEN: (POW-DBCURSOR-KEYSETDRIVEN)<br>Uses the key to the number of rows set in the KeysetSize property.<br>2 - SQL_CURSOR_DYNAMIC: (POW-DBCURSOR-DYNAMIC)<br>Using a dynamic cursor.<br>3 - SQL_CURSOR_STATIC: (POW-DBCURSOR-STATIC)<br>The resulting data set contains static data.<br>The cursor can be scrolled apart from the value 0. |
| <b>Default value:</b>           |   |
| <i>ADODataSource</i>            | 3 - adOpenStatic: Uses the static cursor. (POW-ADODB-ADOPENSTATIC)  |
| <i>DBAccess</i>                 | 0 - SQL_CURSOR_FORWARD_ONLY: (POW-DBCURSOR-FORWARDONLY)   |
| <b>COBOL picture:</b>           |   |
| <i>ADODataSource</i>            | S9(4) COMP-5  |

|  |                    |
|--|--------------------|
| <i>DBAccess</i>                          | S9(9) COMP-5       |
| <b>OLE data type:</b>                    |                    |
| <i>ADODataSource</i>                     | VT_I2              |
| <i>DBAccess</i>                          | VT_I4              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            |                    |
| <i>ADODataSource</i>                     | Set and reference. |
| <i>DBAccess</i>                          | Reference only.    |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.74 DataBase Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the name of the database to be accessed.   |
| <b>Used in control(s):</b>               | DBAccess  |
| <b>Value:</b>                            | The name of the database.   |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Reference only.   |
| <b>Execution time access:</b>            | Set and reference.  |
|  | Note that, you can set only space only when you use the default data source of the machine. |
| <b>Backward compatibility attribute:</b> | POW-DBDATABASEPIC X(260)  |

## 4.75 DataBindings Property

---

|   |   |
|---|---|
| <b>Description:</b>                       | Contains a pointer to the DataBindings collection object, which collects DataBinding objects. |
| <b>Used in controls:</b>                  | Custom  |
| <b>Used in objects:</b>                   | None.   |
| <b>Value:</b>                             | A pointer to the DataBindings collection object.  |
| <b>Default value:</b>                     | None.   |
| <b>COBOL PICTURE:</b>                     | OBJECT REFERENCE POW-COBJECT  |
| <b>OLE data type:</b>                     | VT_DISPATCH   |
| <b>Design time access:</b>                | Reference only.   |
| <b>Execution time access:</b>             | Reference only.   |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.76 DataColor Property (Array)

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Contains a color to be applied to an element (e.g. bar) of the graph. The colors are held in an array, so always use an index when referencing the DataColor property. |
|---------------------|--|

|  |   |
|--|---|
| <b>Used in control(s):</b>               | Graph   |
| <b>Value:</b>                            | Refer to "Appendix A. Color Constants" and OLE_COLOR described in "Appendix C. Data Types" for details of color values.<br><br>The index can take values from 1 to the value of the DataCount property. |
| <b>Default value:</b>                    | Same as ForeColor property.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | OLE_COLOR   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-DATACOLORPIC X(4)   |

## 4.77 DataCount Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the number of data values in the graph.                                       |
| <b>Used in control(s):</b>               | Graph  |
| <b>Value:</b>                            | The number of data values in the graph.<br><br>Valid values are in the range 0 to 256. |
| <b>Default value:</b>                    | 8  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-NUMDATAPIC S9(4) COMP-5  |

## 4.78 DataField Property

---

|   |   |
|---|---|
| <b>Description:</b>                       | Contains the name of the data field that will be bound to a property in a custom control. The data field is contained in the data source object defined in the DataSource property.<br><br>The property in the custom control must be set up for data binding (this is done by the creators of the custom control). |
| <b>Used in controls:</b>                  |   |
| <b>Controls:</b>                          | Custom                      Edit  |
| <b>Object:</b>                            | DataBinding   |
| <b>Value:</b>                             | The name of a data field.<br><br>Note that, if the data source contains more than one data set, it is necessary to specify the DataMember property before you set the DataField property.   |
| <b>Default value:</b>                     | None.   |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.  |
| <b>OLE data type:</b>                     | VT_BSTR   |
| <b>Design time access:</b>                | Set and reference.  |
| <b>Execution time access:</b>             | Set and reference.  |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.79 DataMember Property

---

|   |   |
|---|---|
| <b>Description:</b>                       | Defines the name of the data member that contains a data field to be bound to a property in a custom control. The data member is contained in the data source object defined in the DataSource property.<br><br>The data member is a text string that identifies a data set in the data source object.<br><br>You do not have to specify a data member if the data source object has only one data set. |
| <b>Used in controls:</b>                  |   |
| <b>Controls:</b>                          | Custom                      Edit  |
| <b>Object:</b>                            | DataBinding   |
| <b>Value:</b>                             | The name of a data member.<br><br>Note that, it is necessary to specify the DataMember property before you set the DataField property.  |
| <b>Default value:</b>                     | None.   |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.  |
| <b>OLE data type:</b>                     | VT_BSTR   |
| <b>Design time access:</b>                | Set and reference.  |
| <b>Execution time access:</b>             | Set and reference.  |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.80 DataSource Property

---

|                               |   |
|-------------------------------|---|
| <b>Description:</b>           | Contains the name of, or a pointer to, a connected data source.   |
| <b>Used in:</b>               |   |
| <b>Controls</b>               | Custom                      DBAccess                      Edit  |
| <b>Object</b>                 | DataBinding   |
| <b>Values:</b>                |   |
| <b>DataBinding and Custom</b> | A pointer to the connected data source.object.<br><br>Is set to POW-NULL if you release the connection to the data source object. |
| <b>DBAccess</b>               | The name of a data source.  |
| <b>Default value:</b>         | None.   |
| <b>COBOL picture:</b>         |   |
| <b>DataBinding and Custom</b> | OBJECT REFERENCE POW-COBJECT  |
| <b>DBAccess</b>               | X, up to 8192 bytes   |
| <b>OLE data type:</b>         |   |
| <b>DataBinding and Custom</b> | VT_DISPATCH   |
| <b>DBAccess</b>               | VT_BSTR   |
| <b>Design time access:</b>    | Set and reference.  |
| <b>Execution time access:</b> |   |
| <b>DataBinding and Custom</b> | Set and reference.<br><br>Note that, to set the value, you should code:   |

**INVOKE control-name "SETREF-DataSource"**  
**USING data-source-object**

or

**INVOKE control-name "SETREF-DataSource"**  
**USING POW-NULL**

*DBAccess*

Reference only.

**Backward compatibility  
attribute:**

*DataBinding and  
Custom*

None.

*DBAccess*

POW-DBDATASOURCEPIC X(32)

## 4.81 DateFormat Property

---

**Description:** Defines the date format to be used.

**Used in:**

*Control*

Print

*Object*

RenderText

**Value:**

The date format is made up of macro strings and other text.

A macro string is one of the following:

yyyy: 4 digit year. (e.g. 1998)

Month: Fully spelt month. (e.g. December)

Mon:Abbreviated month. (e.g. Dec)

MMMM:Fully spelt month. Spelling depends on the system's regional settings.

MMM:Abbreviated month. The abbreviation depends on the system's regional settings.

MM:Numeric month. (1 to 12)

dd:Numeric day. (1 to 31)

Note that the strings are case sensitive.

For example, if the value is specified as "dd , Mon - yyyy", the date text "19981231"

would be displayed or printed:

"31 , Dec - 1998"

The DateFormat property is only effective when the DateStyle property is "99-Custom".

*RenderText*

The DateStyle property, and hence the DateFormat property, is only effective when the RenderStyle property is "2 - Date".

The RenderText object converts a character string of the form "yyyyMMdd", or as defined by the InputFormat property, to the style indicated by the macro string.

If you specify a format that does not contain all elements of the date, PowerCOBOL substitutes the value 1 for the missing elements. For example, if there is no InputFormat set, and you enter "19981231" to a field with the format value "yyyy-MM", PowerCOBOL displays "1998-12", but the output value would be "19981201".

**Default value:**

None.

**COBOL picture:**

X, up to 8192 bytes.

**OLE data type:**

VT\_BSTR

**Design time access:**

Set and reference.

**Execution time access:**

|  |                    |
|--|--------------------|
| <i>Print</i>                             | Set and reference. |
| <i>RenderText</i>                        | Reference only.    |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.82 DateStyle Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates the date style to be used.  |
| <b>Used in:</b>                          |   |
| <i>Control</i>                           | Print   |
| <i>Object</i>                            | RenderText  |
| <b>Values (with constants):</b>          | <p>0 - Month dd yyyy(POW-DATESTYLE-MONTHDDYYYY)</p> <p>1 - yyyy/MM/dd(POW-DATESTYLE-YYYYMMDD-SLASH)</p> <p>2 - yyyy.MM.dd(POW-DATESTYLE-YYYYMMDD-PERIOD)</p> <p>3 - MM/dd/yyyy(POW-DATESTYLE-MMDDYYYY-SLASH)</p> <p>4 - MM.dd.yyyy(POW-DATESTYLE-MMDDYYYY-PERIOD)</p> <p>5 - Mon dd yyyy(POW-DATESTYLE-MONDDYYYY)</p> <p>99 - Custom(POW-DATESTYLE-CUSTOM)</p> <p>When the value is 99, you can specify another date style in the DateFormat property.</p> <p><i>RenderText</i> It is only effective when the RenderStyle property is "2 - Date"</p> <p>The RenderText object converts a character string of the form "yyyyMMdd", or as defined by the InputFormat property, to the style indicated by the value.</p> <p>For example, if there is no InputFormat set, entering "19981231" with the value 5 (Mon dd yyyy), would display as "Dec 31 1998".</p> |
| <b>Default value:</b>                    |   |
| <i>Print</i>                             | 5 - Mon dd yyyy(POW-DATESTYLE-MONDDYYYY)  |
| <i>RenderText</i>                        | 0 - Month dd yyyy(POW-DATESTYLE-MONTHDDYYYY)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            |   |
| <i>Print</i>                             | Set and reference.  |
| <i>RenderText</i>                        | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.83 DDEData Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the data transferred from the DDE server.  |
| <b>Used in control(s):</b> | DDE   |
| <b>Value:</b>              | <p>The data passed from the DDE server.</p> <p>The DDEDataLength property contains the length of the data in DDEData.</p> <p>Use the RequestData method if more than 4096 bytes is to be transferred.</p> |

|  |                        |
|--|------------------------|
| <b>Default value:</b>                    | None.                  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes    |
| <b>OLE data type:</b>                    | VT_BSTR                |
| <b>Design time access:</b>               | Not accessible.        |
| <b>Execution time access:</b>            | Reference only.        |
| <b>Backward compatibility attribute:</b> | POW-DDEDATAPIC X(4096) |

## 4.84 DDEDataLength Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the length of the data passed from the DDE server.                |
| <b>Used in control(s):</b>               | DDE  |
| <b>Value:</b>                            | The length of the data passed from the DDE server in the DDEData property. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | POW-DDEDATALENPIC S9(9) COMP-5   |

## 4.85 DDEDataOffset Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the offset of the data passed in the current method invocation.  |
| <b>Used in control(s):</b>               | DDE   |
| <b>Value:</b>                            | The offset, from the start of the complete DDE data, of the data being passed in the current method invocation.<br><br>When the DDE data is too long to fit in the parameter passed by the RequestData method or GetHotData method, these methods need to be invoked several times.<br><br>Set the value to zero to interrupt the transfer of data. Otherwise do not change the value.<br><br>When data less than 1024 bytes is transferred, PowerCOBOL sets the value to zero. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-DDEDATAOFFSETPIC S9(9) COMP-5   |

## 4.86 DDEDataStyle Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Indicates whether the data being transferred from the DDE server is text or binary. |
| <b>Used in control(s):</b>      | DDE   |
| <b>Values (with constants):</b> | 10 - Text(POW-DDETEXT)<br>11 - Binary(POW-DDEBINARY)                                |



|  |  |
|--|--|
|  | If DDEFormat is "CF_TEXT" or "Excel:CSV" set the value to "10 - Text". |
| <b>Default value:</b>                    | 10 - Text(POW-DDETEXT)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DDEDATASTYLEPIC S9(4) COMP-5                                       |

## 4.87 DDEFormat Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the format name of the data being transferred from the DDE server.   |
| <b>Used in control(s):</b>               | DDE   |
| <b>Value:</b>                            | The format name supported in the DDE server.<br><br>For example:<br>"CF_TEXT" (Text format),<br>"Excel: CSV" (Excel Comma-Separated Values)<br><br>When requesting data from a DDE server you need to specify a format name registered in the DDE server.<br><br>For application-specific-formats consult the documentation for the DDE server application. |
| <b>Default value:</b>                    | "CF_TEXT" - text format   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-DDEFORMATPIC X(32)  |

## 4.88 DDEItem Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the name of the item to be retrieved from the DDE server.  |
| <b>Used in control(s):</b>               | DDE  |
| <b>Value:</b>                            | The item name as defined by the DDE server application. For example, if the DDE server is a spreadsheet the item name could be the range of cells to be returned.<br><br>Consult the DDE server application documentation for details of supported item names. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DDEITEMPIC X(128)  |

## 4.89 DDELinkStyle Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates the type of link to be set up for the advise loop.  |
| <b>Used in control(s):</b>               | DDE   |
| <b>Values (with constants):</b>          | 1 - Hot Link(POW-DDEHOTLINK)<br>Notifies control when data is updated.<br><br>2 - Warm Link(POW-DDEWARMLINK)<br>Does not notify control when data is updated.<br><br>The link style must be set before you start the advise loop. |
| <b>Default value:</b>                    | 2 - Warm Link(POW-DDEWARMLINK)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-DDELINKSTYLEPIC S9(4) COMP-5  |

## 4.90 DDEService Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the service name of the DDE server.   |
| <b>Used in control(s):</b>               | DDE  |
| <b>Value:</b>                            | The service name of the DDE server. This is the EXE file name of the DDE server application. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DDESERVICEPIC X(128)   |

## 4.91 DDETimeout Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the time to wait for a response from the DDE server.  |
| <b>Used in control(s):</b>               | DDE   |
| <b>Value:</b>                            | The time, in milliseconds, to wait for a response from the DDE server when a DDE control method is invoked. |
| <b>Default value:</b>                    | 2000 (milliseconds)   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-DDETIMEOUTPIC S9(9) COMP-5  |

## 4.92 DDETopic Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the topic name of the DDE server.   |
| <b>Used in control(s):</b>               | DDE  |
| <b>Value:</b>                            | The topic name of the DDE server.<br><br>Generally this is the full path name of the DDE server application file.<br><br>Consult the DDE server application documentation for details. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DDETOPICPIC X(260)   |

## 4.93 DecimalPointIsComma Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the decimal point is a period or comma for the COBOL-PICTURE render style.  |
| <b>Used in object:</b>                   | RenderText  |
| <b>Values (with constants):</b>          | True - Decimal point is a comma.(POW-TRUE)<br>False - Decimal point is a period.(POW-FALSE)<br><br>It is only effective when the RenderStyle property is "1 - COBOL PICTURE". |
| <b>Default value:</b>                    | Depends on the system.  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.94 DecisionMaxString Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Indicates whether input is completed when the input character string reaches the field length defined by the RenderText object.  |
| <b>Used in control(s):</b>      | Table                      TextBox   |
| <b>Values (with constants):</b> | True - Fixed input. - Focus moves to the next cell.(POW-TRUE)<br><br>False - Not fixed input. - Focus does not move. (POW-FALSE)<br><br>When it is true, and a cell is filled, the focus moves to the next cell to the right, or the first cell of the next line. If there are no cells to move to, the focus does not move.<br><br>When it is False, the focus remains in the cell, but attempts to extend the data beyond the maximum length are ignored.<br><br>The DecisionMaxString property is only effective when the RenderStyle property is something other than "0 - Standard". When DecisionMaxString is effective, setting MaxLength to a value greater than the number of characters specified in the PictureString property has no effect. If the value of MaxLength is less than the picture definition and |

the input reaches the MaxLength number, the Return event is not generated - whether or not you checked the "Text length reached RenderText definition" in the TextBox property page.

|  |                    |
|--|--------------------|
| <b>Default value:</b>                    | True(POW-TRUE)     |
| <b>COBOL picture:</b>                    | S9(4) COMP-5       |
| <b>OLE data type:</b>                    | VT_BOOL            |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.95 Default Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates the default control in the form.   |
| <b>Used in control(s):</b>               | CommandButton    Custom  |
| <b>Values (with constants):</b>          | True - This is the default control.(POW-TRUE)<br>False - This is not the default control.(POW-FALSE)<br><br>A black border highlights the default button.<br><br>The default control receives a Click event when the ENTER key is pressed.<br><br>Only one control in a dialog can be the default control. Setting the value to True for one control causes the value to be set to False in all the other controls.<br><br>Some controls, such as a multi-line TextBox, use the ENTER key event for their own purposes. If the focus is in one of these controls the default control does not get a Click event when the ENTER key is pressed.<br><br>Also, if the user moves the focus (a black border) to another button, the value is changed to False automatically and the Default property of the button that receives focus is set to True automatically. Thus the new default button will receive the Click event when the ENTER key is pressed.<br><br>Note that if the UnacceptableDefault property is True the value of the Default property is forced to be False. |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DEFBUTTONPIC S9(4) COMP-5  |

## 4.96 DefaultRowHeight Property

---

|                            |  |
|----------------------------|--|
| <b>Description:</b>        | Defines the default height of the table rows.  |
| <b>Used in control(s):</b> | Table  |
| <b>Value:</b>              | The default height for each row.<br><br>It is only effective when the AutoRowHeight property is False. |
| <b>Default value:</b>      | Depends on the font size of the Table control.   |
| <b>COBOL picture:</b>      | S9(4) COMP-5   |

|  |                     |
|--|---------------------|
| <b>OLE data type:</b>                    | OLE_YSIZE_CONTAINER |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.               |

## 4.97 DelayedFocusEvent Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the following events are delayed when another event is waiting.   |
| <i>Delayed events</i>                    | LostFocus event, GotFocus event, and the Edit and Return events of the ComboBox, Table and TextBox controls.  |
| <b>Used in object:</b>                   | Form  |
| <b>Values (with constants):</b>          | True - Delays the events.(POW-TRUE)<br>False - Does not delay the events.(POW-FALSE)  |
|  | For example, when DelayedFocusEvent is True and the SetFocus method of another control is invoked from an event procedure, then the GotFocus event is not generated immediately; the event is only generated after other events that are waiting on the system have finished. |
|  | This property depends on the kind of control. Set this property to True in Custom controls.   |
| <b>Default value:</b>                    | True(POW-TRUE)  |
|  | Note: the default value of DelayedFocusEvent for controls in project files converted from PowerCOBOL V4.0L10 or V3.0 is False.  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.98 Device Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the device name to be used by the MCI control. |
| <b>Used in control(s):</b>               | MCI   |
| <b>Value:</b>                            | MCI device name.  |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes                                     |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.                                      |
| <b>Execution time access:</b>            | Set and reference.                                      |
| <b>Backward compatibility attribute:</b> | POW-MCIDEVICEPIC X(32)                                  |

## 4.99 Diffuse Property

---

|                     |   |
|---------------------|---|
| <b>Description:</b> | Indicates whether dithering should be used when the number of colors for the image format exceeds the number of colors supported by the system. |
|---------------------|---|

|  |  |
|--|--|
| <b>Used in control(s):</b>               | Image  |
| <b>Values (with constants):</b>          | True - Dithers the image.(POW-TRUE)<br>False - Does not dither the image.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.100 DisabledFocusAction Property

---

|   |   |
|---|---|
| <b>Description:</b>                       | Indicates the focus behavior when the Enabled or Visible property of a control that has the focus is changed to False.<br><br>Introduced to give the option of compatibility with either Visual Basic's behavior or the behavior of PowerCOBOL releases other than V4L20.   |
| <b>Used in object:</b>                    | Form  |
| <b>Values (with constants):</b>           | If the next item to receive focus is an OptionButton group the value indicates what happens when the group receives the focus (passed by Enabled or Visible being set to False on a control that had the focus).<br><br>0 - Normal(POW-DFA-NORMAL)<br>(PowerCOBOL behavior, other than release V4L20). Focus is placed on the selected OptionButton.<br><br>1 - Ignore option button value (POW-DFA-IGNOREOPTIONVALUE)<br>(Visual Basic behavior). Focus is placed on the first OptionButton and the Value property of the OptionButton is changed to True. |
| <b>Default value:</b>                     | 0 - Normal(POW-DFA-NORMAL)<br>Note : For project files created using PowerCOBOL V4.0L20 the default value is 1. For projects created using V4.0L10, or converted from V3.0, the default value is 0.   |
| <b>COBOL PICTURE:</b>                     | S9(4) COMP-5  |
| <b>OLE data type:</b>                     | VT_I2   |
| <b>Design time access:</b>                | Set and reference.  |
| <b>Execution time access:</b>             | Set and reference.  |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.101 DisabledImageList Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the resource name of the image list file used for disabled buttons in the Toolbar control.  |
| <b>Used in control(s):</b> | Toolbar   |
| <b>Value:</b>              | The resource name of a disabled image list file.<br><br>The image list contains bitmaps of all the images concatenated into a single file.<br><br>PowerCOBOL determines the location of each bitmap by using the ImageWidth property of the image list file. (Note: this is different from the ImageWidth property of the Image control.) You add an image list file to a module in the project list by using the Insert File |

option from the pop-up menu.

The disabled image is used when the Enabled property of a Button object is False.

Note: You must select "Image List (\*.BMP)" as the file type, not "Bitmap Files (\*.bmp)".

|  |                      |
|--|----------------------|
| <b>Default value:</b>                    | None.                |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes. |
| <b>OLE data type:</b>                    | VT_BSTR              |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.                |

## 4.102 DisabledImageType Property

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|  |  |
|--|--|
| <b>Description:</b>                      | Indicates the method of displaying images when the Enabled property of the control is False.   |
| <b>Used in control(s):</b>               | CommandButton  |
| <b>Values (with constants):</b>          | 0 - None:(POW-DISABLEDIMAGE-NONE)<br>No change to the image.<br><br>1 - Simple: (POW-DISABLEDIMAGE-SIMPLE)<br>Dithers the image by applying a pattern of gray pixels.<br><br>2 - 3D:(POW-DISABLEDIMAGE-3D)<br>Gives the image an indented appearance.<br><br>It is only effective when the Enabled property is False, the UseSystemColor property is True and the ImageName property is set. |
| <b>Default value:</b>                    | 1 - Simple: (POW-DISABLEDIMAGE-SIMPLE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.103 DisplayRate Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether the control displays percentage figures.   |
| <b>Used in control(s):</b>               | Graph                      ProgressIndicator   |
| <b>Values (with constants):</b>          | True - Displays percentage figures.(POW-TRUE)<br><br>False - Does not display percentage figures.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.104 DisplayText Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Contains the text as displayed by the control.   |
| <b>Used in:</b>                           |  |
| <b>Control</b>                            | TextBox  |
| <b>Object</b>                             | TableCell  |
| <b>Value:</b>                             | The actual text string that is displayed.<br><br>If the RenderStyle property is "0-Standard", this is the same as the value of the Text property.<br><br>If the RenderStyle property is not "0-Standard" and you move data to the Text property, PowerCOBOL displays the data based on the setting of the RenderText property page. So, the value of the DisplayText property is not the data you set, but it is the text that is actually displayed by the control. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.   |
| <b>OLE data type:</b>                     | VT_BSTR  |
| <b>Design time access:</b>                | Reference only.  |
| <b>Execution time access:</b>             | Reference only.  |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.105 DisplayText Property (ListItem)

---

|   |  |
|---|--|
| <b>Description:</b>                       | Contains the text as displayed by the control. The string is held in an array so always use an index when referencing the DisplayText property.  |
| <b>Used in object:</b>                    | ListItemList   |
| <b>Value:</b>                             | The actual text string that is displayed.<br><br>If the RenderStyle property is "0-Standard", this is the same as the value of the Text property of the ListItem object.<br><br>If the RenderStyle property is not "0-Standard" and you move data to the Text, PowerCOBOL displays the data based on the setting of the RenderText property page. So, the value of the DisplayText property is not the data you set, but it is the text that is actually displayed by the control. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.   |
| <b>OLE data type:</b>                     | VT_BSTR  |
| <b>Design time access:</b>                | Not accessible.  |
| <b>Execution time access:</b>             | Reference only.  |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.106 Divider Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Determines whether the separators on the tool bar are displayed. |
| <b>Used in control(s):</b>      | Toolbar  |
| <b>Values (with constants):</b> | True - Displays the separators.(POW-TRUE)                        |



|  |  |
|--|--|
|  | False - Does not display the separator.(POW-FALSE) |
| <b>Default value:</b>                    | True(POW-TRUE)                                     |
| <b>COBOL picture:</b>                    | S9(4) COMP-5                                       |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.                                 |
| <b>Execution time access:</b>            | Set and reference.                                 |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.107 Driver Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the description of the driver.  |
| <b>Used in control(s):</b>               | DBAccess   |
| <b>Value:</b>                            | The description of the driver. (e.g. Rdb, SQL Server)<br><br>It is set automatically when the control is connected to the common file data source. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes.   |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Reference only.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.108 DropEnabled Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the image can be selected, dragged and dropped.  |
| <b>Used in control(s):</b>               | Image   |
| <b>Values (with constants):</b>          | True:The image can be dragged and dropped. (POW-TRUE)<br><br>False:The image cannot be dragged and dropped. (POW-FALSE)<br><br>It is only effective when the Resource property is set to False. |
| <b>Default value:</b>                    | False (POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.109 EdgeStyle Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Indicates the style to be used for the group box border.                                    |
| <b>Used in control(s):</b>      | Frame                      GroupBox   |
| <b>Values (with constants):</b> | 0 - Bump: a raised line.(POW-EDGEBUMP)<br><br>1 - Etched: an indented line.(POW-EDGEETCHED) |

- 2 - Raised: button-like effect.(POW-EDGERAISED)
- 3 - Sunken: depressed-button effect.(POW-EDGESUNKEN)
- 4 - Raised light: shallow button effect.(POW-EDGERAISEDLIGHT)
- 5 - Sunken light: shallow depressed-button effect.  
(POW-EDGESUNKENLIGHT)

It is only effective when the Appearance property is "1 - 3D".

|  |                             |
|--|-----------------------------|
| <b>Default value:</b>                    |                             |
| <b>Frame</b>                             | 3 - Sunken:(POW-EDGESUNKEN) |
| <b>GroupBox</b>                          | 1 - Etched:(POW-EDGEETCHED) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5                |
| <b>OLE data type:</b>                    | VT_I2                       |
| <b>Design time access:</b>               | Set and reference.          |
| <b>Execution time access:</b>            | Set and reference.          |
| <b>Backward compatibility attribute:</b> | None.                       |

## 4.110 EditableLabel Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the control is used as an editable label (i.e. when you click on the text, it becomes editable).   |
| <b>Used in control(s):</b>               | TextBox   |
| <b>Values (with constants):</b>          | True - Uses edit window.(POW-TRUE)<br>False - Does not use edit window.(POW-FALSE)<br><br>When it is True, the control has a display state and an editing state.<br><br>In the display state, the string position is governed by the Alignment property.<br><br>In the editing state, you edit character strings in an editing window.<br><br>See the description of the TextBox control for the appearance of the edit window.<br><br>It is only effective when the MultiLine property is False. |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.111 EditWhenGotFocus Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Determines whether the <u>Edit</u> event occurs when the edit box receives focus, and when data can be entered. |
| <b>Used in control(s):</b>      | Edit  |
| <b>Values (with constants):</b> | True : Event occurs.(POW-TRUE)<br>False: Event does not occur.(POW-FALSE)                                       |
| <b>Default value:</b>           | False: Event does not occur.(POW-FALSE)   |

|  |                    |
|--|--------------------|
| <b>COBOL picture:</b>                    | S9(4) COMP-5       |
| <b>OLE data type:</b>                    | VT_BOOL            |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.112 Element Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Contains the element name for a compound device.   |
| <b>Used in control(s):</b>                | MCI  |
| <b>Value:</b>                             | The element name for a compound device.<br><br>A compound device is one that requires a data file to play the device.<br><br>Usually the element name is the name of the file to be played by the device. For example an AVI file for a AVIVideo device, a WAV file for a WaveAudio device.<br><br>If you open a device that is not a compound device, ensure that nothing is set in the Element property. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL picture:</b>                     | X, up to 8192 bytes  |
| <b>OLE data type:</b>                     | VT_BSTR  |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | POW-MCIELEMENTPIC X(260)<br>POW-SOUNDNAMEPIC X(260)  |

## 4.113 Enabled Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the control or object is enabled or disabled.   |
| <b>Used in controls/objects:</b>         | All controls and objects that accept mouse or keyboard input.  |
| <b>Values (with constants):</b>          | True:Enables the control or object.(POW-TRUE)<br><br>False:Disables the control or object.(POW-FALSE)<br><br>Disabled controls or objects generally change their display to a dithered and/or flat appearance, and do not respond to mouse or keyboard events.<br><br>Note that, if the Enabled property of the Form object is set to False when a control has the focus, the control keeps the focus and events can be generated by key and mouse input to the control. |
| <b>Default value:</b>                    | True(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-ENABLEPIC S9(4) COMP-5   |

## 4.114 EnableOwnerName Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether to use the owner name.<br><br>The owner name is the name of the table or procedure specified in the TargetName property. |
| <b>Used in control(s):</b>               | DBAccess   |
| <b>Values (with constants):</b>          | True - Uses the owner name.(POW-TRUE)<br><br>False - Does not use the owner name.(POW-FALSE)   |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.115 Expanded Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the Node object is in the expanded state.  |
| <b>Used in object:</b>                   | Node  |
| <b>Values (with constants):</b>          | True - Node is expanded(POW-TRUE)<br><br>False - Node is not expanded(POW-FALSE)<br><br>It is only effective when the Node object has one or more child Node objects. |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.116 ExpandedImageIndex Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the index of the image to use when the Node is in the expanded state. |
| <b>Used in object:</b>                   | Node   |
| <b>Value:</b>                            | The index of the image.<br><br>The value is an integer greater than zero.      |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.117 FileName Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Holds the name of the file that contains the data to display in the list box part of the ComboBox control. |
| <b>Used in control(s):</b>               | ComboBox   |
| <b>Value:</b>                            | The full path name of the file.  |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-FILENAMEPIC X(260)   |

## 4.118 FileType Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates the type of file that contains the data to display in the list box part of the ComboBox control.   |
| <b>Used in control(s):</b>               | ComboBox   |
| <b>Values (with constants):</b>          | 0 - Standard Text File(POW-FILETYPE-NORECORD)<br>1 - CSV (Comma-Separated Value) Format(POW-FILETYPE-CSV)<br>2 - Fixed Length Format (POW-FILETYPE-FIXEDLENGTH)<br><br>For types 1 and 2, you can also specify which field should be used within the record using the CurFieldNo property.<br><br>See the ComboBox control for more details on the file types. |
| <b>Default value:</b>                    | 1 - CSV (Comma-Separated Value) Format(POW-FILETYPE-CSV)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.119 FillColor Property

---

|                               |   |
|-------------------------------|---|
| <b>Description:</b>           | Defines the color to be used inside the Shape control.  |
| <b>Used in control(s):</b>    | Shape   |
| <b>Values:</b>                | Refer to "Appendix A. Color Constants" and OLE_COLOR described in "Appendix C. Data Types" for details on color values.<br><br>The FillColor property is not effective when the FillStyle property is "0 - None". |
| <b>Default value:</b>         | None.   |
| <b>COBOL picture:</b>         | S9(9) COMP-5  |
| <b>OLE data type:</b>         | OLE_COLOR   |
| <b>Design time access:</b>    | Set and reference.  |
| <b>Execution time access:</b> | Set and reference.  |

**Backward compatibility attribute:** None.

## 4.120 FillStyle Property

---

**Description:** Defines the pattern to be used to fill the Shape control.

**Used in control(s):** Shape

**Values (with constants):**

- 0 - None: No pattern (not painted).(POW-FILLSTYLE-NONE)
- 1 - Solid: Solid color.(POW-FILLSTYLE-SOLID)
- 2 - Horizontal: Horizontal hatch (lines). (POW-FILLSTYLE-HORIZONTAL)
- 3 - Vertical: Vertical hatch (lines).(POW-FILLSTYLE-VERTICAL)
- 4 - Backward diagonal: 45 degree, bottom left to top right, lines. (POW-FILLSTYLE-BDIAGONAL)
- 5 - Forward diagonal: 45 degree, top left to bottom right, lines. (POW-FILLSTYLE-FDIAGONAL)
- 6 - Cross: Horizontal and vertical cross hatch. (POW-FILLSTYLE-CROSS)
- 7 - Diagonal cross: 45 degree cross hatch. (POW-FILLSTYLE-DIAGONAL)

**Default value:** 0 - None:(POW-FILLSTYLE-NONE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.121 Font Property

---

**Description:** Contains a pointer to the Font object associated with the control or object.

**Used in controls:**

|               |            |                   |          |
|---------------|------------|-------------------|----------|
| CheckBox      | FileList   | ListBox           | Tab      |
| ComboBox      | FolderList | ListView          | Table    |
| CommandButton | Frame      | OptionButton      | TextBox  |
| DriveList     | GroupBox   | ProgressIndicator | TreeView |
| Edit          | Label      | StaticText        |          |

**Used in object:** Form

**Value:** The Font object contains the defining properties for the font such as name and size.  
At execution time you set or refer to the font properties through the Font property.  
For example, to set the font size in a StaticText control at execution time, use the following code:

```
MOVE 20 TO "Size" OF "Font"  
OF StaticText1
```

**Default value:**

*Form* System font.

*Others* Container's Font property

|  |   |
|--|---|
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-CFONT  |
| <b>OLE data type:</b>                    | VT_DISPATCH   |
| <b>Design time access:</b>               | Reference only.<br>(The object pointer contained in the Font property, not the properties of the Font object) |
| <b>Execution time access:</b>            | Reference only.<br>(The object pointer contained in the Font property, not the properties of the Font object) |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.122 ForeColor Property

---

|                               |   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
|-------------------------------|---|-------------------|------------|-------|------------|----------|------------|---------|-------|---------------|-------|----------|---------|------|-------|--------------|---------|-----------|----------|-------------------|--|
| <b>Description:</b>           | Defines the text color for the control or object.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>Used in control(s):</b>    |   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Controls</i>               | <table> <tr> <td>CheckBox</td> <td>FileList</td> <td>Label</td> <td>StaticText</td> </tr> <tr> <td>ComboBox</td> <td>FolderList</td> <td>ListBox</td> <td>Table</td> </tr> <tr> <td>CommandButton</td> <td>Frame</td> <td>ListView</td> <td>TextBox</td> </tr> <tr> <td>Edit</td> <td>Graph</td> <td>OptionButton</td> <td>Toolbar</td> </tr> <tr> <td>DriveList</td> <td>GroupBox</td> <td>ProgressIndicator</td> <td></td> </tr> </table> | CheckBox          | FileList   | Label | StaticText | ComboBox | FolderList | ListBox | Table | CommandButton | Frame | ListView | TextBox | Edit | Graph | OptionButton | Toolbar | DriveList | GroupBox | ProgressIndicator |  |
| CheckBox                      | FileList  | Label             | StaticText |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| ComboBox                      | FolderList  | ListBox           | Table      |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| CommandButton                 | Frame   | ListView          | TextBox    |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| Edit                          | Graph   | OptionButton      | Toolbar    |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| DriveList                     | GroupBox  | ProgressIndicator |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Objects</i>                | Form      TableCell   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>Values:</b>                | Refer to "Appendix A. Color Constants" and OLE_COLOR described in "Appendix C. Data Types" for more information on color values.  |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>CommandButton</i>          | It is only effective when the UseSystemColor property is False.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Graph</i>                  | The value is used as the default color for the control.<br><br>You should use the DataColor array when you set or refer to the colors of the data elements.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>TableCell</i>              | If the ForeColor property is set to a different value from the Table control's ForeColor property, the cell is painted in the value of the TableCell object's ForeColor property.<br><br>If the ForeColor property is set to the same value as the Table control's ForeColor property, the cell's ForeColor property is initialized and painted in the value of the Table control 's ForeColor property.                                    |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Table</i>                  | If the ForeColor property of a TableCell object is set, the cell is not painted in the value of the Table control's ForeColor property, it is painted in the value of the TableCell object's ForeColor.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Toolbar</i>                | It is only effective when the UseSystemColor property is False and the Style property is "1-Flat" or "2-FlatList".  |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>Default value:</b>         |   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Form</i>                   | System's Window Text color.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>TableCell</i>              | Table control's ForeColor property  |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Others</i>                 | Container's ForeColor property.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>COBOL picture:</b>         | S9(9) COMP-5  |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>OLE data type:</b>         | OLE_COLOR   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>Design time access:</b>    |   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>TableCell</i>              | Not accessible.   |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <i>Others</i>                 | Set and reference.  |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |
| <b>Execution time access:</b> | Set and reference.  |                   |            |       |            |          |            |         |       |               |       |          |         |      |       |              |         |           |          |                   |  |

**Backward compatibility attribute:** POW-TEXTCOLOR PIC X(4)

## 4.123 FramePath Property

---

**Description:** Contains the folder from which images used by the Animation control are fetched.

**Used in control(s):** Animation

**Value:** The pathname of the file containing the animation images.  
If a value is not set, PowerCOBOL searches for the image files in the current folder.  
It is only effective when the Resource property is False.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.124 FrameStyle Property

---

**Descriptions:** Defines the style of frame to be used.

**Used in controls:** Frame

**Values (with constants):** 0 - GroupBox style (POW-FRAME-GROUPBOX)  
1 - Panel style (POW-FRAME-PANEL)

**Default value:** 0 - GroupBox style (POW-FRAME-GROUPBOX)

**COBOL PICTURE:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attributes:** None.

## 4.125 Ghosted Property

---

**Description:** Indicates whether the image color of ListItem objects is lightened.

**Used inobject:** ListItem

**Values (with constants):** True - Lightens the colors of the image.(POW-TRUE)  
False - Does not lighten the colors of the image.(POW-FALSE)

**Default value:** False - Does not lighten the colors of the image.(POW-FALSE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_BOOL

**Design time access:** Not accessible.

**Execution time access:** Set and reference.



**Backward compatibility attribute:** None.

## 4.126 GraphStyle Property

---

**Description:** Defines the style of graph to be used.

**Used in control(s):** Graph

**Values (with constants):** 0 - Vertical bar(POW-GRAPHSTYLE-VERTICALBAR)  
1 - Horizontal bar(POW-GRAPHSTYLE-HORIZONTALBAR)  
2 - Line graph(POW-GRAPHSTYLE-LINE)  
3 - Pie chart(POW-GRAPHSTYLE-PIE)

**Default value:** 0 - Vertical bar(POW-GRAPHSTYLE-VERTICALBAR)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-GRAPHSTYLEPIC S9(4) COMP-5

## 4.127 HeaderText Property

---

**Description:** Contains the text for the column header.

**Used in object:** Column

**Value:** The text to be displayed in the column header cell.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.128 HeadText Property

---

**Description:** Contains the text to be printed at the head of the page.

**Used in control(s):** Print

**Value:** The text of the page header.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-HEADSTRINGPIC X(256)

## 4.129 Height Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the height of the control or object.  |
| <b>Used in controls/objects:</b>         | All sizable controls and the Form object.   |
| <b>Value:</b>                            | The height of the control, or form, specified in the units defined by the ScaleMode property.   |
| <i>ComboBox</i>                          | When the Style property is not "0 - Simple" and the AutoSize property is True, the value does not include the height of the list box part.  |
| <i>DriveList</i>                         | When the AutoSize property is True, the value does not include the height of the list box part.   |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               |   |
| <i>ComboBox</i>                          | Set and reference.  |
| <i>Drivelist</i>                         | Set and reference.  |
| <i>Form</i>                              | Not accessible.   |
| <i>Toolbar</i>                           | Reference only.   |
| <i>Others</i>                            | Set and reference.  |
| <b>Execution time access:</b>            |   |
| <i>ComboBox</i>                          | Set and reference.  |
| <i>Drivelist</i>                         | Set and reference.  |
| <i>Toolbar</i>                           | Reference only.   |
| <i>Others</i>                            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-POSITION - made up of the following elements. This property corresponds to POS-HEIGHT.<br><br><b>01 POSITIONS.</b><br><b>02 POS-XPIC S9(4) COMP-5.</b><br><b>02 POS-YPIC S9(4) COMP-5.</b><br><b>02 POS-WIDTHPIC S9(4) COMP-5.</b><br><b>02 POS-HEIGHTPIC S9(4) COMP-5.</b> |

## 4.130 Hidden Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the FileList control displays hidden files.                               |
| <b>Used in control(s):</b>               | FileList   |
| <b>Values (with constants):</b>          | True - Displays hidden files.(POW-TRUE)<br>False - Does not display hidden files.(POW-FALSE) |
| <b>Default value:</b>                    | False - Does not display hidden files.(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-HIDDENPIC S9(4) COMP-5   |

## 4.131 HideSelection Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the selection indicator (a rectangle or reverse video indicating that a cell or item is selected) is hidden when the control loses focus. |
| <b>Used in control(s):</b>               | ListView            Table            TreeView   |
| <b>Values (with constants):</b>          | True - Hides the selection indicator.(POW-TRUE)<br>False - Does not hide the selection indicator.(POW-FALSE)  |
| <i>Table</i>                             | When the value is False, the rectangle that indicates the selected cell remains displayed.  |
| <i>ListView, TreeView</i>                | When the value is False, the selected item remains in reverse video.  |
| <b>Default value:</b>                    |   |
| <i>Table</i>                             | False(POW-FALSE)  |
| <i>ListView, TreeView</i>                | True(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.132 Highlight Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Indicates whether to highlight the text in the control or object.   |
| <b>Used in controls:</b>        | CheckBox            FileList            ListBox            StaticText<br><br>ComboBox            FolderList            ListView            Table<br><br>CommandButton      Frame            OptionButton      TextBox<br><br>DriveList            GroupBox            ProgressIndicator    Toolbar<br><br>Edit            Lable |
| <b>Used in objects:</b>         | Form            TableCell   |
| <b>Values (with constants):</b> | True - Highlights the text.(POW-TRUE)<br>False - Does not highlight the text.(POW-FALSE)  |
|                                 | When it is True, the control or object uses the color specified in the HilightColor property to highlight the text.   |
|                                 | PowerCOBOL uses the value for the Form object as the default value for controls placed on the form.   |
| <i>Edit and TextBox</i>         | It is only effective when the Password property of the Edit control is False, or the Password property of a TextBox control, whose EditableLabel property is False, is False.   |
| <b>Default values:</b>          |   |
| <i>Form</i>                     | False(POW-FALSE)  |
| <i>TableCell</i>                | Table control's Highlight property.   |
| <i>Others</i>                   | Container's Highlight property.   |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |
| <b>OLE data type:</b>           | VT_BOOL   |
| <b>Design time access:</b>      |   |
| <i>TableCell</i>                | Not accessible.   |
| <i>Others</i>                   | Set and reference.  |

**Execution time access:** Set and reference.  
**Backward compatibility attribute:** None.

## 4.133 HighlightColor Property

---

**Description:** Indicates the color to be used to highlight the text in the control or object.

**Used in control(s):**

|                 |               |            |                   |         |
|-----------------|---------------|------------|-------------------|---------|
| <i>Controls</i> | CheckBox      | FileList   | ListView          | Table   |
|                 | ComboBox      | FolderList | OptionButton      | TextBox |
|                 | CommandButton | Frame      | ProgressIndicator | Toolbar |
|                 | DriveList     | GroupBox   | StaticText        |         |
|                 | Edit          | ListBox    |                   |         |
| <i>Objects</i>  | Form          | TableCell  |                   |         |

**Values:** Refer to "Appendix A. Color Constants" and OLE\_COLOR described in "Appendix C. Data Types" for details on color values.

*CommandButton* It is only effective when the Highlight property is True and the UseSystemColor property is False.

*Toolbar* The value indicates the highlight color of the texts for Button objects.  
It is only effective when the Highlight property is True, the UseSystemColor property is False, and the Style property is "1-Flat" or "2-FlatList".

*Others* It is only effective when the Highlight property is True.

**Default value:**

*Form* System's Highlight color.

*TableCell* Table control's HighlightColor property.

*Others* Container's HighlightColor property.

**COBOL picture:** S9(9) COMP-5

**OLE data type:** OLE\_COLOR

**Design time access:**

*TableCell* Not accessible.

*Others* Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-TEXTBKCOLOR PIC X(4)

## 4.134 HotImageList Property

---

**Description:** Defines the resource name of an image list file. The file contains button images to be used when the mouse pointer is moved over buttons in the Toolbar control.

**Used in control(s):** Toolbar

**Value:** The resource name of a hot image list file.  
It is only effective when the Style property is "1-Flat" or "2-FlatList".  
The image list contains bitmaps of all the images concatenated into a Single file.  
PowerCOBOL determines the location of each bitmap by using the ImageWidth property of the image list file (this is different from the ImageWidth property of the Image control).

You add an image list file to a module in the PowerCOBOL project list by using the Insert File option from the pop-up menu.

Hot images are used when the mouse pointer is moved over a button that can be clicked.

Note: You must select "Image List (\*.BMP)" as the file type, not "Bitmap Files (\*.bmp)".

|  |                      |
|--|----------------------|
| <b>Default value:</b>                    | None.                |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes. |
| <b>OLE data type:</b>                    | VT_BSTR              |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.                |

## 4.135 HScrollBar Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether to use a horizontal scrollbar in the TextBox control.  |
| <b>Used in control(s):</b>               | TextBox   |
| <b>Values (with constants):</b>          | True:Control displays a horizontal scrollbar. (POW-TRUE)<br>False:Control does not display a horizontal scrollbar. (POW-FALSE)<br>It is only effective when the MultiLine property is True. |
| <b>Default value:</b>                    | False:Control does not display a horizontal scrollbar. (POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.136 Icon Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Defines the icon used by the form.   |
| <b>Used in object:</b>          | Form   |
| <b>Values (with constants):</b> | 0 - Default: Depends on the system. It is usually the Windows logo.(POW-ICON-DEFAULT)<br>1 - Application: Small image of a window.(POW-ICON-APPLICATION)<br>2 - Hand: White "X" on red circle.(POW-ICON-HAND)<br>3 - Question: "?" in a white speech balloon.(POW-ICON-QUESTION)<br>4 - Exclamation: "!" in a yellow triangle. (POW-ICON-EXCLAMATION)<br>5 - Asterisk: "i" in a white speech balloon.(POW-ICON-ASTERISK)<br>6 - Winlogo: The Windows logo.(POW-ICON-WINLOGO)<br>99 - Custom: Image specified in the IconName property.(POW-ICON-CUSTOM)<br>Note: You cannot use the COBOL Run-time Environment Variables @IconDLL and @IconName to specify the icon used by the form |
| <b>Default value:</b>           | 0 - Default:(POW-ICON-DEFAULT)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5   |

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_I2              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | POW-ICON PIC X(14) |

## 4.137 IconIndex Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the index of the icon image to be used for the ListItem object.    |
| <b>Used in object:</b>                   | ListItem   |
| <b>Value:</b>                            | The index of the icon image.<br>The value is an integer greater than zero. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.138 IconName Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the resource name of the icon used by the form.  |
| <b>Used in object:</b>                   | Form  |
| <b>Value:</b>                            | The resource name of the icon.<br>It is only effective when the Icon property is "99-Custom".<br>You can only set the resource name in the Resource property page after you register the file in the module. You add an icon file to a module in the project list by using the Insert File option from the pop-up menu. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-ICON PIC X(14)  |

## 4.139 Icons Property

---

|                            |  |
|----------------------------|--|
| <b>Description:</b>        | Defines the resource name of the image list file used by the ListView control when the control displays large icons. |
| <b>Used in control(s):</b> | ListView   |
| <b>Values:</b>             | The resource name of the image list file containing the large icon images.   |
| <b>Default value:</b>      | None.  |
| <b>COBOL picture:</b>      | X, up to 8192 bytes  |

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_BSTR            |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.140 ImageCount Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the number of images in the image file.   |
| <b>Used in control(s):</b>               | Image  |
| <b>Value:</b>                            | The number of images in the image file. The image file can be a file of icons, or Kodak PhotoCD (.pcd) images.<br><br>If another type of image is used the value is 1.<br><br>If no image is specified the value is 0. |
| <b>Default value:</b>                    | 0  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Reference only.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.141 ImageHeight Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the height of the image.   |
| <b>Used in control(s):</b>               | Image   |
| <b>Value:</b>                            | The height of the image expressed in the units defined in the ScaleMode property.   |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | COMP-1  |
| <b>OLE data type:</b>                    | OLE_YSIZE_CONTAINER   |
| <b>Design time access:</b>               | Reference only.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | POW-IMAGESIZE - made up of the following elements.<br><br>This property corresponds to SZ-HEIGHT.<br><br><b>01 IMAGE-SIZE.</b><br><b>02 SZ-WIDTHPIC S9(4) COMP-5.</b><br><b>02 SZ-HEIGHTPIC S9(4) COMP-5.</b> |

## 4.142 ImageIndex Property

---

|                     |   |
|---------------------|---|
| <b>Description:</b> | Defines the index of the image to use in the control or object. |
| <b>Used in:</b>     |   |
| <i>Control</i>      | Image   |
| <i>Objects</i>      | Button                      Node                                |

|  |   |
|--|---|
| <b>Value:</b>                            | The index of the image.<br>The value is an integer greater than zero.<br>For the Image control, it is the index within the Kodak PhotoCD image file "Overview.pcd". |
| <b>Default value:</b>                    |   |
| <i>Image</i>                             | 1   |
| <i>Others</i>                            | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               |   |
| <i>Node</i>                              | Not accessible.   |
| <i>Others</i>                            | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.143 ImageLeft Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the X coordinate, within the image, where the image display begins.   |
| <b>Used in control(s):</b>               | Image   |
| <b>Value:</b>                            | The X coordinate, within the image, where the image display begins.<br>It is expressed in the units defined in the ScaleMode property.<br>For example if the ImageLeft property is 10 pixels, the control displays the image from the 10 <sup>th</sup> pixel right.<br>If ImageMode is set to "2 - Auto", the value of ImageLeft property changes according to the horizontal scroll position of the image. |
| <b>Default value:</b>                    | 0   |
| <b>COBOL picture:</b>                    | COMP-1  |
| <b>OLE data type:</b>                    | OLE_XPOS_CONTAINER  |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.144 ImageList Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the resource name of the image list file that contains the images for the Toolbar or TreeView control.   |
| <b>Used in control(s):</b> | Toolbar                      TreeView   |
| <b>Value:</b>              | The resource name of the image list file.<br>The image list file contains bitmaps of all the images concatenated into a single file.<br>PowerCOBOL determines the location of each bitmap by using the ImageWidth property (this is different from the ImageWidth property of the Image control) of the image list file. You add an image list file to a module in the project list by using the Insert File option from the pop-up menu. |



Note: You must select "Image List (\*.BMP)" as the file type, not "Bitmap Files (\*.bmp)".

|  |                     |
|--|---------------------|
| <b>Default value:</b>                    | None.               |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes |
| <b>OLE data type:</b>                    | VT_BSTR             |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.               |

## 4.145 ImageMode Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the method to be used for displaying the image.  |
| <b>Used in control(s):</b>               | Image  |
| <b>Values (with constants):</b>          | 0 - Standard:(POW-IMAGEMODE-STANDARD)<br>The image is displayed within the control, clipped if necessary.<br><br>1 - Stretch:(POW-IMAGEMODE-STRETCH)<br>The image is expanded or contracted to fit the size of the control.<br><br>2 - Auto:(POW-IMAGEMODE-AUTO)<br>If the image is smaller than the size of the control, the control is shrunk to fit the image.<br>If the image is larger than the size of the control, scrollbars are inserted.<br><br>3 - Adjust:(POW-IMAGEMODE-ADJUST)<br>The size of the control is adjusted to match the size of the image. |
| <b>Default value:</b>                    | 1 - Stretch:(POW-IMAGEMODE-STRETCH)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-IMAGEMODEPIC S9(4) COMP-5<br>POW-STRETCHPIC S9(4) COMP-5   |

## 4.146 ImageName Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the name of the file or resource containing the image.   |
| <b>Used in control(s):</b>               | CommandButton    Image  |
| <b>Value:</b>                            | The name of the file when the Resource property is False.<br><br>The name of the resource when the Resource property is True. |
| <i>Image</i>                             | System generates a Change event when the ImageName is changed.  |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> |   |
| <i>CommandButton</i>                     | POW-IMAGENAME PIC X(260)  |

Image

POW-IMAGENAMEPIC X(260)

POW-METANAMEPIC X(260)

## 4.147 ImageTop Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the Y coordinate, within the image, where the image display begins.  |
| <b>Used in control(s):</b>               | Image  |
| <b>Value:</b>                            | The Y coordinate, within the image, where the image display begins.<br>It is expressed in the units defined in the ScaleMode property.<br>For example if the ImageTop property is 10 pixels, the control displays the image from the 10 <sup>th</sup> pixel down.<br>If the ImageMode property is "2 - Auto", the value of the ImageTop property changes according to the vertical scroll position of the image. |
| <b>Default value:</b>                    | 0  |
| <b>COBOL picture:</b>                    | COMP-1   |
| <b>OLE data type:</b>                    | OLE_YPOS_CONTAINER   |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.148 ImageWidth Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the width of the image.  |
| <b>Used in control(s):</b>               | Image  |
| <b>Value:</b>                            | The width of the image expressed in the units defined in the ScaleMode property.   |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | COMP-1   |
| <b>OLE data type:</b>                    | OLE_XSIZE_CONTAINER  |
| <b>Design time access:</b>               | Reference only.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | POW-IMAGESIZE - made up of the following elements.<br>This property corresponds to SZ-WIDTH.<br><b>01 IMAGE-SIZE.</b><br><b>02 SZ-WIDTHPIC S9(4) COMP-5.</b><br><b>02 SZ-HEIGHTPIC S9(4) COMP-5.</b> |

## 4.149 IMEMode Property

---

|                            |  |          |         |          |
|----------------------------|--|----------|---------|----------|
| <b>Description:</b>        | Specifies the IME mode. (Useful for applications that must operate in non-single-byte character environments.) |          |         |          |
| <b>Used in control(s):</b> |  |          |         |          |
| <i>Controls</i>            | ComboBox   | Edit     | Table   | TreeView |
|                            | Custom   | ListView | TextBox |          |

|  |  |
|--|--|
| <i>Object</i>                            | TableColumn  |
| <b>Values (with constants):</b>          | 0 - None(POW-IMENOOOPERATION)<br>1 - On(POW-IMEON)<br>2 - Off(POW-IMEOFF)<br>3 - Disable(POW-IMEDISABLE)<br>4 - Hiragana Full(POW-IMEDBCSHIRAGANA)<br>5 - Katakana Full(POW-IMEDBCSKATAKANA)<br>6 - Katakana Half(POW-IMESBCSKATAKANA)<br>7 - Alphabet Full(POW-IMEDBCSALPHABET)<br>8 - Alphabet Half(POW-IMESBCSALPHABET) |
| <b>Default value:</b>                    | 0 - None(POW-IMENOOOPERATION)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.150 Indentation Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the size of the indent from the parent Node object to the child Node object. |
| <b>Used in control(s):</b>               | TreeView   |
| <b>Value:</b>                            | The size of the indent expressed in the units defined by the ScaleMode property.     |
| <b>Default value:</b>                    | Depends on the system.   |
| <b>COBOL picture:</b>                    | COMP-1   |
| <b>OLE data type:</b>                    | OLE_XSIZE_CONTAINER  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.151 Index Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the index of the control when it is part of an array.                             |
| <b>Used in control(s):</b>               | All controls apart from the GroupBox control.   |
| <b>Value:</b>                            | The index of a control within an array.<br><br>The value is an integer greater than zero. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.152 InputFormat Property

---

|                        |   |
|------------------------|---|
| <b>Description:</b>    | Defines the order in which the year, month and day are entered for dates.<br><br>Note: The DateStyle and DateFormat properties determine how the date is displayed.   |
| <b>Used in object:</b> | RenderText  |
| <b>Value:</b>          | The format is defined by entering a permutation of the following three strings:<br><br>yyyy : 4 digit year (e.g. 2003)<br><br>MM : Numeric month (1 to 12)<br><br>dd : Numeric day (1 to 31)<br><br>e.g. "yyyyMMdd" or "MMddyyyy"<br><br>Note that:<br><br>- The InputFormat property is only effective when the RenderStyle property is "2-Date".<br><br>- You can only specify each of the above strings one time.<br><br>e.g. Mmddyyyy<br><br>yyyyMMdd<br><br>yyyyMMddMM <= incorrect<br><br>- The strings are case sensitive.<br><br>e.g. mmddyyyy <= incorrect<br><br>MMddYYYY <= incorrect<br><br>- You must specify all of the three strings.<br><br>e.g. MMdd <= incorrect<br><br>yyyyMM <= incorrect<br><br>- You cannot insert other strings to this format.<br><br>e.g. MM,dd,yyyy <= incorrect<br><br>yyyy-MM-dd <= incorrect<br><br>- The InputFormat is entered using strings to allow expansion to many formats in the future.<br><br>When you input the date at execution time, you can use the delimiters, slash (/), hyphen (-), period (.) or the delimiter specified to the system (Date separator in the Date tab of Regional Settings in the Control Panel).<br><br>For example, if you specified the InputFormat "MMddyyyy", you can input the date at execution time as any of the following strings:<br><br>12/31/2003<br><br>12.31. 2003<br><br>12-31-2003<br><br>12312003<br><br>RenderText:<br><br>When you refer to the Text property, the RenderText object converts the string to the InputFormat. For example, if you:<br><br>- specify the InputFormat "ddyyyyMM", and<br><br>- input the date at execution time "31. 2003.12", and<br><br>- code: |

```

01 WK1 PIC X(8).
...
PROCEDURE DIVISION.
...
MOVE "Text" OF CmText1 TO WK1.

```

The value stored in WK1 is "31200312".

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Reference only.

**Backward compatibility attribute:** None.

## 4.153 Interval Property

---

**Description:** Defines the interval between Animation image changes or Timer events for the Timer control.

**Used in control(s):** Animation            Timer

**Values:** 0 to 65535 (milliseconds)

*Animation*  
The Animation control produces an animation effect by displaying successive images. The value of Interval determines the time between image switches in milliseconds.

A low value of Interval may affect the operation of the application.

The image switch may not always happen precisely at the specified interval, depending on the state of the system.

*Timer*  
The interval between Timer events, specified in milliseconds.

**Default values:**

*Animation*                            300

*Timer*                                    1000

**COBOL picture:** S9(9) COMP-5

**OLE data type:** VT\_I4

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:**

*Timer*                                    POW-INTERVALPIC S9(4) COMP-5

## 4.154 IsCheckBtn Property

---

**Description:** Indicates whether checkboxes are inserted to the left of each item in the ListBox control.

**Used in control(s):** ListBox

**Values (with constants):** True - Inserts checkboxes.(POW-TRUE)  
False - Does not insert checkboxes.(POW-FALSE)

**Default value:** False - Does not insert checkboxes.(POW-FALSE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_BOOL

|  |                    |
|--|--------------------|
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Reference only.    |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.155 IsChecked Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a flag indicating whether an item in the ListBox control is checked. The flags are held in an array, so always use an index when referencing the IsChecked property.                             |
| <b>Used in control(s):</b>               | ListBox   |
| <b>Values (with constants):</b>          | True - Checked.(POW-TRUE)<br>False - Not checked.(POW-FALSE)<br><br>It is only effective when the IsCheckBtn property is True.<br><br>The index can be set from 1 to the value of the ListCount property. |
| <b>Default value:</b>                    | False - Not checked.(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.156 IsQuery Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the items displayed in the list box part are filtered by the characters entered in the text box part of the ComboBox control.   |
| <b>Used in control(s):</b>               | ComboBox  |
| <b>Values (with constants):</b>          | True - Filters the list box part.(POW-TRUE)<br>False - Does not filter the list box part.(POW-FALSE)<br><br>It is only effective when the Style property is "0 - Simple" or "1 - DropDown". |
| <b>Default value:</b>                    | False - Does not filter the list box part.(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.157 IsSelected Property (Array)

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Contains a flag indicating whether an item in the list box part is selected. The flags are held in an array, so always use an index when referencing the IsSelected property. |
| <b>Used in control(s):</b>      | FileList                      ListBox   |
| <b>Values (with constants):</b> | True - Selected.(POW-TRUE)<br>False - Not selected.(POW-FALSE)  |

|  |   |
|--|---|
|  | The index can be set from 1 to the value of the ListCount property. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> |   |
| <i>ListBox</i>                           | POW-SELFLAGPIC S9(4) COMP-5<br>DEPENDING ON POW-LISTCOUNT           |

## 4.158 Italic Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the font is italic.                               |
| <b>Used in object:</b>                   | Font  |
| <b>Values (with constants):</b>          | True - Italic.(POW-TRUE)<br>False - Not italic. (Normal)(POW-FALSE) |
| <b>Default value:</b>                    | Container's Italic property   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-ITALICPIC S9(4) COMP-5  |

## 4.159 Item Property (Array or object name)

---

|   |   |
|---|---|
| <b>Descriptions:</b>                      | Contains a pointer to an object corresponding to the index or element name in the collection object. The pointers are held in an array so always use an index when referencing the Item property. |
| <b>Used in objects:</b>                   | Controls                      DataBindings  |
| <b>Values:</b>                            |   |
| <i>Controls</i>                           | Contains a pointer to the control object corresponding to the specified index or control name. The control objects are held in the Controls collection object of the Form object.                 |
| <i>DataBindings</i>                       | Contains a pointer to the property corresponding to the specified index or property name. The properties are held in the DataBindings collection object of a Custom control that can bind data.   |
| <b>Default value:</b>                     | None.   |
| <b>COBOL PICTURE:</b>                     | OBJECT REFERENCE POW-COBJECT  |
| <b>OLE data type:</b>                     | VT_DISPATCH   |
| <b>Design time access:</b>                | Not accessible.   |
| <b>Execution time access:</b>             | Reference only.   |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.160 KeysetSize Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the key set size.   |
| <b>Used in control(s):</b>               | DBAccess  |
| <b>Values:</b>                           | 0 to 65535  |
|  | It is only effective when CursorType is "1 - SQL_CURSOR_KEYSET_DRIVEN". |
| <b>Default value:</b>                    | 0   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.161 LabelEdit Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether node labels can be edited within the control when the label is clicked. |
| <b>Used in control(s):</b>               | ListView                  TreeView  |
| <b>Values (with constants):</b>          | True - Labels can be edited.(POW-TRUE)<br>False - Labels cannot be edited.(POW-FALSE)     |
| <i>ListView</i>                          | The edited string changes the Text property of the ListItem object.                       |
| <i>TreeView</i>                          | The edited string changes the Text property of the Node object.                           |
| <b>Default value:</b>                    | True(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.162 LabelWrap Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines whether long label text wraps to new lines.                                     |
| <b>Used in control(s):</b>               | ListView  |
| <b>Values (with constants):</b>          | True:Text wraps.(POW-TRUE)<br>False:Text does not wrap.(POW-FALSE)                      |
|  | It is only effective when the LVStyle property is "0 - Large icon" or "1 - Small icon". |
| <b>Default value:</b>                    | True:Text wraps.(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |



## 4.163 LargeStep Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the amount of the large step movement in a scroll bar or slider.  |
| <b>Used in control(s):</b>               | ScrollBar                      Slider   |
| <b>Values:</b>                           |   |
| <i>ScrollBar</i>                         | -65535 to 65535<br><br>The "large step" is the amount of movement when the mouse is clicked in the scrollbar shafts (the areas between the arrows and the scroll box), or when the PageDown or PageUp keys are pressed. |
| <i>Slider</i>                            | 0 to 65535<br><br>The "large step" is the amount of movement when the mouse is clicked in the slider shafts (the areas before and after the thumb), or when the PageDown or PageUp keys are pressed.                    |
| <b>Default value:</b>                    | 20  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-LARGESTEPPIC S9(9) COMP-5   |

## 4.164 Layout Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates how an image is aligned within the control.   |
| <b>Used in control(s):</b>               | CommandButton   |
| <b>Values (with constants):</b>          | 0 - Horizontal: Aligned to the left.(POW-LAYOUT-HORIZONTAL)<br>1 - Vertical: Aligned to the top.(POW-LAYOUT-VERTICAL) |
| <b>Default value:</b>                    | 0 - Horizontal: Aligned to the left.(POW-LAYOUT-HORIZONTAL)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.165 Left Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Defines the X coordinate of the left upper corner of the controls or objects.   |
| <b>Used in controls/object:</b> | All controls and the Form object.   |
| <b>Value:</b>                   | The X coordinate expressed in the units defined in the ScaleMode property.  |
| <i>Controls</i>                 | Relative to the left upper corner of the Form or control, which is identified in the Container property.                              |
| <i>Form</i>                     | Relative to the left upper corner of the screen.<br><br>You can only set the value when the StartUpPosition property is "4 - Manual". |
| <b>Default value:</b>           | None.   |
| <b>COBOL picture:</b>           | S9(9) COMP-5  |

|   |   |
|---|---|
| <b>OLE data type:</b>                                   | VT_I4   |
| <b>Design time access:</b>                              |   |
| <i>Toolbar</i>  | Set and reference. - You can only set the value when the Align property is "0 - None" or "4 - Right".   |
| <i>Others</i>   | Set and reference.  |
| <b>Execution time access:</b>                           |   |
| <i>DBAccess, DDE, ExcelConnection, Timer, and Print</i> | Not accessible.   |
| <i>Toolbar</i>  | Set and reference. - You can only set the value when the Align property is "0 - None" or "4 - Right".   |
| <i>Others</i>   | Set and reference.  |
| <b>Backward compatibility attribute:</b>                | POW-POSITION - made up of the following elements.<br>This property corresponds to POS-X.<br><b>01 POSITIONS.</b><br><b>02 POS-XPIC S9(4) COMP-5.</b><br><b>02 POS-YPIC S9(4) COMP-5.</b><br><b>02 POS-WIDTHPIC S9(4) COMP-5.</b><br><b>02 POS-HEIGHTPIC S9(4) COMP-5.</b> |

## 4.166 LeftMargin Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the width of the left-hand margin when the form is printed.               |
| <b>Used in control(s):</b>               | Print   |
| <b>Value:</b>                            | The width of the left margin in the units defined by the PaperScaleUnit property. |
| <b>Default value:</b>                    | 0.6 inch  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-LEFTMARGINPIC S9(9) COMP-5  |

## 4.167 ListCount Property

---

|  |  |            |         |
|--|--|------------|---------|
| <b>Description:</b>                      | Contains the number of items in the list box part. |            |         |
| <b>Used in control(s):</b>               | ComboBox   | FileList   | Listbox |
|  | DriveList  | FolderList |         |
| <b>Value:</b>                            | The number of items in the list box part.          |            |         |
| <b>Default value:</b>                    | None.  |            |         |
| <b>COBOL picture:</b>                    | S9(9) COMP-5                                       |            |         |
| <b>OLE data type:</b>                    | VT_I4  |            |         |
| <b>Design time access:</b>               | Not accessible.                                    |            |         |
| <b>Execution time access:</b>            | Reference only.                                    |            |         |
| <b>Backward compatibility attribute:</b> | POW-COUNTPIC S9(4) COMP-5                          |            |         |

## 4.168 ListIndex Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the index of the selected item in the list box part.   |
| <b>Used in control(s):</b>               | ComboBox            FileList            ListBox<br>DriveList            FolderList  |
| <b>Value:</b>                            | The index of the selected item.<br>The value is an integer from 1 to the value of the ListCount property.<br>0 means nothing is selected. |
| <i>FileList and<br/>ListBox</i>          | The index of the selected item in the list box part.  |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-SELECTPIC S9(4) COMP-5  |

## 4.169 ListItems Property (Array)

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains a pointer to a ListItem object, that is part of an array of such pointers in the ListView control. Always specify an index when referencing the ListItems property. |
| <b>Used in control(s):</b>               | ListView   |
| <b>Value:</b>                            | A pointer to a ListItem object.<br>The index can be set to values from 1 to the value of the Count property.   |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-CLISTITEM   |
| <b>OLE data type:</b>                    | VT_DISPATCH  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.170 ListString Property (Array)

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains a character string that is part of an array of the items in the list box part. Always use an index when referencing the ListString property. |
| <b>Used in control(s):</b> | ComboBox            FileList            ListBox<br>DriveList            FolderList  |
| <b>Value:</b>              | The character string for an item in the list box part.<br>The index can be set from 1 to the value of the ListCount property.                         |
| <b>Default value:</b>      | None.   |
| <b>COBOL picture:</b>      | X, up to 8192 bytes   |
| <b>OLE data type:</b>      | VT_BSTR   |
| <b>Design time access:</b> | Not accessible.   |

|  |  |
|--|--|
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |
| ComboBox, ListBox                        | POW-STRINGPIC X(64)<br>DEPENDING ON POW-COUNT<br>POW-STRING256PIC X(256)<br>DEPENDING ON POW-COUNT |
| DriveList,                               | POW-STRINGPIC X(64)  |
| FileList, FolderList                     | DEPENDING ON POW-COUNT   |

## 4.171 LockType Property

---

|   |  |
|---|--|
| <b>Description:</b>                       | Indicates the type of locks placed on records during editing.  |
| <b>Used in controls:</b>                  | ADODataSource  |
| <b>Used in Objects:</b>                   | None.  |
| <b>Values (with constants):</b>           | -1 - adLockUnspecified: (POW-ADODB-ADLOCKSPECIFIED)<br>Does not specify a type of lock.<br><br>1 - adLockReadOnly:(POW-ADODB-ADLOCKREADONLY)<br>Indicates read-only records.<br><br>2 - adLockPessimistic:(POW-ADODB-ADLOCKPESSIMISTIC)<br>Indicates pessimistic locking, record by record.<br><br>3 - adLockOptimistic:(POW-ADODB-ADLOCKOPTIMISTIC)<br>Indicates optimistic locking, record by record.<br><br>4 - adLockBatchOptimistic: (POW-ADODB-ADLOCKBATCHOPTIMISTIC)<br>Indicates optimistic batch updates.<br><br>Consult the ADO documentation for details about lock types.<br><br>Note: The value may be ignored depending on the kind of OLE DB Provider to which you connected. |
| <b>Default value:</b>                     | 3 - adLockOptimistic:(POW-ADODB-ADLOCKOPTIMISTIC)  |
| <b>COBOL PICTURE:</b>                     | S9(4) COMP-5   |
| <b>OLE data type:</b>                     | VT_I2  |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.172 Lower Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the lower limit of the range of data shown in the graph.  |
| <b>Used in control(s):</b> | Graph   |
| <b>Value:</b>              | The lower limit of the range of data.<br><br>It is not effective when the GraphStyle property is "3 - Pie". |
| <b>Default value:</b>      | 0   |
| <b>COBOL picture:</b>      | S9(9) COMP-5  |

|  |                           |
|--|---------------------------|
| <b>OLE data type:</b>                    | VT_I4                     |
| <b>Design time access:</b>               | Set and reference.        |
| <b>Execution time access:</b>            | Set and reference.        |
| <b>Backward compatibility attribute:</b> | POW-LOWERPIC S9(9) COMP-5 |

## 4.173 LVStyle Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the display style of the ListItem objects.   |
| <b>Used in control(s):</b>               | ListView   |
| <b>Values (with constants):</b>          | <p>0 - Large icon:(POW-LVSTYLE-LARGEICON)<br/>Large icons with the list item label below.</p> <p>1 - Small icon:(POW-LVSTYLE-SMALLICON)<br/>Small icons with the list item label to the right. Listed left to right in rows.</p> <p>2 - List:(POW-LVSTYLE-LIST)<br/>Small icons with the list item label to the right. Listed top to bottom, left to right.</p> <p>3 - Report:(POW-LVSTYLE-REPORT)<br/>Detailed display. Small icons with the label and other information to the right. Listed vertically with one row per item.</p> |
| <b>Default value:</b>                    | 0 - Large icon:(POW-LVSTYLE-LARGEICON)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.174 Max Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the maximum value for the control.   |
| <b>Used in control(s):</b>               | ProgressIndicator      Scrollbar      Slider   |
| <b>Values:</b>                           |  |
| <i>ProgressIndicator,</i>                | 0 to 65535   |
| <i>Slider</i>                            | The value must be greater than the Min property.   |
| <i>Scrollbar</i>                         | -32768 to 32767  |
|  | The value must be greater than the Min property, and satisfy the condition:<br>Min <= Max - (ScrollPage - 1) |
| <b>Default value:</b>                    | 100  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> |  |
| <i>Scrollbar</i>                         | POW-MAXPIC S9(4) COMP-5  |

## 4.175 MaxButton Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the maximize button is displayed in the title bar.                                   |
| <b>Used in object:</b>                   | Form  |
| <b>Values (with constants):</b>          | True - Display the maximize button.(POW-TRUE)<br>False - Do not display the maximize button.(POW-FALSE) |
| <b>Default value:</b>                    | True - Display the maximize button.(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Not accessible.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.176 MaxLength Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the maximum number of characters to be input.  |
| <b>Used in control(s):</b>               | Edit                      TextBox  |
| <b>Value:</b>                            |  |
| <i>Edit</i>                              | The maximum number of characters.<br>The value is an integer greater than zero.<br>A value of zero means there is no limit.  |
| <i>TextBox</i>                           | The maximum number of characters.<br>The value is an integer greater than zero.<br>A value of zero means there is no limit.<br>If you press the ENTER key, it corresponds to 2 characters when the MultiLine property is True.<br>If the RenderStyle property is not "0 - Standard", setting MaxLength to a value greater than the number of characters specified in the PictureString in the RenderText property page has no effect.<br>The setting of the MaxLength property is unrelated to the generation of the Return event. |
| <b>Default value:</b>                    | 0 (there is no limit)  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.177 MediaLength Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the overall playing time of the media.                                       |
| <b>Used in control(s):</b> | MCI   |
| <b>Value:</b>              | The overall playing time expressed in the units specified in the TimeFormat property. |

It is only accessible when the device is open (between the device being opened and closed).

See MediaLength Sample for code for techniques of extracting the track, minute, second and frame information from the this property.

|  |                         |
|--|-------------------------|
| <b>Default value:</b>                    | None.                   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5            |
| <b>OLE data type:</b>                    | VT_I4                   |
| <b>Design time access:</b>               | Not accessible.         |
| <b>Execution time access:</b>            | Reference only.         |
| <b>Backward compatibility attribute:</b> | POW-MCIMEDIALENPIC X(8) |

## 4.178 MediaLength Sample Code

The code below shows how to extract the Track, Minute, Second and Frame from the MediaLength. (When the TimeFormat property is set to "10 -Track/Minute/Second/Frame").

```
DATA DIVISION.
WORKING-STORAGE SECTION.
01 MEDIA-LEN.
   02 LEN                PIC S9(9)COMP-5.
   02 LEN-X REDEFINES LEN PIC X(4).
01 MEDIA-LEN-EXTRACT.
   02 LEN-EXTRACT        PIC S9(9)COMP-5.
   02 LEN-EXTRACT-X REDEFINES LEN-EXTRACT PIC X(4).
01 MCI-MEDIALEN.
   02 MCI-TRACK          PIC S9(4)COMP-5.
   02 MCI-MINUTE        PIC S9(4)COMP-5.
   02 MCI-SECOND        PIC S9(4)COMP-5.
   02 MCI-FRAME         PIC S9(4)COMP-5.

PROCEDURE DIVISION.
*> Code to extract time in form track/minute/second/frame.
   MOVE 10 TO "TimeFormat" OF MCI1.
   MOVE "MediaLength" OF MCI1 TO LEN.
   MOVE 0 TO LEN-EXTRACT.

*> Acquire track field
*> (Taking account of 80x86 byte reversal).
   MOVE LEN-X(1:1) TO LEN-EXTRACT-X(1:1).
   MOVE LEN-EXTRACT TO MCI-TRACK.

*> Acquire minute field
   MOVE LEN-X(2:1) TO LEN-EXTRACT-X(1:1).
   MOVE LEN-EXTRACT TO MCI-MINUTE.

*> Acquire second field
   MOVE LEN-X(3:1) TO LEN-EXTRACT-X(1:1).
   MOVE LEN-EXTRACT TO MCI-SECOND.

*> Acquire frame field
   MOVE LEN-X(4:1) TO LEN-EXTRACT-X(1:1).
   MOVE LEN-EXTRACT TO MCI-FRAME.
```

## 4.179 MediaPosition Property

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the current playing position of the media.   |
| <b>Used in control(s):</b> | MCI   |
| <b>Value:</b>              | The current playing position of the media, expressed in the units defined in the TimeFormat property. |

It is only accessible when the device is open.

See MediaLength Sample for techniques of extracting track, minute, second and frame information.

|  |                         |
|--|-------------------------|
| <b>Default value:</b>                    | None.                   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5            |
| <b>OLE data type:</b>                    | VT_I4                   |
| <b>Design time access:</b>               | Not accessible.         |
| <b>Execution time access:</b>            | Set and reference.      |
| <b>Backward compatibility attribute:</b> | POW-MCIMEDIAPOSPIC X(8) |

## 4.180 MenuBarName Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the name of the Menu object that defines the menubar of the form. |
| <b>Used in object:</b>                   | Form   |
| <b>Value:</b>                            | The name of Menu object. (Name property)                                   |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes.   |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Not accessible.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.181 MenuBreak Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the menu is split immediately before the menu item.   |
| <b>Used in object:</b>                   | MenuItem   |
| <b>Values (with constants):</b>          | 0 - Not MenuBreak:(POW-NOBREAK)<br>Menu is not split.<br><br>1 - MenuBreak:(POW-BREAK)<br>Menu is split into two or more columns.<br><br>2 - MenuBarBreak:(POW-BARBREAK)<br>Menu is split with a vertical bar between columns. |
| <b>Default value:</b>                    | 0 - Not MenuBreak:(POW-NOBREAK)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.182 Min Property

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Defines the minimum value for the control. |
|---------------------|--|



|  |  |
|--|--|
| <b>Used in control(s):</b>               | ProgressIndicator    Scrollbar    Slider   |
| <b>Values:</b>                           |  |
| <i>ProgressIndicator,</i>                | 0 to 65535   |
| Slider                                   | The value must be less than the Max property.  |
| <i>Scrollbar</i>                         | -32768 to 32767  |
|  | The value must be less than the Max property and satisfy the condition:<br>Min <= Max - (ScrollPage - 1) |
| <b>Default value:</b>                    | 0  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> |  |
| <i>ScrollBar</i>                         | POW-MINPIC S9(4) COMP-5  |

## 4.183 MinButton Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the minimize button is displayed in the title bar.                                      |
| <b>Used in control(s):</b>               | Form   |
| <b>Values (with constants):</b>          | True - Displays the minimize button.(POW-TRUE)<br>False - Does not display the minimize button.(POW-FALSE) |
| <b>Default value:</b>                    | True - Displays the minimize button.(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Not accessible.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.184 MouseIconName Property

---

|                               |  |
|-------------------------------|--|
| <b>Description:</b>           | Defines the resource name of a mouse pointer for the form.   |
| <b>Used in control:</b>       | Form   |
| <b>Value:</b>                 | The resource name for a mouse pointer.<br><br>It is only effective when the MousePointer property is "99-Custom".<br><br>You can only set the resource name on the Resource property page after you register the file in the module (using the Insert File function from the pop-up menu in the project view). |
| <b>Default value:</b>         | None.  |
| <b>COBOL picture:</b>         | X, up to 8192 bytes  |
| <b>OLE data type:</b>         | VT_BSTR  |
| <b>Design time access:</b>    | Set and reference.   |
| <b>Execution time access:</b> | Set and reference.   |

**Backward compatibility attribute:** POW-CURSORPIC X(14)

## 4.185 MousePointer Property

---

**Description:** Indicates the style of the mouse pointer.

**Used in control(s):** Form

**Values (with constants):**

- 0 - Default: Standard pointer.(POW-MP-DEFAULT)
- 1 - Arrow: Arrow pointer.(POW-MP-ARROW)
- 2 - Cross: Cross pointer.(POW-MP-CROSS)
- 3 - Ibeam: Ibeam pointer.(POW-MP-IBEAM)
- 4 - Icon: Empty pointer.(POW-MP-ICON)
- 5 - Size:Standard arrow pointer - no special image currently assigned to this value. Use "14 - SizeAll" instead of "5 - Size".  
(POW-MP-SIZE)
- 6 - SizeNESW: Two arrows pointing diagonally to the upper right and lower left corners.  
(POW-MP-SIZENESW)
- 7 - SizeNS: Two arrows pointing vertically up and down. (POW-MP-SIZENS)
- 8 - SizeNWSE: Two arrows pointing diagonally to the upper left and lower right corners.  
(POW-MP-SIZENWSE)
- 9 - SizeWE: Two arrows pointing horizontally left and right.(POW-MP-SIZEWE)
- 10 - UpArrow: Single upward arrow pointer.(POW-MP-UPARROW)
- 11 - Wait: Hourglass pointer.(POW-MP-WAIT)
- 12 - AppStarting:Arrow and hourglass pointer. (POW-MP-APPSTARTING)
- 13 - No:Prohibit sign pointer.(POW-MP-NO)
- 14 - SizeAll: Arrows in four directions.(POW-MP-SIZEALL)
- 15 - Help: Arrow and question mark pointer.(POW-MP-HELP)
- 99 - Custom:(POW-MP-CUSTOM)  
Mouse pointer specified in the MouseIconName property.

**Default value:** 0 - Default (standard)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-CURSORPIC X(14)

## 4.186 Moveable Property

---

**Description:** Indicates whether the form is moveable when the title bar or system menu is operated.

**Used in object:** Form

**Values (with constants):**

- True - Moveable.(POW-TRUE)
- False - Not moveable.(POW-FALSE)

Note that you can move the form by invoking the MoveForm method and setting the Top property or Left property, even if the value is False.

|  |                            |
|--|----------------------------|
| <b>Default value:</b>                    | True - Moveable.(POW-TRUE) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5               |
| <b>OLE data type:</b>                    | VT_BOOL                    |
| <b>Design time access:</b>               | Set and reference.         |
| <b>Execution time access:</b>            | Set and reference.         |
| <b>Backward compatibility attribute:</b> | None.                      |

## 4.187 MultiLine Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the control has multiple lines.   |
| <b>Used in control(s):</b>               | Tab                      TextBox  |
| <b>Values (with constants):</b>          | True - Multiple lines.(POW-TRUE)<br>False - A single line.(POW-FALSE)   |
| <b>Tab</b>                               | Indicates whether there are multiple lines of tabs in the control when the tabs do not fit in a single line.  |
| <b>TextBox</b>                           | Indicates whether the text box should be single or multi-line. When the value is True, the caret (cursor) in the control goes to the next line when the ENTER key is pressed. |
| <b>Default value:</b>                    | False - A single line.(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.188 MultipleInstance Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether multiple instances of a form can be created at execution time.<br><br>(On Windows two or more instances of an application that includes the form can be executing at the same time.)   |
| <b>Used in object:</b>                   | Form   |
| <b>Values (with constants):</b>          | True - Can create multiple instances.(POW-TRUE)<br>False - Cannot create multiple instances.(POW-FALSE)<br><br>It is only effective when the ScriptLanguage property of the Module is "1 - OOCOBOL Language Mode". You cannot create multiple instances when the property is "0 - COBOL85 Language Mode" |
| <b>Default value:</b>                    | False - Cannot create multiple instances.(POW-FALSE)   |
| <b>COBOL PICTURE</b>                     | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT-BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Not accessible.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.189 MultiSelect Property

---

|  |  |         |          |
|--|--|---------|----------|
| <b>Description:</b>                      | Defines the selection mode in the list box part for the control.   |         |          |
| <b>Used in control(s):</b>               | FileList   | ListBox | ListView |
| <b>Values (with constants):</b>          |  |         |          |
| <i>ListView</i>                          | True:Multiple items can be selected.(POW-TRUE)<br>False:Multiple items cannot be selected.(POW-FALSE)  |         |          |
| <i>FileList, ListBox</i>                 | 0 - Single select:(POW-MULTISELECT-NONE)<br>Only one item can be selected at a time.<br>1 - Multiple select:(POW-MULTISELECT-SIMPLE)<br>Two or more items can be selected at a time.<br>2 - Extended select: (POW-MULTISELECT-EXTENDED)<br>Like the multiple selection option, but with the ability to select a single range as well as multiple discrete items. |         |          |
| <b>Default value:</b>                    |  |         |          |
| <i>ListView</i>                          | False:Multiple items cannot be selected.(POW-FALSE)  |         |          |
| <i>FileList, ListBox</i>                 | 0 - Single select: (POW-MULTISELECT-NONE)  |         |          |
| <b>COBOL PICTURE</b>                     | S9(4) COMP-5   |         |          |
| <b>OLE data type</b>                     |  |         |          |
| <i>ListView</i>                          | VT_BOOL  |         |          |
| <i>FileList, ListBox</i>                 | VT_I2  |         |          |
| <b>Design time access:</b>               | Set and reference.   |         |          |
| <b>Execution time access:</b>            |  |         |          |
| <i>ListView</i>                          | Set and reference.   |         |          |
| <i>FileList, ListBox</i>                 | Reference only.  |         |          |
| <b>Backward compatibility attribute:</b> | None.  |         |          |

## 4.190 Name Property

---

|                               |   |      |      |          |
|-------------------------------|---|------|------|----------|
| <b>Description:</b>           | Contains the name of the control or object. |      |      |          |
| <b>Used in:</b>               |   |      |      |          |
| <i>Controls</i>               | All controls                                |      |      |          |
| <i>Objects</i>                | Font  | Form | Menu | MenuItem |
| <b>Values:</b>                |   |      |      |          |
| <i>Font</i>                   | The name of the font to be used.            |      |      |          |
| <i>Others</i>                 | The name of the control or object.          |      |      |          |
| <b>Default value:</b>         |   |      |      |          |
| <i>Font</i>                   | Depends on the container.                   |      |      |          |
| <i>Others</i>                 | A name generated by PowerCOBOL.             |      |      |          |
| <b>COBOL picture:</b>         | X, up to 8192 bytes                         |      |      |          |
| <b>OLE data type:</b>         | VT_BSTR                                     |      |      |          |
| <b>Design time access:</b>    | Set and reference.                          |      |      |          |
| <b>Execution time access:</b> |   |      |      |          |
| <i>Font</i>                   | Set and reference.                          |      |      |          |

|  |                 |
|--|-----------------|
| <i>Form</i>                              | Not accessible. |
| <i>Others</i>                            | Reference only. |
| <b>Backward compatibility attribute:</b> | None.           |

## 4.191 Normal Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether to display normal files (those without special attribute settings).   |
| <b>Used in control(s):</b>               | FileList  |
| <b>Values (with constants):</b>          | True - Display normal files.(POW-TRUE)<br>False - Do not display normal files.(POW-FALSE)<br><br>Normal files are those that do not have the hidden, system, archive or read-only attributes set. |
| <b>Default value:</b>                    | True - Display normal files.(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-NORMALPIC S9(4) COMP-5  |

## 4.192 Numeric Property (ExcelConnection)

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a fixed-point number that is exchanged with the corresponding Excel cell. It is contained in a two- dimensional array so always refer to the ExcelConnection Numeric property using two indexes. |
| <b>Used in control:</b>                  | ExcelConnection   |
| <b>Value:</b>                            | Numeric data.   |
| <b>Default value:</b>                    | None.   |
| <b>Data type:</b>                        | VT_CY   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-NUMERIC(a b)PIC S9(14)V9(4)   |

## 4.193 Numeric Property (ListItem)

---

|                        |   |
|------------------------|---|
| <b>Description:</b>    | Contains numeric data for a ListItem object in the ListView control. The data is held in an array so always use an index when referencing the Numeric property.         |
| <b>Used in object:</b> | ListItem  |
| <b>Value:</b>          | Numeric data.<br><br>See also the Text property of the ListItem control.<br><br>The index can be set from 1 to the value of the Count property of the ListView control. |
| <b>Default value:</b>  | None.   |
| <b>Data type:</b>      | VT_CY   |

|  |                    |
|--|--------------------|
| <b>Design time access:</b>               | Not accessible.    |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.194 OptionButtonClickMode Property

---

|   |   |
|---|---|
| <b>Descriptions:</b>                      | Determines the condition that generates the Click event of the OptionButton control.  |
| <b>Used in controls:</b>                  | None.   |
| <b>Used in objects:</b>                   | Form  |
| <b>Value (with constants):</b>            | 0 : Normal (POW-CLICKMODE-NORMAL)<br>The Click event is not generated until the left mouse button is released.<br><br>1: When left button is pressed (POW-CLICKMODE-LBUTTONDOWN)<br>The Click event is generated when the left mouse button is pressed. |
| <b>Default value:</b>                     | 0 : Normal (POW-CLICKMODE-NORMAL)<br><br>Note : For projects created using V4.0 or V5.0, the default value is 1.  |
| <b>COBOL PICTURE:</b>                     | S9(4) COMP-5  |
| <b>OLE data type:</b>                     | VT_I2   |
| <b>Design time access:</b>                | Set and reference.  |
| <b>Execution time access:</b>             | Set and reference.  |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.195 Orientation Property

---

|                                     |   |           |        |     |
|-------------------------------------|---|-----------|--------|-----|
| <b>Description:</b>                 | Defines the orientation of the control.   |           |        |     |
| <b>Used in control(s):</b>          | ProgressIndicator   | ScrollBar | Slider | Tab |
| <b>Values (with constants):</b>     | <p><i>Tab</i></p> <p>0 - Top(POW-TAB-ORIENTATION-TOP)<br/>1 - Bottom(POW-TAB-ORIENTATION-BOTTOM)<br/>2 - Left(POW-TAB-ORIENTATION-LEFT)<br/>3 - Right(POW-TAB-ORIENTATION-RIGHT)</p> <p>Indicates where the tabs are placed on the control.</p> <p><i>Others</i></p> <p>0 - Horizontal(POW-ORIENTATION-HORIZONTAL)<br/>1 - Vertical(POW-ORIENTATION-VERTICAL)</p> |           |        |     |
| <b>Default value:</b>               | <p><i>Tab</i></p> <p>0 - Top(POW-TAB-ORIENTATION-TOP)</p> <p><i>Others</i></p> <p>0 - Horizontal(POW-ORIENTATION-HORIZONTAL)</p>  |           |        |     |
| <b>COBOL picture:</b>               | S9(4) COMP-5  |           |        |     |
| <b>OLE data type:</b>               | VT_I2   |           |        |     |
| <b>Design time access:</b>          | Set and reference.  |           |        |     |
| <b>Execution time access:</b>       |   |           |        |     |
| <i>ProgressIndicator and Slider</i> | Set and reference.  |           |        |     |
| <i>ScrollBar and Tab</i>            | Reference only.   |           |        |     |

**Backward compatibility attribute:** None.

## 4.196 PageCaption Property (Array)

---

**Description:** Contains a text string to be displayed as the title for a tab page in the Tab control. The titles are held in an array, so always use an index when referencing the PageCaption property.

**Used in control:** Tab

**Value:** The text string for a tab page title.  
The index can be set from 1 to the value of the PageCount property.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.197 PageCount Property

---

**Description:** Defines the number of tab pages in the Tab control.

**Used in control:** Tab

**Value:** An integer from 1 to 99.

**Default value:** 1

**COBOL picture:** S9(9) COMP-5

**OLE data type:** VT\_I4

**Design time access:** Set and reference.

**Execution time access:** Reference only.

**Backward compatibility attribute:** None.

## 4.198 PageNoFormat Property

---

**Description:** Defines the format for printed page numbers.

**Used in control(s):** Print

**Values (with constants):** 0 - None: Does not print page numbers.(POW-NOPAGENO)  
1 - Page: Prints the current page number.(POW-CURRENTPAGE)  
2 - Page/Total: Prints the current page number and total number of pages.(POW-CURRENTTOT)

**Default value:** 1 - Page:(POW-CURRENTPAGE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:**

POW-PAGENOFORMATPIC S9(4) COMP-5

## 4.199 PageTooltip Property (Array)

---

**Description:** Contains a text string to be displayed as a tool tip for a tab page title in the Tab control. The text strings are held in an array, so always use an index when referencing the PageToolTip property.

**Used in control:** Tab

**Value:** The text string to be displayed as a tool tip.

If the mouse pointer lingers over the tab page title for a short period of time, the control displays the tool tip.

The index can be set from 1 to the value of the PageCount property.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.200 PaperOrientation Property

---

**Description:** Defines the orientation of the image on the paper.

**Used in control(s):** Print

**Values (with constants):** 0 - Auto:(POW-DEFAULTORIENTATION)  
Uses the printer setting.

1 - Portrait:(POW-PORTRAIT)  
Prints the image length-wise on the paper.

2 - Landscape:(POW-LANDSCAPE)  
Prints the image across the paper.

**Default value:** Depends on the target printer.

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** POW-PAPERDIRECTPIC S9(4) COMP-5

## 4.201 PaperScaleUnit Property

---

**Description:** Defines the unit of measurement used for lengths associated with print output.

**Used in control(s):** Print

**Values (with constants):** 0 - mm (millimeters)(POW-MM)  
1 - inch(POW-INCH)

**Default value:** 1 - inch(POW-INCH)



|  |                    |
|--|--------------------|
| <b>COBOL picture:</b>                    | S9(4) COMP-5       |
| <b>OLE data type:</b>                    | VT_I2              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.202 PaperType Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the size of paper for the print output.  |
| <b>Used in control(s):</b>               | Print  |
| <b>Values (with constants):</b>          | 0 - Auto (depends on the target printer.)(POW-DEFAULTSIZE)<br>1 - Letter 216x279 mm / Letter 8.5x11 inch(POW-PAPERLETTER)<br>5 - Legal 216x356 mm / Legal 8.5x14 inch(POW-PAPERLEGAL)<br>8 - A3 297x420 mm / A3 11.5x16.5 inch(POW-PAPERA3)<br>9 - A4 210x297 mm / A4 8.2x11.5 inch(POW-PAPERA4)<br>11 - A5 148x210 mm / A5 5.8x8.2 inch(POW-PAPERA5)<br>12 - B4 257x364 mm / B4 10x14.3 inch(POW-PAPERB4)<br>13 - B5 182x257 mm / B5 7x10 inch(POW-PAPERB5) |
| <b>Default value:</b>                    | Depends on the target printer.   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-PAPERTYPEPIC S9(4) COMP-5  |

## 4.203 Parent Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a pointer to the parent object.  |
| <b>Used in:</b>                          |   |
| <b>Controls</b>                          | All controls  |
| <b>Object</b>                            | Node  |
| <b>Values:</b>                           |   |
| <b>Controls</b>                          | A pointer to the GroupBox control if the control is pasted on the GroupBox control.<br><br>In the other cases, it's a pointer to the Form object. |
| <b>Node</b>                              | A pointer to the parent Node object.  |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    |   |
| <b>Controls</b>                          | OBJECT REFERENCE POW-COBJECT  |
| <b>Node</b>                              | OBJECT REFERENCE POW-CNODE  |
| <b>OLE data type:</b>                    | VT_DISPATCH   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.204 Password Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a password string or indicates a password mode for a TextBox.  |
| <b>Used in control(s):</b>               | ADODataSource      DBAccess              Edit                      TextBox  |
| <b>Values:</b>                           |   |
| <i>ADODataSource and DBAccess</i>        | The input password is enabled while the project file is opened at design time. The value of this property is cleared at closing of the project and the password is not saved. If you don't set a value in the procedure code, the database may prompt for the password in another way when you connect to the database.           |
| <i>Edit</i>                              | True - Treats the characters as a password.<br>Echoes the PasswordChar value and not the value the user types.<br><br>False - Does not treat the characters as a password.  |
| <i>TextBox</i>                           | True - Treats the characters as a password.<br>Echoes the PasswordChar value and not the value the user types.<br><br>False - Does not treat the characters as a password.<br><br>It is only effective when the MultiLine property is False.<br><br>When the value is True, you should set the IMEMode property to "3 - Disable". |
| <b>Default value:</b>                    |   |
| <i>ADODataSource and DBAccess</i>        | None.   |
| <i>TextBox</i>                           | False - Does not treat the characters as a password.  |
| <b>COBOL PICTURE:</b>                    |   |
| <i>ADODataSource and DBAccess</i>        | X, up to 8192 bytes   |
| <i>TextBox</i>                           | S9(4) COMP-5  |
| <b>OLE Data type:</b>                    |   |
| <i>ADODataSource and DBAccess</i>        | VT_BSTR   |
| <i>TextBox</i>                           | VT_BOOL   |
| <b>Design time access:</b>               |   |
| <i>ADODataSource and TextBox</i>         | Set and reference.  |
| <i>DBAccess</i>                          | Not accessible.   |
| <b>Execution time access:</b>            |   |
| <i>ADODataSource and DBAccess</i>        | Set and reference.  |
| <i>TextBox</i>                           | Reference only.   |
| <b>Backward compatibility attribute:</b> |   |
| <i>DBAccess</i>                          | POW-DBPASSWORDPIC X(32)   |
| <i>Others</i>                            | None.   |

## 4.205 PasswordChar Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the character to be echoed when a password is typed into the text box.  |
| <b>Used in control(s):</b> | Edit                      TextBox   |
| <b>Value:</b>              | The character to be echoed.<br><br>You can only set a single character.<br><br>It is only effective when the Password property is True. |

|  |                    |
|--|--------------------|
| <b>Default value:</b>                    | * (Asterisk)       |
| <b>COBOL picture:</b>                    | X                  |
| <b>OLE data type:</b>                    | VT_BSTR            |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Reference only.    |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.206 Path Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains a path name.  |
| <b>Used in:</b>                          |  |
| <i>Controls</i>                          | FileList                      FolderList   |
| <i>Object</i>                            | Node   |
| <b>Values:</b>                           |  |
| <i>Node</i>                              | An absolute path made up of the character strings defined in the Text properties of the Node objects for the TreeView control.<br><br>For example if the TreeView has the structure:<br><br>+aaa<br><br>+bbb<br><br>+ccc<br><br>the path value of Node object whose Text property is "ccc" is:<br><br>aaa\bbb\ccc<br><br>where "\" is the character defined in the PathSeparator property of the TreeView control. |
| <i>Others</i>                            | The relative or absolute path of the current folder.   |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            |  |
| <i>Node</i>                              | Reference only.  |
| <i>Others</i>                            | Set and reference.   |
| <b>Backward compatibility attribute:</b> |  |
| <i>Node</i>                              | POW-PATHPIC X(260)   |

## 4.207 PathSeparator Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the path separator character - the character used to separate folder names within a path.         |
| <b>Used in control(s):</b> | TreeView  |
| <b>Value:</b>              | The character used to separate folder names.<br><br>This is used in the Path property of the Node object. |
| <b>Default value:</b>      | \\(back slash)  |

|  |                     |
|--|---------------------|
| <b>COBOL picture:</b>                    | X, up to 8192 bytes |
| <b>OLE data type:</b>                    | VT_BSTR             |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.               |

## 4.208 Pattern Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the string to be used as a filter for the file names displayed in the FileList.   |
| <b>Used in control(s):</b>               | FileList   |
| <b>Value:</b>                            | A string to be used as a filter.<br><br>The string can contain the wild-card characters "*" and "?".<br><br>For example to limit the list to only those files with a "COB" extension code:<br><br><b>MOVE "*.COB" TO "Pattern" OF FileListName</b> |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-MASKPIC X(256)   |

## 4.209 PcdColorType Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the number of colors used in a Kodak Photo CD image file.  |
| <b>Used in control(s):</b>               | Image  |
| <b>Values (with constants):</b>          | 0 - 24bit color(POW-PCDCOLORATYPE-24BITCOLOR)<br>1 - 256 color(POW-PCDCOLORATYPE-256COLOR)<br>2 - 16 color(POW-PCDCOLORATYPE-16COLOR)<br>3 - 256 gray scale color(POW-PCDCOLORATYPE-256GRAY) |
| <b>Default value:</b>                    | 0 - 24bit color(POW-PCDCOLORATYPE-24BITCOLOR)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.210 PcdResolution Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Defines the resolution for a Kodak Photo CD image file.  |
| <b>Used in control(s):</b>      | Image  |
| <b>Values (with constants):</b> | 0 - BASE_OVER_64 (64 x 96) (POW-PCDRESOLUTION-BASE-OVER-64)<br>1 - BASE_OVER_16 (128 x 192) (POW-PCDRESOLUTION-BASE-OVER-16) |

- 2 - BASE\_OVER\_4 (256 x 384) (POW-PCDRESOLUTION-BASE-OVER-4)
- 3 - BASE (512 x 768) (POW-PCDRESOLUTION-BASE)
- 4 - 4BASE (1024 x 1526) (POW-PCDRESOLUTION-4BASE)
- 5 - 16BASE (2048 x 3072) (POW-PCDRESOLUTION-16BASE)

The figures in parentheses give the dimensions in pixels.

Note that memory use increases as the resolution increases. If there is insufficient memory, the image cannot be displayed.

If the ImageName property is set to "Overview.pcd", you should use the value 0 or 1.

|  |   |
|--|---|
| <b>Default value:</b>                    | 2 - BASE_OVER_4 (256 x 384) (POW-PCDRESOLUTION-BASE-OVER-4) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.211 PictureString Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a COBOL picture edit string.   |
| <b>Used in object:</b>                   | RenderText  |
| <b>Value:</b>                            | A COBOL picture edit string.<br><br>When the RenderStyle property is "1 - COBOL PICTURE", defines the COBOL picture string to be used for editing the data.<br><br>The CurrencySign and DecimalPointIsComma properties also affect the data.<br><br>PowerCOBOL supports up to 4 decimal digits and up to 14 digits in the integer part.<br><br>The total string length, whose picture is specified by the PictureString property, must be shorter than 8192 bytes.<br><br>See the COBOL Reference Manual for detailed descriptions of COBOL picture edit strings. |
| <b>Default value:</b>                    | Container's RenderText property.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.212 Printable Property

---

|                                  |   |
|----------------------------------|---|
| <b>Description:</b>              | Determines whether the control is printed at execution time by the Print control.   |
| <b>Used in controls/objects:</b> | All controls and forms that can be printed at execution time.                       |
| <b>Values (with constants):</b>  | True - Print the control.(POW-TRUE)<br>False - Do not print the control.(POW-FALSE) |
| <b>Default value:</b>            | True - Print the control.(POW-TRUE)   |
| <b>COBOL picture:</b>            | S9(4) COMP-5  |

|  |                               |
|--|-------------------------------|
| <b>OLE data type:</b>                    | VT_BOOL                       |
| <b>Design time access:</b>               | Set and reference.            |
| <b>Execution time access:</b>            | Set and reference.            |
| <b>Backward compatibility attribute:</b> | POW-PRNENABLEPIC S9(4) COMP-5 |

## 4.213 PrintDate Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether the date is printed by the Print control.  |
| <b>Used in control(s):</b>               | Print  |
| <b>Values (with constants):</b>          | True - The Print control Prints the date.(POW-TRUE)<br>False - The Print control does not print the date.(POW-FALSE) |
| <b>Default value:</b>                    | True - The Print control Prints the date.(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.214 PrinterName Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the name of the printer to be used.  |
| <b>Used in control(s):</b>               | Print   |
| <b>Value:</b>                            | The printer name string.<br><br>The value is changed if you invoke the SetPrinter or SetPage method and specify a printer name in the dialog. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes.  |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.215 PrintTitle Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Indicates whether the title text is printed in the page header by the Print control.                                   |
| <b>Used in control(s):</b>      | Print  |
| <b>Values (with constants):</b> | True - The Print control prints the title.(POW-TRUE)<br>False - The Print control does not print the title.(POW-FALSE) |
| <b>Default value:</b>           | True - The Print control prints the title.(POW-TRUE)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5   |
| <b>OLE data type:</b>           | VT_BOOL  |
| <b>Design time access:</b>      | Set and reference.   |

|  |                    |
|--|--------------------|
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.216 PropertyName Property

---

|   |   |
|---|---|
| <b>Descriptions:</b>                      | Contains the name of the property for which the DataBinding object defines the data binding properties.   |
| <b>Used in object:</b>                    | DataBinding   |
| <b>Value:</b>                             | Text string containing the name of the property.  |
| <b>Default value:</b>                     | None.   |
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes.  |
| <b>OLE data type:</b>                     | VT_BSTR   |
| <b>Design time access:</b>                | Reference only. (The PropertyName is fixed for each DataBinding object, but you can select which PropertyName/DataBinding object you want to work with in the DataBinding property page.) |
| <b>Execution time access:</b>             | Reference only.   |
| <b>Backward compatibility attributes:</b> | None.   |

## 4.217 PunchMargin Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines an additional margin to be used for binding.   |
| <b>Used in control(s):</b>               | Print  |
| <b>Value:</b>                            | The margin width required to allow for binding, expressed in the units defined in the PaperScaleUnit property. |
| <b>Default value:</b>                    | 0 inch   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-PUNCHMARGINPIC S9(9) COMP-5  |

## 4.218 QueryString Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the character string used as a filter for the items displayed in the list box part.  |
| <b>Used in control(s):</b> | ComboBox  |
| <b>Value:</b>              | The character string to be used as a filter.<br><br>The control only lists items that begin with the character string.<br><br>The value is cleared when the CurFieldNo, FileName, FileType or RecordForm property is changed. |
| <b>Default value:</b>      | None.   |
| <b>COBOL picture:</b>      | X, up to 8192 bytes   |
| <b>OLE data type:</b>      | VT_BSTR   |

|  |                      |
|--|----------------------|
| <b>Design time access:</b>               | Not accessible.      |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-STRINGPIC X(128) |

## 4.219 RangeSelect Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the slider contains a bar that covers a particular range.   |
| <b>Used in control(s):</b>               | Slider   |
| <b>Values (with constants):</b>          | True - Displays a bar that covers the range specified by the SelectStart and SelectEnd properties.(POW-TRUE)<br>False - Does not display a bar.(POW-FALSE) |
| <b>Default value:</b>                    | False - Does not display a bar.(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.220 Rate Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the ratio by which the printed output should be enlarged or reduced, expressed as a percentage of the original size. |
| <b>Used in control(s):</b>               | Print   |
| <b>Values:</b>                           | Enlargement or reduction ratio expressed as a percentage between 50 and 150.  |
| <b>Default value:</b>                    | 100%  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.221 ReadOnly Property

---

|                            |  |
|----------------------------|--|
| <b>Description:</b>        | Determines whether read only files are displayed in the file list, or whether text can be input to the TextBox control.                    |
| <b>Used in control(s):</b> | Edit                      FileList                      TextBox  |
| <b>Values:</b>             |  |
| <i>FileList</i>            | True - Displays files with the read-only attribute. (POW-TRUE)<br>False - Does not display files with the read-only attribute. (POW-FALSE) |
| <i>Edit and</i>            | True - Text cannot be input. (POW-TRUE)  |
| TextBox                    | False - Text can be input. (POW-FALSE)<br><br>When the value is True, you should set the IMEMode property to "0 - None" or "3 - Disable".  |



**Default value:***FileList* False - Does not display files with the read-only attribute. (POW-FALSE)*TextBox* False - Text can be input. (POW-FALSE)**COBOL picture:** S9(4) COMP-5**OLE data type:** VT\_BOOL**Design time access:** Set and reference.**Execution time access:** Set and reference.**Backward compatibility attribute:** POW-READONLYPIC S9(4) COMP-5

## 4.222 Receive Property

---

**Description:** Contains the return information from an MCI command.**Used in control(s):** MCI**Value:** The return information from an MCI command, set by the Command property.**Default value:** None.**COBOL picture:** X, up to 8192 bytes**OLE data type:** VT\_BSTR**Design time access:** Not accessible.**Execution time access:** Reference only.**Backward compatibility attribute:** POW-MCIRECEIVEPIC X(256)

## 4.223 RecordForm Property

---

**Description:** Defines the record format for fixed length text files.**Used in control(s):** ComboBox**Value:** The format of the record, specified by providing a list of field lengths. Field lengths can be separated by comma (",") or blank (" ").

For example, to specify a record consisting of two fields of 11 and 8 bytes respectively code:

**MOVE "11, 8" TO "RecordForm"  
OF ComboBoxName**

It is only effective when the FileType property is "2 - Fixed Text Format".

**Default value:** None.**COBOL picture:** X, up to 8192 bytes**OLE data type:** VT\_BSTR**Design time access:** Set and reference.**Execution time access:** Set and reference.**Backward compatibility attribute:** POW-RECORDFORMPIC X(128)

## 4.224 Recordset Property

---

**Description:** Contains a pointer to the ADO recordset object.

|   |  |
|---|--|
| <b>Used in controls:</b>                  | ADODataSource  |
| <b>Used in Objects:</b>                   | None.  |
| <b>Value:</b>                             | A pointer to the ADO recordset object.<br>Consult the ADO documentation for details about recordset objects.   |
| <b>Notes</b>                              | The following properties of the ADODataSource control cannot be set if the ADO recordset object is created dynamically and set to this property.<br>CommandType<br>CursorLocation<br>CursorType<br>LockType<br>And, you must open the recordset by using the Open method of the ADO recordset object if the recordset is not opened.<br>Consult the ADO documentation for details about recordset objects. |
| <b>Default value:</b>                     | None.  |
| <b>COBOL PICTURE:</b>                     | OBJECT REFERENCE POW-COBJECT   |
| <b>OLE data type:</b>                     | VT_DISPATCH  |
| <b>Design time access:</b>                | Not accessible.  |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.  |

## 4.225 RenderStyle Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates the manner in which text is converted in the RenderText object.   |
| <b>Used in object:</b>                   | RenderText  |
| <b>Values (with constants):</b>          | 0 - Standard:(POW-RENDERSTYLE-STANDARD)<br>Does not convert text.<br>1 - COBOL PICTURE:(POW-RENDERSTYLE-COBOLPICTURE)<br>Converts text based on the COBOL picture string defined in the PictureString property.<br>2 - Date:(POW-RENDERSTYLE-DATE)<br>Converts text based on the date string defined in the DateStyle property. |
| <b>Default value:</b>                    | 0 - Standard:(POW-RENDERSTYLE-STANDARD)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.226 RenderText Property

---

|                            |   |       |              |         |
|----------------------------|---|-------|--------------|---------|
| <b>Description:</b>        | Contains a pointer to the RenderText object that determines how the text is edited. |       |              |         |
| <b>Used in control(s):</b> |   |       |              |         |
| <i>Controls</i>            | CheckBox  | Frame | OptionButton | TextBox |

|  |  |             |            |
|--|--|-------------|------------|
|  | ComboBox   | ListBox     | StaticText |
|  | CommandButton  |             |            |
| <i>Objects</i>                           | Column   | TableColumn |            |
| <b>Value:</b>                            | A pointer to the RenderText object.  |             |            |
|  | The properties of the RenderText object determine how the text contained in the control or object is displayed at execution time. The RenderText properties are the RenderStyle, PictureString and DateStyle properties. |             |            |
|  | For example, if the RenderStyle property is "1 - COBOL PICTURE", the PictureString property is "\$\$\$,\$\$\$,\$\$9" and you move "3000" to the Caption property, PowerCOBOL converts the string and displays "\$3,000". |             |            |
|  | However, if you refer to the Caption property, the string "\$3,000" is converted by PowerCOBOL giving you the value "3000".  |             |            |
| <i>ComboBox</i>                          | Applies to the text of items in the list box part.   |             |            |
| <i>Column</i>                            | Applies to the Text property of the ListItem object corresponding to the column.   |             |            |
| <i>TableColumn</i>                       | Applies to the Text property of the TableCell object corresponding to the row.   |             |            |
| <b>Default value:</b>                    | None.  |             |            |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-COJECT  |             |            |
| <b>OLE data type:</b>                    | VT_DISPATCH  |             |            |
| <b>Design time access:</b>               | Not accessible.  |             |            |
| <b>Execution time access:</b>            | Reference only.  |             |            |
| <b>Backward compatibility attribute:</b> | None.  |             |            |

## 4.227 Repeat Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether animation repeats from the first frame.                       |
| <b>Used in control(s):</b>               | Animation  |
| <b>Values (with constants):</b>          | True:Animation repeats. POW-TRUE)<br>False:Animation does not repeat.(POW-FALSE) |
| <b>Default value:</b>                    | False:Animation does not repeat.(POW-FALSE)                                      |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.228 Resource Property

---

|                                 |  |               |       |
|---------------------------------|--|---------------|-------|
| <b>Description:</b>             | Indicates whether the name specified for an image is a resource name or a file name. |               |       |
| <b>Used in control(s):</b>      | Animation  | CommandButton | Image |
| <b>Values (with constants):</b> | True - A resource name(POW-TRUE)<br>False - A file name(POW-FALSE)                   |               |       |
| <i>Animation</i>                | The image name is the name used in the FrameList in the Properties dialog.           |               |       |
| <i>CommandButton and Image</i>  | The image name is specified in the ImageName property.                               |               |       |

|  |                                  |
|--|----------------------------------|
| <b>Default value:</b>                    |                                  |
| <i>Animation and Image</i>               | False - A file name(POW-FALSE)   |
| <i>CommandButton</i>                     | True - A resource name(POW-TRUE) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5                     |
| <b>OLE data type:</b>                    | VT_BOOL                          |
| <b>Design time access:</b>               | Set and reference.               |
| <b>Execution time access:</b>            | Set and reference.               |
| <b>Backward compatibility attribute:</b> | None.                            |

## 4.229 RestoreFocusWhenEnablingForm Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether to restore focus when the Enabled property of a form is changed to True.   |
| <b>Used in control(s):</b>               | None.   |
| <b>Used in object:</b>                   | Form  |
| <b>Value:</b>                            | True : Focus is restored when the Enabled property of a form is changed to True.(POW-TRUE)<br>False: Focus is not restored when the Enabled property of a form is changed to True.(POW-FALSE) |
| <b>Default value:</b>                    | True : Focus is restored.(POW-TRUE)<br>Note : For projects created using V4.0, or converted from V3.0, the default value is False.  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.230 RestrictInputChar Property

---

|                                |   |
|--------------------------------|---|
| <b>Description:</b>            | Specifies the input character restriction mode.   |
| <b>Used in control(s):</b>     | None.   |
| <b>Used in object:</b>         | Form  |
| <b>Value (with constants):</b> | 0 - None (POW-RESTRICT-CHAR-NONE): Does not restrict character input from the keyboard.<br><br>1 - Restrict to BMP of Unicode (POW-RESTRICTCHAR_BMPONLY): Restricts input to the BMP (Basic Multilingual Plane) of Unicode.<br><br>2 - Restrict to ANSI code page (POW-RESTRICTCHAR-ACPONLY) Restricts input to the ANSI code page of the system at runtime.<br><br>- When the property value is not "0 - None", PowerCOBOL checks the character input when pasting it from the clipboard.<br><br>- The restriction of the character input by this function may not work correctly when you use a control not included in PowerCOBOL. In this case, change the operation of the input character restriction by modifying the value of the RestrictInputCharBehavior control property. |
| <b>Default value:</b>          | 0 - None  |

**COBOL picture:** S9(4) COMP-5  
**OLE data type:** VT\_I2  
**Design time access:** Set and reference.  
**Execution time access:** Reference only.  
**Backward compatibility attribute:** None.

## 4.231 RestrictInputCharBehavior Property

---

**Description:** Specifies the restrictions of the input character of the control.

**Used in control(s):**

|               |            |              |          |
|---------------|------------|--------------|----------|
| Checkbox      | Edit       | OptionButton | TextBox  |
| ComboBox      | FileList   | ScrollBar    | TreeView |
| CommandButton | FolderList | Slider       |          |
| Custom        | ListBox    | Tab          |          |
| DriveList     | ListView   | Table        |          |

**Used in object:** None.

**Value (with constants):**

0 - Always (POW-RESTRICTBEHAVIOR-ALWAYS): Restricts the input character according to the specification of the RestrictInputChar property.

1 - Never (POW-RESTRICTBEHAVIOR-NEVER): Does not restrict the input character.

2 - Only IME (POW-RESTRICTBEHAVIOR-ONLYIME) Restricts only the input character from IME according to the specification of the RestrictInputChar property.

**Default value:** 0 - Always

**COBOL picture:** S9(4) COMP-5  
**OLE data type:** VT\_I2  
**Design time access:** Set and reference.  
**Execution time access:** Reference only.  
**Backward compatibility attribute:** None.

## 4.232 ReturnWhenEnterKey Property

---

**Description:** Determines whether the Return event occurs when the ENTER key is pressed while editing in the edit box.

**Used in control(s):** Edit

**Value:** True : Event occurs.(POW-TRUE)  
False: Event does not occur.(POW-FALSE)

**Default value:** True : Event occurs.(POW-TRUE)

**COBOL picture:** S9(4) COMP-5  
**OLE data type:** VT\_BOOL  
**Design time access:** Set and reference.  
**Execution time access:** Set and reference.  
**Backward compatibility attribute:** None.

## 4.233 ReturnWhenLostFocus Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the Return event occurs when the edit box loses focus, and when another control gains focus. |
| <b>Used in control(s):</b>               | Edit  |
| <b>Value:</b>                            | True : Event occurs.(POW-TRUE)<br>False: Event does not occur.(POW-FALSE)                                       |
| <b>Default value:</b>                    | False: Event does not occur.(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.234 ReturnWhenMaxText Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the Return event occurs when the text string reaches the length that is defined in the MaxLength property. |
| <b>Used in control(s):</b>               | Edit  |
| <b>Value:</b>                            | True : Event occurs.(POW-TRUE)<br>False: Event does not occur.(POW-FALSE)   |
| <b>Default value:</b>                    | True : Event occurs.(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.235 RightMargin Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the width of the right margin when the form is printed.                    |
| <b>Used in control(s):</b>               | Print  |
| <b>Value:</b>                            | The width of the right margin in the units defined by the PaperScaleUnit property. |
| <b>Default value:</b>                    | 0.6 inch   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-RIGHTMARGINPIC S9(9) COMP-5  |

## 4.236 Root Property (Array)

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains a pointer to a root Node object in the TreeView control. There can be more than one root node object, so the pointers are held in an array. Always use an index when referencing the Root property. |
| <b>Used in control(s):</b>               | TreeView   |
| <b>Value:</b>                            | A pointer to a root node objects.<br><br>The index can take values from 1 to the value of the Count property.  |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-CNODE   |
| <b>OLE data type:</b>                    | VT_DISPATCH  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.237 Row Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the row number of the cell that has focus in the Table control.  |
| <b>Used in control(s):</b>               | Table   |
| <b>Value:</b>                            | The line number of the cell that has the focus. Only cells in TableColumn objects, with the Writable property set to True, can have focus.  |
| <b>Default value:</b>                    | Row number of the most significant editable cell (i.e. the cell closest to the top left corner) whose Writable property is True.<br><br>Undefined if there are cells whose Writable property is True. |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-ROWPIC S9(9) COMP-5   |

## 4.238 RowCaption Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether to display row headings.   |
| <b>Used in control(s):</b>               | Table  |
| <b>Values (with constants):</b>          | True - Displays row headings.(POW-TRUE)<br>False - Does not display row headings.(POW-FALSE) |
| <b>Default value:</b>                    | True - Displays row headings.(POW-TRUE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-ROWCAPTIONPIC S9(4) COMP-5   |

## 4.239 RowCount Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the number of rows in the table.                      |
| <b>Used in control(s):</b>               | Table  |
| <b>Values:</b>                           | The number of rows in the table.<br>The maximum value is 2000. |
| <b>Default value:</b>                    | 3  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-ROWSPIC S9(4) COMP-5                                       |

## 4.240 Scalable Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the size, position and/or font size of controls on a form are changed proportionately when the size of the form is changed.   |
| <b>Used in object:</b>                   | Form  |
| <b>Values (with constants):</b>          | True : Changes the size, position and/or font size of controls.(POW-TRUE)<br>False: Does not change size, position or font size of controls.(POW-FALSE)<br>The ScalingStyle property of each control on the form determines which of the size, position and font size properties are affected when the form is resized. |
| <b>Default value:</b>                    | False(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.241 Scale Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the interval between the graduation marks on the bar chart axis.  |
| <b>Used in control(s):</b> | Graph   |
| <b>Value:</b>              | The interval between graduation marks.<br>When the value is 0, the graduation marks are not displayed.<br>It is not effective when the GraphStyle property is "3 - Pie".<br>The value must be less than or equal to the greater of the absolute value of the Lower property and the absolute value of the Upper property.<br>For example, when the value of the Lower property is -50 and the value of the Upper property is 100, the maximum value is 100. |
| <b>Default value:</b>      | 0   |
| <b>COBOL picture:</b>      | S9(9) COMP-5  |
| <b>OLE data type:</b>      | VT_I4   |
| <b>Design time access:</b> | Set and reference.  |



**Execution time access:** Set and reference.  
**Backward compatibility attribute:** None.

## 4.242 ScaleMode Property

---

**Description:** Defines the units to be used for the coordinates of the control or form.

**Used in control(s):** All controls and forms.

**Values (with constants):** 0 - Pixel(POW-SCALEPIXELS)  
 1 - 1/100 mm(POW-SCALEHIMETRIC)  
 2 - 1/1000 inch(POW-SCALEHIENGLISH)  
 3 - 1/20 Point(POW-SCALETWIPS)

**Default value:**

**Form** 3 - 1/20 Point(POW-SCALETWIPS)

**Others** Container's ScaleMode.

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:**

*DBAccess, DDE,* Not accessible.

ExcelConnection,  
 Timer, Print

*Others* Set and reference.

**Backward compatibility attribute:** None.

## 4.243 ScalingStyle Property

---

**Description:** Indicates which attributes of the control to change when the containing Form object is resized.

**Used in controls:**

|               |            |                   |            |
|---------------|------------|-------------------|------------|
| Animation     | FileList   | ListBox           | Slider     |
| CheckBox      | FolderList | ListView          | StaticText |
| ComboBox      | Frame      | MCI               | Tab        |
| CommandButton | Graph      | OptionButton      | Table      |
| Custom        | GroupBox   | ProgressIndicator | TextBox    |
| DriveList     | Image      | ScrollBar         | Toolbar    |
| Edit          | Label      | Shape             | Treeview   |

**Values (with constants):** 0 - None(POW-SCALING-NONE)  
 1 - Resize only(POW-SCALING-SIZE)  
 2 - Reposition only(POW-SCALING-POSITION)  
 3 - Resize and reposition(POW-SCALING-SIZEPOSITION)  
 5 - Resize and resize font(POW-SCALING-SIZEFONT)  
 7 - Resize, reposition and resize font (POW-SCALING-SIZEPOSITIONFONT)

It is only effective when the Scalable property of the containing Form object is set to True.

Note:

(i) You should use true type fonts if you choose to resize the font. If you do not use true type fonts, the control may not be drawn accurately.

(ii) You cannot change the size (Width property) of the TableColumn or Column object if the form size is changed.

|  |   |
|--|---|
| <b>Default value:</b>                    | 7 - Resize, reposition and resize font (POW-SCALING-SIZEPOSITIONFONT) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.244 ScrollLock Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the column scrolls.<br><br>When the size of the table is too small to display all the columns, PowerCOBOL displays a horizontal scroll bar. This property determines whether the column can be scrolled out of view or remains in a fixed position. |
| <b>Used in object:</b>                   | TableColumn  |
| <b>Values (with constants):</b>          | True - Does not scroll the column.(POW-TRUE)<br><br>False - Scrolls the column.(POW-FALSE)<br><br>You can lock scrolling for consecutive columns.  |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.245 ScrollPage Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the size of a scroll bar "page".  |
| <b>Used in control(s):</b> | ScrollBar   |
| <b>Value:</b>              | Zero or a positive integer.<br><br>The amount the Value is incremented by each time the scroll bar is "paged" (e.g. by clicking in the lift shaft areas).<br><br>The value should satisfy the following relationship:<br>$\text{Min} \leq \text{Max} - (\text{ScrollPage} - 1)$<br>When the value is greater than zero the size of the scroll box is changed. |
| <b>Default value:</b>      | 0   |
| <b>COBOL picture:</b>      | S9(9) COMP-5  |

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_I4              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.246 Selected Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether an object is selected.   |
| <b>Used in object(s):</b>                | ListItem                  Node   |
| <b>Values (with constants):</b>          | True - The object is selected.(POW-TRUE)<br>False - The object is not selected.(POW-FALSE) |
| <b>Default value:</b>                    | False(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.247 SelectedImageIndex Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the index into the image list when a Node object is selected. |
| <b>Used in control(s):</b>               | Node   |
| <b>Value:</b>                            | An integer greater than zero.  |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.248 SelectEnd Property

---

|                            |  |
|----------------------------|--|
| <b>Description:</b>        | Defines the ending value of the selected range within the Slider control.  |
| <b>Used in control(s):</b> | Slider   |
| <b>Value:</b>              | Zero or a positive integer.<br><br>The value should satisfy the following relationships:<br><br>SelectStart <= SelectEnd<br>and<br>SelectEnd <= Max<br><br>It is only effective when the RangeSelect property is True. |
| <b>Default value:</b>      | 0  |
| <b>COBOL picture:</b>      | S9(9) COMP-5   |

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_I4              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.249 SelectStart Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the starting value of the selected range within the Slider control.  |
| <b>Used in control(s):</b>               | Slider   |
| <b>Value:</b>                            | Zero or a positive integer.<br><br>The value should satisfy the following relationships:<br><br>SelectStart <= SelectEnd<br>and<br>SelectStart >= Min<br><br>It is only effective when the RangeSelect property is True. |
| <b>Default value:</b>                    | 0  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.250 SelectText Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether text in the control is selected when it gains editing focus.   |
| <b>Used in control(s):</b>               | Edit                      Table                      TextBox  |
| <b>Values (with constants):</b>          | True - Text is selected.(POW-TRUE)<br><br>False - Text is not selected.(POW-FALSE)  |
| <i>Table</i>                             | Determines whether text is selected when the table cell enters the edit state.  |
| <i>TextBox</i>                           | If the EditableLabel property is False, determines whether text is selected when the control receives focus.<br><br>If the EditableLabel property is True, determines whether text is selected when the user starts editing the text.<br><br>It is only effective when the MultiLine property is False. |
| <b>Default value:</b>                    | True (POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            |   |
| <i>Table</i>                             | Set and reference.  |
| <i>TextBox</i>                           | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.251 SelField Property (Array)

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the text in a field of the record for the selected item. As there can be several fields in a record, the field texts are held in an array. Always use an index when referencing the SelField property. |
| <b>Used in control(s):</b>               | ComboBox  |
| <b>Value:</b>                            | Text string of a field.<br><br>The index is the number of the field to be accessed.<br><br>It is only effective when the data was loaded using the FileName property.   |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | POW-SELRECORDSTR PIC X(128)<br><br>DEPENDING ON fields  |

## 4.252 SelItem Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a pointer to the selected ListItem object.   |
| <b>Used in control(s):</b>               | ListView  |
| <b>Value:</b>                            | A pointer to the ListItem object.<br><br>It is only effective when the MultiLine property is False. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-CLISTITEM  |
| <b>OLE data type:</b>                    | VT_DISPATCH   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.253 SelItemIndex Property

---

|                               |   |
|-------------------------------|---|
| <b>Description:</b>           | Contains the index of the selected ListItem object.   |
| <b>Used in control(s):</b>    | ListView  |
| <b>Value:</b>                 | The index of the selected ListItem object.<br><br>The value is an integer from 1 to Count property.<br><br>It is only effective when the MultiLine property is False. |
| <b>Default value:</b>         | None.   |
| <b>COBOL picture:</b>         | S9(9) COMP-5  |
| <b>OLE data type:</b>         | VT_I4   |
| <b>Design time access:</b>    | Not accessible.   |
| <b>Execution time access:</b> | Reference only.   |

**Backward compatibility attribute:** None.

## 4.254 SelNode Property

---

**Description:** Contains a pointer to the selected Node object.  
**Used in control(s):** TreeView  
**Value:** A pointer to the node object.  
**Default value:** None.  
**COBOL picture:** OBJECT REFERENCE POW-CNODE  
**OLE data type:** VT\_DISPATCH  
**Design time access:** Not accessible.  
**Execution time access:** Reference only.  
**Backward compatibility attribute:** None.

## 4.255 SelString Property

---

**Description:** Contains the character string of the selected item or a string representing the selected item.  
**Used in control(s):** ComboBox      FileList      ListBox  
DriveList      FolderList  
**Value:** The character string of the selected item.  
*FileList, ListBox* The character string that has focus when the MultiSelect property is "1 - Multiple" or "2 - Extended select".  
*FolderList* The relative path from the current folder to the selected folder. For example:  
- If the current folder is selected the value is "." (period).  
- If the parent of the current folder is selected the value is "..\".  
**Default value:** None.  
**COBOL picture:** X, up to 8192 bytes  
**OLE data type:** VT\_BSTR  
**Design time access:** Not accessible.  
**Execution time access:** Reference only.  
**Backward compatibility attribute:** POW-SELSTRINGPIC X(64)  
*ComboBox, ListBox* POW-SELSTRING256PIC X(256)

## 4.256 ShapeStyle Property

---

**Description:** Defines the style of the shape for the Shape control.  
**Used in control(s):** Shape  
**Values (with constants):** 0 - Rectangle(POW-SHAPESTYLE-RECTANGLE)  
1 - Square(POW-SHAPESTYLE-SQUARE)  
2 - Circle(POW-SHAPESTYLE-CIRCLE)  
3 - Oval(POW-SHAPESTYLE-ELLIPSE)

|  |   |
|--|---|
| <b>Default value:</b>                    | 0 - Rectangle(POW-SHAPESTYLE-RECTANGLE) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5                            |
| <b>OLE data type:</b>                    | VT_I2                                   |
| <b>Design time access:</b>               | Set and reference.                      |
| <b>Execution time access:</b>            | Set and reference.                      |
| <b>Backward compatibility attribute:</b> | None.                                   |

## 4.257 ShowExcel Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the Excel application is displayed.   |
| <b>Used in control(s):</b>               | ExcelConnection  |
| <b>Values (with constants):</b>          | True - Displays the Excel application.(POW-TRUE)<br>False - Does not display the Excel application.(POW-FALSE)<br>If there is more than one ExcelConnection control on the form, PowerCOBOL uses the ShowExcel value of the control that is last in the control order. |
| <b>Default value:</b>                    | True - Displays the Excel application.(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.258 ShowInTaskbar Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Specifies whether to display the form in the Windows taskbar.  |
| <b>Used in control(s):</b>               | None.  |
| <b>Used in object:</b>                   | Form   |
| <b>Values:</b>                           | True - Displays the form in the Windows taskbar. (POW-TRUE)<br>False - Does not display the form in the Windows taskbar. (POW-FALSE)<br>If there is more than one ExcelConnection control on the form, PowerCOBOL uses the ShowExcel value of the control that is last in the control order. |
| <b>Default value:</b>                    | False - Does not display the form in the Windows taskbar. (POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.259 ShowStatusbar Property

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Determines whether the form includes a status bar. |
|---------------------|--|

|  |   |
|--|---|
| <b>Used in object:</b>                   | Form  |
| <b>Values (with constants):</b>          | True:Form includes a status bar. (POW-TRUE)<br>False:Form does not include a status bar.(POW-FALSE) |
| <b>Default value:</b>                    | False:Form does not include a status bar.(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.260 ShowToolTips Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the ToolTipText is displayed for the Button objects of the tool bar.<br><br>Note that ShowToolTips does not affect the display of the ToolTipText property in the Toolbar control. |
| <b>Used in control:</b>                  | Toolbar   |
| <b>Values (with constants):</b>          | True - Displays the tool tip text.(POW-TRUE)<br>False - Does not display the tool tip text.(POW-FALSE)  |
| <b>Default value:</b>                    | True (POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.261 Size Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the size of the font.                                       |
| <b>Used in object:</b>                   | Font  |
| <b>Value:</b>                            | The size of the font expressed in points. One point is 1/72 inches. |
| <b>Default value:</b>                    | Container's Size property.  |
| <b>COBOL picture:</b>                    | S9(14)V9(4)   |
| <b>OLE data type:</b>                    | VT_CY   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-FONTSIZEPIC S9(4) COMP-5  |

## 4.262 SmallIconIndex Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Contains the index of the small icon image list when small icons are being used in the ListItem object. |
| <b>Used in control(s):</b> | ListItem  |



|  |   |
|--|---|
| <b>Value:</b>                            | The index for the small icon image list.<br>The value is an integer greater than 0. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.263 SmallIcons Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the name of the resource that contains the small icon images when small icons are being used in the ListItem objects of the ListView control. |
| <b>Used in control(s):</b>               | ListView   |
| <b>Value:</b>                            | The name of the resource that contains the small icon images.  |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.264 SmallStep Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the amount of a small step movement in a scroll bar or slider.  |
| <b>Used in control(s):</b>               | ScrollBar                  Slider   |
| <b>Values:</b>                           |   |
| <i>ScrollBar</i>                         | -65535 to 65535<br><br>The "small step" is the amount of movement when the mouse is clicked on the arrow buttons, or when the arrow keys are pressed. |
| <i>Slider</i>                            | 0 to 65535<br><br>The "small step" is the amount of movement when the arrow keys are pressed.   |
| <b>Default value:</b>                    | 10  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> |   |
| <i>ScrollBar</i>                         | POW-SMALLSTEPPI S9(9) COMP-5  |

## 4.265 Smooth Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether the progress indicator grows continuously or in discrete steps.  |
| <b>Used in control(s):</b>               | ProgressIndicator   |
| <b>Values (with constants):</b>          | True - Grows smoothly.(POW-TRUE)<br>False - Grows in steps.(POW-FALSE)<br>When the value is False, the size of each step is the value defined in the Step property. |
| <b>Default value:</b>                    | False - Grows in steps.(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.266 SortColumn Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains the index of the column that is used to sort the ListItem objects.   |
| <b>Used in control(s):</b>               | ListView  |
| <b>Value:</b>                            | The index of the column to sort.<br>The value is an integer from 1 to the ColumnCount property.<br>The Text property corresponding to the column is used as the key for the sort. |
| <b>Default value:</b>                    | 1   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.267 Sorted Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Determines whether to sort list items.  |
| <b>Used in control(s):</b>      | ComboBox          ListBox          TreeView   |
| <b>Values (with constants):</b> | True - Sort items.(POW-TRUE)<br>False - Do not sort items.(POW-FALSE)   |
| <b>ComboBox and ListBox</b>     | Sorts the items in the list box part.<br><br>Note: Items inserted by the InsertString method are not sorted automatically. The items are inserted at the position specified by the InsertIndex parameter. Use the AddString method if you want to sort the items. |
| <b>TreeView</b>                 | Sorts the Node objects.   |
| <b>Default value:</b>           | False - Do not sort items.(POW-FALSE)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |
| <b>OLE data type:</b>           | VT_BOOL   |
| <b>Design time access:</b>      | Set and reference.  |
| <b>Execution time access:</b>   |   |

|  |                    |
|--|--------------------|
| <i>ComboBox and ListBox</i>              | Reference only.    |
| <i>TreeView</i>                          | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.268 SortKind Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether ListItem objects are sorted in text or numerical order.  |
| <b>Used in control(s):</b>               | ListView  |
| <b>Values (with constants):</b>          | 0 - Text(POW-SORTKIND-TEXT)<br>1 - Numeric(POW-SORTKIND-NUMERIC)  |
|  | For example, assume that there are three ListItem objects and their Text properties are set to "1", "2", and "10":  |
|  | If the value is "0 - Text", the ascending order is "1", "10", "2". If the value is "1 - Numeric", the ascending order is "1", "2", "10".  |
|  | Note that:  |
|  | The objects are not sorted immediately after this value is changed, however the objects are sorted after the value of the SortOrder property is changed.  |
|  | If the value is "1 - Numeric" the sort order is determined by using equivalent VT_CY values. If a numeric value cannot be converted to a VT_CY value, (see "Appendix C. Data Types" for supported range) the ListItem object is not sorted and the position is undefined. |
| <b>Default value:</b>                    | 0 - Text  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.269 SortOrder Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the sort order for the ListItem objects.   |
| <b>Used in control(s):</b>               | ListView   |
| <b>Values (with constants):</b>          | 0 - None(POW-SORTORDER-NONE)<br>1 - Ascending(POW-SORTORDER-ASC)<br>2 - Descending(POW-SORTORDER-DESC) |
|  | The objects are resorted as soon as the value is changed.  |
| <b>Default value:</b>                    | 0 - None(POW-SORTORDER-NONE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.270 Source Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates the paper source to be used on the printer.   |
| <b>Used in object:</b>                   | Print   |
| <b>Values (with constants):</b>          | 0 - Default: (POW-PRINTSOURCE-DEFAULT)<br>The default setting of the printer.<br><br>Values other than 0: Source defined by the printer.<br><br>Each printer has different printer source options. If you want to use a paper source other than the default, refer to your printer's documentation for the other values to set.<br><br>If in doubt you should set the value to 0. |
| <b>Default value:</b>                    | 0 - Default: (POW-PRINTSOURCE-DEFAULT)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.271 StartUpPosition Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the initial position for the form window.   |
| <b>Used in object:</b>                   | Form  |
| <b>Values (with constants):</b>          | 0 - Auto: (POW-STARTUPPOS-AUTO)<br>PowerCOBOL determines the position based on the position of the window at design time.<br><br>1 - Center Owner: (POW-STARTUPPOS-CENTEROWN)<br>When you open the form using the OpenForm method or CallForm2 (CallForm) method, PowerCOBOL centers the form in the parent window. If the form is opened by any other means it is centered on the screen.<br><br>2 - Center Screen: (POW-STARTUPPOS-CENTERSCR)<br>PowerCOBOL centers the form on the screen, excluding the task bar.<br><br>3 - Windows Default:(POW-STARTUPPOS-DEFAULT)<br>The Windows system default position.<br><br>4 - Manual:(POW-STARTUPPOS-MANUAL)<br>PowerCOBOL positions the form using the values specified in the Top and Left properties. |
| <b>Default value:</b>                    | 0 - Auto:(POW-STARTUPPOS-AUTO)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Not accessible.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.272 StatusText Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the text to display in the status bar.  |
| <b>Used in object:</b>                   | Form  |
| <b>Value:</b>                            | The character string to display.<br>It is only effective when the ShowStatusbar property is True. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.273 Step Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | The Step property defines the amount to increase the Value property using the ProgressStep method - these are the steps by which the progress indicator bar grows. |
| <b>Used in control(s):</b>               | ProgressIndicator  |
| <b>Values (with constants):</b>          | The size of the steps.<br>The value is an integer greater than zero.<br>The value should satisfy the following relationship:<br>$Step < Max - Min$                 |
| <b>Default value:</b>                    | 10   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.274 Strikethrough Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether the text has the strikethrough (deletion) line.                      |
| <b>Used in object:</b>                   | Font   |
| <b>Values (with constants):</b>          | True - Has strikethrough.(POW-TRUE)<br>False - Does not have strikethrough.(POW-FALSE) |
| <b>Default value:</b>                    | Container's Strikethrough property   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-STRIKE PIC S9(4) COMP-5  |

## 4.275 Style Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Defines the style of the control  |
| <b>Used in control(s):</b>      | ComboBox            Tab                    Toolbar  |
| <b>Used in object:</b>          | Button  |
| <b>Values (with constants):</b> |   |
| <i>ComboBox</i>                 | <p>0 - Simple:(POW-COMBO-STYLE-SIMPLE)<br/>A combination of a text box and a list box. Always displays the list box.</p> <p>1 - DropDown:(POW-COMBO-STYLE-DROPDOWN)<br/>A combination of a text box and a list box. Displays a down-arrow button that displays the list when clicked, or the user can enter text into the text box.</p> <p>2 - DropDownList:(POW-COMBO-STYLE-DROPDOWNLIST)<br/>A combination of a static text control and a list box. Displays a down-arrow button that displays the list when clicked. The user cannot filter the contents of the list box.</p>  |
| <i>Tab</i>                      | <p>0 - Tabs:(POW-TAB-STYLE-TABS)<br/>Pages are selected using file tabs.</p> <p>1 - Buttons:(POW-TAB-STYLE-BUTTONS)<br/>Pages are selected using "latching" buttons.</p>  |
| <i>Toolbar</i>                  | <p>0 - Normal:(POW-TBAR-STYLE-NORMAL)<br/>Made up of buttons in the 3D style.</p> <p>1 - Flat:(POW-TBAR-STYLE-FLAT)<br/>Made up of flat buttons with Caption text displayed below the buttons.</p> <p>2 - FlatList:(POW-TBAR-STYLE-FLATLIST)<br/>Made up of flat buttons Caption text displayed at the side of the image.</p>   |
| <i>Button</i>                   | <p>0 - Normal: (POW-TBAR-BTN-STYLE-NORMAL)<br/>Normal push button.</p> <p>1 - Separator: (POW-TBAR-BTN-STYLE-SEPARATOR)<br/>The separator between buttons. The ButtonClick event is not generated if you click it.</p> <p>2 - CheckButton:(POW-TBAR-BTN-STYLE-CHECK)<br/>A "latching" button - i.e. a button that stays depressed or raised until clicked again. Used for indicating that an option is selected or not selected.</p> <p>3 - CheckButtonGroup:(POW-TBAR-BTN-STYLE-CHECKGROUP)<br/>A group of connected "latching" buttons. Only one button in the group can be selected at a time. The selected button remains in the selected state until another button in the group is depressed.<br/>A group consists of all adjacent buttons whose Style property is "3 - CheckButtonGroup". The ButtonClick event is not generated when you click the mouse on a button that is already selected.</p> <p>4 - DropDownButton:(POW-TBAR-BTN-STYLE-DROPDOWN)<br/>A button with an arrow. When the arrow button is clicked a DropDown event is generated. You can use this event to show a pop-up menu using the PopupMenu method.</p> |
| <b>Default value:</b>           |   |
| <i>ComboBox</i>                 | 2 - DropDownList:(POW-COMBO-STYLE-DROPDOWNLIST)   |
| <i>Tab</i>                      | 0 - Tabs:(POW-TAB-STYLE-TABS)   |
| <i>Toolbar</i>                  | 0 - Normal:(POW-TBAR-STYLE-NORMAL)  |
| <i>Button</i>                   | 0 - Normal: (POW-TBAR-BTN-STYLE-NORMAL)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |
| <b>OLE data type:</b>           | VT_I2   |

|  |                    |
|--|--------------------|
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            |                    |
| <i>Toolbar and Button</i>                | Set and reference. |
| <i>Others</i>                            | Reference only.    |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.276 System Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether the file list displays files with the system attribute.  |
| <b>Used in control(s):</b>               | FileList   |
| <b>Values (with constants):</b>          | True - Displays files with the system attribute. (POW-TRUE)<br>False - Does not display files with the system attribute. (POW-FALSE) |
| <b>Default value:</b>                    | False - Does not display files with the system attribute. (POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-SYSEMPIC S9(4) COMP-5  |

## 4.277 TabFixedHeight Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the height of the tab.  |
| <b>Used in control:</b>                  | Tab   |
| <b>Value:</b>                            | The height of the tab expressed in the units defined in the ScaleMode property.<br>It is only effective when the TabWidthStyle property is "1 - Fixed". |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture</b>                     | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.278 TabFixedWidth Property

---

|                         |  |
|-------------------------|--|
| <b>Description:</b>     | Defines the width of the tab.  |
| <b>Used in control:</b> | Tab  |
| <b>Value:</b>           | The width of the tab expressed in the units defined in the ScaleMode property.<br>It is only effective when the TabWidthStyle property is "1 - Fixed". |
| <b>Default value:</b>   | None.  |
| <b>COBOL picture</b>    | S9(9) COMP-5   |
| <b>OLE data type:</b>   | VT_I4  |

|  |                    |
|--|--------------------|
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.279 TabGroup Property

---

|  |   |            |              |          |
|--|---|------------|--------------|----------|
| <b>Description:</b>                      | Indicates whether the control is the first control in a tab group.  |            |              |          |
| <b>Used in control(s):</b>               | CheckBox  | FileList   | ListView     | Table    |
|  | ComboBox  | FolderList | OptionButton | TextBox  |
|  | CommandButton   | Frame      | Scrollbar    | Toolbar  |
|  | Custom  | GroupBox   | Slider       | TreeView |
|  | DriveList   | Label      | StaticText   |          |
|  | Edit  | ListBox    | Tab          |          |
| <b>Values (with constants):</b>          | True - The first control.(POW-TRUE)   |            |              |          |
|  | False - Not the first control.(POW-FALSE)   |            |              |          |
|  | A tab group is a group of controls in which input focus can be moved by using the arrow keys. Each control that can gain focus has a unique number defined in the TabIndex property (if you enter the numbers PowerCOBOL ensures that no other control has that number). A tab group starts with the first control that has the TabGroup property set to True, and contains all the controls with higher numbers up to (but not including) the next control with the TabGroup property set to True. |            |              |          |
|  | The TabStop property determines whether focus can be gained by the control by use of the tab key. It operates independently of the TabGroup property.   |            |              |          |
| <b>Default value:</b>                    |   |            |              |          |
| <i>GroupBox, StaticText and Tab</i>      | True(POW-TRUE)  |            |              |          |
| <i>Others</i>                            | False(POW-FALSE)  |            |              |          |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |            |              |          |
| <b>OLE data type:</b>                    | VT_BOOL   |            |              |          |
| <b>Design time access:</b>               | Set and reference.  |            |              |          |
| <b>Execution time access:</b>            | Set and reference.  |            |              |          |
| <b>Backward compatibility attribute:</b> | None.   |            |              |          |

## 4.280 TabIndex Property

---

|                            |  |            |              |          |
|----------------------------|--|------------|--------------|----------|
| <b>Description:</b>        | Defines the order in which focus moves from control to control when using the tab or arrow keys. |            |              |          |
| <b>Used in control(s):</b> | CheckBox   | FileList   | ListView     | Table    |
|                            | ComboBox   | FolderList | OptionButton | TextBox  |
|                            | CommandButton  | Frame      | Scrollbar    | Toolbar  |
|                            | Custom   | GroupBox   | Slider       | TreeView |
|                            | DriveList  | Label      | StaticText   |          |
|                            | Edit   | ListBox    | Tab          |          |



|  |   |
|--|---|
| <b>Value:</b>                            | <p>The value is an integer greater than zero.</p> <p>When the tab key is pressed focus moves between controls that can receive focus and have TabStop set to True. The focus moves from one control to the control with the next highest TabIndex value.</p> <p>Back Tab (Shift + Tab) works in the reverse order.</p> <p>If TabGroup properties are defined focus can be moved, within tab groups, by the arrow keys, following the TabIndex order.</p> <p>Tab groups can be particularly useful for sets of option buttons.</p> <p>Although TabIndex can be set for the GroupBox, StaticText and Toolbar controls, which cannot receive focus at execution time, they are skipped when the focus is being moved by the tab key.</p> |
| <b>Default value:</b>                    | Assigned by PowerCOBOL using the first unassigned number.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.281 TableCells Property (Two-Dimensional-Array)

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a pointer to a TableCell object in the Table control. The pointers are held in a two-dimensional array so always use two indexes when referencing the TableCells property.   |
| <b>Used in control(s):</b>               | Table   |
| <b>Value:</b>                            | <p>A pointer to a TableCell object.</p> <p>Refer to a TableCell using the syntax:</p> <p><b>"TableCells" (a, b) OF TableName</b></p> <p>Valid values for the indexes are:</p> <p>0 &lt;= a &lt;= RowCount</p> <p>0 &lt;= b &lt;= ColumnCount</p> <p>If you set "a" to zero, it references the pointer to the row headings.</p> <p>If you set "b" to zero, it references the pointer to the column headings.</p> |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-COBJECT  |
| <b>OLE data type:</b>                    | VT_DISPATCH   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.282 TableColumns Property (Array)

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Contain a pointer to a TableColumn object in the Table control. The pointers are held in an array so always use an index when referencing the TableColumns property. |
|---------------------|--|

|  |  |
|--|--|
| <b>Used in control(s):</b>               | Table  |
| <b>Value:</b>                            | A pointer to a TableColumn object.<br>The index can take values from zero to the value of the ColumnCount property.<br>If you set the index to zero, it references the pointer to the header column. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | OBJECT REFERENCE POW-COBJECT   |
| <b>OLE data type:</b>                    | VT_DISPATCH  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.283 TabStop Property

---

|  |  |            |              |          |
|--|--|------------|--------------|----------|
| <b>Description:</b>                      | Indicates whether the control receives focus when focus is being moved using the tab key.                              |            |              |          |
| <b>Used in control(s):</b>               | CheckBox   | Edit       | OptionButton | Table    |
|  | ComboBox   | FileList   | ScrollBar    | TextBox  |
|  | CommandButton  | FolderList | Slider       | TreeView |
|  | Custom   | Listbox    | Tab          |          |
|  | DriveList  | ListView   |              |          |
| <b>Values (with constants):</b>          | True - Receives focus when focus is moved.(POW-TRUE)<br>False - Does not receive focus when focus is moved.(POW-FALSE) |            |              |          |
| <b>Default value:</b>                    | True - Receives focus when focus is moved.(POW-TRUE)   |            |              |          |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |            |              |          |
| <b>OLE data type:</b>                    | VT_BOOL  |            |              |          |
| <b>Design time access:</b>               | Set and reference.   |            |              |          |
| <b>Execution time access:</b>            | Set and reference.   |            |              |          |
| <b>Backward compatibility attribute:</b> | None.  |            |              |          |

## 4.284 TabWidthStyle Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Determines whether the tabs are sized to fit the PageCaption text or are fixed width.  |
| <b>Used in control:</b>         | Tab  |
| <b>Values (with constants):</b> | 0 - Normal:(POW-TAB-STYLE-NORMAL)<br>The size is adjusted automatically using the size of the page caption text.<br>1 - Fixed:(POW-TAB-STYLE-FIXED)<br>The size is specified in the TabFixedWidth and TabFixedHeight properties. |
| <b>Default value:</b>           | 0 - Normal:(POW-TAB-STYLE-NORMAL)  |
| <b>COBOL picture</b>            | S9(4) COMP-5   |
| <b>OLE data type:</b>           | VT_I2  |
| <b>Design time access:</b>      | Set and reference.   |
| <b>Execution time access:</b>   | Reference only.  |

**Backward compatibility attribute:** None.

## 4.285 TargetName Property

---

**Description:** Contains the table, view or procedure name being accessed.  
**Used in control(s):** DBAccess  
**Value:** The table, view, or procedure name.  
**Default value:** None.  
**COBOL picture:** X, up to 8192 bytes  
**OLE data type:** VT\_BSTR  
**Design time access:** Set and reference.  
**Execution time access:** Reference only.  
**Backward compatibility attribute:** POW-DBTABLENAMEPIC X(260)

## 4.286 TargetType Property

---

**Description:** Defines the kind of data to be extracted.  
**Used in control(s):** DBAccess  
**Values (with constants):** 0 - Table/View(POW-TARGETYPE-TABLE)  
1 - Procedure(POW-TARGETYPE-PROCEDURE)  
**Default value:** 0 - Table/View(POW-TARGETYPE-TABLE)  
**COBOL picture:** S9(9) COMP-5  
**OLE data type:** VT\_I4  
**Design time access:** Set and reference.  
**Execution time access:** Reference only.  
**Backward compatibility attribute:** None.

## 4.287 Text Property

---

**Description:** Contains the text character string associated with the control or object  
**Used in:**  
*Controls* ComboBox Edit TextBox  
*Objects* Node TableCell  
**Value:** The text character string displayed or input.  
The values that you can set depend on the definitions in the RenderText object.  
*ComboBox* The character string in the static text or text box part.  
*TextBox* The character string in the text box.  
*Node* The character string in a Node of the TreeView control.  
*TableCell* The character string for a column heading of the Table control.  
**Default value:**  
*TextBox* Same as Name property.

|  |   |
|--|---|
| <i>Others</i>                            | None.   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes   |
| <b>OLE data type:</b>                    | VT_BSTR   |
| <b>Design time access:</b>               |   |
| <i>TextBox</i>                           | Set and reference.  |
| <i>Others</i>                            | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <i>ComboBox</i>                          | Note that, when the Style property is "2 - DropDownList", it is reference only.                                       |
| <b>Backward compatibility attribute:</b> |   |
| <i>ComboBox</i>                          | POW-TEXTPIC X(256)  |
| <i>TextBox</i>                           | 1. POW-TEXTPIC X(256)<br>2. POW-MULTITEXTPIC X(4096)<br>3. POW-MULTITEXT8PIC X(8192)<br>4. POW-NUMERICPIC S9(14)V9(4) |

## 4.288 Text Property (ExcelConnection)

---

|                            |  |
|----------------------------|--|
| <b>Description:</b>        | Contains the data value of the corresponding Excel cell. The data is held in a two dimensional array that is exchanged with Excel, so always use two indexes when referencing the ExcelConnection Text property. |
| <b>Used in control(s):</b> | ExcelConnection  |
| <b>Value:</b>              | The data value of the corresponding Excel cell.<br>Refer to cell data using the syntax:  |

|  |
|--|
| <pre>"Text" (a b)   OF Excel-Connection-Name</pre> |
|--|

Where:

a is the column

b is the row

|  |                         |
|--|-------------------------|
| <b>Default value:</b>                    | None.                   |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes     |
| <b>OLE data type:</b>                    | VT_BSTR                 |
| <b>Design time access:</b>               | Not accessible.         |
| <b>Execution time access:</b>            | Set and reference.      |
| <b>Backward compatibility attribute:</b> | POW-TEXT(a b)PIC X(256) |

## 4.289 Text Property (ListItem)

---

|                        |   |
|------------------------|---|
| <b>Description:</b>    | Contains the data associated with a ListItem object in the ListView control. The data is held in an array so always use an index when referencing the ListItem Text property. |
| <b>Used in object:</b> | ListItem  |
| <b>Value:</b>          | The character string of the object.   |

The first item in the array (index = 1) is the item label displayed in all views of the ListView control.

If the LVStyle property is "3 - Report", the control may have several columns of data. The Text array contains the data for each column of the object. The data for indexes greater than 1 is only displayed in this style. The control displays this data to the right of the item label.

|  |                     |
|--|---------------------|
| <b>Default value:</b>                    | None.               |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes |
| <b>OLE data type:</b>                    | VT_BSTR             |
| <b>Design time access:</b>               | Not accessible.     |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.               |

## 4.290 TextCase Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the case of characters entered should be converted to upper, lower or left as entered.  |
| <b>Used in control(s):</b>               | TextBox   |
| <b>Values (with constants):</b>          | 0 - Normal: No conversion.(POW-TEXTCASE-NORMAL)<br>1 - UpperCase: Converts all characters to upper case.<br>(POW-TEXTCASE-UPPERCASE)<br>2 - LowerCase: Converts all characters to lower case.<br>(POW-TEXTCASE-LOWERCASE) |
| <b>Default value:</b>                    | 0 - Normal: No conversion.(POW-TEXTCASE-NORMAL)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.291 ThreeStates Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Indicates whether the check box can take three states, rather than two states.   |
| <b>Used in control(s):</b>      | CheckBox   |
| <b>Values (with constants):</b> | True - Takes three states.(POW-TRUE)<br>False - Takes two states.(POW-FALSE)<br><br>When the value is True, the control takes three states -<br>selected (black checkmark),<br>unselected (no checkmark) and<br>undefined (grayed checkmark).<br><br>The third state (grayed checkmark) is used to indicate partial selection of a group of options, or other in between states. |
| <b>Default value:</b>           | False - Takes two states.(POW-FALSE)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5   |

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_BOOL            |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.292 ThumbVisible Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Determines whether the sliding pointer ("thumb") is visible.                           |
| <b>Used in control(s):</b>               | Slider   |
| <b>Values (with constants):</b>          | True - Displays the thumb.(POW-TRUE)<br>False - Does not display the thumb.(POW-FALSE) |
| <b>Default value:</b>                    | True - Displays the thumb.(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.293 TickCount Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the number of graduation marks ("ticks") displayed.   |
| <b>Used in control(s):</b>               | Slider   |
| <b>Value:</b>                            | The number of ticks.<br><br>The value is an integer greater than zero.<br><br>The value includes the marks at the Min and Max property points. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.294 TickFrequency Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Defines the increments between graduation marks ("ticks") on the slider.  |
| <b>Used in control(s):</b> | Slider  |
| <b>Value:</b>              | The increments between ticks.<br><br>The value is an integer greater than zero.<br><br>It is only effective when the AutoTick property is True.<br><br>The value should satisfy the following relationship:<br><br>$\text{TickFrequency} < \text{Max} - \text{Min}$ |

|  |                    |
|--|--------------------|
| <b>Default value:</b>                    | 10                 |
| <b>COBOL picture:</b>                    | S9(9) COMP-5       |
| <b>OLE data type:</b>                    | VT_I4              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.295 TickPosition Property (Array)

---

|  |   |
|--|---|
| <b>Description:</b>                      | Contains a tick position on the Slider control. The tick positions are held in an array, so always an index when referencing the TickPosition property.   |
| <b>Used in control(s):</b>               | Slider  |
| <b>Value:</b>                            | A tick position.<br><br>The positions are integers greater than zero.<br><br>The index should satisfy the following relationships:<br><br>Index >= 1<br>and<br>Index <= TickCount - 2<br><br>The values contained in the TickPosition property can be used as parameters for the DeleteTick method. |
| <b>Default value:</b>                    | None.   |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.296 TickStyle Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the manner in which the graduation marks ("ticks") are displayed  |
| <b>Used in control(s):</b>               | Slider  |
| <b>Values (with constants):</b>          | 0 - No Ticks(POW-TICKSTYLE-NOTICKS)<br>1 - Bottom / Right(POW-TICKSTYLE-BOTTOMRIGHT)<br>2 - Top / Left (POW-TICKSTYLE-TOPLEFT)<br>3 - Both(POW-TICKSTYLE-BOTH)<br><br>Apart from value 3, the sliding pointer points towards the ticks. |
| <b>Default value:</b>                    | 1 - Bottom / Right(POW-TICKSTYLE-BOTTOMRIGHT)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.297 TimeFormat Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the time units used in the MCI control. This affects the MediaPosition and MediaLength properties.   |
| <b>Used in control(s):</b>               | MCI  |
| <b>Values (with constants):</b>          | 0 - Millisecond(POW-MCIFORMATMILLISECONDS)<br>2 - Minute/second/frame(POW-MCIFORMATMSF)<br>3 - Frame(POW-MCIFORMATFRAMES)<br>10 - Track/minute/second/frame(POW-MCIFORMATTMSF)<br><br>The value is undefined until the MCI driver is open.<br><br>Specifiable values vary between MCI drivers.<br><br>When TimeFormat is 0 or 3, the times are held as four byte quantities defining the number of milliseconds or frames.<br><br>When TimeFormat is 2, the data is stored in the lower three bytes:<br>Lowest order byte:Minutes<br>2nd lowest order byte:Seconds<br>3rd lowest order byte:Frames<br><br>When TimeFormat is 10, the data is stored in the four bytes:<br>Lowest order byte:Tracks<br>2nd lower order byte:Minutes<br>3rd lower order byte:Seconds<br>4th lower order byte:Frames<br><br>See the MediaLength Sample Code for an example of how to extract the track, minute, second and frame information.<br><br><b>Note:</b><br>For Intel 80x86 CPU platforms (the usual platform for Windows) low-high ordering of bytes is reversed compared to normal COBOL byte ordering. Using COMP-5 normally takes care of this for you, but you need to be aware of the reverse byte order when unpicking multiple bytes as in the above sample. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-MCITIMEFORMATPIC S9(4) COMP-5  |

## 4.298 TitleBar Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Determines whether the form displays a title bar.  |
| <b>Used in object:</b>          | Form   |
| <b>Values (with constants):</b> | True - Displays a title bar.(POW-TRUE)<br>False - Does not display a title bar.(POW-FALSE) |
| <b>Default value:</b>           | True (POW-TRUE)  |
| <b>COBOL picture:</b>           | S9(4) COMP-5   |
| <b>OLE data type:</b>           | VT_BOOL  |
| <b>Design time access:</b>      | Set and reference.   |
| <b>Execution time access:</b>   | Not accessible.  |



**Backward compatibility attribute:** None.

## 4.299 ToolboxBitmap Property

---

**Description:** Contains the name of the image to use in the toolbox if you register the form as an ActiveX control and add the ActiveX as a custom control to a toolbox (such as the toolboxes in PowerCOBOL or Visual Basic).

**Used in control:** Form

**Value:** A Resource name corresponded to a bitmap file.  
The size of the bitmap should be 16x15 pixels.  
You should register the ActiveX to the system before you add the ActiveX control to the toolbox.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Not accessible.

**Backward compatibility attribute:** None.

## 4.300 TooltipText Property

---

**Description:** Contains the tool tip text for the control or object.  
A tool tip is a brief description of the object, displayed when the mouse pointer hovers over the object.

**Tab** Contains the tooltip text for the currently selected tab page.

**Used in controls:**

|               |            |                   |            |
|---------------|------------|-------------------|------------|
| Animation     | FileList   | ListView          | StaticText |
| CheckBox      | FolderList | MCI               | Tab        |
| ComboBox      | Frame      | OptionButton      | Table      |
| CommandButton | Graph      | ProgressIndicator | TextBox    |
| Custom        | GroupBox   | ScrollBar         | Toolbar    |
| DriveList     | Image      | Shape             | TreeView   |
| Edit          | ListBox    | Slider            |            |

**Used in objects:** Button

**Value:** The tooltip text.

**Default value:** None.

**COBOL picture:** X, up to 8192 bytes

**OLE data type:** VT\_BSTR

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.301 Top Property

---

|  |   |
|--|---|
| <b>Description:</b>                                    | Contains the Y coordinate of the upper left corner of the control.  |
| <b>Used in control(s):</b>                             | All controls and the Form object  |
| <b>Value:</b>  | The Y coordinate expressed in the units defined in the ScaleMode property.  |
| <b>Controls</b>  | Relative to the upper left corner of the Form or control, which is identified in the Container property.  |
| <b>Form</b>  | Relative to the upper left corner of the screen.<br><br>You can only set the value when the StartUpPosition property is "4 - Manual".   |
| <b>Default value:</b>                                  | None.   |
| <b>COBOL picture:</b>                                  | S9(9) COMP-5  |
| <b>OLE data type:</b>                                  | VT_I4   |
| <b>Design time access:</b>                             |   |
| <b>Toolbar</b>   | Set and reference.<br><br>You can only set the value when the Align property is "0 - None".   |
| <b>Others</b>  | Set and reference.  |
| <b>Execution time access:</b>                          |   |
| <i>DBAccess, DDE, ExcelConnection, Timer and Print</i> | Not accessible.   |
| <b>Toolbar</b>   | Set and reference.<br><br>You can only set the value when the Align property is "0 - None".   |
| <b>Others</b>  | Set and reference.  |
| <b>Backward compatibility attribute:</b>               | POW-POSITION - made up of the following elements.<br><br>This property corresponds to POS-Y.<br><br><b>01 POSITIONS.</b><br><b>02 POS-XPIC S9(4) COMP-5.</b><br><b>02 POS-YPIC S9(4) COMP-5.</b><br><b>02 POS-WIDTHPIC S9(4) COMP-5.</b><br><b>02 POS-HEIGHTPIC S9(4) COMP-5.</b> |

## 4.302 TopMargin Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the width of the top margin when the form is printed.                                       |
| <b>Used in control(s):</b>               | Print   |
| <b>Value:</b>                            | The width of the margin at the top of the page in the units defined by the PaperScaleUnit property. |
| <b>Default value:</b>                    | 0.6 inch  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5  |
| <b>OLE data type:</b>                    | VT_I4   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | POW-UPMARGINPIC S9(9) COMP-5  |

## 4.303 Topmost Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates that the form is taken to the top of the Z order (the order in which windows are layered on the screen) and is kept there.  |
| <b>Used in object:</b>                   | Form  |
| <b>Values (with constants):</b>          | True - Takes the form to the top of the Z order and keeps it there. (POW-TRUE)<br>False - The form is not kept at the top of the Z order. (POW-FALSE)<br>When the value is True, the form is not hidden behind another window even if the form loses focus. |
| <b>Default value:</b>                    | False - The form is not kept at the top of the Z order. (POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.304 TotalCount Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the total number of all Node objects in the TreeView control. |
| <b>Used in control(s):</b>               | TreeView   |
| <b>Value:</b>                            | The number of Node objects.<br>The value is an integer greater than 0. |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Reference only.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.305 TVLineStyle Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Defines how lines are displayed between the Node objects in the TreeView control.  |
| <b>Used in control(s):</b>      | TreeView   |
| <b>Values (with constants):</b> | 0 - TreeLines:(POW-TVLINESTYLE-TREELINES)<br>Displays lines from parent to child and between sibling nodes.<br>1 - RootLines:(POW-TVLINESTYLE-ROOTLINES)<br>As for style 0, but also with lines connecting root nodes. |
| <b>Default value:</b>           | 0 - TreeLines:(POW-TVLINESTYLE-TREELINES)  |
| <b>COBOL picture:</b>           | S9(4) COMP-5   |
| <b>OLE data type:</b>           | VT_I2  |
| <b>Design time access:</b>      | Set and reference.   |
| <b>Execution time access:</b>   | Set and reference.   |

**Backward compatibility attribute:** None.

## 4.306 TVStyle Property

---

**Description:** Determines which elements of the Node objects are displayed in the TreeView control.

**Used in control(s):** TreeView

**Values (with constants):** 0 - Text Only(POW-TVSTYLE-TEXTONLY)  
1 - Image and Text(POW-TVSTYLE-IMAGE)  
2 - Plus / Minus and Text(POW-TVSTYLE-PLUSMINUS)  
3 - Plus / Minus, Image and Text(POW-TVSTYLE-PLUSMINUSIMAGE)  
4 - TreeLines and Text(POW-TVSTYLE-LINE)  
5 - TreeLines, Image and Text(POW-TVSTYLE-LINEIMAGE)  
6 - TreeLines, Plus / Minus and Text (POW-TVSTYLE-LINEPLUSMINUS)  
7 - TreeLines, Plus / Minus, Image and Text (POW-TVSTYLE-LINEPLUSMINUSIMAGE)

**Default value:** 5 - TreeLines, Image and Text(POW-TVSTYLE-LINEIMAGE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_I2

**Design time access:** Set and reference.

**Execution time access:** Set and reference.

**Backward compatibility attribute:** None.

## 4.307 UnacceptableDefault Property

---

**Description:** Indicates whether the control can become the default button.

**Used in object:** CommandButton

**Values (with constants):** True - Cannot become the default button.(POW-TRUE)  
False - Can become the default button.(POW-FALSE)

When the value is True, the Click event is not generated when the ENTER key is pressed, even if the control has focus. And the Default property is always False (cannot be set to True).

This property is used when you allocate a function key to the CommandButton. You can select whether the CommandButton accepts or rejects the Click event when you press the ENTER key.

**Default value:** False - Can become the default button.(POW-FALSE)

**COBOL picture:** S9(4) COMP-5

**OLE data type:** VT\_BOOL

**Design time access:** Set and reference.

**Execution time access:** Reference only.

**Backward compatibility attribute:** None.

## 4.308 Underline Property

---

**Description:** Determines whether the text is underlined.

|  |  |
|--|--|
| <b>Used in object:</b>                   | Font   |
| <b>Values (with constants):</b>          | True - Text is underlined.(POW-TRUE)<br>False - Text is not underlined.(POW-FALSE) |
| <b>Default value:</b>                    | Container's UnderLine property.  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-UNDERLINEPIC S9(4) COMP-5  |

## 4.309 Upper Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the upper limit of the range of data shown on the graph.   |
| <b>Used in control(s):</b>               | Graph  |
| <b>Value:</b>                            | The upper limit of the range of data<br><br>It is not effective when the GraphStyle property is "3 - Pie". |
| <b>Default value:</b>                    | 100  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-UPPERPIC S9(9) COMP-5  |

## 4.310 UseCaption Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether to display the value of the Caption property in the control.         |
| <b>Used in control(s):</b>               | GroupBox   |
| <b>Values (with constants):</b>          | True:Displays the caption.(POW-TRUE)<br>False:Does not display the caption.(POW-FALSE) |
| <b>Default value:</b>                    | True:Displays the caption.(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.311 UseControlWindow Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Indicates whether the MCI control window is displayed when the media is played. |
| <b>Used in control(s):</b>      | MCI   |
| <b>Values (with constants):</b> | True:Displays control window. (POW-TRUE)  |

|  |   |
|--|---|
|  | False:Does not display the control window.(POW-FALSE) |
| <b>Default value:</b>                    | False:Does not display the control window.(POW-FALSE) |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.                                    |
| <b>Execution time access:</b>            | Set and reference.                                    |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.312 UseDefaultDate Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether to display the current system date when the input to a RenderText date style item is blank.   |
| <b>Used in object:</b>                   | RenderText  |
| <b>Values (with constants):</b>          | True - Displays the current system date, formatted to the RenderText specification, when the corresponding text field is empty.<br>(POW-TRUE)<br>False - Displays spaces when the corresponding text field is empty.(POW-FALSE)<br>It is only effective when the RenderStyle property is "2 - Date".<br>When the value is False, you should ensure a value is set in "YYYYMMDD" format. |
| <b>Default value:</b>                    | True - Displays the current system date, formatted to the RenderText specification, when the corresponding text field is empty.<br>(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.313 UseMnemonic Property

---

|                            |   |
|----------------------------|---|
| <b>Description:</b>        | Determines whether to use the '&' character in the Caption property to indicate that the following character is the mnemonic character.<br>It is used to read strings in databases that include the '&' character.  |
| <b>Used in control(s):</b> | Label                      StaticText   |
| <b>Value:</b>              | True : Uses the '&' character to indicate the mnemonic key.(POW-TRUE)<br>False: Does not use the '&' character to indicate the mnemonic key.(POW-FALSE)<br>The character '&' is displayed in the caption string when the value is False.<br>When the value is true, the character immediately following the '&' in the caption string is underlined.<br>Note that, if you put "&&" in the caption, it is taken as a single '&' character, not underlined. |
| <b>Default value:</b>      | True: Use the '&' character as the mnemonic key.(POW-TRUE)  |
| <b>COBOL picture:</b>      | S9(4) COMP-5  |

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_BOOL            |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.314 UsePalette Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether to use a logical palette for animation bitmaps.   |
| <b>Used in control(s):</b>               | Animation   |
| <b>Values (with constants):</b>          | True - Uses a logical palette.(POW-TRUE)<br>False - Does not use a logical palette.(POW-FALSE)<br><br>When the value is True, PowerCOBOL uses a logical palette and displays the images with approximate colors.<br><br>However, the images are not dithered. So if the image contains more colors than the system setting, the image may not be displayed with the correct colors.<br><br>When set to True drawing the image takes more time than when set to False. |
| <b>Default value:</b>                    | False - Does not use a logical palette.(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.315 UserID Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains the user ID of the person accessing the database. |
| <b>Used in control(s):</b>               | DBAccess   |
| <b>Value:</b>                            | The user ID.   |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | X, up to 8192 bytes  |
| <b>OLE data type:</b>                    | VT_BSTR  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DBUSERIDPIC X(32)                                      |

## 4.316 UserName Property

---

|                          |  |
|--------------------------|--|
| <b>Description:</b>      | Contains the user name or ID to connect to the database. |
| <b>Used in controls:</b> | ADODataSource  |
| <b>Used in Objects:</b>  | None.  |
| <b>Value:</b>            | The user name or ID.                                     |
| <b>Default value:</b>    | None.  |

|   |                      |
|---|----------------------|
| <b>COBOL PICTURE:</b>                     | X, up to 8192 bytes. |
| <b>OLE data type:</b>                     | VT_BSTR              |
| <b>Design time access:</b>                | Set and reference.   |
| <b>Execution time access:</b>             | Set and reference.   |
| <b>Backward compatibility attributes:</b> | None.                |

## 4.317 UseSystemColor Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether to use the system colors.  |
| <b>Used in control(s):</b>               | CommandButton    Toolbar   |
| <b>Values (with constants):</b>          | True:Uses the system colors.(POW-TRUE)<br>False:Does not use the system colors.(POW-FALSE)<br>When the value of this property is False, the "Button Face" color is mapped to the color of the BackColor property, the "Button Text" color is mapped to the color of the ForeColor property, and the color of the text's background is mapped to the HilightColor property. |
| <b>Default value:</b>                    | True:Uses the system colors.(POW-TRUE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.318 Value Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Contains a value associated with the control.  |
| <b>Used in:</b>                 |  |
| <i>Controls</i>                 | CheckBox            ProgressIndicator    ScrollBar<br>OptionButton        Slider   |
| <i>Object</i>                   | Button   |
| <b>Values (with constants):</b> |  |
| <i>CheckBox</i>                 | 0 - Unchecked(POW-TRISTATE-UNCHECKED)<br>1 - Checked(POW-TRISTATE-CHECKED)<br>2 - Grayed(POW-TRISTATE-GRAY)<br>The value of 2 is only effective when the ThreeStates property is True. |
| <i>OptionButton</i>             | True:Selected(POW-TRUE)<br>False:Not selected.(POW-FALSE)  |
| <i>ProgressIndicator</i>        | Value indicating the progress.<br>The value should satisfy the following relationships:<br>Min property <= value<br>and<br>Max property >= value                                       |
| <i>Slider</i>                   | Value indicating the present position.   |



|   |  |
|---|--|
|   | The value should satisfy the following relationships:<br>Min property <= value<br>and<br>Max property >= value   |
| <i>ScrollBar</i>                                | Value indicating the position of the scroll box.<br><br>The value should satisfy the following relationships:<br>-32768 <= value <= 32767<br>and<br>Min property <= value<br>and<br>Max property >= value<br>and<br>value <= Max property - (ScrollPage property - 1)<br><br>If you change the value of the Max or Min property and the above relationship is not satisfied, PowerCOBOL automatically resets the value to the closest valid value. |
| <i>Button</i>                                   | True - Selected.(POW-TRUE)<br>False - Not selected.(POW-FALSE)<br><br>It is only effective when the Style property is<br>"2 - CheckButton" or "3 - CheckButtonGroup".<br><br>If the value becomes True, the button is changed to the image contained in the<br>HotImageList .<br><br>If no HotImageList is specified, the image specified in the ImageList is used.  |
| <b>Default values:</b>                          |  |
| <i>CheckBox</i>                                 | 0 - Unchecked(POW-TRISTATE-UNCHECKED)  |
| <i>OptionButton</i>                             | False: Not selected.(POW-FALSE)  |
| <i>ProgressIndicator</i>                        | Value of the Min property  |
| <i>Slider</i>                                   | 0  |
| <i>ScrollBar</i>                                | 0  |
| <i>Button</i>                                   | False - Not selected.(POW-FALSE)   |
| <b>Data type:</b>                               |  |
| <i>CheckBox</i>                                 | COBOL picture:S9(4) COMP-5<br>OLE data type:VT_I2  |
| <i>OptionButton and Button</i>                  | COBOL picture:S9(4) COMP-5<br>OLE data type:VT_BOOL  |
| <i>ProgressIndicator, Slider,<br/>ScrollBar</i> | COBOL picture:S9(9) COMP-5<br>OLE data type:VT_I4  |
| <b>Design time access:</b>                      |  |
| <i>ProgressIndicator</i>                        | Not accessible.  |
| <i>Others</i>                                   | Set and reference.   |
| <b>Execution time access:</b>                   |  |
|   | Set and reference.   |
| <b>Backward compatibility attributes:</b>       |  |
| <i>CheckBox, OptionButton</i>                   | POW-CHECKPIC S9(4) COMP-5  |
| <i>ScrollBar</i>                                | POW-SCRPOSITIONPIC S9(4) COMP-5  |
| <i>Others</i>                                   | None.  |

## 4.319 Value Property (Graph)

---

|  |  |
|--|--|
| <b>Description:</b>                      | Contains a value for one of the elements of the Graph control. The values are held in an array so always use an index when referencing the Graph Value property.   |
| <b>Used in control(s):</b>               | Graph  |
| <b>Value:</b>                            | A value for one of the elements of the Graph control.<br><br>The index can take values from 1 to the value of the DataCount property.<br><br>The graph values should satisfy the following relationships:<br>Lower property <= value<br>and<br>Upper property >= value |
| <b>Default value:</b>                    | None.  |
| <b>COBOL picture:</b>                    | S9(9) COMP-5   |
| <b>OLE data type:</b>                    | VT_I4  |
| <b>Design time access:</b>               | Not accessible.  |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | POW-DATAPIC S9(9)COMP-5<br><br>DEPENDING ON POW-NUMDATA  |

## 4.320 ValueTips Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Indicates whether the value of the Value property is displayed in a tool tip box as the user drags the sliding pointer ("thumb"). |
| <b>Used in control(s):</b>               | Slider  |
| <b>Values (with constants):</b>          | True - Displays tool tips.(POW-TRUE)<br>False - Does not display tool tips.(POW-FALSE)  |
| <b>Default value:</b>                    | False - Does not display tool tips.(POW-FALSE)  |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.321 Visible Property

---

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Determines whether the control or object is displayed.  |
| <b>Used in control(s):</b>      |   |
| <i>Controls</i>                 | Controls that can be displayed at execution time.   |
| <i>Objects</i>                  | Button                      Form                      MenuItem  |
| <b>Values (with constants):</b> | True - Displayed.(POW-TRUE)<br>False - Not displayed.(POW-FALSE)  |
| <b>MCI</b>                      | The display is not affected by the setting of this property when the UseControlWindow property is True. |
| <b>Default value:</b>           | True - Displayed.(POW-TRUE)   |
| <b>COBOL picture:</b>           | S9(4) COMP-5  |

|  |                             |
|--|-----------------------------|
| <b>OLE data type:</b>                    | VT_BOOL                     |
| <b>Design time access:</b>               | Set and reference.          |
| <b>Execution time access:</b>            | Set and reference.          |
| <b>Backward compatibility attribute:</b> | POW-VISIBLEPIC S9(4) COMP-5 |

## 4.322 VScrollBar Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Determines whether to use a vertical scrollbar in the TextBox control.  |
| <b>Used in control(s):</b>               | TextBox   |
| <b>Values (with constants):</b>          | True - Displays a vertical scrollbar.(POW-TRUE)<br>False - Does not display a vertical scrollbar.(POW-FALSE)<br>It is only effective when the MultiLine property is True. |
| <b>Default value:</b>                    | False - Does not display a vertical scrollbar.(POW-FALSE)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE data type:</b>                    | VT_BOOL   |
| <b>Design time access:</b>               | Set and reference.  |
| <b>Execution time access:</b>            | Reference only.   |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.323 Weight Property

---

|  |   |
|--|---|
| <b>Description:</b>                      | Defines the weight of the characters - bold or normal.                                      |
| <b>Used in object:</b>                   | Font  |
| <b>Values (with constants):</b>          | The weight of the characters:<br>Normal(POW-FONTWEIGHT-NORMAL)<br>Bold(POW-FONTWEIGHT-BOLD) |
| <b>Default value:</b>                    | Depends on the container's Font property.   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5  |
| <b>OLE Data type:</b>                    | VT_I2   |
| <b>Design time access:</b>               | Not accessible.   |
| <b>Execution time access:</b>            | Set and reference.  |
| <b>Backward compatibility attribute:</b> | None.   |

## 4.324 Width Property

---

|                               |   |
|-------------------------------|---|
| <b>Description:</b>           | Defines the width of the control or object.                                       |
| <b>Used:</b>                  |   |
| <i>Controls</i>               | Sizable controls.   |
| <i>Objects</i>                | Column                      Form                      TableColumn                 |
| <b>Values:</b>                |   |
| <i>Column and TableColumn</i> | The width of the column specified in the units defined by the ScaleMode property. |

*Others* The width of the control, or object, specified in the units defined by the ScaleMode property.

**Default value:**

*Column and TableColumn* 100 pixels (when ScaleMode property is "0 - Pixel")

*Others* None.

**COBOL PICTURE:**

*Column and TableColumn* COMP-1

*Others* S9(9) COMP-5

**OLE data type:**

*Column and TableColumn* OLE\_XSIZE\_CONTAINER

*Others* VT\_I4

**Design time access:**

*Form* Not accessible.

*Toolbar* Set and reference.

Note that, when the Align property is "1 - Top" or "2 - Bottom", this is reference only.

*Others* Set and reference.

**Execution time access:**

*Toolbar* Set and reference.

Note that, when the Align property is "1 - Top" or "2 - Bottom", this is reference only.

*Others* Set and reference.

**Backward compatibility attribute:**

*Column and TableColumn* None.

*Others* POW-POSITION - made up of the following elements.

This property corresponds to POS-WIDTH.

- 01 POSITIONS.**
- 02 POS-XPIC S9(4) COMP-5.**
- 02 POS-YPIC S9(4) COMP-5.**
- 02 POS-WIDTHPIC S9(4) COMP-5.**
- 02 POS-HEIGHTPIC S9(4) COMP-5.**

## 4.325 WindowAdjustment Property

---

**Description:** Indicates whether to match the size of the MCI control window with the size of the media image.

**Used in control(s):** MCI

**Values (with constants):** 0 - Standard:(POW-MCIWINADJUST-STANDARD)  
No adjustment.

1 - Adjust Control Window: (POW-MCIWINADJUST-CONTROLWINDOW)  
Adjusts image to fit window.

2 - Adjust Device Frame:(POW-MCIWINADJUST-DEVICEFRAME)  
Adjust window to fit image.

It is only effective when the UseControlWindow property is True.

**Default value:** 0 - Standard:(POW-MCIWINADJUST-STANDARD)

**COBOL picture:** S9(4) COMP-5

|  |                    |
|--|--------------------|
| <b>OLE data type:</b>                    | VT_I2              |
| <b>Design time access:</b>               | Set and reference. |
| <b>Execution time access:</b>            | Set and reference. |
| <b>Backward compatibility attribute:</b> | None.              |

## 4.326 WindowState Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Defines the initial state of the Form window.  |
| <b>Used object:</b>                      | Form   |
| <b>Values (with constants):</b>          | 0 - Normal(POW-WINDOWSTATE-NORMAL)<br>1 - Maximize(POW-WINDOWSTATE-MAXIMIZE)<br>2 - Minimize(POW-WINDOWSTATE-MINIMIZE)   |
|  | If you invoke the Execute method with the ShowWindow parameter (the second parameter) and the WindowState value is 0, the state specified in the ShowWindow parameter takes precedence over the WindowState setting. |
| <b>Default value:</b>                    | 0 - Normal(POW-WINDOWSTATE-NORMAL)   |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_I2  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Not accessible.  |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.327 WordWrap Property

---

|  |  |
|--|--|
| <b>Description:</b>                      | Indicates whether text wraps to the next line.                         |
| <b>Used object:</b>                      | TableColumn  |
| <b>Values (with constants):</b>          | True - Wraps text.(POW-TRUE)<br>False - Does not wrap text.(POW-FALSE) |
| <b>Default value:</b>                    | False - Does not wrap text.(POW-FALSE)                                 |
| <b>COBOL picture:</b>                    | S9(4) COMP-5   |
| <b>OLE data type:</b>                    | VT_BOOL  |
| <b>Design time access:</b>               | Set and reference.   |
| <b>Execution time access:</b>            | Set and reference.   |
| <b>Backward compatibility attribute:</b> | None.  |

## 4.328 Wrapable Property

---

|                                 |  |
|---------------------------------|--|
| <b>Description:</b>             | Indicates whether to wrap the Toolbar buttons to another line, when the buttons do not fit on a single line.     |
| <b>Used object:</b>             | Toolbar  |
| <b>Values (with constants):</b> | True - Wraps buttons to another line.(POW-TRUE)<br>False - Does not wrap the buttons to another line.(POW-FALSE) |
| <b>Default value:</b>           | False - Does not wrap the buttons to another line.(POW-FALSE)  |

**COBOL picture:** S9(4) COMP-5  
**OLE data type:** VT\_BOOL  
**Design time access:** Set and reference.  
**Execution time access:** Set and reference.  
**Backward compatibility attribute:** None.

## 4.329 Writable Property

---

**Description:** Indicates whether cells in the column can gain focus and be edited.  
**Used object:** TableColumn  
**Values (with constants):** True:Cells can gain focus and be edited(POW-TRUE)  
False:Cells cannot gain focus(POW-FALSE)  
**Default value:** True:Cells can gain focus and be edited(POW-TRUE)  
**COBOL picture:** S9(4) COMP-5  
**OLE data type:** VT\_BOOL  
**Design time access:** Set and reference.  
**Execution time access:** Set and reference.  
**Backward compatibility attribute:** None.

# Chapter 5 Methods

This chapter describes all of the PowerCOBOL methods.

## 5.1 Introduction to the PowerCOBOL Methods

PowerCOBOL Methods are special sub-routines for manipulating or interfacing with controls and objects. They are like most sub-routines in that they take parameters (arguments) and return data and completion codes either in the parameters or in a RETURNING parameter. Unlike regular COBOL sub-routines PowerCOBOL methods are invoked using the INVOKE statement.

## 5.2 How Information is Presented on Each Method

PowerCOBOL Methods are explained as follows:

|  |   |
|--|---|
| <b>Method name:</b>                        | The name of the method is the string used in the topic title.   |
| <b>Description:</b>                        | Describes the purpose of the method.  |
| <b>Used in controls:</b>                   | Lists the controls that have the method.  |
| <b>Used in objects:</b>                    | Lists the objects that have the method.   |
| <b>Parameters:</b>                         | Lists the method's parameters, with definitions of the OLE Data Types and the COBOL data descriptions.<br><br>Bracketed arguments can be omitted.<br><br>"VT_BSTR - X(8192)" means the string is 8192 bytes or less. The VT_BSTR type of parameter can be shortened if necessary. |
| <b>Description of parameters:</b>          | Describes the parameters of the method.   |
| <b>Return value:</b>                       | Describes the Data Type of the method's return value and COBOL data description.  |
| <b>Example:</b>                            | Provides an example of using the method.  |
| <b>Backward compatibility method name:</b> | The equivalent method names from earlier release of PowerCOBOL.<br><br>Use the "Method name" rather than these names when creating new applications.  |
| <b>Backward compatibility arguments:</b>   | The equivalent arguments of the method (Backward compatibility method name) from earlier release of PowerCOBOL.<br><br>Use the "Parameters" rather than these arguments when creating new applications.   |

## 5.3 How to Use Methods

PowerCOBOL Methods are invoked using the INVOKE statement. This INVOKE statement is defined to invoke the methods of PowerCOBOL controls and objects and its specification is different from the OO COBOL specification.

The general format of the INVOKE statement is:

```
INVOKE Control-name "Method-name"  
    [USING Parameter-1 [Parameter-2... ] ]  
    [RETURNING Return-Value]
```

Bracketed arguments can be omitted.

For example, to add "ListItem-1" to the list part of the ListBox control (control-name: "ListBox1"), code:

```
INVOKE ListBox1 "AddString" USING "ListItem-1".
```

## 5.4 Activate Method

|  |   |
|--|---|
| <b>Description:</b>                        | Activates a form.<br>The form object must be loaded.  |
| <b>Used in controls:</b>                   | None.   |
| <b>Used in objects:</b>                    | Form  |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_BOOL - ReturnValueS9(4) COMP-5<br>POW-TRUE indicates normal completion.<br>POW-FALSE indicates an error. |
| <b>Example:</b>                            | INVOKE Form-Name "Activate" RETURNING ReturnValue   |
| <b>Backward compatibility method name:</b> | None.   |

## 5.5 Add Method

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Adds a ListItem object to a ListView control or a child Node object to the TreeView control and Node object.  |
| <b>Used in controls:</b>          | ListView                  TreeView  |
| <b>Used in objects:</b>           | Node  |
| <b>Parameters:</b>                |   |
| <i>ListView</i>                   | VT_I4 - IconIndexS9(9) COMP-5<br>VT_I4 - SmallIconIndexS9(9) COMP-5   |
| <i>TreeView and Node</i>          | VT_BSTR - TextStringX(8192)<br>VT_I4 - ImageIndexS9(9) COMP-5]<br>[VT_I4 - SelectImageIndexS9(9) COMP-5]<br>[VT_I4 - ExpandImageIndexS9(9) COMP-5]  |
| <b>Description of Parameters:</b> |   |
| <i>ListView</i>                   | IconIndex: Contains the index of the image to use in the large icon display style. It is only used when the LVStyle property is "0 - Large icon".<br>SmallIconIndex: Contains the index of the image to use in the small icon display style. It is only used when the LVStyle property is "1 - Small icon".                       |
| <i>TreeView and Node</i>          | TextString: Contains the text displayed at the Node object.<br>ImageIndex: Contains the index of the image to use for the Node object.<br>SelectImageIndex: Contains the index of the image to use when the Node object is selected.<br>ExpandImageIndex: Contains the index of the image to use when the Node object is expanded |
| <b>Return value:</b>              | VT_I4 - ReturnValueS9(9) COMP-5<br>The index of the added item (ListItem object or Node object).  |
| <b>Examples:</b>                  |   |
| <i>Listview:</i>                  | INVOKE ListView-Name "Add"<br><br>USING        Icon<br><br>SmallIcon  |



```

RETURNING ReturnValue

TreeView control, Node object:: INVOKE Node-Name "Add"

USING      Text
          Image
          SelectedImage
          ExpandedImage

RETURNING ReturnValue

Backward compatibility      None.
method name:

```

## 5.6 AddString Method

---

**Description:** Adds the character string contained in the parameter to the end of the list or, if the Sorted property is set to True, inserts the character string in the list at the appropriate position to maintain the sort order.

**ComboBox** Adds the character string contained in the TextString parameter to the end of the list, or in sort order if Sorted is True, when the FileType property is something other than "0 - Standard Text File".

**Used in controls:** ComboBox          ListBox

**Used in objects**          None.

**Parameters:**          VT\_BSTR - TextStringX(8192)

**Description of Parameters:**          Contains the string to add to the list.

**Return value:**          VT\_I4 - ReturnValueS9(9) COMP-5

                                If positive, this is the index of the added item.

                                -1 indicates an error.

**Example:**                  MOVE "This is a new String"

                                TO StringToAdd

                                INVOKE ComboBox-Name "AddString"

                                USING          StringToAdd

                                RETURNING ReturnValue

**Backward compatibility**          ADDSTRING  
**method name:**                  ADDSTRING256

**Backward compatibility**          ADDSTRING: X(64)  
**arguments:**                      ADDSTRING256: X(256)

## 5.7 AddTick Method

---

**Description:**                  Adds a graduation mark ("tick") at the specified position.

                                It is only effective if the AutoTick property is False.

**Used in controls:**                  Slider

**Used in objects:**                  None.

**Parameters:** VT\_I4 - TickPositionS9(9) COMP-5

**Description of Parameters:** Specifies the position where the tick should be added.  
The TickPosition property is an array containing the positions of all the ticks

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
The total number of ticks added using AddTick methods.

**Example:**

```

WORKING-STORAGE SECTION.

01 lPos          PIC S9(9) COMP-5.

01 ReturnValue   PIC S9(9) COMP-5.

PROCEDURE DIVISION.

* Turn off any auto tick marks

MOVE POW-FALSE

    TO "AutoTick" OF CmSlider1

* Create a Tickmark at position 20

MOVE 20 TO lPos

INVOKE CmSlider1 "AddTick"

    USING      lPos

    RETURNING ReturnValue

Backward compatibility      None.
method name:

```

## 5.8 AdviseDDE Method

---

**Description:** Starts the advise loop with the DDE server.

**Used in controls:** DDE

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:**

```

* First point to the DDE control

* "DDE-name" at a valid DDE server

* such as Excel (using the InitiatedDDE

* method) then:

INVOKE DDE-Name "AdviseDDE"

    RETURNING ReturnValue

Backward compatibility      ADVISEDDE
method name:

```

**Backward compatibility arguments:** None.

## 5.9 Alarm Method

---

**Description:** Plays the wave file configured for the defined sound in the Windows system.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** [VT\_I4 - SoundTypeS9(9) COMP-5]

**Description of Parameters:** Defines the sound to use. You can use the following constants to set the sound.

POW-MBOK: (Default) The default sound (Normal)

POW-MBASTERISK: The Asterisk sound (Information)

POW-MBQUESTION: The Question sound

POW-MBEXCLAMATION: The Exclamation sound (Warning)

POW-MBHAND: The Critical Stop sound

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

Non-zero indicates normal completion.  
Zero indicates an error.

**Example:**

```
* Play the exclamation sound for the
* current form

INVOKE POW-SELF "Alarm"

    USING     POW-MBEXCLAMATION

    RETURNING ReturnValue
```

**Backward compatibility method name:** ALARM

**Backward compatibility arguments:** S9(4) COMP-5

## 5.10 CallForm Method

---

**Description:** Opens (Shows) a form in "Modal" mode.

"Modal" means that the parent form is inactive until the child form is closed. The child form looks like a dialog box.

It is different from the OpenForm method in that control is returned after all the child form's procedures have completed.

The child form cannot be re-opened if the child form is already open.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_BSTR - FormNameX(8192)

[VT\_BSTR - DllNameX(8192)]

[VT\_I4 - CookieS9(9) COMP-5]

**Description of Parameters:** FormName: The name of the form to be opened.

DllName: When the form is in a DLL file, defines the name of the DLL file containing the form.

It should be omitted when you specify a form in the same Module, as specifying the same DLL name that contains the invoking form degrades performance.

Cookie: An integer to distinguish the opened form.

It is set in a parameter of the CloseChild

event when the opened form is closed. If omitted, the parameter value is zero.

**Return value:**

VT\_I4 - ReturnValueS9(9) COMP-5

This is the value set in the Result parameter when the CloseForm method is invoked. When you omit the parameter, or the form is closed in some way other than by invoking methods, the value is zero. Otherwise, if the form was not closed for any reason, the value is -1.

**DLL Search Path:**

When the DllName parameter does not contain the full path, PowerCOBOL searches for the DLL folders in the following order:

1. The folder containing the execution file.
2. The current folder
3. The system folder of 32 bit Windows
4. The system folder of 16 bit Windows
5. The folder in which Windows is installed.
6. The folders of the PATH environment variable.

**Example:**

To invoke another form called "DialogBox1", contained within the same module, you would code:

```
WORKING-STORAGE SECTION.  
  
01 ReturnValue PIC S9(9) COMP-5.  
  
PROCEDURE DIVISION.  
  
    INVOKE POW-SELF "CallForm"  
  
        USING      "DialogBox1"  
  
        RETURNING ReturnValue  
  
    IF ReturnValue = ID-OK  
  
        * Code to handle a good return  
  
        :  
  
    END-IF
```

Where ID-OK is a global variable set in a top-level section of each form, such as the forms' CONSTANT sections:

```
01 ID-OK PIC S9(9) COMP-5 VALUE 1  
  
IS GLOBAL.
```

To return from "DialogBox1", with an "OK" value you would code, in a closing event such as the user clicking on DialogBox1's "OK" button:

```
INVOKE POW-SELF "CloseForm"  
  
USING ID-OK
```

**Backward compatibility  
method name:**

None.

## 5.11 CallForm2 Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | <p>Opens (Shows) a form in "Modal" mode, taking an extra, modal style, parameter to the CallForm method.</p> <p>"Modal" means that the parent form is inactive until the child form is closed. The child form looks like a dialog box.</p> <p>It is different from the OpenForm method in that control is returned after all the child form's procedures have completed.</p> <p>The child form cannot be re-opened if the child form is already open.</p>   |
| <b>Used in controls:</b>                   | None.   |
| <b>Used in objects:</b>                    | Form  |
| <b>Parameters:</b>                         | <ol style="list-style-type: none"><li>1. VT_BSTR - FormNameX(8192)</li><li>2.[VT_BSTR - DllNameX(8192)]</li><li>3.[VT_I4 - CookieS9(9) COMP-5]</li><li>4.[VT_I4 - ModalStyleS9(9) COMP-5]</li></ol>   |
| <b>Description of Parameters:</b>          | <p>FormName: The name of the form to be opened.</p> <p>DllName: When the form is in a DLL file, defines the name of the DLL file containing the form.</p> <p>It should be omitted when you specify a form in the same Module, as specifying the same DLL name that contains the invoking form degrades performance.</p> <p>Cookie: An integer to distinguish the opened form.</p> <p>It is set in a parameter of the CloseChild event when the opened form is closed. If omitted, the parameter value is zero.</p> <p>ModalStyle: A modal style. Either:<br/>POW-MODALSTYLE-APPLICATIONMODAL:<br/>Only the parent form is inactive.<br/>or:<br/>POW-MODALSTYLE-TASKMODAL: (Default)<br/>All forms in the same thread, except the opened form, are inactive.</p> |
| <b>Return value:</b>                       | <p>VT_I4 - ReturnValueS9(9) COMP-5</p> <p>This is the value set in the Result parameter when the CloseForm method is invoked. When you omit the parameter, or the form is closed in some way other than by invoking methods, the value is zero. Otherwise, if the form was not closed for any reason, the value is -1.</p>  |
| <b>DLL Search Path:</b>                    | <p>When the DllName parameter does not contain the full path, PowerCOBOL searches for the DLL folders in the following order:</p> <ol style="list-style-type: none"><li>1. The folder containing the execution file.</li><li>2. The current folder</li><li>3. The system folder of 32 bit Windows</li><li>4. The system folder of 16 bit Windows</li><li>5. The folder in which Windows is installed.</li><li>6. The folders of the PATH environment variable.</li></ol>  |
| <b>Backward compatibility method name:</b> | None.   |

## 5.12 ChangeDDEItem Method

---

|                          |   |
|--------------------------|---|
| <b>Description:</b>      | Re-connects the advise loop, using a new DDE item name. |
| <b>Used in controls:</b> | DDE   |

**Used in objects:** None.

**Parameters:** VT\_BSTR - DDEItemNameX(8192)  
VT\_BSTR - DDEFormatNameX(8192)

**Description of Parameters:** DDEItemName: The new DDE item name.  
DDEFormatName: The format name of the new DDE item.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:** See the ChangeDDEItem Example

**Backward compatibility method name:** CHANGEDDEITEM

**Backward compatibility arguments:** 1. X(128)  
2. X(32)

#### Example of the ChangeDDEItem Method

Assume that you want to set these properties in an Excel DDE control (CmDDE1):

```
DDEServiceName:
DDETopicName:
DDEItemName:      R1C1:R2C2
DDEFormatName:   CF_TEXT
DDELinkStyle:     2 - Warm-Link
```

In the form's Opened event procedure add this code to be executed only once to start the DDE session with Excel:

```
ENVIRONMENT      DIVISION.
DATA              DIVISION.
WORKING-STORAGE SECTION.
PROCEDURE        DIVISION.
    INVOKE CmDDE1 "Execute" Using
        "Excel c:\exceldde97.xls"
        POW-SWSHOWNORMAL
        Returning ReturnValue
    INVOKE CmDDE1 "OpenDDE"
        RETURNING ReturnValue
```

The following code executes the ChangeDDEItem method

```
ENVIRONMENT      DIVISION.
DATA           DIVISION.
WORKING-STORAGE SECTION.
01 DDE-Item      Pic X(16).
01 DDE-Format    Pic X(16).
01 ReturnValue    Pic S9(9) COMP-5.
PROCEDURE        DIVISION.
    Move "R1C1:R2C2" To DDE-Item
    Move "CF_TEXT" To DDE-Format
    INVOKE CmDDE1 "ChangeDDEItem"
        USING DDE-Item
        DDE-Format
        RETURNING ReturnValue
```

## 5.13 Clear Method

**Description:** Deletes all objects or items from the control or object.

**List View** Deletes all ListItem objects.

|  |                                    |
|--|------------------------------------|
| <b>TreeView</b>                                | Deletes all items.                 |
| <b>Node</b>                                    | Deletes all child Node objects.    |
| <b>Used in controls:</b>                       | ListView                  TreeView |
| <b>Used in objects:</b>                        | Node                               |
| <b>Parameters:</b>                             | None.                              |
| <b>Return value:</b>                           | None.                              |
| <b>Example:</b>                                | INVOKE CmListView1 "Clear"         |
| <b>Backward compatibility<br/>method name:</b> | None.                              |

## 5.14 ClearList Method

---

|  |   |
|--|---|
| <b>Description:</b>                            | Deletes all items in the list box part. |
| <b>Used in controls:</b>                       | ComboBox                  ListBox       |
| <b>Used in objects:</b>                        | None.                                   |
| <b>Parameters:</b>                             | None.                                   |
| <b>Return value:</b>                           | None.                                   |
| <b>Example:</b>                                | INVOKE CmList1 "ClearList"              |
| <b>Backward compatibility<br/>method name:</b> | CLEARLIST                               |
| <b>Backward compatibility<br/>arguments:</b>   | None.                                   |

## 5.15 ClearSelect Method

---

|  |   |
|--|---|
| <b>Description:</b>                            | Clears the selected range, setting SelectStart property and SelectEnd property to their Min property value. |
| <b>Used in controls:</b>                       | Slider  |
| <b>Used in objects:</b>                        | None.   |
| <b>Parameters:</b>                             | None.   |
| <b>Return value:</b>                           | None.   |
| <b>Example:</b>                                | INVOKE CmSlider1 "ClearSelect"  |
| <b>Backward compatibility<br/>method name:</b> | None.   |

## 5.16 ClearTable Method

---

|                          |   |
|--------------------------|---|
| <b>Description:</b>      | Clears the contents of all cells except the heading area. |
| <b>Used in controls:</b> | Table   |
| <b>Used in objects:</b>  | None.   |
| <b>Parameters:</b>       | None.   |
| <b>Return value:</b>     | None.   |
| <b>Example</b>           | INVOKE CmTable1 "ClearTable"                              |

**Backward compatibility**          None.  
**method name:**

## 5.17 ClearTicks Method

---

**Description:**                      Clears all the graduation marks ("Ticks") from the slider, apart from the tick at the Min property and Max property positions.  
  
It is effective only when the AutoTick property is False.

**Used in controls:**                  Slider

**Used in objects:**                  None.

**Parameters:**                      None.

**Return value:**                      None.

**Example:**                            INVOKE CmSlider1 "ClearTicks"

**Backward compatibility**          None.  
**method name:**

## 5.18 CloseBook Method

---

**Description:**                      Closes the Excel book.

**Used in controls:**                  ExcelConnection

**Used in objects:**                  None.

**Parameters:**                      1. [VT\_BOOL - CloseAllS9(4) COMP-5]  
2. [VT\_BOOL - SaveChangesS9(4) COMP-5]

**Description of Parameters:**      CloseAll: Specify whether to close all the books connected with the PowerCOBOL application or only the books connected with the control.  
POW-TRUE: Close all the books connected with the PowerCOBOL application.  
POW-FALSE: Close the books connected with the control.  
If omitted, all books connected with the PowerCOBOL application are closed.

SaveChanges: Specify whether to save the book connected with the control. This parameter is effective only when the first parameter (CloseAll) is False.  
POW-TRUE: Save the book connected with the control.  
POW-FALSE: Do not save the book.  
If omitted, a confirming message box is displayed.

**Return value:**                      None.

**Example:**                            INVOKE CmExcel "CloseBook"

**Backward compatibility**          CLOSEEXCELSHEET  
**method name:**

**Backward compatibility**          None.  
**arguments:**

## 5.19 CloseCursor Method

---

**Description:**                      Closes the cursor (or result set) created by the SelectRecords method or ExecuteProcedure method.

**Used in controls:**                  DB Access

**Used in objects:**                  None.



**Parameters:** None.

**Return value:** VT\_I4 - ReturnValue S9(9) COMP-5  
 Zero or greater indicates normal completion.  
 Negative indicates an error.

**Example:**  
 INVOKE CmDB1 "CloseCursor"  
 RETURNING ReturnValue

**Backward compatibility method name:** None.

## 5.20 CloseDB Method

---

**Description:** Ends the data base connection.

**Used in controls:** DB Access

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
 Zero or greater indicates normal completion.  
 Negative indicates an error.

**Example:**  
 INVOKE CmDB1 "CloseDB"  
 RETURNING ReturnValue

**Backward compatibility method name:** CLOSEDB

**Backward compatibility arguments:** None.

## 5.21 CloseDDE Method

---

**Description:** Ends the advise loop with the DDE server and closes the DDE conversation.  
 Its effect is the same as if you executed the UnadviseDDE and TerminateDDE methods successively.

**Used in controls:** DDE

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:**  
 INVOKE CmDDE1 "CloseDDE"

**Backward compatibility method name:** CLOSEDDE

**Backward compatibility arguments:** None.

## 5.22 CloseDevice Method

---

**Description:** Closes the MCI device.

**Used in controls:** MCI

**Used in objects:** None.

|  |                             |
|--|-----------------------------|
| <b>Parameters:</b>                         | None.                       |
| <b>Return value:</b>                       | None.                       |
| <b>Example:</b>                            | INVOKE CmMCI1 "CloseDevice" |
| <b>Backward compatibility method name:</b> | CLOSEDEVICE                 |
| <b>Backward compatibility arguments:</b>   | None.                       |

## 5.23 CloseForm Method

---

|  |  |
|--|--|
| <b>Description:</b>                        | Closes the form and child forms opened from the form.  |
| <b>Used in controls:</b>                   | None.  |
| <b>Used in objects:</b>                    | Form   |
| <b>Parameters:</b>                         | [VT_BSTR - FormNameX(8192)]<br>[VT_BSTR - DllNameX(8192)]<br>[VT_I4 - Result S9(9) COMP-5]   |
| <b>Description of Parameters:</b>          | <p><b>FormName:</b> The name of the form to be closed. When it is omitted with the DllName parameter, the form itself is closed (its effect is equal to the Deactivate method).</p> <p><b>DllName:</b> The name of the DLL file containing the form. If it is omitted PowerCOBOL searches for the form name in the application.</p> <p><b>Result:</b> This value is set to the ResultValue parameter passed to the CallForm2 (CallForm) method. (This parameter is not effective for a form opened with the OpenForm method).</p> <p>Note that the order of parameters is different from the order of CLOSESHEET's parameters.</p> |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero indicates normal completion.<br>Non-zero indicates an error.   |
| <b>Note:</b>                               | If event procedures in the form to be closed have not finished, the CloseForm method waits for them to complete.   |
| <b>Example:</b>                            | <p>1. To close a form itself code:</p> <pre>INVOKE POW-SELF "CloseForm"        USING Result-Code</pre> <p>Where Result-Code contains a value you wish to communicate to the invoking form.</p> <p>2. To close a form called "Subform1" from another form, contained in the same DLL module, code:</p> <pre>INVOKE POW-SELF "CloseForm"        USING "Subform1"</pre>   |
| <b>Backward compatibility method name:</b> | CLOSESHEET   |
| <b>Backward compatibility arguments:</b>   | 1. X(260) - DLL<br>2. X(14) - Sheet (form) name  |

## 5.24 CommitDB Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Execute the commit procedure when the CommitMode property is "1 - Manual".  |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error. |
| <b>Example:</b>                            | INVOKE CmDB1 "CommitDB"<br>RETURNING ReturnValue  |
| <b>Backward compatibility method name:</b> | COMMITDB  |
| <b>Backward compatibility arguments:</b>   | None.   |

## 5.25 Connect Method

---

|  |  |
|--|--|
| <b>Description:</b>                        | Does not do anything. It is provided for backward compatibility with an earlier function so that code can still be interchanged. |
| <b>Used in controls:</b>                   | ExcelConnection  |
| <b>Used in objects:</b>                    | None.  |
| <b>Parameters:</b>                         | None.  |
| <b>Return value:</b>                       | None.  |
| <b>Example:</b>                            | INVOKE CmExcel1 "Connect"  |
| <b>Backward compatibility method name:</b> | CONNECTEXCEL   |
| <b>Backward compatibility arguments:</b>   | None.  |

## 5.26 ConvertScale Method

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Converts coordinates between specified scale modes.<br><br>The details of scale mode are described in the ScaleMode property.   |
| <b>Used in controls:</b>          | None.   |
| <b>Used in objects:</b>           | Form  |
| <b>Parameters:</b>                | VT_I2 - ScaleModeInS9(4) COMP-5<br>VT_I2 - ScaleModeOutS9(4) COMP-5<br>VT_I4 - PosXS9(9) COMP-5<br>VT_I4 - PosYS9(9) COMP-5   |
| <b>Description of Parameters:</b> | ScaleModeIn: The scale mode of the input coordinates. Valid values (with constants) are:<br>0 - Pixels(POW-SCALEPIXELS)<br>1 - 1/100mm (POW-SCALEHIMETRIC)<br>2 - 1/1000inch(POW-SCALEHIENGLISH)<br>3 - 1/20Points (POW-SCALETWIPS) |

ScaleModeOut: The scale mode to be used for the output coordinates. Valid values (with constants) are:

- 0 - Pixels(POW-SCALEPIXELS)
- 1 - 1/100mm (POW-SCALEHIMETRIC)
- 2 - 1/1000inch(POW-SCALEHIENGLISH)
- 3 - 1/20Points (POW-SCALETWIPS)

PosX: The horizontal coordinates to be converted. The converted value is returned in this parameter.

PosY: The vertical coordinates to be converted. The converted value is returned in this parameter

**Return value:** None.

**Example:**

```
WORKING-STORAGE SECTION.  
01 ScaleModeInPIC S9(4) COMP-5.  
01 ScaleModeOutPIC S9(4) COMP-5.  
01 XPIC S9(9) COMP-5.  
01 YPIC S9(9) COMP-5.  
01 ReturnValuePIC S9(9) COMP-5.  
PROCEDURE DIVISION.  
* This example obtains the current  
* scale mode (Default is "3" = 1/20  
* points), and converts 100 and 200  
* in that scale mode, to their  
* values in scale mode "0" pixels).  
MOVE "ScaleMode" OF POW-SELF  
TO ScaleModeIn  
MOVE 0 TO ScaleModeOut  
MOVE 100 TO X  
MOVE 200 TO Y  
INVOKE POW-SELF "ConvertScale"  
USING ScaleModeIn ScaleModeOut  
X Y
```

**Backward compatibility** None.  
**method name:**

## 5.27 Deactivate Method

---

**Description:** Deactivates the form.  
**Used in controls:** None.  
**Used in objects:** Form  
**Parameters:** None.  
**Return value:** VT\_BOOL - ReturnValueS9(4) COMP-5  
POW-TRUE indicates normal completion.  
POW-FALSE indicates an error.

**Example:**

```
INVOKE POW-SELF "Deactivate"  
  
RETURNING ReturnValue
```

**Backward compatibility** None.  
**method name:**

## 5.28 Delete Method

---

**Description:** Deletes the specified item or object.

*ListView* Deletes a specified ListItem object.

*TreeView* Deletes the specified root Node object and all child Node objects included in it.

*Node* Deletes a child Node object.

**Used in controls:** ListView                      TreeView

**Used in objects:** Node

**Parameters:** VT\_I4 - ObjectIndexS9(9) COMP-5

**Description of Parameters:**

*ListView* The index of a ListItem object.

*TreeView* The index of a root Node object.

*Node* The index of a child Node object.

**Return value:** VT\_I4 - ReturnValue S9(9) COMP-5

*ListView* Number of the remaining ListItem objects.

*TreeView* Number of the remaining brother root Node objects.

*Node* Number of the remaining brother Node objects.

**Example:**

```

WORKING-STORAGE SECTION.

    01 IndexNum          PIC S9(9) COMP-5.

    01 ReturnValue       PIC S9(9) COMP-5.

PROCEDURE      DIVISION.

    Move 1 To IndexNum

    INVOKE CmListView1 "Delete"

    USING      IndexNum

    RETURNING ReturnValue

Backward compatibility            None.
method name:

```

## 5.29 DeleteCurRecord Method

---

**Description:** Deletes the current record. It does not work if ConcurrencyCursor property is "1 - SQL\_CONCUR\_READ\_ONLY".

**Used in controls:** DB Access

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:**

```

INVOKE CmDB1 "DeleteCurRecord"

    RETURNING ReturnValue

Backward compatibility            None.
method name:

```

## 5.30 DeleteRecord Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Deletes a record in the table. It uses the Update/Delete key specified in the DB Access property page.                      |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater means the number of records deleted.<br>Negative indicates an error. |
| <b>Example:</b>                            | <pre>INVOKE CmDB1 "DeleteRecord"  RETURNING ReturnValue</pre>   |
| <b>Backward compatibility method name:</b> | DELETERECORD  |
| <b>Backward compatibility arguments:</b>   | None.   |

## 5.31 DeleteString Method

---

|  |  |
|--|--|
| <b>Description:</b>                        | Deletes an item from the list box part.  |
| <b>ComboBox</b>                            | Deletes the record when the FileType property is not "0 - No Records".   |
| <b>Used in controls:</b>                   | ComboBox          ListBox  |
| <b>Used in objects</b>                     | None.  |
| <b>Parameters:</b>                         | VT_I4 - ListItemIndexS9(9) COMP-5  |
| <b>Description of Parameters:</b>          | The index of the item to be deleted. (The items in the list box are indexed by consecutive numbers starting from 1.)                       |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater means the number of items remaining in the list box part.<br>-1 indicates an error. |
| <b>Example:</b>                            | <pre>MOVE 1 TO IndexNum  INVOKE CmList1 "DeleteString"  USING          IndexNum  RETURNING ReturnValue</pre>                               |
| <b>Backward compatibility method name:</b> | DELETESTRING   |
| <b>Backward compatibility arguments:</b>   | S9(4) COMP-5   |

## 5.32 DeleteTick Method

---

|                          |  |
|--------------------------|--|
| <b>Description:</b>      | Removes the graduation mark ("tick") from the specified position.<br><br>It is only effective if the AutoTick property is False. |
| <b>Used in controls:</b> | Slider   |

**Used in objects:** None.

**Parameters:** VT\_I4 - TickPositionS9(9) COMP-5

**Description of Parameters:** The position of the tick to be deleted.  
The TickPosition property is an array containing the positions of all the ticks.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
The number of remaining ticks.

**Example:**

```
MOVE 20 TO TickPos

INVOKE CmSlider1 "DeleteTick"

    USING    TickPos

    RETURNING ReturnValue
```

**Backward compatibility method name:** None.

### 5.33 DisableCommit Method

---

**Description:** Notify Microsoft Transaction Server that transactions cannot be committed.

**Used in controls:** MTS Support

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:**

```
INVOKE CmViper1 "DisableCommit"
```

**Backward compatibility method name:** None.

### 5.34 Disconnect Method

---

**Description:** Does not do anything. It is provided for backward compatibility with an earlier function so that code can still be interchanged.

**Used in controls:** ExcelConnection

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:**

```
INVOKE CmExcell "Disconnect"
```

**Backward compatibility method name:** DISCONNECTEXCEL

### 5.35 DisplayMessage Method

---

**Description:** Displays a message box.  
The user needs to respond to the message box (needs to select a button) to continue the process.

**Used in controls:** None.

**Used in objects:** Form

|                                  |  |
|----------------------------------|--|
| <b>Parameters:</b>               | VT_BSTR - TextStringX(8192)<br>VT_BSTR - MessageTitleX(8192)]<br>[VT_I4 - MessageStyleS9(9) COMP-5]  |
| <b>Description of Parameters</b> | <p>TextString: The text to be displayed in the message box. You can start new lines in the message by inserting the value X"0A" in the TextString data item.</p> <p>MessageTitle: The text to be displayed in the message box title. If this parameter is omitted PowerCOBOL uses the form Caption property in the title.</p> <p>MessageStyle: The style of the message box.<br/>The style is defined by adding a value from each of the three groups (type, icon and default button).<br/>If this parameter is omitted PowerCOBOL uses the style of POW-DMDEFAULT.<br/>POW-DMDEFAULT:<br/>This contains the defaults from all three groups. (A single OK button, no icon and OK is the default button.)</p> |
| <b>Type Group</b>                | <p>The buttons to display.</p> <p>POW-DMOK (The default): A single OK button.</p> <p>POW-DMOKCANCEL: OK and Cancel buttons.</p> <p>POW-DMABORTRETRYIGNORE: Abort (Stop), Retry and Ignore buttons.</p> <p>POW-DMYESNOCANCEL: Yes, No and Cancel buttons.</p> <p>POW-DMYESNO: Yes and No buttons.</p> <p>POW-DMRETRYCANCEL: Retry and Cancel buttons.</p>   |
| <b>Icon Group</b>                | <p>The icon to display.</p> <p>POW-DMNOICON (The default): No icon.</p> <p>POW-DMICONSTOP: Displays the stop icon.</p> <p>POW-DMICONERROR: Displays the error icon.</p> <p>POW-DMICONQUESTION: Displays the question mark icon.</p> <p>POW-DMICONEXCLAMATION: Displays the exclamation mark icon.</p> <p>POW-DMICONWARNING: Displays the warning icon.</p> <p>POW-DMICONINFORMATION: Displays the information icon.</p> <p>Note that currently:<br/>stop icon = error icon<br/>exclamation icon = warning icon</p>   |
| <b>Default Button Group</b>      | <p>The button used when the ENTER key is pressed.</p> <p>POW-DMDEFBUTTON1: (The default) The first button is the default.</p> <p>POW-DMDEFBUTTON2: The second button is the default.</p> <p>POW-DMDEFBUTTON3: The third button is the default.</p>   |
| <b>Return value:</b>             | <p>VT_I4 - ReturnValue S9(9) COMP-5</p> <p>The result of displaying the message box. Use the following constants to check the return value.</p> <p>POW-DMRNOMEMORY: The message box could not be displayed because of insufficient memory.</p> <p>POW-DMROK: The OK button was pushed.</p> <p>POW-DMRCANCEL: The Cancel button was pushed.</p> <p>POW-DMRABORT: The Abort (Stop) button was pushed.</p>  |



POW-DMRRETRY:The Retry button was pushed.  
 POW-DMRIGNORE:The Ignore button was pushed.  
 POW-DMRYES:The Yes button was pushed.  
 POW-DMRNO:The No button was pushed.

**Example:**

```

01 Message-Style PIC S9(9) COMP-5.

01 ReturnValue   PIC S9(9) COMP-5.

PROCEDURE DIVISION.

    MOVE 0 TO Message-Style

* Select a message box with OK and
* Cancel Buttons

    ADD POW-DMOKCANCEL

    TO Message-Style

* Display the Information Icon
* in the message box

    ADD POW-DMICONINFORMATION

    TO Message-Style

* Make sure the first button (OK)
* is the default button for
* hitting the enter key.

    ADD POW-DMDEFBUTTON1

    TO Message-Style

    INVOKE POW-SELF "DisplayMessage"

        USING      "Display this Message!"

                "The Title I Want"

                Message-Style

    RETURNING ReturnValue
  
```

**Backward compatibility method name:** DISPLAYMESSAGE

**Backward compatibility arguments:**  
 1. X(256)  
 2. X(60)  
 3. S9(4) COMP-5

## 5.36 DoModal Method

---

**Description:** Activates the form in "Modal" mode.

It can only be used if the form is already loaded.  
"Modal" means that the parent form that opened a child form is inactive until the child form is closed.

It looks like a "Dialog box".

**Used in controls:** None.  
**Used in objects:** Form  
**Parameters:** None.  
**Return value:** VT\_BOOL - ReturnValueS9(4) COMP-5  
POW-TRUE indicates normal completion.  
POW-FALSE indicates an error.  
**Example:** See the DoModal Example  
**Backward compatibility method name:** None.

#### Example of Using the DoModal Method

The following code can be found in the CallActiveX sample, in the WORKING-STORAGE and CallInputFrom scriptlets. It illustrates creating a sub-form as an OLE server and using the DoModal method to activate it in modal state.

WORKING-STORAGE SECTION.

```
01 G-SUBFORM          OBJECT REFERENCE OLE GLOBAL.  
  
01 G-SUBFORM-OLENAME PIC X(32) VALUE "PowerCOBOL.SampleDialog1.1" GLOBAL.
```

:

PROCEDURE DIVISION.

\* Create the subform as an OLE server and activate it in modal state.  
\* Uses the special \*OLE class that provides functions for working  
\* with OLE servers.

```
        INVOKE OLE "CREATE-OBJECT" USING G-SUBFORM-OLENAME RETURNING G-SUBFORM
```

\* Disable the invoking form

```
        MOVE POW-FALSE TO "Enabled" OF POW-SELF
```

\* Pass text using the "SetString" custom method

```
        INVOKE G-SUBFORM "SetString" USING WK-VALUE
```

\* Open the sub-form in modal mode

```
        INVOKE G-SUBFORM "DoModal"
```

\* On return enable and activate the invoking form

```
        MOVE POW-TRUE TO "Enabled" OF POW-SELF
```

```
        INVOKE POW-SELF "Activate"
```

## 5.37 DoModal2 Method

---

**Description:** Activates the form in "Modal" mode, taking a modal style parameter.

|  |  |
|--|--|
|  | It can only be used if the form is already loaded.<br>"Modal" means that the parent form that opened a child form is inactive until the child form is closed.  |
|  | It looks like a "Dialog box".  |
| <b>Used in controls:</b>                       | None.  |
| <b>Used in objects:</b>                        | Form   |
| <b>Parameters:</b>                             | [VT_I4 - ModalStyleS9(9) COMP-5]   |
| <b>Description of Parameters:</b>              | ModalStyle: A modal style. Either:<br>POW-MODALSTYLE-APPLICATIONMODAL: Only the parent form is inactive.<br>or:<br>POW-MODALSTYLE-TASKMODAL: (Default) All forms in the same thread.<br>except the activated form, are inactive. |
| <b>Return value:</b>                           | VT_BOOL - ReturnValueS9(4) COMP-5<br><br>POW-TRUE indicates normal completion.<br>POW-FALSE indicates an error.  |
| <b>Backward compatibility<br/>method name:</b> | None.  |

## 5.38 EnableCommit Method

---

|  |   |
|--|---|
| <b>Description:</b>                            | Notify Microsoft Transaction Server that transactions can be committed. |
| <b>Used in controls:</b>                       | MTS Support   |
| <b>Used in objects:</b>                        | None.   |
| <b>Parameters:</b>                             | None.   |
| <b>Return value:</b>                           | None.   |
| <b>Example:</b>                                | <code>INVOKE CmViper1 "EnableCommit"</code>                             |
| <b>Backward compatibility<br/>method name:</b> | None.   |

## 5.39 End Method

---

|  |   |
|--|---|
| <b>Description:</b>                            | Closes the Excel application.   |
| <b>Used in controls:</b>                       | ExcelConnection   |
| <b>Used in objects:</b>                        | None.   |
| <b>Parameters:</b>                             | None.   |
| <b>Return value:</b>                           | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error. |
| <b>Example:</b>                                | <code>INVOKE CmExcel1 "End"</code><br><br><code>RETURNING ReturnValue</code>  |
| <b>Backward compatibility<br/>method name:</b> | None.   |

## 5.40 EnsureVisible Method

---

**Description:** Ensures that the object is visible, scrolling the control list if necessary.

**Used in controls:** None.

**Used in objects:** ListItem            Node

**Parameters:** None.

**Return value:** None.

**Example:** WORKING-STORAGE SECTION.

```

01 ListItem            PIC S9(9) COMP-5.

01 ReturnValue        PIC S9(9) COMP-5.

PROCEDURE DIVISION.

                      MOVE 1 TO ListItem

                      INVOKE "ListItems"(ListItem)

                                              OF CmListView1

                                              "EnsureVisible"

```

**Backward compatibility method name:** None.

## 5.41 Execute Method

---

**Description:** Executes an application.

**Used in controls:** DDE

**Used in objects:** Form

**Parameters:** 1. VT\_BSTR - CommandLineX(8192)  
2.[VT\_I4 - ShowWindowS9(9) COMP-5]

**Description of Parameters:** CommandLine: The command line for the application to be executed. Includes the application name, command line parameters and, if necessary, the full path name if that is different from the current directory and the path is not set in the PATH environment variable.

ShowWindow: The manner in which the application should be invoked. This parameter can be omitted in calling from the Form object. If it is omitted PowerCOBOL uses POW-SWSHOWNORMAL as default. Use the following constants to set the value of ShowWindow:  
POW-SWHIDE: Starts the application in the background - it does not display a window.  
POW-SWSHOWNORMAL: (Default) Activates the application using its default window size.  
POW-SWNORMAL: Same as POW-SWSHOWNORMAL.  
POW-SWSHOWMINIMIZED: Activates the application in the minimized state.  
POW-SWSHOWMINNOACTIVE: Starts the application in the minimized state but leaves an active window unchanged.  
POW-SWSHOWMAXIMIZED: Activates the application with the window maximized.

**Return value:** Only the DDE control returns the return value.

VT\_I4 - ReturnValueS9(9) COMP-5

Zero or greater indicates normal completion.  
Negative indicates an error.

**Examples:** See the Execute method examples

**Backward compatibility method name:** EXECAPL

**Backward compatibility arguments:** 1. X(520)  
2. S9(9)COMP-5

## 5.41.1 Examples of the Execute Method

---

### Example 1:

Example 1 shows how to start the Windows Notepad with the autoexec.bat file loaded.

```
WORKING-STORAGE SECTION.
01 Command-Line    PIC X(128).
01 ReturnValue     PIC S9(9) COMP-5.
PROCEDURE         DIVISION.
    MOVE "Notepad c:\autoexec.bat"
      TO Command-Line
    INVOKE CmDDE1 "Execute"
      USING      Command-Line
                POW-SWSHOWNORMAL
    RETURNING ReturnValue
```

### Example 2:

Example 2 demonstrates how to execute a Dir command.

```
ENVIRONMENT      DIVISION.
DATA             DIVISION.
WORKING-STORAGE SECTION.
01 Command-Line  PIC X(128).
01 ReturnValue    PIC S9(9) COMP-5.
PROCEDURE       DIVISION.
* The "/K" option tells CMD to keep the window open so you
* can see the results. Change this to "/C" if you want the
* window to close after the command executes.
    MOVE "CMD /K Dir *.*" TO Command-Line
    INVOKE CmDDE1 "Execute"
      USING      Command-Line
                POW-SWSHOWNORMAL
    RETURNING ReturnValue
```

## 5.42 ExecuteDDECommand Method

---

**Description:** Executes a DDE server command.

**Used in controls:** DDE

**Used in objects:** None.

**Parameters:** VT\_BSTR - CommandString X(8192)

**Description of Parameters:** The command to be executed by the DDE server.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:** See the ExecuteDDECommand Example

|  |   |
|--|---|
| <b>Backward compatibility method name:</b> | EXECUTEDDECMD<br>EXECUTEDDECMD512<br>EXECUTEDDECMD1024                          |
| <b>Backward compatibility arguments:</b>   | EXECUTEDDECMD: X(256)<br>EXECUTEDDECMD512: X(512)<br>EXECUTEDDECMD1024: X(1024) |

## 5.42.1 Example of the ExecuteDDECommand Method

---

This example shows how to use the ExecuteDDECommand method to open another Excel spreadsheet.

Assume that the properties currently set in the DDE control (CmDDE1), are:

```
DDEServiceName: EXCEL
DDETopicName:   SYSTEM
DDEItemName:    R1C1:R2C2
DDEFormatName: CF_TEXT
DDELinkStyle:   2 - Warm-Link
```

Place the following code in the form's Opened event procedure to be executed once to start the DDE session with Excel:

```
ENVIRONMENT      DIVISION.
DATA             DIVISION.
WORKING-STORAGE SECTION.
PROCEDURE        DIVISION.
    INVOKE CmDDE1 "Execute" USING "Excel c:\exceldde97.xls"
                                POW-SWSHOWNORMAL
                                RETURNING ReturnValue
    INVOKE CmDDE1 "InitiateDDE" RETURNING ReturnValue
```

The following code instructs EXCEL to open another spreadsheet:

```
ENVIRONMENT      DIVISION.
DATA             DIVISION.
WORKING-STORAGE SECTION.
01 Excel-Command PIC X(128).
01 ReturnValue    PIC S9(9) COMP-5.
PROCEDURE        DIVISION.
    MOVE Spaces TO Excel-Command
    MOVE "[OPEN("C:\my.xls")]" TO Excel-Command
    INVOKE CmDDE1 "ExecuteDDECommand" USING Excel-Command
                                RETURNING ReturnValue
```

### ExecuteProcedure Method

|  |   |
|--|---|
| <b>Description:</b>                        | Executes the database procedure defined in the TargetName property.   |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error. |
| <b>Example:</b>                            | See the ExecuteProcedure Example  |
| <b>Backward compatibility method name:</b> | None.   |

Example of the ExecuteProcedure Method

The code below shows how to invoke a procedure whose:

Input parameter field name is "ParamIN".  
 Output parameter field name is "ParamOUT".  
 Return value field name is "Ret\_Val" .

```

ENVIRONMENT      DIVISION.
DATA             DIVISION.
WORKING-STORAGE SECTION.
01 ReturnValue   PIC S9(9)COMP-5.
01 WorkRetVal   PIC S9(9)COMP-5.
01 WorkParamOUT PIC S9(4)COMP-5.
PROCEDURE       DIVISION.
*> Connect with the database.
*> The return value of the method is stored in ReturnValue.
    INVOKE Cmdb1 "OpenDB" RETURNING ReturnValue.
*> Process the return value.
    :
*> Set the input parameter to 1.
    MOVE 1 TO "ParamIN" OF Cmdb1.
*> Execute the procedure.
*> The return value of the method is stored in ReturnValue.
    INVOKE Cmdb1 "ExecuteProcedure" RETURNING ReturnValue.
*> Process the return value.
    :
*> Save the procedure's return value in WorkRetVal.
    MOVE "Ret_Val" OF Cmdb1 TO WorkRetVal.
*> Save the procedure's output parameter in WorkParamOUT.
    MOVE "ParamOUT" OF Cmdb1 TO WorkParamOUT.
*> Use WorkRetVal and WorkParamOUT for the application processing.
    :
*> Release the database connection.
    INVOKE Cmdb1 "ClosedB".

```

## 5.43 ExecuteSync Method

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Executes an application synchronously.<br><br>Control is not returned to the invoking program until the executed application terminates. (Note that the form remains active, it is just the invoking code that waits for the application to terminate.)  |
| <b>Used in controls:</b>          | None.  |
| <b>Used in objects:</b>           | Form   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"> <li>1. VT_BSTR - CommandLineX(8192)</li> <li>2. [VT_I4 - ShowWindowS9(9) COMP-5]</li> <li>3. [VT_I4 - ReturnValueS9(9) COMP-5]</li> </ol>   |
| <b>Description of Parameters:</b> | <p><b>CommandLine:</b> The command line for the application to be executed.</p> <p><b>ShowWindow:</b> The manner in which the application should be invoked. This parameter can be omitted in calling from the Form object. If it is omitted PowerCOBOL uses POW-SWSHOWNORMAL as default. Use the following constants to set the value of ShowWindow:<br/>         POW-SWHIDE: Starts the application in the background - it does not display a window.<br/>         POW-SWSHOWNORMAL: (Default) Activates the application using its default window size.<br/>         POW-SWNORMAL: Same as POW-SWSHOWNORMAL.<br/>         POW-SWSHOWMINIMIZED: Activates the application in the minimized state.</p> |

POW-SWSHOWMINNOACTIVE: Starts the application in the minimized state but leaves an active window unchanged.

POW-SWSHOWMAXIMIZED: Activates the application with the window maximized.

ReturnValue: The value that is returned from the command.

If the command does not return any value, the ReturnValue is not set.

**Return value:** None.

**Example:** Shows how to start the Windows Notepad with the autoexec.bat file loaded.

```
WORKING-STORAGE SECTION.  
  
01 Command-Line    PIC X(128).  
  
PROCEDURE          DIVISION.  
  
    MOVE "Notepad c:\autoexec.bat "  
  
    TO Command-Line  
  
    INVOKE MainForm "ExecuteSync"  
  
    USING          Command-Line  
  
                POW-SWSHOWNORMAL
```

**Backward compatibility method name:** None.

## 5.44 GetFileName Method

---

**Description:** Display the select file dialog.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_BSTR - FileNameX(8192)  
VT\_BSTR - DialogTitleX(8192)  
VT\_BSTR - MaskListX(8192)  
VT\_I4 - DialogStyle S9(9) COMP-5

**Description of Parameters:** FileName: The field in which the selected file name should be returned.

DialogTitle: The text for the title of the select file dialog.

MaskList: A Mask list to be used for the "Files of type" list box in the select file dialog.

The mask contains pairs of character strings, each pair being separated by the character "|" (vertical bar). The strings within the pairs are also separated by the "|" character.

The first string in each pair gives a description to be displayed in the list box; the second string in each pair gives the corresponding pattern (or filter).

For example to let the user select a list of all files or only text files, set up Mask with the following string:

```
"All files|*.*|Text files|*.txt"
```

DialogStyle: The style of the select file dialog. The style is obtained by adding a value from each of the groups (type and folder).

Use the constants described below to set DialogStyle.

**Type Group** The type of dialog to be displayed:



POW-CDLFNAME: Neither the head of the pattern in the mask list nor the blank at the end is removed.

POW-CDOPEN: (The default) Open file dialog.

POW-CDSAVE: Save file dialog.

**Folder Group**

Whether the current folder is changed when the user changes folders.

POW-CDCHANGEDIR: (The default) Changes the current folder.

POW-CDNOCHANGEDIR: Does not change the current folder.

**Return value:**

VT\_BOOL - ReturnValueS9(4) COMP-5

POW-TRUE means the Open or Save button was pushed.

POW-FALSE means the Cancel button was pushed.

**Example:**

See the GetFileName Example

**Backward compatibility  
method name:**

GETFILENAME

**Backward compatibility  
arguments:**

1. X(260)
2. X(60)
3. X(128)
4. S9(4) COMP-5

## 5.44.1 Example of the GetFileName Method

---

Demonstrates code to select a file name.

```
ENVIRONMENT      DIVISION.
DATA             DIVISION.
WORKING-STORAGE SECTION.
01 Filename      PIC X(256).
01 FileMask      PIC X(30).
01 FileStyle     PIC S9(9) COMP-5.
01 ReturnValue   PIC S9(9) COMP-5.

PROCEDURE        DIVISION.
* Specify the types of files to list
  MOVE "All files|*.*|Text files|*.txt"
    TO FileMask
* Specify the File Open dialog.
* (Change this to POW-CDSAVE if you need
* the File Save Dialog.)
  ADD POW-CDOPEN TO FileStyle

* Specify the behavior required if the
* user changes the current directory when
* browsing for a file to open.
  ADD POW-CDCHANGEDIR TO FileStyle
  INVOKE MainForm "GetFileName"
    USING   FileName
           "Title Displayed in Title Bar"
           FileMask
           FileStyle
  RETURNING ReturnValue
```

## 5.45 GetFolderName Method

---

**Description:** Display the select folder dialog.

**Used in controls:** None.

|  |   |
|--|---|
| <b>Used in objects:</b>                    | Form  |
| <b>Parameters:</b>                         | <ol style="list-style-type: none"> <li>1. VT_BSTR - FolderNameX(8192)</li> <li>2. VT_BSTR - DialogTitleX(8192)</li> <li>3. [VT_BOOL - NoChangeCurrentS9(4) COMP-5]</li> </ol>   |
| <b>Description of Parameters:</b>          | <p>FolderName: The field in which the selected folder name should be returned. If FolderName is passed with a value set, the value becomes the initial folder of the dialog. If FolderName is not set (SPACE) the current folder becomes the initial folder of the dialog.</p> <p>DialogTitle: The text for the title of the select folder dialog.</p> <p>NoChangeCurrent: Whether to change the current folder to the selected folder or not. The current folder is not changed if NoChangeCurrent is set to POW-TRUE or the parameter is omitted. The current folder is changed if NoChangeCurrent is set to POW-FALSE.</p> |
| <b>Return value:</b>                       | <p>VT_BOOL - ReturnValueS9(4) COMP-5</p> <p>POW-TRUE means the OK button was pushed.<br/>POW-FALSE means the Cancel button was pushed.</p>  |
| <b>Backward compatibility method name:</b> | None.   |

## 5.46 GetHotData Method

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | <p>Acquires data from the DDE server when a DDECHANGE event is generated by the hot link.</p> <p>The maximum length that can be acquired at a time is 1024 bytes. When you need to acquire data of 1024 bytes or more, you get it in 1024 byte chunks.</p>  |
| <b>Used in controls:</b>          | DDE   |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | <p>No OLE data types.</p> <p>HotData: A group item whose length is 1028 bytes.</p>  |
| <b>Description of Parameters:</b> | <p>HotData has the following elementary items:</p> <p>DataLengthS9(9) COMP-5<br/>The length of the data in the buffer. If the total data length is longer than a single buffer can contain, use the DDEDataOffset property to track the data over multiple calls.</p> <p>DataAreaX(1024)<br/>The data from the DDE server</p> |
| <b>Return value:</b>              | <p>VT_I4 - ReturnValue S9(9) COMP-5</p> <p>Zero or greater indicates normal completion.<br/>Negative indicates an error.</p>  |
| <b>Example:</b>                   | <pre>WORKING-STORAGE SECTION.  01 Hot-Data.  03 Buffer-Length PIC S9(9) COMP-5.  03 Hot-Buffer PIC X(1024) VALUE Spaces.  01 ReturnValue PIC S9(9) COMP-5.</pre>  |

```

PROCEDURE DIVISION.

    COMPUTE Buffer-Length
        = LENGTH OF Hot-Buffer

    INVOKE CmDDE1 "GetHotData"

    USING      Hot-Data

    RETURNING ReturnValue

```

**Backward compatibility  
method name:**

GETHOTDATA

**Backward compatibility  
arguments:**

A group item made up of the following elementary items.

1.S9(9) COMP-5  
2.X(1024)

## 5.47 GetScreenSize Method

---

**Description:** Acquires the dimensions of the screen in the units defined in the ScaleMode parameter.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_I4 - ScreenWidthS9(9) COMP-5  
VT\_I4 - ScreenHeightS9(9) COMP-5  
[VT\_I2 - ScaleModeS9(4) COMP-5]

**Description of Parameters:** ScreenWidth: Returns the width of the screen.

ScreenHeight: Returns the height of the screen.

ScaleMode: The units to be used. If omitted, PowerCOBOL uses the ScaleMode property value. Use the values (with equivalent constants)

0 - Pixels(POW-SCALEPIXELS)  
1 - 1/100mm(POW-SCALEHIMETRIC)  
2 - 1/1000inch(POW-SCALEHIENGLISH)  
3 - 1/20Points (POW-SCALETWIPS)

**Return value:** None.

**Example:**

```

WORKING-STORAGE SECTION.

01 ScreenWidth   PIC S9(9) COMP-5.

01 ScreenHeight PIC S9(9) COMP-5.

01 ScreenScale   PIC S9(4) COMP-5.

PROCEDURE DIVISION.

* Specify the scale desired -

* Pixels in this example

    MOVE 0 To ScreenScale

    INVOKE MainForm "GetScreenSize"

    USING ScreenWidth

```

ScreenHeight

ScreenScale

**Backward compatibility method name:** GETSCREENSIZE

**Backward compatibility arguments:** A group item having the following elementary items.  
1.S9(4) COMP-5  
2.S9(4) COMP-5

## 5.48 GetWorkArea Method

---

**Description:** Acquires the dimensions of the available display area on the screen - the screen size, less areas occupied by the task bar(s). Uses the units defined in the ScaleMode parameter.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_I4 - WorkAreaLeftS9(9) COMP-5  
VT\_I4 - WorkAreaTopS9(9) COMP-5  
VT\_I4 - WorkAreaWidthS9(9) COMP-5  
VT\_I4 - WorkAreaHeightS9(9) COMP-5  
[VT\_I2 - ScaleModeS9(4) COMP-5]

**Description of Parameters:** WorkAreaLeft: Returns the position of the left side of the screen work area.  
WorkAreaTop: Returns the position of the top side of the screen work area.  
WorkAreaWidth: Returns the width of the screen work area.  
WorkAreaHeight: Returns the height of the screen work area.  
ScaleMode: The units to be used. If omitted, PowerCOBOL uses the ScaleMode property value. Use the values (with equivalent constants)  
0 - Pixels(POW-SCALEPIXELS)  
1 - 1/100mm(POW-SCALEHIMETRIC)  
2 - 1/1000inch(POW-SCALEHIENGLISH)  
3 - 1/20Points (POW-SCALETWIPS)

**Return value:** None.

**Example:**

```
WORKING-STORAGE SECTION.  
  
01 ScreenLeft      PIC S9(9) COMP-5.  
  
01 ScreenTop       PIC S9(9) COMP-5.  
  
01 ScreenWidth     PIC S9(9) COMP-5.  
  
01 ScreenHeight    PIC S9(9) COMP-5.  
  
01 ScreenScale     PIC S9(4) COMP-5.  
  
PROCEDURE          DIVISION.  
  
* Specify the scale desired -  
  
* Pixels in this example  
  
    MOVE 0 TO ScreenScale
```

```

        INVOKE MainForm "GetWorkArea"

        USING ScreenLeft

            ScreenTop

            ScreenWidth

            ScreenHeight

            ScreenScale

```

**Backward compatibility method name:** None.

## 5.49 InitiateDDE Method

---

**Description:** Opens a DDE conversation with DDE server.

**Used in controls:** DDE

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:**

```

        INVOKE CmDDE1 "InitiateDDE"

            RETURNING ReturnValue

```

**Backward compatibility method name:** INITIATEDDE

**Backward compatibility arguments:** None.

## 5.50 Insert Method

---

**Description:** Inserts the Node object at the specified index position.

*TreeView* If the Sorted property is set to True, the Node object is sorted immediately after the insert.

**Used in controls:** TreeView

**Used in objects:** Node

**Parameters:** VT\_I4 - InsertIndex S9(9) COMP-5  
VT\_BSTR - TextStringX(8192)  
[VT\_I4 - ImageIndex S9(9) COMP-5]  
[VT\_I4 - SelectImageIndexS9(9) COMP-5]  
[VT\_I4 - ExpandImageIndexS9(9) COMP-5]

**Description of Parameters:** InsertIndex: The index position at which the Node object is inserted.  
TextString: The character string displayed in the Node object.  
ImageIndex: The index of an image for the Node object.  
SelectImageIndex: The index of an image to use when the Node object is selected.

ExpandImageIndex: The index of an image to use when the Node object is expanded.

**Return value:**

None.

**Example:**

```
WORKING-STORAGE SECTION.  
  
01 Ipos          PIC S9(9) COMP-5.  
  
01 iString      PIC X(20).  
  
01 ImageIndex   PIC S9(9) COMP-5.  
  
01 SelimageIndex PIC S9(9) COMP-5.  
  
01 ExpimageIndex PIC S9(9) COMP-5.  
  
01 ReturnValue   PIC S9(9) COMP-5.  
  
PROCEDURE DIVISION.  
  
    MOVE 1          TO iPos  
  
    MOVE "My Item" TO iString  
  
    MOVE 1          TO ImageIndex  
  
                        SelimageIndex  
  
                        ExpimageIndex  
  
    INVOKE CmTreeView1 "Insert"  
  
    USING          iPos  
  
                        iString  
  
                        ImageIndex  
  
                        SelimageIndex  
  
                        ExpimageIndex  
  
    RETURNING ReturnValue
```

**Backward compatibility  
method name:**

None.

## 5.51 InsertListItem Method

---

**Description:** Inserts a ListItem object at the specified index position.

**Used in controls:** ListView

**Used in objects:** None.

**Parameters:**

1. VT\_BSTR - TextStringX(8192)
- 2.[VT\_I4 - IconIndexS9(9) COMP-5]
- 3.[VT\_I4 - SmallIconIndexS9(9) COMP-5]
- 4.[VT\_I4 - InsertIndexS9(9) COMP-5]

**Description of Parameters:** TextString: The character string to be displayed in the ListItem object. It corresponds to the value of Text(ListItem) property.

IconIndex: The index of the large icon for the ListItem object. It is only effective when the Icons property is specified.

**SmallIconIndex:** The index of the small icon for the ListItem object.  
It is only effective when the SmallIcons property is specified.

**InsertIndex:** The index position at which the ListItem object is inserted.  
The value is an integer greater than zero.

If omitted, the ListItem is added to the end of the list.

**Note:** The ListItem is not inserted into the position specified by InsertIndex if the LVStyle property is "0 - LargeIcon" or "1 - SmallIcon". The ListItem is added at the last position.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

If positive, this is the index of the inserted item.

**Example:**

```
INVOKE CmCombol "InsertString"  
    USING      TextString  
             IconIndex  
             SmallIconIndex  
             InsertIndex  
    RETURNING ReturnValue
```

**Backward compatibility  
method name:** None.

## 5.52 InsertString Method

---

**Description:** Inserts a character string contained in the first parameter at the position contained in the second parameter.

**Used in controls:** ComboBox                      ListBox

**Used in objects:** None.

**Parameters:**

1. VT\_BSTR - TextStringX(8192)
2. VT\_I4 - IndexS9(9) COMP-5

**Description of Parameters:**

**TextString:** Contains the string to insert to the list.

**Index:** The index position at which the string is inserted.  
The value is an integer greater than zero. The string is inserted at the top of the list if the value is 1, and inserted at the end of the list if the value is ListCount property plus 1.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

If positive, this is the index of the inserted item.  
-1 indicates an error (for example, the data type is not correct)

**Example:**

```
INVOKE CmCombol "InsertString"  
    USING      TextString  
             Index  
    RETURNING ReturnValue
```

**Backward compatibility  
method name:** None.

## 5.53 IsCallerInRole Method

---

**Description:** Determines whether the caller is in the role.

**Used in controls:** MTS Support

**Used in objects:** None.

**Parameters:** VT\_BSTR - RoleName X(8192)

**Description of Parameters:** The name of the role.

**Return value:** VT\_BOOL - ReturnValue S9(4) COMP-5  
 POW-TRUE means the caller is in the role.  
 POW-FALSE means the caller is not in the role.

**Example:** INVOKE CmViper1 "IsCallerInRole"  
 USING RoleName  
 RETURNING ReturnValue

**Backward compatibility method name:** None.

## 5.54 IsInTransaction Method

---

**Description:** Determines whether the current object is being executed as a transaction.

**Used in controls:** MTS Support

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_BOOL - ReturnValue S9(4) COMP-5  
 POW-TRUE means the object is being executed as a transaction.  
 POW-FALSE means the object is not being executed as a transaction.

**Example:** INVOKE CmViper1 "IsInTransaction"  
 RETURNING ReturnValue

**Backward compatibility method name:** None.

## 5.55 IsSecurityEnabled Method

---

**Description:** Determines whether security is enabled.

**Used in controls:** MTS Support

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_BOOL - ReturnValue S9(4) COMP-5  
 POW-TRUE means security is enabled.  
 POW-FALSE means security is not enabled.

**Example:** INVOKE CmViper1 "IsSecurityEnabled"  
 RETURNING ReturnValue

**Backward compatibility method name:** None.

## 5.56 LoadFile Method

---

**Description:** Load the contents of the file to the control.

**ComboBox and ListBox** Adds the contents of the file to the list box part.

**TextBox** Sets the Text property to the contents of the file. The text values depend on RenderText property. Non-display values are to be ignored.

**Used in controls:** ComboBox      ListBox      TextBox



**Used in objects:** None.

**Parameters:** VT\_BSTR - FileNameX(8192)

**Description of Parameters:** The name of the file to be read.

**Return value:** None.

**Example:** WORKING-STORAGE SECTION.  
 01 LoadFileName PIC X(256).  
 PROCEDURE DIVISION.  
 MOVE "C:\my.txt" TO LoadFileName  
 INVOKE CmText1 "LoadFile"  
 USING LoadFileName

**Backward compatibility method name:** LOADFILE

**Backward compatibility arguments:** X(260)

## 5.57 Move Method

---

**Description:** Moves the control to the specified position.  
 The units are those defined in the ScaleMode property of the control being moved.

**Toolbar** It is effective when the Align property is "0 - None".

**Used in controls:**

|               |            |                   |            |
|---------------|------------|-------------------|------------|
| Animation     | FileList   | ListBox           | Slider     |
| CheckBox      | FolderList | ListView          | StaticText |
| ComboBox      | Frame      | MCI               | Tab        |
| CommandButton | Graph      | OptionButton      | Table      |
| Custom        | GroupBox   | ProgressIndicator | TextBox    |
| DriveList     | Image      | ScrollBar         | Toolbar    |
| Edit          | Label      | Shape             | TreeView   |

**Used in objects:** None.

**Parameters:** VT\_I4 - LeftS9(9) COMP-5  
 VT\_I4 - TopS9(9) COMP-5  
 [VT\_I4 - WidthS9(9) COMP-5]  
 [VT\_I4 - Height S9(9) COMP-5]

**Description of Parameters:** Left: The new horizontal position for the top left corner of the control.  
 Top: The new vertical position for the top left corner of the control.  
 Width: The new width for the control.  
 Height: The new height for the control.  
 If Width and Height parameters are omitted, the size of the control is not changed.

**Return value:** None.

**Example:** WORKING-STORAGE SECTION.  
 01 ScreenLeft PIC S9(9) COMP-5.  
 01 ScreenTop PIC S9(9) COMP-5.

```

01 ScreenWidth  PIC S9(9) COMP-5.

01 ScreenHeight PIC S9(9) COMP-5.

PROCEDURE      DIVISION.

* Remember that values must be expressed in the current Scale
* Mode. Here we set the scale mode to pixels first.

        MOVE 0 TO "ScaleMode" OF CmText1

* Use the optional ScreenWidth and ScreenHeight ParmS to resize
* the control as well.

        MOVE 10 TO ScreenLeft

        MOVE 20 TO ScreenTop

        MOVE 50 TO ScreenWidth

        MOVE 20 TO ScreenHeight

        INVOKE CmText1 "Move" USING ScreenLeft  ScreenTop

                                   ScreenWidth ScreenHeight

```

**Backward compatibility method name:** Corresponds to setting a value to POW-POSITION.

## 5.58 MoveForm Method

---

**Description:** Moves the form to the specified position.  
The units are those defined in the ScaleMode property of the form.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_I4 - LeftS9(9) COMP-5  
VT\_I4 - TopS9(9) COMP-5  
[VT\_I4 - WidthS9(9) COMP-5]  
[VT\_I4 - HeightS9(9) COMP-5]

**Description of Parameters:** Left: The new horizontal position for the top left corner of the form.  
Top: The new vertical position for the top left corner of the form.  
Width: The new width for the form.  
Height: The new height for the form.  
If Width and Height parameters are omitted, the size of form is not changed.

**Return value:** None.

**Example:**

```

WORKING-STORAGE SECTION.

01 ScreenLeft   PIC S9(9) COMP-5.

01 ScreenTop    PIC S9(9) COMP-5.

01 ScreenWidth  PIC S9(9) COMP-5.

```

```

01 ScreenHeight PIC S9(9) COMP-5.

PROCEDURE DIVISION.

* Remember that values must be
* expressed in the current Scale
* Mode.

* Here we set the scale mode to
* pixels first

        MOVE 0 TO "ScaleMode" OF CmText1

* Use the optional ScreenWidth and
* ScreenHeight ParmS to
* resize the form as well

        MOVE 10 TO ScreenLeft

        MOVE 20 TO ScreenTop

        MOVE 200 TO ScreenWidth

        MOVE 200 TO ScreenHeight

        INVOKE MainForm "MoveForm"

        USING ScreenLeft

                ScreenTop

                ScreenWidth

                ScreenHeight

```

**Backward compatibility method name:** Corresponds to setting a value to POW-POSITION.

## 5.59 NewBook Method

---

**Description:** Executes the Excel new command to create a new book.  
Starts Excel if Excel is not running.

**Used in controls:** ExcelConnection

**Used in objects:** None.

**Parameters:** [VT\_I4 SheetIndexS9(9) COMP-5]

**Description of Parameters:** The index of the sheet to connect to within the Excel book. Data is exchanged with this sheet, however, the sheet is not selected in Excel.  
Each sheet has a tab in Excel (by default labeled "Sheet1", "Sheet2", "Sheet3"). The index numbers the sheets from left to right 1, 2, 3...

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:**

```

WORKING-STORAGE SECTION.

01 ExcelSheetIndx PIC S9(9) COMP-5.

01 ReturnValue    PIC S9(9) COMP-5.

PROCEDURE DIVISION.

    MOVE 2 To ExcelSheetIndx

    INVOKE CmExcel1 "NewBook"

        USING      ExcelSheetIndex

        RETURNING ReturnValue

```

**Backward compatibility method name:** NEWEXCELSHEET

**Backward compatibility arguments:** None.

## 5.60 OpenBook Method

---

**Description:** Executes the Excel open command to open an existing book.  
Starts Excel if Excel is not running.

**Used in controls:** ExcelConnection

**Used in objects:** None.

**Parameters:** VT\_BSTR - BookNameX(8192)  
[VT\_I4 - SheetIndexS9(9) COMP-5]

**Description of Parameters:** BookName: The name of the Excel book to open.  
SheetIndex: The index of the sheet to connect to within the Excel book. Data is exchanged with this sheet, however, the sheet is not selected in Excel. Each sheet has a tab in Excel (by default labeled "Sheet1", "Sheet2", "Sheet3"). The index numbers the sheets from left to right 1, 2, 3...

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:**

```

WORKING-STORAGE SECTION.

01 ExcelBookName PIC X(20).

01 ExcelSheetIndx PIC S9(9) COMP-5.

01 ReturnValue    PIC S9(9) COMP-5.

PROCEDURE DIVISION.

* Opens the "my.xls" book and goes
* to page 2

    MOVE "C:\my.xls" TO ExcelBookName

    MOVE 2 TO ExcelSheetIndx

    INVOKE CmExcel1 "OpenBook"

```

```

        USING      ExcelBookName

                ExcelSheetIndx

RETURNING ReturnValue

```

**Backward compatibility method name:** OPENEXCELSHEET

**Backward compatibility arguments:** X(260)

## 5.61 OpenDB Method

---

**Description:** Starts the data base connection.

**Used in controls:** DB Access

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

Zero or greater indicates normal completion. Negative indicates an error.

**Example:** INVOKE CmDB1 "OpenDB" RETURNING ReturnValue

**Backward compatibility method name:** OPENDB

**Backward compatibility arguments:** None.

## 5.62 OpenDDE Method

---

**Description:** Opens the DDE conversation with the DDE server and starts the advise loop.

Its effect is the same as executing the InitiateDDE and AdviseDDE methods successively.

It is necessary to call the OpenDDE method before conducting a conversation with the DDE server. For example you can have a conversation if you call the Execute and OpenDDE methods from the Opened event of the form.

**Used in controls:** DDE

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

Zero or greater indicates normal completion. Negative indicates an error.

**Example:** INVOKE CmDDE1 "OpenDDE" RETURNING ReturnValue

**Backward compatibility method name:** OPENDDE

**Backward compatibility arguments:** None.

## 5.63 OpenDevice Method

---

**Description:** Opens the MCI device.

|  |                            |
|--|----------------------------|
| <b>Used in controls:</b>                   | MCI                        |
| <b>Used in objects:</b>                    | None.                      |
| <b>Parameters:</b>                         | None.                      |
| <b>Return value:</b>                       | None.                      |
| <b>Example:</b>                            | INVOKE CmMCI1 "OpenDevice" |
| <b>Backward compatibility method name:</b> | OPENDEVICE                 |
| <b>Backward compatibility arguments:</b>   | None.                      |

## 5.64 OpenForm Method

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | <p>Opens (shows) a form in "Modeless" mode.</p> <p>"Modeless" means that the parent form is active after opening the child form.</p> <p>It is different from the CallForm2 (CallForm) method in that control is returned to the code immediately after opening the child form.</p> <p>The child form cannot be re-opened until it is closed.</p>   |
| <b>Used in controls:</b>          | None.  |
| <b>Used in objects:</b>           | Form   |
| <b>Parameters:</b>                | <p>VT_BSTR - FormNameX(8192)</p> <p>[VT_BSTR - DllNameX(8192)</p> <p>[VT_I4 - CookieS9(9) COMP-5]</p>  |
| <b>Description of Parameters:</b> | <p>FormName: The name of the form to be opened.</p> <p>DllName: When the form is a DLL, defines the name of the DLL file containing the form.</p> <p>It should be omitted when the form is in the same DLL file, as specifying the DLL name that contains the invoking form degrades performance.</p> <p>Cookie: An integer that distinguishes the opened form.</p> <p>It is set in a parameter of the CloseChild event when the opened form is closed. If you omit it, the parameter value is zero.</p> <p>Note that the order of parameters is different from the order of OPENSHEET's parameters.</p> |
| <b>Return value:</b>              | <p>VT_I4 - ReturnValueS9(9) COMP-5</p> <p>Zero indicates normal completion.</p> <p>Non-zero indicates an error.</p>  |
| <b>DLL Search Path:</b>           | <p>When the DllName Parameter does not contain the full path, PowerCOBOL searches for the DLL in folders in the following order:</p> <ol style="list-style-type: none"> <li>1. The folder containing the execution file.</li> <li>2. The current folder.</li> <li>3. The system folder of 32 bit Windows.</li> <li>4. The system folder of 16 bit Windows.</li> <li>5. The folder containing Windows.</li> <li>6. The folders set in the PATH environment variable.</li> </ol>   |
| <b>Example:</b>                   | <p>1. To open a form called "Subform1" contained in the same DLL module you would code:</p> <pre>WORKING-STORAGE SECTION.</pre>  |

```

01 SubForm1-ID PIC S9(9) COMP-5

                                VALUE 1.

PROCEDURE DIVISION.

    INVOKE POW-SELF "OpenForm"

        USING "SubForm1"

            Subform1-ID

        SET Subform1-Open TO TRUE

```

Where Subform1-Open is a global item

2. To open a form called "Subform2" contained in a DLL called "SubForm2.DLL" you would code:

```

WORKING-STORAGE SECTION.

01 SubForm2-ID PIC S9(9) COMP-5

                                VALUE 2.

PROCEDURE DIVISION.

    INVOKE POW-SELF "OpenForm"

        USING "SubForm2"

            "SubForm2.DLL"

            Subform2-ID

```

|  |   |
|--|---|
| <b>Backward compatibility method name:</b> | OPENSHEET                                     |
| <b>Backward compatibility arguments:</b>   | 1. X(260) - DLL name<br>2. X(14) - Sheet name |

## 5.65 PauseAnimation Method

---

|  |                                      |
|--|--------------------------------------|
| <b>Description:</b>                        | Pauses the animation.                |
| <b>Used in controls:</b>                   | Animation                            |
| <b>Used in objects:</b>                    | None.                                |
| <b>Parameters:</b>                         | None.                                |
| <b>Return value:</b>                       | None.                                |
| <b>Example:</b>                            | INVOKE CmAnimation1 "PauseAnimation" |
| <b>Backward compatibility method name:</b> | PAUSE                                |
| <b>Backward compatibility arguments:</b>   | None.                                |

## 5.66 PauseDevice Method

---

|                     |                                   |
|---------------------|-----------------------------------|
| <b>Description:</b> | Pauses in playing the MCI device. |
|---------------------|-----------------------------------|

**Used in controls:** MCI  
**Used in objects:** None.  
**Parameters:** None.  
**Return value:** None.  
**Example:** INVOKE CmMCI1 "PauseDevice"  
**Backward compatibility method name:** PAUSEDEVICE  
**Backward compatibility arguments:** None.

## 5.67 PlayAnimation Method

---

**Description:** Starts the animation.  
**Used in controls:** Animation  
**Used in objects:** None.  
**Parameters:** None.  
**Return value:** None.  
**Example:** INVOKE CmAnimation1 "PlayAnimation"  
**Backward compatibility method name:** PLAY  
**Backward compatibility arguments:** None.

## 5.68 PlayDevice Method

---

**Description:** Starts the MCI device.  
**Used in controls:** MCI  
**Used in objects:** None.  
**Parameters:** None.  
**Return value:** None.  
**Example:** INVOKE CmMCI1 "PlayDevice"  
**Backward compatibility method name:** PLAYDEVICE  
**Backward compatibility arguments:** None.

## 5.69 PlaySound Method

---

**Description:** Plays the sound file specified in the Element property.  
**Used in controls:** MCI  
**Used in objects:** None.  
**Parameters:** None.  
**Return value:** None.  
**Example:** INVOKE CmMCI1 "PlaySound"



**Backward compatibility method name:** PLAY

**Backward compatibility arguments:** None.

## 5.70 PokeData Method

---

**Description:** Sets data in the DDE server.

**Used in controls:** DDE

**Used in objects:** None.

**Parameters:** No OLE data types.  
PokeData: A group item whose length is 8196 bytes.

**Description of Parameters:** PokeData has the following elementary items.  
DataLengthS9(9) COMP-5  
The length of the data in the buffer.  
DataAreaX(8192)  
The data to pass to the DDE server.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:** Place this code in the Form's Opened method so that it establishes the DDE connection and executes only once:

```

ENVIRONMENT DIVISION.

DATA DIVISION.

WORKING-STORAGE SECTION.

PROCEDURE DIVISION.

    INVOKE CmDDE1 "Execute"

    USING "Excel c:\exceldde97.xls"

    POW-SWSHOWNORMAL

    RETURNING ReturnValue

    INVOKE CmDDE1 "OpenDDE"

    RETURNING ReturnValue

```

The following code executes the PokeData method:

```

ENVIRONMENT DIVISION.

DATA DIVISION.

WORKING-STORAGE SECTION.

01 DDE-Data.

    03 Buffer-Len PIC S9(9) COMP-5.

```

```

03 DDE-Buffer PIC X(1024).

01 ReturnValue PIC S9(9) COMP-5.

PROCEDURE DIVISION.

    COMPUTE Buffer-Len
        = LENGTH OF DDE-Buffer.

    MOVE "all of my data"
        TO DDE-Buffer

    INVOKE CmDDE1 "PokeData" USING DDE-Data

    RETURNING ReturnValue

```

**Backward compatibility method name:** POKEDATA  
 POKEDATA1  
 POKEDATA4  
 POKEDATA8

**Backward compatibility arguments:** POKEDATA made up of:  
 S9(9)COMP-5  
 X(256)

POKEDATA1 made up of:  
 S9(9)COMP-5  
 X(1024)

POKEDATA4 made up of:  
 S9(9)COMP-5  
 X(4096)

POKEDATA8 made up of:  
 S9(9)COMP-5  
 X(8192)

## 5.71 PopupMenu Method

---

**Description:** Opens a floating popup menu.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_BSTR - MenuNameX(8192)  
 [VT\_I4 - PosXS9(9) COMP-5]  
 [VT\_I4 - PosYS9(9) COMP-5]

**Description of Parameters:** MenuName: The name of Menu object  
 (Name property value)

PosX: The relative position (X coordinates) for the top left corner of the floating popup menu. The units are defined in the ScaleMode property.

PosY: The relative position (Y coordinates) for the top left corner of the floating popup menu. The units are defined in the ScaleMode property.

**Return value:** None.

**Example:** To display a pop-up menu at the point the mouse is clicked code, in the MouseUp event:

```
INVOKE POW-SELF "PopupMenu"  
  
USING "PopupMenuName"
```

**Backward compatibility** None.  
**method name:**

## 5.72 PrintForm Method

---

**Description:** Prints the form, including all controls whose Printable property is True, and excluding all the controls whose Printable property is False or which are not printable.

**Used in controls:** Print

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:** INVOKE CmPrint1 "PrintForm"

**Backward compatibility** None.  
**method name:**

## 5.73 ProgressStep Method

---

**Description:** Adds the value of the Step property to the Value property.

**Used in controls:** ProgressIndicator

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:** INVOKE CmProgress1 "ProgressStep"

**Backward compatibility** None.  
**method name:**

## 5.74 ReadFirstRecord Method

---

**Description:** Reads the first record.  
CursorType property must be set to a value other than "0 - SQL\_CURSOR\_FORWARD\_ONLY".

**Used in controls:** DB Access

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
1 indicates normal completion.  
Zero means that the record does not exist.  
Negative indicates an error.

**Example:** INVOKE CmDB1 "ReadFirstRecord"  
  
RETURNING ReturnValue

**Backward compatibility** None.  
**method name:**

## 5.75 ReadLastRecord Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Reads the last record.<br><br>CursorType property must be set to a value other than "0 - SQL_CURSOR_FORWARD_ONLY".                                  |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>1 indicates normal completion.<br>Zero means that the record does not exist.<br>Negative indicates an error. |
| <b>Example:</b>                            | <code>INVOKE CmDB1 "ReadLastRecord" RETURNING ReturnValue</code>  |
| <b>Backward compatibility method name:</b> | None.   |

## 5.76 ReadNextRecord Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Reads the next record.  |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>1 indicates normal completion.<br>Zero means that the record does not exist.<br>Negative indicates an error. |
| <b>Examples:</b>                           | <code>INVOKE CmDB1 "ReadNextRecord" RETURNING ReturnValue</code>  |
| <b>Backward compatibility method name:</b> | READNEXTRECORD  |
| <b>Backward compatibility arguments:</b>   | None.   |

## 5.77 ReadPreviousRecord Method

---

|  |  |
|--|--|
| <b>Description:</b>                        | Reads the previous record. CursorType property must be set to a value other than "0 - SQL_CURSOR_FORWARD_ONLY".                                  |
| <b>Used in controls:</b>                   | DB Access  |
| <b>Used in objects:</b>                    | None.  |
| <b>Parameters:</b>                         | None.  |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>1 indicates normal completion.<br>Zero means that the record does not exist. Negative indicates an error. |
| <b>Examples:</b>                           | <code>INVOKE CmDB1 "ReadPreviousRecord" RETURNING ReturnValue</code>   |
| <b>Backward compatibility method name:</b> | None.  |

## 5.78 Refresh Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Forces a repainting of the control on the screen.<br><br>Painting of controls in Windows normally happens asynchronously. Therefore, when you update a property, such as the Caption property, within a PERFORM loop, the screen may not be updated immediately. Use this method to force an immediate refresh. |
| <b>Used in controls:</b>                   | All controls that can be displayed at execution time.   |
| <b>Used in objects:</b>                    | Form  |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | None.   |
| <b>Example:</b>                            | <code>INVOKE CmText1 "Refresh"</code>   |
| <b>Backward compatibility method name:</b> | None.   |

## 5.79 RequestData Method

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Acquires data from the DDE server.<br><br>The maximum length that can be acquired at a time is 1024 bytes. When you acquire the data of 1024 bytes or more, you need to acquire it in 1024 byte chunks.  |
| <b>Used in controls:</b>          | DDE  |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | No OLE data types.<br><br>DDEData: A group item whose length is 1028 bytes.  |
| <b>Description of Parameters:</b> | DDEData has the following elementary items.<br><br>DataLengthS9(9) COMP-5<br>The length of the data in the buffer. If the total data length is longer than a single buffer can contain, use the DDEDataOffset property to track the data over multiple calls.<br><br>DataAreaX(1024)<br>The data from the DDE server.  |
| <b>Return value:</b>              | VT_I4 - ReturnValue S9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error.   |
| <b>Example:</b>                   | Place this code in the form's Opened method so that it establishes the DDE connection and executes only once:<br><br><code>ENVIRONMENT DIVISION.<br/><br/>DATA DIVISION.<br/><br/>WORKING-STORAGE SECTION.<br/><br/>PROCEDURE DIVISION.<br/><br/>    INVOKE CmDDE1 "Execute"<br/><br/>    USING "Excel c:\exceldde97.xls"<br/><br/>    POW-SWSHOWNORMAL</code> |

```

RETURNING ReturnValue

INVOKE CmDDE1 "OpenDDE"

RETURNING ReturnValue

```

The following code executes the RequestData method:

```

ENVIRONMENT DIVISION.

DATA DIVISION.

WORKING-STORAGE SECTION.

01 DDE-Data.

    03 Buffer-Len PIC S9(9) COMP-5.

    03 DDE-Buffer PIC X(1024).

01 ReturnValue PIC S9(9) COMP-5.

PROCEDURE DIVISION.

    COMPUTE Buffer-Length
        = LENGTH OF DDE-Buffer.

    MOVE Spaces TO DDE-Buffer

    INVOKE CmDDE1 "RequestData"

    USING DDE-Data

    RETURNING ReturnValue

```

**Backward compatibility  
method name:**

REQUESTDATA

**Backward compatibility  
arguments:**

A group item made up of the following elementary items.

1. S9(9) COMP-5
2. X(1024)

## 5.80 ResumeDevice Method

---

|  |                                  |
|--|----------------------------------|
| <b>Description:</b>                            | Restarts playing the MCI device. |
| <b>Used in controls:</b>                       | MCI                              |
| <b>Used in objects:</b>                        | None.                            |
| <b>Parameters:</b>                             | None.                            |
| <b>Return value:</b>                           | None.                            |
| <b>Example:</b>                                | INVOKE CmMCi1 "ResumeDevice"     |
| <b>Backward compatibility<br/>method name:</b> | RESUMEDEVICE                     |
| <b>Backward compatibility<br/>arguments:</b>   | None.                            |

## 5.81 RewriteCurRecord Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Rewrites the current record.<br><br>ConcurrencyCursor property must be set to a value other than "1 - SQL_CONCUR_READ_ONLY".<br><br>You cannot update a key field (as specified in the DBAccess page - "Other" option). |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error.   |
| <b>Example:</b>                            | INVOKE CmDB1 "RewriteCurRecord" RETURNING ReturnValue   |
| <b>Backward compatibility method name:</b> | None.   |

## 5.82 RewriteRecord Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Updates the record defined by the value of the key field. (The key field is specified in the DBAccess property page.) |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error.   |
| <b>Example:</b>                            | See the RewriteRecord Example   |
| <b>Backward compatibility method name:</b> | REWRITERECORD   |
| <b>Backward compatibility arguments:</b>   | None.   |

### 5.82.1 Example of the RewriteRecord Method

---

The code below shows how to access a table whose structure is:

```
"JOB_ID" S9(3)<= Specified as the key field  
"FUNCTION" X(30)
```

```
DATA          DIVISION.  
WORKING-STORAGE SECTION.  
01 ReturnValue PIC S9(9) COMP-5.  
PROCEDURE    DIVISION.  
*> Connect with the database.  
*> The return value of the method is stored in ReturnValue.  
    INVOKE CmDB1 "OpenDB" RETURNING ReturnValue.  
*> Process the return value.  
    :  
*> Set "JOB_ID" to 500. (key field)  
*> Set "FUNCTION" to "DRIVER".  
    MOVE 500      TO "JOB_ID"      OF CmDB1.
```

```

    MOVE "DRIVER" TO "FUNCTION" OF Cmdb1.
*> If "JOB_ID" field of the record is 500, "FUNCTION" field of the
*> record is set to "DRIVER".
    INVOKE Cmdb1 "RewriteRecord" RETURNING ReturnValue.
*> Process the return value.
    :
*> Release the database connection.
    INVOKE Cmdb1 "CloseDB".

```

## 5.83 RollbackDB Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Rolls back updates in manual commit mode.   |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error. |
| <b>Example:</b>                            | INVOKE Cmdb1 "RollbackDB" RETURNING ReturnValue   |
| <b>Backward compatibility method name:</b> | ROLLBACKDB  |
| <b>Backward compatibility arguments:</b>   | None.   |

## 5.84 SaveAsBook Method

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Executes the Excel save as command to save the book.  |
| <b>Used in controls:</b>          | ExcelConnection   |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"> <li>VT_BSTR - BookNameX(8192)</li> <li>[VT_BOOL - DisplayDialogS9(4) COMP-5]</li> <li>[VT_BSTR - FileFilterX(8192)]</li> </ol>   |
| <b>Description of Parameters:</b> | <ol style="list-style-type: none"> <li>BookName: The name to use when saving the book.</li> <li>DisplayDialog: Specify whether to display the Save As dialog.<br/>POW-TRUE: Display the Save As dialog.<br/>POW-FALSE: Do not display the Save As dialog.<br/>If omitted, the Save As dialog is displayed.</li> <li>Specify the file filter to specify the candidate of the file.<br/><br/>This specification is displayed in the [Save as type] list of the [Save As] dialog box of Excel. The file filter delimits by the comma and specifies the pair of the description and the extension as follows.<br/><br/>"Excel book(*.xlsx),*.xlsx"<br/><br/>If omitted, the file filter is set as follows by the use of the extension of the file specified for BookName. The extension is converted into the small letter.<br/><br/>"(*.extension),*.extention"</li> </ol> |
| <b>Return value:</b>              | VT_I4 - ReturnValueS9(9) COMP-5   |



Zero or greater indicates normal completion. Negative indicates an error.

**Example:**

```
WORKING-STORAGE SECTION.  
  
01 ExcelBookName PIC X(20).  
  
01 ReturnValue PIC S9(9) COMP-5.  
  
PROCEDURE DIVISION.  
  
* Saves the current Excel book as  
  
* "my.xls"  
  
MOVE "C:\my.xls" TO ExcelBookName  
  
INVOKE CmExcel1 "SaveAsBook" USING ExcelBookName  
  
RETURNING ReturnValue
```

**Backward compatibility** None.  
**method name:**

## 5.85 SaveBook Method

---

**Description:** Execute the Excel save command to save the book.

**Used in controls:** ExcelConnection

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5

Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:** INVOKE CmExcel1 "SaveBook" RETURNING ReturnValue

**Backward compatibility** SAVEEXCELSHEET  
**method name:**

**Backward compatibility** None.  
**arguments:**

## 5.86 SaveFile Method

---

**Description:** Saves the contents of the control in the specified file.

**ComboBox** Saves the contents of the list box part in the specified file. Uses the file format specified in the FileType property.

**ListBox** Saves the contents of the list box in the specified file.

**TextBox** Saves the contents of the Text property in the specified file.

**Used in controls:** ComboBox      TextBox  
ListBox

**Used in objects:** None.

**Parameters:** VT\_BSTR - FileNameX(8192)

**Description of Parameters:** The name of the file.

**Return value:** None.

**Example:** WORKING-STORAGE SECTION.

```

01 FileName          PIC X(20).

PROCEDURE DIVISION.

        MOVE "C:\myfile.txt" TO FileName

        INVOKE CmList1 "SaveFile" USING FileName

```

**Backward compatibility method name:** SAVEFILE

**Backward compatibility arguments:** X(260)

## 5.87 SelectCell Method

---

**Description:** Sets the focus on the specified cell.

**Used in controls:** Table

**Used in objects:** None.

**Parameters:** VT\_I4 - RowS9(9) COMP-5  
VT\_I4 - ColumnS9(9) COMP-5

**Description of Parameters:** Row: The row number of the target cell.  
Column: The column number of the target cell.

**Return value:** None.

**Example:**

```

WORKING-STORAGE SECTION.

01 TableRow          PIC S9(9) COMP-5.
01 TableColumn       PIC S9(9) COMP-5.

PROCEDURE DIVISION.

* Select Table cell 2,3

        MOVE 2 TO TableRow

        MOVE 3 TO TableColumn

        INVOKE CmTable1 "SelectCell"

                USING TableRow TableColumn

```

**Backward compatibility method name:** SELECTCELL

**Backward compatibility arguments:** 1. S9(4) COMP-5  
2. S9(4) COMP-5

## 5.88 SelectRecords Method

---

**Description:** Selects the records to be processed in subsequent reads, based on the condition set in the Condition property.

**Used in controls:** DB Access

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_I4 - ReturnValueS9(9) COMP-5  
Zero or greater indicates normal completion.  
Negative indicates an error.

**Example:** See the SelectRecords Example

**Backward compatibility method name:** SELECTRECORDS

**Backward compatibility arguments:** None.

### Example of the SelectRecords Method

The code below shows how to access a table whose structure is:

"JOB\_ID" S9(3) <= Specified as the key field  
"FUNCTION" X(30)

```

DATA          DIVISION.
WORKING-STORAGE SECTION.
01 ReturnValue      PIC S9(9) COMP-5.
01 WorkJOBID       PIC S9(3).
01 WorkFUNCTION    PIC X(30).
PROCEDURE      DIVISION.
*> Connect with the database.
*> The return value of the method is stored in ReturnValue.
    INVOKE Cmdb1 "OpenDB" RETURNING ReturnValue.
*> Process the return value.
    :
*> Set "JOB_ID" to 500. (key field); Set "FUNCTION" to "DRIVER".
    MOVE 500      TO "JOB_ID"    OF Cmdb1.
    MOVE "TAXI DRIVER" TO "FUNCTION" OF Cmdb1.
*> Adds a record to the table.
*> The return value of the method is stored in ReturnValue.
    INVOKE Cmdb1 "WriteRecord" RETURNING ReturnValue.
*> Process the return value.
    :
*> Sets the condition of the database.
    MOVE "JOB_ID = 500" TO "Condition" OF Cmdb1.
*> Selects records whose "JOB_ID" field is 500.
    INVOKE Cmdb1 "SelectRecords" RETURNING ReturnValue.
*> Process the return value.
    :
*> Reads next record.
    INVOKE Cmdb1 "ReadNextRecord" RETURNING ReturnValue.
*> Process the return value.
    :
*> Refers to the value of field.
*> WorkJOBID is set to 500 and WorkFUNCTION is set to "TAXI DRIVER".
    MOVE "JOB_ID" OF Cmdb1 TO WorkJOBID.
    MOVE "FUNCTION" OF Cmdb1 TO WorkFUNCTION.
    :
*> Release the database connection.
    INVOKE Cmdb1 "CloseDB".

```

## 5.89 SetAbort Method

---

**Description:** Notifies Microsoft Transaction Server that the transaction has been aborted.

**Used in controls:** MTS Support

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:** INVOKE CmViper1 "SetAbort"

**Backward compatibility method name:** None.

## 5.90 SetComplete Method

---

**Description:** Notifies Microsoft Transaction Server that the transaction has been completed.

**Used in controls:** MTS Support

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:** INVOKE CmViper1 "SetComplete"

**Backward compatibility method name:** None.

## 5.91 SetFocus Method

---

**Description:** Sets the focus on the control.  
It does not work when the Enabled or Visible property is False.

**Used in controls:** CheckBox      Edit      ListView      Tab  
 ComboBox      FileList      OptionButton      Table  
 CommandButton      FolderList      ScrollBar      TextBox  
 Custom      ListBox      Slider      TreeView  
 DriveList

**Used in objects:** None.

**Parameters:** None.

**Return value:** None.

**Example:** INVOKE CmText1 "SetFocus"

**Backward compatibility method name:** SETFOCUS

**Backward compatibility arguments:** None.

## 5.92 SetMCICommand Method

---

**Description:** Passes an MCI command to the MCI driver.

**Used in controls:** MCI

**Used in objects:** None.

**Parameters:** VT\_BSTR - MCICommandX(8192)

**Description of Parameters:** The MCI command string.

**Return value:** VT\_BSTR - ReturnValueX(8192)

```

The character string returned by the command.
Example:
WORKING-STORAGE SECTION.

01 MCI-Chk-CD    PIC X(28) VALUE

    "status cdaudio media present".

01 CD-Received  PIC X(256).

PROCEDURE DIVISION.

* This command checks to see if a
* CD player is available. "True"
* is returned in the CD-Received
* parameter if present, otherwise
* "False" is returned.

    INVOKE CmMCI1 "SetMCICommand"

    USING      MCI-Chk-CD

    RETURNING CD-Received

```

**Backward compatibility method name:** None.

## 5.93 SetPage Method

---

**Description:** Displays the Page Setup dialog allowing the user to configure page details before printing.

Values set in the dialog update the following Print control properties:

|              |                  |             |           |
|--------------|------------------|-------------|-----------|
| BottomMargin | PaperOrientation | PrinterName | Source    |
| LeftMargin   | PaperType        | RightMargin | TopMargin |

**Used in controls:** Print

**Used in objects:** None.

**Parameters:** [VT\_I4 DisableSettingS9(9) COMP-5]

**Description of Parameters:** Defines which of the features in the dialog to disable. If no parameter is provided all features are enabled. The following constants can be used to set the styling.

POW-DISABLEMARGINS: Margins  
POW-DISABLEPRINTER: Printer setting  
POW-DISABLEORIENTATION: Orientation  
POW-DISABLEPAPER: Paper  
POW-DISABLEPAGEPAINTING: Layout

**Return value:** VT\_BOOL - ReturnValueS9(4) COMP-5

POW-TRUE means the OK button was pushed.  
POW-FALSE means the Cancel button was pushed.

**Example:**

```

INVOKE CmPrint1 "SetPage"

    USING      DialogStyle

    RETURNING ReturnValue

```

**Backward compatibility method name:** None.

## 5.94 SetPrinter Method

---

**Description:** Displays the Print Setup dialog allowing the user to configure printer details before printing.

Values set in the dialog update the following Print control properties.

PaperOrientation    PaperType    PrinterName    Source

**Used in controls:** Print

**Used in objects:** None.

**Parameters:** None.

**Return value:** VT\_BOOL - ReturnValueS9(4) COMP-5

POW-TRUE means the OK button was pushed.

POW-FALSE means the Cancel button was pushed.

**Example:** INVOKE CmPrint "SetPrinter"

RETURNING ReturnValue

**Backward compatibility method name:** None.

## 5.95 ShowForm Method

---

**Description:** Displays the specified form.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_I4 - WindowState S9(9) COMP-5

**Description of Parameters:** The state in which the form should be displayed.

POW-SWHIDE: Puts the form in the background - it does not display a window.

POW-SWSHOWNORMAL: Displays the form using its default window size.

POW-SWSHOWMINIMIZED: Minimizes the form making it active.

POW-SWMINIMIZED: Minimizes the form making it inactive.

POW-SWSHOWMINNOACTIVE: Minimizes the form. The active window is unchanged (keeps the focus).

POW-SWSHOWMAXIMIZED: Maximizes the form making it active.

**Return value:** None.

**Example:** INVOKE POW-SELF "ShowForm" USING POW-SWSHOWNORMAL

INVOKE CmText1 "SetFocus"

**Backward compatibility method name:** SHOWSHEET

**Backward compatibility arguments:** S9(4) COMP-5

## 5.96 Start Method

---

|  |   |
|--|---|
| <b>Description:</b>                            | Starts Excel.   |
| <b>Used in controls:</b>                       | ExcelConnection   |
| <b>Used in objects:</b>                        | None.   |
| <b>Parameters:</b>                             | None.   |
| <b>Return value:</b>                           | VT_I4 - ReturnValueS9(9) COMP-5<br>Zero or greater indicates normal completion.<br>Negative indicates an error. |
| <b>Example:</b>                                | <pre>INVOKE CmExcell "Start"  RETURNING ReturnValue</pre>   |
| <b>Backward compatibility<br/>method name:</b> | None.   |

## 5.97 StartEdit Method

---

|  |  |
|--|--|
| <b>Description:</b>                            | Puts the control into edit mode.<br>It works even when the LabelEdit property is False.<br>Invoking this method generates an Edit event. |
| <b>Used in controls:</b>                       | ListView           TreeView  |
| <b>Used in objects:</b>                        | None.  |
| <b>Parameters:</b>                             | None.  |
| <b>Return value:</b>                           | None.  |
| <b>Example:</b>                                | <pre>INVOKE CmListView1 "StartEdit"</pre>  |
| <b>Backward compatibility<br/>method name:</b> | None.  |

## 5.98 StopDevice Method

---

|  |                                       |
|--|---------------------------------------|
| <b>Description:</b>                            | Stops playing the MCI device.         |
| <b>Used in controls:</b>                       | MCI                                   |
| <b>Used in objects:</b>                        | None.                                 |
| <b>Parameters:</b>                             | None.                                 |
| <b>Return value:</b>                           | None.                                 |
| <b>Example:</b>                                | <pre>INVOKE CmMCI1 "StopDevice"</pre> |
| <b>Backward compatibility<br/>method name:</b> | STOPDEVICE                            |
| <b>Backward compatibility<br/>arguments:</b>   | None.                                 |

## 5.99 TerminateDDE Method

---

|                          |  |
|--------------------------|--|
| <b>Description:</b>      | Closes the DDE conversation with the DDE server. |
| <b>Used in controls:</b> | DDE  |

|  |                              |
|--|------------------------------|
| <b>Used in objects:</b>                    | None.                        |
| <b>Parameters:</b>                         | None.                        |
| <b>Return value:</b>                       | None.                        |
| <b>Example:</b>                            | INVOKE CmDDE1 "TerminateDDE" |
| <b>Backward compatibility method name:</b> | TERMINATEDDE                 |
| <b>Backward compatibility arguments:</b>   | None.                        |

## 5.100 ThruEvents Method

---

**Description:** Compels window messages, which are waiting for an event procedure to finish, to execute before the event procedure finishes.

For example, if you code an event procedure "A" that takes a long time to execute, and use a Timer control to update the form in the Timer event, the Timer event will wait for the procedure "A" to conclude.

If you invoke the ThruEvents method at intervals from the procedure "A", the Timer events work smoothly.

Refer to the ThruEvents Example for details.

Caution: The ThruEvents method can cause unexpected results because of timing or procedure coding errors. Refer to Unexpected Results when using the ThruEvents Method for more details.

Use this method with care.

|  |                            |
|--|----------------------------|
| <b>Used in controls:</b>                   | None.                      |
| <b>Used in objects:</b>                    | Form                       |
| <b>Parameters:</b>                         | None.                      |
| <b>Return value:</b>                       | None.                      |
| <b>Example:</b>                            | See the ThruEvents Example |
| <b>Backward compatibility method name:</b> | None.                      |

### Example of the ThruEvents Method

The code below demonstrates code containing a loop that invokes the ThruEvents method every 1000<sup>th</sup> iteration. This enables the counter to be displayed (every 1000<sup>th</sup> iteration) and for the event to exit when the cancel button is clicked.

WORKING-STORAGE SECTION of the Form

```
01 RUNNING-FLAG PIC S9(4) GLOBAL VALUE 0.
88 IS-RUNNING VALUE 1.
```

If the click event is executing, exit program to prevent(restrict) the event nesting

Click event of a CommandButton, which invokes the ThruEvents Method

```
ENVIRONMENT DIVISION.
DATA DIVISION.
WORKING-STORAGE SECTION.
01 I PIC S9(9) COMP-5.
PROCEDURE DIVISION.
    IF IS-RUNNING THEN
        EXIT PROGRAM                *> Exit to prevent nesting of the event
    END-IF
```



```

MOVE 1 TO RUNNING-FLAG.          *> Sets the executing flag
PERFORM VARYING I FROM 1 BY 1 UNTIL I > 1000000
MOVE I TO "Caption" OF COUNTER   *> Display counter
IF FUNCTION MOD (I 1000) = 0 THEN
    INVOKE POW-SELF "ThruEvents" *> Executes any waiting event procedures
    IF NOT IS-RUNNING THEN       *> Exits if the cancel button is clicked
        EXIT PERFORM
    END-IF
END-IF
END-PERFORM
MOVE 0 TO RUNNING-FLAG.          *> Releases the executing flag

```

#### Click event of the Cancel CommandButton

```

ENVIRONMENT DIVISION.
DATA DIVISION.
WORKING-STORAGE SECTION.
PROCEDURE DIVISION.
    MOVE 0 TO RUNNING-FLAG.      *> Sets the executing flag to 0

```

#### QueryClose event of the Form

```

ENVIRONMENT DIVISION.
DATA DIVISION.
WORKING-STORAGE SECTION.
LINKAGE SECTION.
01 POW-CANCEL PIC S9(4) COMP-5.
PROCEDURE DIVISION USING POW-CANCEL.
    IF IS-RUNNING THEN
        MOVE POW-TRUE TO POW-CANCEL
    END-IF

```

## 5.100.1 Unexpected Results when using the ThruEvents Method

---

This topic describes some unexpected results that can occur when you use the ThruEvents method. When using this method it is recommended that you test on several machines that have different performance characteristics to ensure that you do not miss a timing issue on a particular machine.

### 1. Order in which event procedures are executed

The ThruEvents method generates the events that are waiting in the Windows message queue. In some cases, as shown in the example below, the order in which the events are invoked can be changed.

Example:

If the following three events are waiting and the ThruEvents method is invoked, the AddString methods are executed in the reverse order, so that "Rose", "Ken" and "Tom" are added to the ListBox control (LIST1).

First event:

```

INVOKE POW-SELF "ThruEvents"
INVOKE LIST1 "AddString" USING "Tom"

```

Second event:

```

INVOKE POW-SELF "ThruEvents"
INVOKE LIST1 "AddString" USING "Ken"

```

Third event:

```

INVOKE POW-SELF "ThruEvents"
INVOKE LIST1 "AddString" USING "Rose"

```

Explanation:

When ThruEvents is invoked from the first event, the execution of the first event pauses while the other events in the queue are executed. So the second event starts, and similarly pauses while the third event starts. After the third event has paused for any other events, its AddString method is executed - adding "Rose" to the list. The third event completes so the second event can now continue and adds "Ken" to the list. The second event completes so the first event can continue and adds "Tom" to the list.

## 2. CloseForm in an event generated by ThruEvents

If you close the Form (e.g. by invoking the CloseForm method) in an event procedure that is generated by the ThruEvents method, the application ends abnormally.

To prevent this happening, you should check in the QueryClose event whether the event that invoked ThruEvents has stopped executing or not.

## 3. Same events generated in the queue

If you create code as shown below for a CommandButton click event, and quickly click the button several times, the same events are generated in the event queue.

When the ScriptLanguage property of the Module is "0-COBOL85 Language Mode" WK-COUNT is incremented more than you would expect.

For example, if you click the button 1 time the value of WK-COUNT will be 1,000,000, but if you click the button 2 times ThruEvents generates the 2<sup>nd</sup> click event and the final value will be greater than 1,000,000.

```
ENVIRONMENT DIVISION.  
DATA DIVISION.  
WORKING-STORAGE SECTION.  
01 WK-COUNT PIC S9(9) COMP-5.  
PROCEDURE DIVISION.  
    MOVE 0 TO WK-COUNT.  
    PERFORM 1000000 TIMES  
        ADD 1 TO WK-COUNT  
        IF FUNCTION MOD (WK-COUNT 1000) = 0 THEN  
            INVOKE POW-SELF "ThruEvents"  
        END-IF  
    END-PERFORM.  
    MOVE WK-COUNT TO "Text" OF TEXTBOX1.
```

Explanation:

Suppose you make the second click when WK-COUNT is at 300,000 in the first click event. The ThruEvents method pauses the first click execution and the code starts executing again for the second click. If you do not click again, the second click execution proceeds until WK-COUNT is 1,000,000 and control returns to the execution for the first click. However, with the ScriptLanguage property set to "0-COBOL85 Language Mode", the two events use the same data area for WK-COUNT. Therefore the first event continues adding to WK-COUNT, but WK-COUNT has jumped from 300,000 to 1,000,000. The first event executes another 700,000 iterations of the PERFORM statement, so WK-COUNT ends up with the value 1,700,000.

If the ScriptLanguage property is set to "1-00COBOL Language Mode" each event invocation uses a different data area for WK-COUNT and each click takes WK-COUNT to 1,000,000.

## 5.101 UnadviseDDE Method

---

|  |   |
|--|---|
| <b>Description:</b>                            | Ends the advise loop with the DDE server. |
| <b>Used in controls:</b>                       | DDE                                       |
| <b>Used in objects:</b>                        | None.                                     |
| <b>Parameters:</b>                             | None.                                     |
| <b>Return value:</b>                           | None.                                     |
| <b>Example:</b>                                | INVOKE CmDDE1 "UnadviseDDE"               |
| <b>Backward compatibility<br/>method name:</b> | UNADVISEDDE                               |

**Backward compatibility arguments:** None.

## 5.102 UpdateRecord Method

---

**Description:** Updates the field that is bound to the property.  
**Used in controls:** Custom Edit  
**Used in objects:** DataBinding  
**Parameters:** None.  
**Return value:** None.  
**Example:** See the UpdateRecord method examples.  
**Backward compatibility method name:** None.

## 5.103 Examples of the UpdateRecord Method

---

### Example 1:

For a data field that is bound to the custom control "Custom1":

```
INVOKE Custom1 "UpdateRecord"
```

### Example 2:

For a field that is bound to the Text property of the custom control "Custom2"

```
INVOKE "Item"("Text") OF "DataBindings"  
OF Custom2 "UpdateRecord"
```

### Example 3:

For data fields that are bound to several properties of the custom control "Custom3"

```
WORKING-STORAGE SECTION.  
01 PROPERTY-COUNT PIC S9(9) COMP-5.  
01 IDX PIC S9(9) COMP-5.  
PROCEDURE DIVISION.  
MOVE "Count" OF Custom3 TO PROPERTY-COUNT  
PERFORM VARYING IDX FROM 1 BY 1 UNTIL I > PROPERTY-COUNT  
INVOKE "Item"(IDX) OF "DataBindings"  
OF Custom3 "UpdateRecord"  
END PERFORM
```

### Notes on the UpdateRecord Method:

1. The UpdateRecord method updates the temporary area (copy buffer) of the database record when the ADODataSource control binds to ADO. When invoked UpdateRecord method does not write the new data into the database. The copy buffer is managed by the ADODataSource control.
2. The copy buffer is written into the database just after invoking the Update method or UpdateBatch method of the ADO Recordset object (methods that are not PowerCOBOL methods but can be invoked from PowerCOBOL code using the syntax: INVOKE "Recordset" OF ADODataSource "...." USING ...).

- The copy buffer is written into the database just after changing the current record (cursor), for example, MoveNext, MovePrevious, MoveFirst, MoveLast, and Move methods of the Recordset object (as in 2, these methods are not PowerCOBOL methods, but can be invoked from PowerCOBOL code).

The update can be canceled by invoking the CancelUpdate method if the copy buffer has not been written into the database (again this method is invoked using the syntax described in point 2 above).

## 5.104 WriteRecord Method

---

|  |   |
|--|---|
| <b>Description:</b>                        | Adds a record to the table.   |
| <b>Used in controls:</b>                   | DB Access   |
| <b>Used in objects:</b>                    | None.   |
| <b>Parameters:</b>                         | None.   |
| <b>Return value:</b>                       | VT_I4 - ReturnValueS9(9) COMP-5<br><br>Zero or greater indicates normal completion.<br>Negative indicates an error. |
| <b>Example:</b>                            | <pre>INVOKE CmDB1 "WriteRecord"  RETURNING ReturnValue</pre>  |
| <b>Backward compatibility method name:</b> | WRITERECORD   |
| <b>Backward compatibility arguments:</b>   | None.   |

## 5.105 ZOrder Method

---

|  |   |            |                   |            |
|--|---|------------|-------------------|------------|
| <b>Description:</b>                                | Changes the Z-order, the order in which controls are painted (in the "Z" dimension - perpendicular to the surface of the screen).<br><br>It does not affect the TabIndex property.  |            |                   |            |
| <b>Used in controls:</b>                           | Animation   | FileList   | ListBox           | Slider     |
|  | CheckBox  | FolderList | ListView          | StaticText |
|  | ComboBox  | Frame      | MCI               | Tab        |
|  | CommandButton   | Graph      | OptionButton      | Table      |
|  | Custom  | GroupBox   | ProgressIndicator | TextBox    |
|  | DriveList   | Image      | ScrollBar         | ToolBar    |
|  | Edit  | Label      | Shape             | TreeView   |
| <b>Used in objects:</b>                            | None.   |            |                   |            |
| <b>Parameters:</b>                                 | [VT_I2 - ZorderPosS9(4) COMP-5]   |            |                   |            |
| <b>Description of Parameters (with constants):</b> | The new position of the control in the Z-dimension.<br><br>0: Puts the control at the top of the order.<br>(POW-ZORDER-FRONT)<br>1: Puts the control at the bottom of the order.<br>(POW-ZORDER-BACK)<br><br>If the parameter is omitted PowerCOBOL puts the control at the top of the order. |            |                   |            |
| <b>Return value:</b>                               | None.   |            |                   |            |

**Example:**

To ensure an image, called "CmImage1", is displayed behind all other controls on your form, code:

```
WORKING-STORAGE SECTION.  
  
01 ZOrder-Bottom PIC S9(4) COMP-5  
  
                                VALUE 1.  
  
PROCEDURE DIVISION.  
  
    INVOKE CmImage1 "ZOrder"  
  
    USING ZOrder-Bottom
```

**Backward compatibility  
method name:**

None.

# Chapter 6 Events

This chapter describes all of the PowerCOBOL events.

## 6.1 Introduction to PowerCOBOL Events

An event is a call to a procedure to notify that something has happened in or to a control or object. For example, the control was clicked, or a property of the control changed. Events generally have parameters to the call containing data relating to the event.

The topics in this section describe the circumstances that cause the event to be generated, the controls that can receive the event, and the parameters supplied when the event is invoked.

## 6.2 How Information is Presented on Each Event

PowerCOBOL Events are explained as follows:

|                                   |  |
|-----------------------------------|--|
| <b>Event name:</b>                | The name of the event is the string used in the topic title.   |
| <b>Description:</b>               | Describes the purpose of the event.  |
| <b>Used in controls:</b>          | Lists the controls that have the event.  |
| <b>Used in objects:</b>           | Lists the objects that have the event.   |
| <b>Parameters:</b>                | Lists the parameters passed with the call to the event code, with definitions of the OLE Data and the COBOL data definitions. Bracketed parameters can be omitted.<br><br>"VT_BSTR - X(8192)" means the string is 8192 bytes or less. The VT_BSTR type of parameter can be shortened if necessary. |
| <b>Description of parameters:</b> | Describes the parameters.  |

## 6.3 How to Use Events

You do not have to write code to handle every event that may be generated. You simply add code to handle those events that are of relevance to your application.

To add code for an event, select a control in the Form Editor and click the right mouse button, or press the Shift + F10 key or press the Application key, to display the popup menu. Select "Edit Event Procedure" from the popup menu and select the event you want to handle from the side menu. This opens an edit window with skeleton COBOL code, including LINKAGE SECTION definitions of any parameters passed with the call to the event. Enter your code to handle the event in this sub-program, called a "scriptlet" in the PowerCOBOL Project list.

## 6.4 BeforeClick Event

|                          |  |
|--------------------------|--|
| <b>Description:</b>      | The purpose of this event is to let you verify the input to a tab page before switching to another page. If there are errors you can maintain the focus on the current page.<br><br>The event is generated when a tab or Tab control button is clicked - before the Click event.<br><br>If PageCancel is set to True, the Tab control does not switch to the new page.<br><br>See the BeforeClick Sample Code. |
| <b>Used in controls:</b> | Tab  |
| <b>Used in objects:</b>  | None.  |
| <b>Parameters:</b>       | 1. [VT_I4 - Index S9(9) COMP-5]<br>2. VT_I4 - OldPageIndex S9(9) COMP-5<br>3. VT_BOOL - PageCancel S9(4) COMP-5  |

- Description of parameters:**
1. Index: When the control is part of an array, Index contains the control's index in the array.
  2. OldPageIndex: Number of the tab page that is currently displayed.
  3. PageCancel: Determines whether the tab control switches to the new selected page. If you set PageCancel to POW-TRUE, the page is not switched. If you set it to POW-FALSE, the page is switched.

## 6.4.1 BeforeClick Sample Code

```

ENVIRONMENT DIVISION.
DATA DIVISION.
WORKING-STORAGESECTION.
01 WK-INDEXPIC S9(9).
LINKAGE SECTION.
01 POW-PAGEOLDINDEXPIC S9(9) COMP-5.
01 POW-PAGECANCEL PIC S9(4) COMP-5.
PROCEDURE DIVISION USING POW-PAGEOLDINDEX POW-PAGECANCEL.
EVALUATE POW-PAGEOLDINDEX
WHEN 1
  IF "Value" OF CmOption2 NOT = 0
    AND "Text" OF CmText1 = SPACE THEN
      MOVE POW-TRUE TO POW-PAGECANCEL
      INVOKE CmText1 "SetFocus"
  END-IF
WHEN 2
  MOVE "Text" OF CmText2 TO I
  IF WK-INDEX <= 0 OR 100 < WK-INDEX THEN
    MOVE POW-TRUE TO POW-PAGECANCEL
    INVOKE CmText2 "SetFocus"
  END-IF
END-EVALUATE

```

## 6.5 ButtonClick Event

- Description:** Generated when a button on the Toolbar control is clicked.
- Used in controls:** Toolbar
- Used in objects:** None.
- Parameters:**
1. [VT\_I4 - Index S9(9) COMP-5]
  2. VT\_I4 - ButtonIndex S9(9) COMP-5
- Description of parameters:**
1. Index: When the control is part of an array, Index gives the control's index in the array.
  2. ButtonIndex: The index of the button clicked on.

## 6.6 Change Event

- Description:** Generated when:
- ComboBox* Text in the text box changes if the Style property is "0 - Simple" or "1 - DropDown".
  - Edit* Text in the control changes.
  - FolderList* Another folder is selected and the current folder changes.
  - Generated after the SelChange event.
  - Image* Displayed image changes.

|                                   |  |
|-----------------------------------|--|
| <i>ProgressIndicator</i>          | Value property changes.  |
| <i>ScrollBar</i>                  | Scrollbar position changes.  |
| <i>Slider</i>                     | Slider pointer position changes.   |
| <i>StaticText</i>                 | Displayed text changes.  |
| <i>TextBox</i>                    | If the EditableLabel property is False, a Change event is generated every time the user presses a character key.<br><br>If the EditableLabel property is True, the Change event is only generated when the user presses the ENTER key. |
| <b>Used in controls:</b>          | ComboBox          Image                  ScrollBar          StaticText<br>Edit                  ProgressIndicator    Slider              TextBox<br>FolderList   |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.  |

## 6.7 Click Event

---

|                      |  |
|----------------------|--|
| <b>Description:</b>  | Generated when the left mouse button is clicked on the control or an equivalent event occurs.  |
| <i>CheckBox</i>      | Mouse left button is clicked on the control.<br><br>Space bar is pressed when the control has focus.   |
| <i>CommandButton</i> | <ol style="list-style-type: none"> <li>1. Mouse left button is clicked on the control.</li> <li>2. Space bar is pressed when the control has focus.</li> <li>3. ENTER key is pressed when the control has focus.</li> <li>4. Button is the default (Default property is True), and the focus is not in a control that processes the ENTER key, and ENTER key is pressed.</li> <li>5. Function key set in the CommandButton property page is pressed.</li> <li>6. When Cancel is True, and the focus is not in a control that processes the ESC key, and ESC key is pressed.</li> </ol> <p>Note that if UnacceptableDefault property is True, the Click event is not generated when the ENTER key is pressed.</p> |
| <i>MenuItem</i>      | Mouse left button is clicked on the control.   |
| <i>OptionButton</i>  | <ol style="list-style-type: none"> <li>1. Mouse left button is clicked on the control.</li> <li>2. Control receives focus.</li> <li>3. The Value property is set to True in an event procedure.</li> </ol> <p>Only generated when the button enters the selected state. Not generated by a click that puts the button in the unselected state.</p>   |
| <i>Tab</i>           | <ol style="list-style-type: none"> <li>1. Mouse left button is clicked on the tab (button, if Style is "1").</li> <li>2. One of the arrow keys is pressed when the focus is in the tab.</li> </ol> <p>Note that the Click event is only generated when the page is changed - it is not generated if the BeforeClick event prevents the page changing.</p>  |
| <i>Table</i>         | Mouse left button is clicked on the control.   |



The position of the cell that was clicked is in the ClickRow and ClickColumn properties.

*Others*  
 Mouse left button is clicked on the control.

**Used in controls:**

|               |          |                   |            |
|---------------|----------|-------------------|------------|
| Animation     | Frame    | ListView          | StaticText |
| CheckBox      | Graph    | MCI               | Tab        |
| ComboBox      | GroupBox | OptionButton      | Table      |
| CommandButton | Image    | ProgressIndicator | TextBox    |
| FileList      | ListBox  | Slider            | TreeView   |
| FolderList    |          |                   |            |

**Used in objects:** Form Menuitem

**Parameters:**

*Form and GroupBox*  
 None.

*Others*  
 [VT\_I4 - IndexS9(9) COMP-5]

**Description of parameters:**  
 Index: When the control is part of an array, Index contains the control's index in the array.

## 6.8 CloseChild Event

---

**Description:** Generated when a child form, opened with the OpenForm or CallForm2 (CallForm) method, is closed.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_I4 - CookieS9(9) COMP-5

**Description of parameters:** Cookie: Value set in the third parameter ("Cookie") of the OpenForm or CallForm method.

## 6.9 Closed Event

---

**Description:** Generated when a form is closed.

*Notes*  
 Do not invoke the OpenForm, CallForm2 (CallForm) and CloseForm methods in the Closed event.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** None.

## 6.10 Collapse Event

---

**Description:** Generated when a Node object in the TreeView control is collapsed.

**Used in controls:** TreeView

**Used in objects:** None.

**Parameters:**

- [VT\_I4 - Index S9(9) COMP-5]
- VT\_DISPATCH - Node OBJECT REFERENCE POW-CNODE

**Description of parameters:**

- Index: When the control is part of an array, Index contains the control's index in the array.

2. Node: Pointer to the Node object being collapsed.

## 6.11 ColumnClick Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when the LVStyle property is "3 - Report", and the heading of a column in the ListView control is clicked.   |
| <b>Used in controls:</b>          | ListView   |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | <ol style="list-style-type: none"> <li>1. [VT_I4 - Index S9(9) COMP-5]</li> <li>2. VT_I4 - ColumnIndex S9(9) COMP-5</li> </ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"> <li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li> <li>2. ColumnIndex: The index of the Column object that was clicked.</li> </ol> |

## 6.12 DbClick Event

---

|                                   |   |          |              |          |
|-----------------------------------|---|----------|--------------|----------|
| <b>Description:</b>               | Generated when the mouse left button is double-clicked as follows.  |          |              |          |
| <i>ComboBox</i>                   | The Style property is "0 - Simple" and an item in the list box is double-clicked.   |          |              |          |
| <i>FileList</i>                   | An item in the list box is double-clicked. The event can obtain the selected file from the SelString property of the control. |          |              |          |
| <i>ListBox</i>                    | An item in the list box is double-clicked.  |          |              |          |
| <i>Others</i>                     | The control or form is double-clicked.  |          |              |          |
| <b>Used in controls:</b>          | Animation   | Graph    | ListView     | Table    |
|                                   | ComboBox  | GroupBox | MCI          | TextBox  |
|                                   | FileList  | Image    | OptionButton | TreeView |
|                                   | Frame   | ListBox  | StaticText   |          |
| <b>Used in objects:</b>           | Form  |          |              |          |
| <b>Parameters:</b>                |   |          |              |          |
| <i>Form and GroupBox</i>          | None.   |          |              |          |
| <i>Others</i>                     | [VT_I4 - IndexS9(9) COMP-5]   |          |              |          |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.                                 |          |              |          |

## 6.13 DDEChange Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when data in the DDE server is updated.   |
|                                   | The length of the data received from the DDE server is set in the DDEDataLength property.     |
|                                   | The updated data is contained in the DDEData property.  |
| <b>Used in controls:</b>          | DDE   |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]   |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array. |

## 6.14 DropDown Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when a dropdown button is clicked.<br><br>It is only generated when the Style property of the clicked button is "4 - DropDownButton".  |
| <b>Used in controls:</b>          | Toolbar  |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | 1. [VT_I4 - Index S9(9) COMP-5]<br>2. VT_I4 - ButtonIndex S9(9) COMP-5<br>3. VT_I4 - PosX S9(9) COMP-5<br>4. VT_I4 - PosY S9(9) COMP-5   |
| <b>Description of parameters:</b> | 1. Index: When the control is part of an array, Index contains the control's index in the array.<br>2. ButtonIndex: Index of the clicked button.<br>3. PowX: The horizontal coordinate of the bottom-left corner of the clicked button. The ScaleMode property of the Toolbar control determines the units.<br>4. PowY: The vertical coordinate of the bottom-left corner of the clicked button. The ScaleMode property of the Toolbar control determines the units. |

## 6.15 Edit Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when the control enters the edit state.<br><br>The event is generated after the GotFocus event.  |
| <i>ComboBox</i>                   | Generated only when the Style property is "0 - Simple" or "1 - DropDown".<br><br>You can select whether the Edit event is generated in the ComboBox property page. |
| <i>Edit</i>                       | Generated when the control enters the edit state if EditWhenGotFocus property is True.   |
| <i>TextBox</i>                    | You can select whether the Edit event is generated in the TextBox property page.   |
| <b>Used in controls:</b>          | ComboBox          ListView          TextBox          TreeView<br><br>Edit                  Table   |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.  |

## 6.16 EndAnimation Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when the last frame of an animation has played.                                     |
| <b>Used in controls:</b>          | Animation   |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]   |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array. |

## 6.17 EndOfRecordset Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when there is an attempt to move to a row past the end of the Recordset.   |
| <b>Used in controls:</b>          | ADODataSource  |
| <b>Used in Objects:</b>           | None.  |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. [VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_BOOL - MoreData S9(4) COMP-5</li><li>3. VT_I4 - adStatus S9(9) COMP-5</li><li>4. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT</li></ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. MoreData: If the value is set to True, it indicates more rows have been added to the recordset.</li><li>3. adStatus: Indicates or requests the current status as follows:<br/>POW-ADODB-ADSTATUSERRORSOCCURRED:<br/>Indicates that the operation that caused the event failed due to an error or errors.<br/>POW-ADODB-ADSTATUSOK:<br/>Indicates that the operation that caused the event was successful.<br/>POW-ADODB-ADSTATUSUNWANTEDEVENT:<br/>Requests that further events of the type that caused this event to be generated should not be generated.</li><li>4. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.</li></ol> |
| <b>Details:</b>                   | Consult the ADO documentation for details.   |

## 6.18 EndScroll Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when the mouse button or a key is released after controlling the slider or scroll bar. |
| <b>Used in controls:</b>          | ScrollBar                      Slider  |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.    |

## 6.19 Expand Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when a Node object in the TreeView control is expanded.<br><br>The event is generated after the Click and DbIClick events.   |
| <b>Used in controls:</b>          | TreeView   |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1.[VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_DISPATCH - Node OBJECT REFERENCE POW-CNODE</li></ol>  |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. Node: Pointer to the Node object that is being expanded.</li></ol> |

## 6.20 FieldChangeComplete Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated after the value of one or more ADO field objects has changed.   |
| <b>Used in controls:</b>          | ADODataSource   |
| <b>Used in Objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. [VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_I4 - Reserved1 S9(9) COMP-5</li><li>3. VT_I4 - Reserved2 S9(9) COMP-5</li><li>4. VT_DISPATCH - pError OBJECT REFERENCE POW-COBJECT</li><li>5. VT_I4 - adStatus S9(9) COMP-5</li><li>6. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT</li></ol>  |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. Reserved1: Do not use this parameter. It is reserved for future use.</li><li>3. Reserved2: Do not use this parameter. It is reserved for future use.</li><li>4. pError: Indicates an ADO error object. It describes the error that occurred if the value of adStatus parameter is POW-ADODB-ADSTATUSERRORSOCCURRED, otherwise it is not set.</li><li>5. adStatus: Indicates or requests the current status as follows:<br/>POW-ADODB-ADSTATUSERRORSOCCURRED:<br/>Indicates that the operation that caused the event failed due to an error or errors.<br/>POW-ADODB-ADSTATUSOK:<br/>Indicates that the operation that caused the event was successful.<br/>POW-ADODB-ADSTATUSUNWANTEDEVENT:<br/>Requests that further events of the type that caused this event to be generated should not be generated.</li><li>6. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.</li></ol> |
| <b>Details:</b>                   | Consult the ADO documentation for details.  |

## 6.21 GotFocus Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when the control receives the focus.  |
| <b>Used in controls:</b>          | CheckBox      Edit      ListView      Tab<br>ComboBox      FileList      OptionButton      Table<br>CommandButton      FolderList      ScrollBar      TextBox<br>Custom      ListBox      Slider      TreeView<br>DriveList |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]   |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.   |

## 6.22 ItemClick Event

---

**Description:** Generated when a ListViewItem object in the ListView control is clicked.  
 The event is generated before the Click event.  
 You can identify the clicked ListViewItem object by referring to the ListViewItem parameter.

**Used in controls:** ListView

**Used in objects:** None.

**Parameters:**  
 1. [VT\_I4 - Index S9(9) COMP-5]  
 2. VT\_DISPATCH - ListViewItem OBJECT REFERENCE POW-CLISTITEM

**Description of parameters:**  
 1. Index: When the control is part of an array, Index contains the control's index in the array.  
 2. ListViewItem: Pointer to the ListViewItem object that is being clicked.

## 6.23 KeyDown Event

---

**Description:** Generated when a key is pressed and passed to the control that has the focus.  
 The KeyPress and KeyUp events are usually generated after the KeyDown event.  
 If a key is pressed and kept depressed, multiple KeyDown and KeyPress events are generated before a KeyUp event.  
 Note that if you press a toggle key (e.g. Caps Lock, Num Lock):  
 The order of events may be changed.  
 One of these events may not be generated.  
 To support special keystrokes, such as short-cuts, on the form, see the PreKeyDown event.

*TreeView and  
 ListView*

KeyDown events are not generated when a label is being edited.

*Others*

Event is not generated in the following cases:

- a. When the Tab key is pressed.
- b. When an access (mnemonic) key is pressed.
- c. When an arrow key is pressed.  
 Note that if a control, which uses arrow keys (e.g. ComboBox control, ScrollBar control), has the focus, the KeyDown and KeyUp events are generated.
- d. When a function key, which was defined in the CommandButton property page, is pressed.
- e. When a short-cut key, which was defined in the MenuItem property page, is pressed.
- f. If the form contains the following controls, when the ENTER key is pressed:
  - A control, which has focus, does not use ENTER key (e.g. Table control, a TextBox control whose MultiLine property is True, use the ENTER key.)
  - A CommandButton control, whose Default property is True, has the focus.
- g. If there are following controls on the form, when ESCAPE key is pressed:
  - The control, which has focus, does not use ESCAPE key.
  - CommandButton control, whose Cancel property is True.

**Used in controls:**

|          |          |              |       |
|----------|----------|--------------|-------|
| CheckBox | Edit     | ListView     | Tab   |
| ComboBox | FileList | OptionButton | Table |

|                                   |   |            |           |          |
|-----------------------------------|---|------------|-----------|----------|
|                                   | CommandButton   | FolderList | ScrollBar | TextBox  |
|                                   | DriveList   | ListBox    | Slider    | TreeView |
| <b>Used in objects:</b>           | Form  |            |           |          |
| <b>Parameters:</b>                | <ol style="list-style-type: none"> <li>1. [VT_I4 - Index S9(9) COMP-5]</li> <li>2. VT_I2 - KeyCode S9(4) COMP-5</li> <li>3. VT_I2 - ShiftState S9(4) COMP-5</li> </ol>  |            |           |          |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"> <li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li> <li>2. KeyCode: The key code that was pressed. See Key Code Constants for details of key codes.</li> <li>3. ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is: <ul style="list-style-type: none"> <li>1 - Shift key(POW-SHIFTSTATE-SHIFT)</li> <li>2 - Ctrl key(POW-SHIFTSTATE-CTRL)</li> <li>3 - Alt key(POW-SHIFTSTATE-ALT)</li> </ul> For example if the parameter has a value of 6 (binary 00000110), this indicates that the Ctl and Alt keys are depressed.</li> </ol> |            |           |          |

## 6.24 KeyPress Event

---

|                              |   |
|------------------------------|---|
| <b>Description:</b>          | <p>Generated when a character key is pressed and passed to the control that has the focus.</p> <p>The event is not generated for non-character keys such as the function keys and the shift keys.</p> <p>The KeyPress and Key events are usually generated after the KeyDown event.</p> <p>If a key is pressed, and kept depressed, multiple KeyDown and KeyPress events are generated.</p> <p>To support special keystrokes, such as short-cuts, on the form, see the PreKeyUp event.</p>  |
| <b>TreeView and ListView</b> | <p>KeyDown events are not generated when a label is being edited.</p>   |
| <b>Others</b>                | <p>Event is not generated in the following cases:</p> <ol style="list-style-type: none"> <li>a. When the Tab key is pressed.</li> <li>b. When an access (mnemonic) key is pressed.</li> <li>c. If the form contains the following controls, when the ENTER key is pressed: <ul style="list-style-type: none"> <li>- The control that has focus does not use ENTER key (e.g. Table control, a TextBox control whose MultiLine property is True, use the ENTER key.)</li> <li>- A CommandButton control, whose Default property is True, has the focus.</li> </ul> </li> <li>d. If there are the following controls on the form, when ESCAPE key is pressed: <ul style="list-style-type: none"> <li>- The control that has focus does not use ESCAPE key.</li> <li>- CommandButton control, whose Cancel property is True.</li> </ul> </li> </ol> <p>Note that, if the KeyAscii parameter of the PreKeyPress event of the Form object is set to another character code just before the KeyPress event is generated, the KeyAscii parameter of the KeyPress event is the character code that was set in the PreKeyPress event.</p> |

|                          |               |            |              |          |
|--------------------------|---------------|------------|--------------|----------|
| <b>Used in controls:</b> | CheckBox      | Edit       | ListView     | Tab      |
|                          | ComboBox      | FileList   | OptionButton | Table    |
|                          | CommandButton | FolderList | ScrollBar    | TextBox  |
|                          | DriveList     | ListBox    | Slider       | TreeView |

**Used in objects:** Form

- Parameters:**
1. [VT\_I4 - Index S9(9) COMP-5]
  2. VT\_I2 - KeyAscii S9(4) COMP-5

- Description of parameters:**
1. Index: When the control is part of an array, Index contains the control's index in the array.
  2. KeyAscii: The ASCII code of the key that was pressed. See Key Code Constants for details. You can only use the constants POW-KEY-0 to POW-KEY-9 and POW-KEY-A to POW-KEY-Z in the list.

## 6.25 KeyUp Event

---

**Description:** Generated when a key is released and passed to the control that has the focus.

The KeyPress and KeyUp events are usually generated after the KeyDown event.

If a key is pressed and kept depressed, multiple KeyDown and KeyPress events are generated before a KeyUp event.

Note that if you pressed a toggle key (e.g. Caps Lock, Num Lock):

The order of events may be changed.

One of these events may not be generated.

To support special keystrokes, such as short-cuts, on the form, see the PreKeyPress event.

**TreeView and ListView** KeyDown events are not generated when a label is being edited.

- Others** Event is not generated in the following cases:
- a. When the Tab key is pressed.
  - b. When an access (mnemonic) key is pressed.
  - c. When an arrow key is pressed.  
Note that if a control, which uses direction keys (e.g. ComboBox control, ScrollBar control), has the focus, the KeyDown and KeyUp events are generated.
  - d. When a function key, which was defined in the CommandButton property page, is pressed.
  - e. When a short-cut key, which was defined in the MenuItem property page, is pressed.

|                          |               |            |              |          |
|--------------------------|---------------|------------|--------------|----------|
| <b>Used in controls:</b> | CheckBox      | Edit       | ListView     | Tab      |
|                          | ComboBox      | FileList   | OptionButton | Table    |
|                          | CommandButton | FolderList | ScrollBar    | TextBox  |
|                          | DriveList     | ListBox    | Slider       | TreeView |

**Used in objects:** Form

- Parameters:**
1. [VT\_I4 - Index S9(9) COMP-5]
  2. VT\_I2 - KeyCode S9(4) COMP-5



**Description of parameters (with constants):**

3. VT\_I2 - ShiftState S9(4) COMP-5

1. Index: When the control is part of an array, Index contains the control's index in the array.
2. KeyCode: The key code that was pressed. See Key Code Constants for details of key codes.
3. ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:
  - 1 - Shift key(POW-SHIFTSTATE-SHIFT)
  - 2 - Ctrl key(POW-SHIFTSTATE-CTRL)
  - 3 - Alt key(POW-SHIFTSTATE-ALT)
 For example if the parameter has a value of 3 (binary 00000011), this indicates that the Shift and Ctl keys are depressed.

## 6.26 LostFocus Event

---

|                                   |   |            |              |          |
|-----------------------------------|---|------------|--------------|----------|
| <b>Description:</b>               | Generated immediately after the control loses focus.  |            |              |          |
| <b>Used in controls:</b>          | CheckBox  | Edit       | ListView     | Tab      |
|                                   | ComboBox  | FileList   | OptionButton | Table    |
|                                   | CommandButton   | FolderList | ScrollBar    | TextBox  |
|                                   | Custom  | ListBox    | Slider       | TreeView |
|                                   | DriveList   |            |              |          |
| <b>Used in objects:</b>           | None.   |            |              |          |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]   |            |              |          |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array. |            |              |          |

## 6.27 MouseDown Event

---

|                              |   |            |                   |            |
|------------------------------|---|------------|-------------------|------------|
| <b>Description:</b>          | Generated when a mouse button is depressed when the mouse pointer is over the control.<br>The Click and DblClick events are generated after the MouseDown and MouseUp events.<br>The control that receives the MouseDown event continues to receive MouseMove events until the corresponding MouseUp event - whether or not the mouse remains over the control. |            |                   |            |
| <i>ComboBox</i>              | Mouse events (e.g. Click, MouseDown etc.) are not generated when the Style property is "1 - DropDown" or "2 - DropDownList", and the drop down list is displayed.   |            |                   |            |
| <i>DriveList</i>             | Mouse events (e.g. Click, MouseDown etc.) are not generated when the drop down list is displayed.   |            |                   |            |
| <i>TreeView and ListView</i> | Mouse events (e.g. Click, MouseDown etc.) are not generated when a label is being edited.   |            |                   |            |
| <b>Used in controls:</b>     | Animation   | FolderList | ListView          | StaticText |
|                              | CheckBox  | Frame      | MCI               | Tab        |
|                              | ComboBox  | Graph      | OptionButton      | Table      |
|                              | CommandButton   | GroupBox   | ProgressIndicator | TextBox    |
|                              | DriveList   | Image      | ScrollBar         | Toolbar    |

|  | FileList  | ListBox | Slider | TreeView |
|--|---|---------|--------|----------|
| <b>Used in objects:</b>                                | Form  |         |        |          |
| <b>Parameters:</b>                                     |   |         |        |          |
| <i>Form and</i>  | 1. VT_I2 - MouseButton S9(4) COMP-5   |         |        |          |
| GroupBox   | 2. VT_I2 - ShiftState S9(4) COMP-5  |         |        |          |
|  | 3. VT_I4 - PosX S9(9) COMP-5  |         |        |          |
|  | 4. VT_I4 - PosY S9(9) COMP-5  |         |        |          |
| <i>Others</i>  | 1. [VT_I4 - Index S9(9) COMP-5]   |         |        |          |
|  | 2. VT_I2 - MouseButton S9(4) COMP-5   |         |        |          |
|  | 3. VT_I2 - ShiftState S9(4) COMP-5  |         |        |          |
|  | 4. VT_I4 - PosX S9(9) COMP-5  |         |        |          |
|  | 5. VT_I4 - PosY S9(9) COMP-5  |         |        |          |
| <b>Description of parameters<br/>(with constants):</b> |   |         |        |          |
| <i>Form and</i>  | 1. MouseButton: Bit mask settings indicate the button(s) depressed. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:                                  |         |        |          |
| GroupBox   | 1 - Left button(POW-MOUSE-LBUTTON)<br>2 - Right button(POW-MOUSE-RBUTTON)<br>3 - Middle button(POW-MOUSE-MBUTTON)   |         |        |          |
|  | 2. ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is: |         |        |          |
|  | 1 - Shift key(POW-SHIFTSTATE-SHIFT)<br>2 - Ctrl key(POW-SHIFTSTATE-CTRL)<br>3 - Alt key(POW-SHIFTSTATE-ALT)   |         |        |          |
|  | For example if the parameter has a value of 5 (binary 00000101), this indicates that the Shift and Alt keys are depressed.  |         |        |          |
|  | 3. PosX: The horizontal coordinate of the mouse position relative to the top left corner of the control. The ScaleMode property of the containing control determines the units.                 |         |        |          |
|  | 4. Pos Y: The vertical coordinate of the mouse position relative to the top left corner of the control. The ScaleMode property of the containing control determines the units.                  |         |        |          |
| <i>Others</i>  | Index: When the control is part of an array, Index contains the control's index in the array.   |         |        |          |
|  | The descriptions of the other parameters (from 2 to 5) are the same as " <i>Form and GroupBox</i> ".  |         |        |          |

## 6.28 MouseMove Event

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Generated when the mouse pointer is moved over the control.<br><br>The control that receives theMouseDown event continues to receive MouseMove events until the corresponding MouseUp event - whether or not the mouse remains over the control. |
| <i>ComboBox</i>     | Mouse events (e.g. Click, MouseDown etc.) are not generated when the Style property is "1 - DropDown" or "2 - DropDownList", and the drop down list is displayed.  |
| <i>DriveList</i>    | Mouse events (e.g. Click, MouseDown etc.) are not generated when the drop down list is displayed.  |

*TreeView and ListView*

Mouse events (e.g. Click, MouseDown etc.) are not generated when a label is being edited.

**Used in controls:**

|               |            |                   |            |
|---------------|------------|-------------------|------------|
| Animation     | FolderList | ListView          | StaticText |
| CheckBox      | Frame      | MCI               | Tab        |
| ComboBox      | Graph      | OptionButton      | Table      |
| CommandButton | GroupBox   | ProgressIndicator | TextBox    |
| DriveList     | Image      | ScrollBar         | ToolBar    |
| FileList      | ListBox    | Slider            | TreeView   |

**Used in objects:**

Form

**Parameters:**

*Form and GroupBox*

1. VT\_I2 - MouseButton S9(4) COMP-5
2. VT\_I2 - ShiftState S9(4) COMP-5
3. VT\_I4 - PosX S9(9) COMP-5
4. VT\_I4 - PosY S9(9) COMP-5

*Others*

1. [VT\_I4 - Index S9(9) COMP-5]
2. VT\_I2 - MouseButton S9(4) COMP-5
3. VT\_I2 - ShiftState S9(4) COMP-5
4. VT\_I4 - PosX S9(9) COMP-5
5. VT\_I4 - PosY S9(9) COMP-5

**Description of parameters (with constants):**

*Form and GroupBox*

1. MouseButton: Bit mask settings indicate the button(s) depressed. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:  
 1 - Left button(POW-MOUSE-LBUTTON)  
 2 - Right button(POW-MOUSE-RBUTTON)  
 3 - Middle button(POW-MOUSE-MBUTTON)
2. ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:  
 1 - Shift key(POW-SHIFTSTATE-SHIFT)  
 2 - Ctrl key(POW-SHIFTSTATE-CTRL)  
 3 - Alt key(POW-SHIFTSTATE-ALT)  
 For example if the parameter has a value of 4 (binary 00000100), this indicates that the Alt key is depressed.
3. PosX: The horizontal coordinate of the mouse position relative to the top left corner of the control. The ScaleMode property of the containing control determines the units.
4. PosY: The vertical coordinate of the mouse position relative to the top left corner of the control. The ScaleMode property of the containing control determines the units.

*Others*

1. Index: When the control is part of an array, Index contains the control's index in the array.

The descriptions of the other parameters (from 2 to 5) are the same as "*Form and GroupBox*".

## 6.29 MouseUp Event

---

**Description:** Generated when a mouse button is released.

The Click and DbClick events are generated after the MouseDown and MouseUp events.

The control that receives the MouseDown event continues to receive MouseMove events until the corresponding MouseUp event - whether or not the mouse remains over the control.

Note that if the focus changes, or if the active window changes (e.g. Alt + Tab key pressed), the MouseUp event may not be generated.

*ComboBox* The event is generated when the Style property is "1 - DropDown" or "2 - DropDownList", and the drop down list is displayed, and the menu button is clicked (to hide the drop down list).

*DriveList* The event is generated when the control loses focus and when the drop down list is displayed, and the menu button is clicked (to hide the drop down list).

*TreeView and ListView* Mouse events (e.g. Click, MouseDown etc.) are not generated when a label is being edited.

**Used in controls:**

|               |            |                   |            |
|---------------|------------|-------------------|------------|
| Animation     | FolderList | ListView          | StaticText |
| CheckBox      | Frame      | MCI               | Tab        |
| ComboBox      | Graph      | OptionButton      | Table      |
| CommandButton | GroupBox   | ProgressIndicator | TextBox    |
| DriveList     | Image      | ScrollBar         | ToolBar    |
| FileList      | ListBox    | Slider            | TreeView   |

**Used in objects:** Form

**Parameters:**

*Form and GroupBox*

1. VT\_I2 - MouseButton S9(4) COMP-5
2. VT\_I2 - ShiftState S9(4) COMP-5
3. VT\_I4 - PosX S9(9) COMP-5
4. VT\_I4 - PosY S9(9) COMP-5

*Others*

1. [VT\_I4 - Index S9(9) COMP-5]
2. VT\_I2 - MouseButton S9(4) COMP-5
3. VT\_I2 - ShiftState S9(4) COMP-5
4. VT\_I4 - PosX S9(9) COMP-5
5. VT\_I4 - PosY S9(9) COMP-5

**Description of parameters (with constants):**

*Form and GroupBox*

1. MouseButton: Bit mask settings indicate the button(s) released. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:
  - 1 - Left button(POW-MOUSE-LBUTTON)
  - 2 - Right button(POW-MOUSE-RBUTTON)
  - 3 - Middle button(POW-MOUSE-MBUTTON)
2. ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:
  - 1 - Shift key(POW-SHIFTSTATE-SHIFT)
  - 2 - Ctrl key(POW-SHIFTSTATE-CTRL)

3 - Alt key(POW-SHIFTSTATE-ALT)

For example if the parameter has a value of 7 (binary 00000111), this indicates that the Shift, Ctl and Alt keys are depressed.

3. PosX: The horizontal coordinate of the mouse position relative to the top left corner of the control. The ScaleMode property of the containing control determines the units.
4. PosY: The vertical coordinate of the mouse position relative to the top left corner of the control. The ScaleMode property of the containing control determines the units.

*Others*

1. Index: When the control is part of an array, Index contains the control's index in the array.

The descriptions of the other parameters (from 2 to 5) are the same as "*Form and GroupBox*".

## 6.30 MoveComplete Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated after the current position in the ADO recordset object changes.   |
| <b>Used in controls:</b>          | ADODataSource   |
| <b>Used in Objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. [VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_I4 - adReason S9(9) COMP-5</li><li>3. VT_DISPATCH - pError OBJECT REFERENCE POW-COBJECT</li><li>4. VT_I4 - adStatus S9(9) COMP-5</li><li>5. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT</li></ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. adReason: Indicates the reason for this event as follows:<br/>POW-ADODB-ADRSNMOVEFIRST: An operation moved the record pointer to the first record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVELAST: An operation moved the record pointer to the last record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVENEXT: An operation moved the record pointer to the next record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVEPREVIOUS: An operation moved the record pointer to the previous record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVE: An operation moved the record pointer within the ADO recordset object.<br/>POW-ADODB-ADRSNREQUERY: An operation required the ADO recordset object.</li><li>3. PError: Indicates an ADO error object. It describes the error that occurred if the value of adStatus parameter is<br/>POW-ADODB-ADSTATUSERRORSOCCURRED; otherwise it is not set.</li><li>4. adStatus: Indicates or requests the current status as follows:<br/>POW-ADODB-ADSTATUSERRORSOCCURRED: Indicates that the operation that caused the event failed due to an error or errors.<br/>POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.<br/>POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.</li></ol> |

5. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.

**Details:** Consult the ADO documentation for details.

## 6.31 NodeClick Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when a Node object is clicked.<br>The event is generated before the Click event.  |
| <b>Used in controls:</b>          | TreeView  |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | 1.[VT_I4 - IndexS9(9) COMP-5]<br>2. VT_DISPATCH NodeOBJECT REFERENCE POW-CNODE  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.<br>Node: Pointer to the Node object that was clicked. |

## 6.32 Opened Event

---

|                          |                                  |
|--------------------------|----------------------------------|
| <b>Description:</b>      | Generated when a form is opened. |
| <b>Used in controls:</b> | None.                            |
| <b>Used in objects:</b>  | Form                             |
| <b>Parameters:</b>       | None.                            |

## 6.33 PathChange Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when the current folder is changed.   |
| <b>Used in controls:</b>          | FileList  |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | [VT_I4 - Index S9(9) COMP-5]  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array. |

## 6.34 PatternChange Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when the Pattern property (filename filter containing wild card) is changed.        |
| <b>Used in controls:</b>          | FileList  |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]   |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array. |

## 6.35 PowerBroadcast Event

---

|                     |  |
|---------------------|--|
| <b>Description:</b> | Generated when an event related to the system's power management is generated. This event is used when you execute the application on hardware or Windows systems that |
|---------------------|--|

support ACPI (Advanced Configuration and Power Interface) or APM (Advanced Power Management).

For example, POW-PBT-APMQUERYSPEND (see parameters below) is generated when the system is preparing to suspend. If your application is in a state in which you would rather the system did not suspend, you can request that the suspension does not happen.

The PowerBroadcast event is not generated when the form is used as an ActiveX control pasted into another form.

Note: System power management may be different on each operating system and hardware platform. For example, the timing of this event may be different in each environment. Therefore you are advised only to use this event once you have a good understanding of the power management on your target platforms.

Refer to the operating system and hardware manuals for details of power management.

The topic "Power Management" under "Platform SDK" in the MSDN (Microsoft Developer Network) contains details of the events.

**Used in controls:**

None.

**Used in objects:**

Form

**Parameters:**

1. VT\_I2 - Event S9(4) COMP-5
2. VT\_I4 - Data S9(9) COMP-5
3. VT\_BOOL - Grant S9(4) COMP-5

**Description of parameters:**

1. Event:

The value defines the event generated by the system. Possible values are:

- POW-PBT-APMBATTERYLOW: Battery power is low.
- POW-PBT-APMOEMEVEVENT: OEM-defined event occurred.
- POW-PBT-APMPOWERSTATUSCHANGE: Power status has changed.
- POW-PBT-APMQUERYSPEND: Request for permission to suspend.
- POW-PBT-APMQUERYSPENDFAILED: Suspension request denied.
- POW-PBT-APMRESUMEAUTOMATIC: Operation resuming automatically after event.
- POW-PBT-APMRESUMECRITICAL: Operation resuming after critical suspension.
- POW-PBT-APMRESUMESUSPEND: Operation resuming after suspension.
- POW-PBT-APMSUSPEND: System is suspending operation.

2. Data:

Data generated by the event.

3. Grant:

Specify whether you accept the request to suspend.

It is effective only when the value of Event is

POW-PBT-APMQUERYSPEND.

If you permit the suspend action, set the value to True.

If not, set the value to False.

Use the following constants to set to the value.

POW-TRUE : True

POW-FALSE: False

If the Grant parameter is omitted, PowerCOBOL assumes the value is True.

## 6.36 PreKeyDown Event

---

**Description:** Generated when a key is pressed before the KeyDown event is passed to the control that has the focus.

The PreKeyDown, PreKeyPress, and PreKeyUp events enable you to take action on special keys, such as short-cut keys (e.g. Ctrl + D).

If no control has the focus then the PreKeyDown event is not generated - the Form only receives the KeyDown event.

The PreKeyDown event is generated before the KeyDown event, and hence usually before the PreKeyPress, KeyPress, PreKeyUp, and KeyUp events.

If a key is pressed and kept depressed, multiple PreKeyDown, KeyDown, PreKeyPress and KeyPress events are generated before the PreKeyUp and KeyUp events.

Note that if you press a toggle key (e.g. Caps Lock, Num Lock):

- The order of events may be changed.
- One of these events may not be generated.

If the active window is changed in the PreKeyDown event, like a message box displayed by DisplayMessage, the value of the ShiftState parameter in the next event (such as KeyDown or CommandButton Click) is different from the key you input. For example,

1. In the PreKeyDown event, a message box is displayed when it recognizes that you pressed the [Shift+F5] key. Then, in the KeyDown event, the ShiftState parameter is zero unless you keep pressing the [Shift] key at the same time as pushing a button that closes the message box.
2. Suppose that a CommandButton is operated by the [F5] key and a message box is displayed in the PreKeyDown event when you press the [Shift+F5] key. The Click event of the CommandButton is generated unless you are pressing the [Shift] key when you push one of the buttons that closes the message box.
3. Similarly, suppose the CommandButton is operated by the [Shift+F5] key and a message box is displayed in the PreKeyDown event when you press the [Shift+F5] key. The Click event of the CommandButton is NOT generated unless you keep pressing the [Shift] key when you push one of the buttons to close the message box.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:**  
1. VT\_I2 - KeyCodeS9(4) COMP-5  
2. VT\_I2 - ShiftStateS9(4) COMP-5

**Description of parameters (with constants):** KeyCode: The key code that was pressed. See Key Code Constants for details of key codes.

ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:

1 - Shift key(POW-SHIFTSTATE-SHIFT)



2 - Ctrl key(POW-SHIFTSTATE-CTRL)

3 - Alt key(POW-SHIFTSTATE-ALT)

For example if the parameter has a value of 6 (binary 00000110), this indicates that the Ctl and Alt keys are depressed.

## 6.37 PreKeyPress Event

---

**Description:** Generated when a character key is pressed before the KeyPress event is passed to the control that has the focus.

The PreKeyDown, PreKeyPress, and PreKeyUp events enable you to take action on special keys, such as short-cut keys (e.g. Ctrl + D).

If no control has the focus then the PreKeyPress event is not generated - the Form only receives the KeyPress event.

The PreKeyPress event is generated before the KeyPress event, and hence usually before PreKeyUp and KeyUp events.

If a key is pressed and kept depressed, multiple PreKeyDown, KeyDown, PreKeyPress and KeyPress events are generated before the PreKeyUp and KeyUp events.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** VT\_I2 - KeyAsciiS9(4) COMP-5

**Description of parameters:** KeyAscii: The ASCII code of the key that was pressed. See Key Code Constants for details. You can only use the constants POW-KEY-0 to POW-KEY-9 and POW-KEY-A to POW-KEY-Z in the list.

## 6.38 PreKeyUp Event

---

**Description:** Generated when a key is released before the KeyUp event is passed to the control that has the focus.

The PreKeyDown, PreKeyPress, and PreKeyUp events enable you to take action on special keys, such as short-cut keys (e.g. Ctrl + D).

If no control has the focus then the PreKeyUp event is not generated - the Form only receives the KeyUp event.

If a key is pressed and kept depressed, multiple PreKeyDown, KeyDown, PreKeyPress and KeyPress events are generated before the PreKeyUp and KeyUp events.

Note that if you press a toggle key (e.g. Caps Lock, Num Lock):

- The order of events may be changed.
- One of these events may not be generated.

**Used in controls:** None.

**Used in objects:** Form

**Parameters:** 1. VT\_I2 - KeyCode S9(4) COMP-5

2. VT\_I2 - ShiftState S9(4) COMP-5

**Description of parameters (with constants):** 1. KeyCode: The key code that was pressed. See Key Code Constants for details of key codes.

2. ShiftState: Bit mask settings indicate the state of each of the shift keys - Shift, Ctrl and ALT. Numbering the bits 1 to 8, from least significant to most significant, the bit mapping is:

1 - Shift key(POW-SHIFTSTATE-SHIFT)

2 - Ctrl key(POW-SHIFTSTATE-CTRL)

3 - Alt key(POW-SHIFTSTATE-ALT)

For example if the parameter has a value of 3 (binary 00000011), this indicates that the Shift and Ctl keys are depressed.

## 6.39 QueryClose Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated immediately before the closing process - before the Closed event.  |
| <b>Used in controls:</b>          | None.  |
| <b>Used in objects:</b>           | Form   |
| <b>Parameters:</b>                | VT_BOOL - CloseCancelS9(4) COMP-5  |
| <b>Description of parameters:</b> | CloseCancel: Determines whether the Closed event will happen:<br>If set to POW-TRUE, the Closed event does not occur (i.e. Closed event is canceled.)<br>If set to POW-FALSE, the Closed event does occur. |

## 6.40 RecordChangeComplete Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated after one or more records change.   |
| <b>Used in controls:</b>          | ADODataSource1  |
| <b>Used in Objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"> <li>1. [VT_I4 - Index S9(9) COMP-5]</li> <li>2. VT_I4 - adReason S9(9) COMP-5</li> <li>3. VT_DISPATCH - pError OBJECT REFERENCE POW-COBJECT</li> <li>4. VT_I4 - adStatus S9(9) COMP-5</li> <li>5. VT_I4 - cRecords S9(9) COMP-5</li> <li>6. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT</li> </ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"> <li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li> <li>2. adReason: Indicates the reason for this event as follows:<br/>POW-ADODB-ADRSNADDNEW: An operation added a new record.<br/>POW-ADODB-ADRSNDELETE: An operation deleted a record.<br/>POW-ADODB-ADRSNUPDATE: An operation updated an existing record.<br/>POW-ADODB-ADRSNUNDOUPDATE: An operation reversed the update of a record.<br/>POW-ADODB-ADRSNUNDOADDNEW: An operation reversed the addition of a new record.<br/>POW-ADODB-ADRSNUNDODELETE: An operation reversed the deletion of a record.<br/>POW-ADODB-ADRSNFIRSTCHANGE: An operation made the first change to a record.</li> <li>3. pError: Indicates an ADO error object. It describes the error that occurred if the value of adStatus parameter is</li> </ol> |

POW-ADODB-ADSTATUSERRORSOCCURRED;  
otherwise it is not set.

4. adStatus: Indicates or requests the current status as follows:  
POW-ADODB-ADSTATUSERRORSOCCURRED: Indicates that the operation that caused the event failed due to an error or errors.  
POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.  
POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.
5. cRecords: Indicates the number of records affected.
6. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.

**Details:** Consult the ADO documentation for details.

## 6.41 RecordsetChangeComplete Event

---

**Description:** Generated after the ADO recordset object has changed.

**Used in controls:** ADODataSource

**Used in Objects:** None.

**Parameters:**

1. [VT\_I4 - Index S9(9) COMP-5]
2. VT\_I4 - adReason S9(9) COMP-5
3. VT\_DISPATCH - pError OBJECT REFERENCE POW-COBJECT
4. VT\_I4 - adStatus S9(9) COMP-5
5. VT\_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT

**Description of parameters:**

1. Index: When the control is part of an array, Index contains the control's index in the array.
2. adReason: Indicates the reason for this event as follows:  
POW-ADODB-ADRSNREQUERY: An operation required the ADO recordset object.  
POW-ADODB-ADRSNRESYNCH: An operation resynchronized the ADO recordset object with the database.  
POW-ADODB-ADRSNCLOSE: An operation closed the ADO recordset object.
3. pError: Indicates an ADO error object. It describes the error that occurred if the value of adStatus parameter is  
POW-ADODB-ADSTATUSERRORSOCCURRED;  
otherwise it is not set.
4. adStatus: Indicates or requests the current status as follows:  
POW-ADODB-ADSTATUSERRORSOCCURRED: Indicates that the operation that caused the event failed due to an error or errors.  
POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.  
POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.
5. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.

**Details:** Consult the ADO documentation for details.

## 6.42 Resized Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when the form is resized.   |
| <b>Used in controls:</b>          | None.   |
| <b>Used in objects:</b>           | Form  |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. VT_I2 - SizeState S9(4) COMP-5</li><li>2. VT_I4 - ClientWidth S9(9) COMP-5</li><li>3. VT_I4 - ClientHeight S9(9) COMP-5</li></ol>  |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. SizeState: Contains the target state of the resize. Use the following constants to determine the state:<br/>POW-SIZE-RESTORED: Window is neither maximized, nor minimized - its size is determined by the user or the application.<br/>POW-SIZE-MINIMIZED: Window is minimized.<br/>POW-SIZE-MAXIMIZED: Window is maximized.</li><li>2. ClientWidth: The new width of the form. The ScaleMode property defines the units.</li><li>3. ClientHeight: The new height of the form. The ScaleMode property defines the units.</li></ol> |

## 6.43 Return Event

---

|                     |   |
|---------------------|---|
| <b>Description:</b> | Generated when the Return key is pressed or an equivalent condition, specified for some control, occurs.  |
| <i>ComboBox</i>     | <ol style="list-style-type: none"><li>1. The text is being edited and the focus moves to another control in the same form.</li><li>2. The text is being edited and the ENTER key is pressed.</li></ol> <p>The event is generated when the Style property is "0 - Simple" or "1 - DropDown".</p> <p>You can select which conditions cause the event to be generated in the ComboBox property page.</p>   |
| <i>Edit</i>         | Generated in the following cases: <ul style="list-style-type: none"><li>- If the ReturnWhenLostFocus property is True and the control has the focus, the event is generated when the focus moves to another control in the same form, before generating the LostFocus event.</li><li>- If ReturnWhenEnterKey property is True and you are editing a string, the event is generated when the ENTER key is pressed.</li><li>- If ReturnWhenMaxText property is True, the event is generated when the length of the text reaches the MaxLength property value. Note that, the event is only generated when the text length is changed. For example:<br/><br/>When the MaxLength property is 3, string "ABC" has already been set into the Text property, and you select text "BC". If you replace the text "BC" with "EF" using the Ctrl+V key, the text length is not changed, so the event is not generated.</li></ul> |
| <i>Table</i>        | <ol style="list-style-type: none"><li>1. A cell is being edited and the focus moves to another control in the same form.</li><li>2. A cell is being edited and the focus moves to another cell using one of the arrow keys.</li><li>3. A cell is being edited and the ENTER key is pressed.</li></ol>   |

4. The DecisionMaxString property is True and the input character string reaches the effective maximum length (defined by the picture or date string of RenderText property).

You can select which conditions cause the event to be generated in the Table property page.

#### TextBox

When the EditableLabel property is False:

1. The text is being edited and the focus moves to another control in the same form.
2. The text is being edited and the ENTER key is pressed.
3. The input character string reaches the effective maximum length.

When EditableLabel property is True:

1. Data entry is concluded. See the TextBox control description.

The event is generated before the LostFocus event.

You can select which conditions cause the event to be generated in the TextBox property page.

Note that if you do not set the RenderStyle property to "0 - Standard", the maximum length depends on the picture or date style (it does not depend on the setting of the MaxLength property).

#### *Others*

1. The text is being edited and the focus moves to another control in the same form.
2. The text is being edited and the ENTER key is pressed.

#### **Used in controls:**

ComboBox      Table      TextBox      TreeView  
ListView

#### **Used in objects:**

None.

#### **Parameters:**

[VT\_I4 - IndexS9(9) COMP-5]

#### **Description of parameters:**

Index: When the control is part of an array, Index contains the control's index in the array.

## 6.44 SelChange Event

---

#### **Description:**

Generated when a selection changes as follows.

#### *ComboBox and ListBox*

When the item selected in the list box changes.

The event is generated after the Click and DbClick events.

#### *DriveList*

When the selected drive name in the list box changes.

#### *FileList*

When the selected file name in the list box changes.

The event is generated after the Click and DbClick events.

#### *FolderList*

When the selected folder name in the list box changes.

The event is generated after the Click and DbClick events.

#### **Used in controls:**

ComboBox      FileList      FolderList      ListBox  
DriveList

#### **Used in objects:**

None.

#### **Parameters:**

[VT\_I4 - IndexS9(9) COMP-5]

#### **Description of parameters:**

Index: When the control is part of an array, Index contains the control's index in the array.

## 6.45 Select Event

---

|                          |   |
|--------------------------|---|
| <b>Description:</b>      | Generated when a menu item is selected. |
| <b>Used in controls:</b> | None.                                   |
| <b>Used in objects:</b>  | MenuItem                                |
| <b>Parameters:</b>       | None.                                   |

## 6.46 SelectClose Event

---

|                          |                                  |
|--------------------------|----------------------------------|
| <b>Description:</b>      | Generated when a menu is closed. |
| <b>Used in controls:</b> | None.                            |
| <b>Used in objects:</b>  | MenuItem                         |
| <b>Parameters:</b>       | None.                            |

## 6.47 StartAnimation Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated when the first frame of the animation is replayed.<br><br>Note that if the AutoPlay property is True, the animation is started automatically after the form is opened and this event is not generated. If you stop animation and restart animation, the event is generated. |
| <b>Used in controls:</b>          | Animation   |
| <b>Used in objects:</b>           | None.   |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]   |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.   |

## 6.48 Stepped Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated when the increase in the Value property exceeds the value of the Step property. The event is generated after the Change event. |
| <b>Used in controls:</b>          | ProgressIndicator  |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.  |

## 6.49 Timer Event

---

|                                   |  |
|-----------------------------------|--|
| <b>Description:</b>               | Generated at the intervals specified in the Interval property when the Active property is set to True. |
| <b>Used in controls:</b>          | Timer  |
| <b>Used in objects:</b>           | None.  |
| <b>Parameters:</b>                | [VT_I4 - IndexS9(9) COMP-5]  |
| <b>Description of parameters:</b> | Index: When the control is part of an array, Index contains the control's index in the array.          |

## 6.50 WillChangeField Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated before a pending operation changes the value of one or more ADO field objects in the ADO recordset object.  |
| <b>Used in controls:</b>          | ADODataSource   |
| <b>Used in Objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. [VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_I4 - Reserved1 S9(9) COMP-5</li><li>3. VT_I4 - Reserved2 S9(9) COMP-5</li><li>4. VT_I4 - adStatus S9(9) COMP-5</li><li>5. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT</li></ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. Reserved1: Do not use this parameter. It is reserved for future use.</li><li>3. Reserved2: Do not use this parameter. It is reserved for future use.</li><li>4. adStatus: Indicates or requests the current status as follows:<br/>POW-ADODB-ADSTATUSCANCEL: Requests cancellation of the operation that caused the event to occur.<br/>POW-ADODB-ADSTATUSCANTDENY: Indicates that the operation cannot request cancellation of the pending operation.<br/>POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.<br/>POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.</li><li>5. pRecordset: Indicates a pointer to the recordset object, for which this event generated.</li></ol> |
| <b>Details:</b>                   | Consult the ADO documentation for details.  |

## 6.51 WillChangeRecord Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated before one or more records (rows) in the ADO recordset object change.   |
| <b>Used in controls:</b>          | ADODataSource   |
| <b>Used in Objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. [VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_I4 - adReason S9(9) COMP-5</li><li>3. VT_I4 - adStatus S9(9) COMP-5</li><li>4. VT_I4 - cRecords S9(9) COMP-5</li><li>5. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT</li></ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. adReason: Indicates the reason for this event as follows:<br/>POW-ADODB-ADRSNADDNEW: An operation will add a new record.<br/>POW-ADODB-ADRSNDELETE: An operation will delete a record.<br/>POW-ADODB-ADRSNUPDATE: An operation will update an existing record.<br/>POW-ADODB-ADRSNUNDOUPDATE: An operation will reverse the update of a record.</li></ol> |

POW-ADODB-ADRSNUNDOADDNEW: An operation will reverse the addition of a new record.

POW-ADODB-ADRSNUNDODELETE: An operation will reverse the deletion of a record.

POW-ADODB-ADRSNFIRSTCHANGE: An operation will make the first change to a record.

3. adStatus: Indicates or requests the current status as follows:
  - POW-ADODB-ADSTATUSCANCEL: Requests cancellation of the operation that caused the event to occur.
  - POW-ADODB-ADSTATUSCANTDENY: Indicates that the operation cannot request cancellation of the pending operation.
  - POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.
  - POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.
4. cRecords: Indicates the number of records changing.
5. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.

**Details:** Consult the ADO documentation for details.

## 6.52 WillChangeRecordset Event

---

**Description:** Generated before pending operation changes the ADO recordset object.

**Used in controls:** ADODataSource

**Used in Objects:** None.

**Parameters:**

1. [VT\_I4 - Index S9(9) COMP-5]
2. VT\_I4 - adReason S9(9) COMP-5
3. VT\_I4 - adStatus S9(9) COMP-5
4. VT\_DISPATCH - pRecordset OBJECT REFERENCE POW-COBJECT

**Description of parameters:**

1. Index: When the control is part of an array, Index contains the control's index in the array.
2. adReason: Indicates the reason for this event as follows:
  - POW-ADODB-ADRSNREQUERY: An operation will require the ADO recordset object.
  - POW-ADODB-ADRSNRESYNCH: An operation will resynchronize the ADO recordset object with the database.
  - POW-ADODB-ADRSNCLOSE: An operation will close the ADO recordset object.
3. adStatus: Indicates or requests the current status as follows:
  - POW-ADODB-ADSTATUSCANCEL: Requests cancellation of the operation that caused the event to occur.
  - POW-ADODB-ADSTATUSCANTDENY: Indicates that the operation cannot request cancellation of the pending operation.
  - POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.
  - POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.
4. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.

**Details:** Consult the ADO documentation for details.



## 6.53 WillMove Event

---

|                                   |   |
|-----------------------------------|---|
| <b>Description:</b>               | Generated before a pending operation changes the current position in the ADO recordset object.  |
| <b>Used in controls:</b>          | ADODataSource   |
| <b>Used in Objects:</b>           | None.   |
| <b>Parameters:</b>                | <ol style="list-style-type: none"><li>1. [VT_I4 - Index S9(9) COMP-5]</li><li>2. VT_I4 - adReason S9(9) COMP-5</li><li>3. VT_I4 - adStatus S9(9) COMP-5</li><li>4. VT_DISPATCH - pRecordset OBJECT REFERENCE POW-COJECT</li></ol>   |
| <b>Description of parameters:</b> | <ol style="list-style-type: none"><li>1. Index: When the control is part of an array, Index contains the control's index in the array.</li><li>2. adReason: Indicates the reason for this event as follows:<br/>POW-ADODB-ADRSNMOVEFIRST: An operation will move the record pointer to the first record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVELAST: An operation will move the record pointer to the last record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVENEXT: An operation will move the record pointer to the next record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVEPREVIOUS: An operation will move the record pointer to the previous record in the ADO recordset object.<br/>POW-ADODB-ADRSNMOVE: An operation will move the record pointer within the ADO recordset object.<br/>POW-ADODB-ADRSNREQUERY: An operation will require the ADO recordset object.</li><li>3. adStatus: Indicates or requests the current status as follows:<br/>POW-ADODB-ADSTATUSCANCEL: Requests cancellation of the operation that caused the event to occur.<br/>POW-ADODB-ADSTATUSCANTDENY: Indicates that the operation cannot request cancellation of the pending operation.<br/>POW-ADODB-ADSTATUSOK: Indicates that the operation that caused the event was successful.<br/>POW-ADODB-ADSTATUSUNWANTEDEVENT: Requests that further events of the type that caused this event to be generated should not be generated.</li><li>4. pRecordset: Indicates a pointer to the recordset object, for which this event is generated.</li></ol> |
| <b>Details:</b>                   | Consult the ADO documentation for details.  |

# Appendix A Color Constants

For properties having the OLE data type "OLE\_COLOR" PowerCOBOL provides COBOL constants that you can use to set the colors. There are two sets of color constants:

- Constants for the 16 standard colors
- Constants for the system colors
- These are listed in the tables below.

| Standard Color          | Constant                       |
|-------------------------|--------------------------------|
| Black                   | POW-COLOR-BLACK                |
| Blue                    | POW-COLOR-BLUE                 |
| Cyan                    | POW-COLOR-CYAN                 |
| Gray                    | POW-COLOR-GRAY                 |
| Green                   | POW-COLOR-GREEN                |
| Magenta                 | POW-COLOR-MAGENTA              |
| Red                     | POW-COLOR-RED                  |
| White                   | POW-COLOR-WHITE                |
| Yellow                  | POW-COLOR-YELLOW               |
| Dark blue               | POW-COLOR-DARKBLUE             |
| Dark cyan               | POW-COLOR-DARKCYAN             |
| Dark gray               | POW-COLOR-DARKGRAY             |
| Dark green              | POW-COLOR-DARKGREEN            |
| Dark magenta            | POW-COLOR-DARKMAGENTA          |
| Dark red                | POW-COLOR-DARKRED              |
| Dark yellow             | POW-COLOR-DARKYELLOW           |
| Active title bar        | POW-COLOR-ACTIVETITLEBAR       |
| Active title bar text   | POW-COLOR-ACTIVETITLEBARTEXT   |
| Active window border    | POW-COLOR-ACTIVEBORDER         |
| Application workspace   | POW-COLOR-APPLICATIONWORKSPACE |
| Button dark shadow      | POW-COLOR-BUTTONDARKSHADOW     |
| Button highlight        | POW-COLOR-BUTTONHIGHLIGHT      |
| Button light shadow     | POW-COLOR-BUTTONLIGHTSHADOW    |
| Button shadow           | POW-COLOR-BUTTONSHADOW         |
| Button surface          | POW-COLOR-BUTTONFACE           |
| Button text             | POW-COLOR-BUTTONTEXT           |
| Desktop                 | POW-COLOR-DESKTOP              |
| Disabled text           | POW-COLOR-DISABLEDTEXT         |
| Highlight               | POW-COLOR-HIGHLIGHT            |
| Highlighted text        | POW-COLOR-HIGHLIGHTEDTEXT      |
| Inactive title bar      | POW-COLOR-INACTIVETITLEBAR     |
| Inactive title bar text | POW-COLOR-INACTIVETITLEBARTEXT |

| <b>Standard Color</b>  | <b>Constant</b>            |
|------------------------|----------------------------|
| Inactive window border | POW-COLOR-INACTIVEBORDER   |
| Menu bar               | POW-COLOR-MENUBAR          |
| Menu text              | POW-COLOR-MENUTEXT         |
| Scroll bars            | POW-COLOR-SCROLLBARS       |
| Tool tip background    | POW-COLOR-TOOLTIP          |
| Tool tip text          | POW-COLOR-TOOLTIPTEXT      |
| Window background      | POW-COLOR-WINDOWBACKGROUND |
| Window frame           | POW-COLOR-WINDOWFRAME      |
| Window text            | POW-COLOR-WINDOWTEXT       |

## Appendix B Key Code Constants

You can use the following constants to check the contents of the KeyCode argument of the KeyDown, KeyPress and KeyUp events.

| Key   | Constant                              |
|---|---------------------------------------|
| [0] to [9]  | POW-KEY-0 to POW-KEY-9                |
| [A] to [Z]  | POW-KEY-A to POW-KEY-Z                |
| [Alphanumerical Japanese syllabary - for 2 byte character code systems] | POW-KEY-KANA                          |
| [Alt]   | POW-KEY-MENU                          |
| [Application Key]   | POW-KEY-APPS                          |
| [Back Space]  | POW-KEY-BACK                          |
| [Break]   | POW-KEY-CANCEL                        |
| [Caps Lock]   | POW-KEY-CAPITAL                       |
| [Clear]   | POW-KEY-CLEAR                         |
| [Ctrl]  | POW-KEY-CONTROL                       |
| [Del]   | POW-KEY-DELETE                        |
| [Down arrow]  | POW-KEY-DOWN                          |
| [End]   | POW-KEY-END                           |
| [Enter]   | POW-KEY-RETURN                        |
| [Esc]   | POW-KEY-ESCAPE                        |
| [F1] to [F24]   | POW-KEY-F1 to POW-KEY-F24             |
| [Home]  | POW-KEY-HOME                          |
| [Ins]   | POW-KEY-INSERT                        |
| [Left arrow]  | POW-KEY-LEFT                          |
| [Left Windows Key]  | POW-KEY-LWIN                          |
| [Num Lock]  | POW-KEY-NUMLOCK                       |
| [Numeric pad * ]  | POW-KEY-MULTIPLY                      |
| [Numeric pad . ]  | POW-KEY-DECIMAL                       |
| [Numeric pad / ]  | POW-KEY-DIVIDE                        |
| [Numeric pad - ]  | POW-KEY-SUBTRACT                      |
| [Numeric pad + ]  | POW-KEY-ADD                           |
| [Numeric Pad 0] to<br>[Numeric Pad 9]                                   | POW-KEY-NUMPAD0 to<br>POW-KEY-NUMPAD9 |
| [Page Down]   | POW-KEY-NEXT                          |
| [Page Up]   | POW-KEY-PRIOR                         |
| [Pause]   | POW-KEY-PAUSE                         |
| [Print Screen]  | POW-KEY-SNAPSHOT                      |
| [Right arrow]   | POW-KEY-RIGHT                         |
| [Right Windows Key]   | POW-KEY-RWIN                          |
| [Scroll Lock]   | POW-KEY-SCROLL                        |

| <b>Key</b> | <b>Constant</b> |
|------------|-----------------|
| [Shift]    | POW-KEY-SHIFT   |
| [Space]    | POW-KEY-SPACE   |
| [Tab]      | POW-KEY-TAB     |
| [Up arrow] | POW-KEY-UP      |

## Appendix C Data Types

Because PowerCOBOL is designed to comply with the Component Object Model (COM) most properties and parameters are defined in terms of an OLE (Object Linking and Embedding) data type. Within this help system COBOL equivalents are always given first. The descriptions below provide fuller details of each of the OLE data types.

Note: The COBOL equivalents indicate only the standard definitions that correspond to the OLE VT data types. In some cases you may want to use more digits than provided in the COBOL definition, in which case you should define more digits in the PICTURE string. For example, OLE\_COLOR has 4 bytes numeric with a COBOL equivalent of S9(9) COMP-5; however, the system color may contain 10 digits. In this case you would define the COBOL data as S9(10) COMP-5 - although this allocates 8 bytes of memory the higher 4 bytes are always zero so the item still maps to OLE\_COLOR.

The following data types are used in objects provided by PowerCOBOL:

| OLE Data Type | Description  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
|---------------|--|----|-------------|----|---------|----|------------------|----|--------------------|----|----------|----|-------------------|----|--------------|----|-----------|----|-------------|----|-----------------------|----|----------------------|----|------------------------|----|-----------------------|----|-----------|----|------------------|----|----------------|
| VT_I2         | A two byte numeric.<br>COBOL equivalent:S9(4) COMP-5   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| VT_I4         | A four byte numeric.<br>COBOL equivalent:S9(9) COMP-5  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| OLE_COLOR     | <p>A four byte number defining a color.<br/>COBOL equivalent:S9(9) COMP-5</p> <p>The hexadecimal value of the four bytes (in the COMP-5 reverse order) is: X"rrggbbss"</p> <p>When ss (the most significant byte) is X"00", "rr" is Red, "gg" is Green, "bb" is Blue.</p> <p>When ss is X"80", "rr" contains a value indicating the system color value (listed below), and "gg" and "bb" should be zero.</p> <p>Therefore, PowerCOBOL supports:<br/>X"rrggbb00" (rr: Red, gg: Green, bb: Blue)<br/>or<br/>X"rr000080" (rr: as listed below)</p> <table border="1"> <tbody> <tr><td>00</td><td>Scroll bars</td></tr> <tr><td>01</td><td>Desktop</td></tr> <tr><td>02</td><td>Active title bar</td></tr> <tr><td>03</td><td>Inactive title bar</td></tr> <tr><td>04</td><td>Menu bar</td></tr> <tr><td>05</td><td>Window background</td></tr> <tr><td>06</td><td>Window frame</td></tr> <tr><td>07</td><td>Menu text</td></tr> <tr><td>08</td><td>Window text</td></tr> <tr><td>09</td><td>Active title bar text</td></tr> <tr><td>0A</td><td>Active window border</td></tr> <tr><td>0B</td><td>Inactive window border</td></tr> <tr><td>0C</td><td>Application workspace</td></tr> <tr><td>0D</td><td>Highlight</td></tr> <tr><td>0E</td><td>Highlighted text</td></tr> <tr><td>0F</td><td>Button surface</td></tr> </tbody> </table> | 00 | Scroll bars | 01 | Desktop | 02 | Active title bar | 03 | Inactive title bar | 04 | Menu bar | 05 | Window background | 06 | Window frame | 07 | Menu text | 08 | Window text | 09 | Active title bar text | 0A | Active window border | 0B | Inactive window border | 0C | Application workspace | 0D | Highlight | 0E | Highlighted text | 0F | Button surface |
| 00            | Scroll bars  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 01            | Desktop  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 02            | Active title bar   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 03            | Inactive title bar   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 04            | Menu bar   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 05            | Window background  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 06            | Window frame   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 07            | Menu text  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 08            | Window text  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 09            | Active title bar text  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 0A            | Active window border   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 0B            | Inactive window border   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 0C            | Application workspace  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 0D            | Highlight  |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 0E            | Highlighted text   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |
| 0F            | Button surface   |    |             |    |         |    |                  |    |                    |    |          |    |                   |    |              |    |           |    |             |    |                       |    |                      |    |                        |    |                       |    |           |    |                  |    |                |

| OLE Data Type | Description   |                         |
|---------------|---|-------------------------|
|               | 10  | Button shadow           |
|               | 11  | Disabled text           |
|               | 12  | Button text             |
|               | 13  | Inactive title bar text |
|               | 14  | Button highlight        |
|               | 15  | Button dark shadow      |
|               | 16  | Button light shadow     |
|               | 17  | Tool tip text           |
|               | 18  | Tool tip background     |
|               | <p>You can set colors by using the color constants defined in PowerCOBOL (see "Appendix A. Color Constants" for details) or by coding the following in COBOL:</p> <pre> 01 COLOR-VALUE PIC S9(9) COMP-5. 01 COLOR REDEFINES COLOR-VALUE PIC X(4). *&gt; Make the text color blue. MOVE X"0000FF00" TO COLOR. MOVE COLOR-VALUE TO "ForeColor" OF StaticText1. *&gt; Make the character background red. MOVE 255 TO "HighlightColor" OF StaticText1. *&gt; Make the background color the button surface color. MOVE X"0F000080" TO COLOR. MOVE COLOR-VALUE TO "BackColor" OF StaticText1. </pre> <p>Notes:</p> <p>The byte order is reversed on Intel 80x86 processors - hence the hex values in the above examples.</p> <p>You cannot store system color values in PIC S9(9) COMP-5 item because of decimal truncation. X"80xxxxxx" is equivalent to a 10 digit decimal number. Therefore, if you want to store a system color in a COBOL data item (e.g. in WORKING-STORAGE) you need to define it as PIC S9(10) COMP-5. This is not an issue if you move hex values to PowerCOBOL properties such as the ForeColor property.</p> |                         |
| VT_BOOL       | <p>A number indicating a True or False value.</p> <p>Convention is that any non-zero value indicates True, zero indicates False. Generally -1 is used for the True value.</p> <p>COBOL equivalent:S9(9) COMP-5</p> <p>See "Appendix D. Boolean Constants" for constants to set and test VT_BOOL items.</p>  |                         |
| VT_BSTR       | <p>A character string.</p> <p>COBOL equivalent:X(8192)<br/>(or an alphanumeric field up to 8192 bytes long)</p>   |                         |
| VT_CY         | <p>Fixed point number.</p> <p>COBOL equivalent:S9(14)V9(4)</p>  |                         |

| OLE Data Type      | Description  |
|--------------------|--|
|                    | The value of VT_CY can be between -922337203685477.5808 and 922337203685477.5807. (the integer part can be 15 digits and the decimal part can be 4 digits) |
| VT_R4              | A four-byte floating-point number.<br>COBOL equivalent:COMP-1.   |
| VT_R8              | An eight byte floating-point number.<br>COBOL equivalent:COMP-2  |
| OLE_????_CONTAINER | Floating point number converted according to the coordinate system of the container.<br>"???" can be XPOS, YPOS, XSIZE, YSIZE.<br>COBOL equivalent:COMP-1  |
| OLE_????_PIXELS    | A four byte numeric containing coordinates in pixels. "???" can be XPOS, YPOS, XSIZE, YSIZE.<br>COBOL equivalent: S9(9) COMP-5                             |
| OLE_????_HIMETRIC  | A four byte numeric containing coordinates by the himetric (1/100 mm).<br>"???" can be XPOS, YPOS, XSIZE, YSIZE.<br>COBOL equivalent: S9(9) COMP-5         |
| VT_DISPATCH        | A pointer to an object.<br>COBOL equivalent:OBJECT REFERENCE   |



## Appendix D Constants for VT\_BOOL

PowerCOBOL provides the following constants that you can use to set the values of properties having the OLE data type "VT\_BOOL":

POW-TRUE : True (-1)

POW-FALSE: False (0)

Although PowerCOBOL follows the convention that -1 is used for True, the general definition of the VT\_BOOL quantity simply states that zero is False and non-zero is True.

When you set a property, it is recommended that you use POW-TRUE for true and POW-FALSE for False. However, when you test a VT\_BOOL item only use POW-FALSE (because POW-TRUE is equivalent to using the numeric literal -1).

For example, if you want to test whether a property is True, code:

```
IF "Visible" OF StaticText1 NOT = POW-FALSE THEN
    MOVE "Visible" TO "Caption" OF StaticText1
END-IF
```

## Appendix E Property and Parameter Constants

PowerCOBOL provides you with a number of constants that you can use to set properties or parameters, rather than using numeric literals or defining your own constants.

These constants are listed below in alphabetical order of the property or parameter to which they apply. Table E.1 provides a list of all the properties and parameters for which constants are provided and listed in this appendix.

The constants are then listed, in the order of the properties and parameters listed in Table E.1.

Table E.1 List of Properties and Parameters that have PowerCOBOL Constants

|   |   |
|---|---|
| AccessMode Property                                 | MenuBreak Property                      |
| adReason Parameter (ADODataSource)                  | MouseButton Parameter                   |
| adStatus Parameter (ADODataSource)                  | MousePointer Property                   |
| Align Property                                      | MultiSelect Property (FileList/ListBox) |
| Alignment Property (CheckBox, OptionButton)         | OptionButtonClickMode                   |
| Alignment Property (Frame)                          | Orientation Property (Others)           |
| Alignment Property (Frame, StaticText, TableColumn) | Orientation Property (Tab)              |
| Alignment Property (TextBox, Column)                | PageNoFormat Property                   |
| Appearance Property                                 | PaperOrientation Property               |
| Arrange Property                                    | PaperScaleUnit Property                 |
| BackStyle Property (Shape)                          | PaperType Property                      |
| BackStyle Property (Shape, TextBox, Others)         | PcdColorType Property                   |
| BorderStyle Property (Form)                         | PcdResolution Property                  |
| BorderStyle Property (Frame/Shape/Others)           | RenderStyle Property                    |
| BorderStyle Property (Shape)                        | ScaleMode Property                      |
| ColorMap Property                                   | ScaleModeIn/ScaleModeOut Parameters     |
| CommandButtonFunctionKeyMode                        | ScaleMode Parameters                    |
| CommandType Property                                | ScalingStyle Property                   |
| CommitMode Property                                 | ShapeStyle Property                     |
| ConcurrencyCursor Property                          | ShiftState Parameter                    |
| ConnectMode Property                                | SortKind Property                       |
| CursorLocation Property                             | SortOrder Property                      |
| CursorType Property (ADODataSource)                 | Source Property                         |
| CursorType Property (DBAccess)                      | StartUpPosition Property                |
| DateStyle Property                                  | Style Property (Button)                 |
| DDEDataStyle Property                               | Style Property (ComboBox)               |
| DDELinkStyle Property                               | Style Property (Tab)                    |
| DisabledFocusAction Property                        | Style Property (Toolbar)                |
| DisabledImageType Property                          | TabWidthStyle Property                  |
| EdgeStyle Property                                  | TargetType Property                     |
| FileType Property                                   | TextCase Property                       |
| FillStyle Property                                  | TickStyle Property                      |
| FrameStyle Property                                 | TimeFormat Property                     |

|                     |                           |
|---------------------|---------------------------|
| GraphStyle Property | TVLineStyle Property      |
| Icon Property       | TVStyle Property          |
| ImageMode Property  | Value Property (CheckBox) |
| IMEMode Property    | Weight Property           |
| Layout Property     | WindowAdjustment Property |
| LockType Property   | WindowState Property      |
| LVStyle Property    | Zorder Method             |

## E.1 AccessMode Property

---

| Value          | Constant         |
|----------------|------------------|
| 0 - Read-Write | POW-DB-READWRITE |
| 1 - ReadOnly   | POW-DB-READONLY  |

## E.2 adReason Parameter (Events of the ADODataSource Control)

---

| Value   | Constant                    |
|---|-----------------------------|
| An operation added a new record.  | POW-ADODB-ADRSNADDNEW       |
| An operation deleted a record.  | POW-ADODB-ADRSNDELETE       |
| An operation closed the ADO recordset object.   | POW-ADODB-ADRSNCLOSE        |
| An operation made the first change to a record.   | POW-ADODB-ADRSNFIRSTCHANGE  |
| An operation moved the record pointer within the ADO recordset object.                    | POW-ADODB-ADRSNMOVE         |
| An operation moved the record pointer to the first record in the ADO recordset object.    | POW-ADODB-ADRSNMOVEFIRST    |
| An operation moved the record pointer to the last record in the ADO recordset object.     | POW-ADODB-ADRSNMOVELAST     |
| An operation moved the record pointer to the next record in the ADO recordset object.     | POW-ADODB-ADRSNMOVENEXT     |
| An operation moved the record pointer to the previous record in the ADO recordset object. | POW-ADODB-ADRSNMOVEPREVIOUS |
| An operation required the ADO recordset object.   | POW-ADODB-ADRSNREQUERY      |
| An operation resynchronized the ADO recordset object with the database.                   | POW-ADODB-ADRSNRESYNCH      |
| An operation reversed the addition of a new record.                                       | POW-ADODB-ADRSNUNDOADDNEW   |
| An operation reversed the deletion of a record.   | POW-ADODB-ADRSNUNDODELETE   |
| An operation reversed the update of a record.   | POW-ADODB-ADRSNUNDOUPDATE   |
| An operation updated an existing record.  | POW-ADODB-ADRSNUPDATE       |

## E.3 adStatus Parameter (Events of the ADODataSource Control)

---

| Value  | Constant                         |
|--|----------------------------------|
| Requests cancellation of the operation that caused the event to occur.                       | POW-ADODB-ADSTATUSCANCEL         |
| Indicates that the operation cannot request cancellation of the pending operation.           | POW-ADODB-ADSTATUSCANTDENY       |
| Indicates that the operation that caused the event failed due to an error or errors.         | POW-ADODB-ADSTATUSERRORSOCCURRED |
| Indicates that the operation that caused the event was successful.                           | POW-ADODB-ADSTATUSOK             |
| Requests to prevent subsequent notifications before the event method has finished executing. | POW-ADODB-ADSTATUSUNWANTEDEVENT  |

## E.4 Align Property

---

| Value      | Constant        |
|------------|-----------------|
| 0 - None   | POW-ALIGNNONE   |
| 1 - Top    | POW-ALIGNTOP    |
| 2 - Bottom | POW-ALIGNBOTTOM |
| 3 - Left   | POW-ALIGNLEFT   |
| 4 - Right  | POW-ALIGNRIGHT  |

## E.5 Alignment Property (CheckBox, OptionButton)

---

| Value     | Constant                   |
|-----------|----------------------------|
| 0 - Left  | POW-CAPTIONALIGNMENT-LEFT  |
| 1 - Right | POW-CAPTIONALIGNMENT-RIGHT |

## E.6 Alignment Property (Column, TextBox )

---

| Value      | Constant                 |
|------------|--------------------------|
| 0 - Left   | POW-TEXTALIGNMENT-LEFT   |
| 1 - Center | POW-TEXTALIGNMENT-CENTER |
| 2 - Right  | POW-TEXTALIGNMENT-RIGHT  |

## E.7 Alignment Property (Frame)

---

| Value     | Constant           |
|-----------|--------------------|
| 99 - Auto | POW-ALIGNMENT-AUTO |

## E.8 Alignment Property (Frame, StaticText, TableColumn)

---

| Value           | Constant                 |
|-----------------|--------------------------|
| 0 - Top/Left    | POW-ALIGNMENT-TOPLEFT    |
| 1 - Top/HCenter | POW-ALIGNMENT-TOPHCENTER |

| Value               | Constant                     |
|---------------------|------------------------------|
| 2 - Top/Right       | POW-ALIGNMENT-TOPRIGHT       |
| 4 - VCenter/Left    | POW-ALIGNMENT-VCENTERLEFT    |
| 5 - VCenter/HCenter | POW-ALIGNMENT-VCENTERHCENTER |
| 6 - VCenter/Right   | POW-ALIGNMENT-VCENTERRIGHT   |
| 8 - Bottom/Left     | POW-ALIGNMENT-BOTTOMLEFT     |
| 9 - Bottom/HCenter  | POW-ALIGNMENT-BOTTOMHCENTER  |
| 10 - Bottom/Right   | POW-ALIGNMENT-BOTTOMRIGHT    |

## E.9 Appearance Property

---

| Value    | Constant            |
|----------|---------------------|
| 0 - Flat | POW-APPEARANCE-FLAT |
| 1 - 3D   | POW-APPEARANCE-3D   |

## E.10 Arrange Property

---

| Value    | Constant        |
|----------|-----------------|
| 0 - None | POW-LVICON-AUTO |
| 1 - Left | POW-LVICON-LEFT |
| 2 - Top  | POW-LVICON-TOP  |

## E.11 BackStyle Property (Shape)

---

| Value                | Constant                  |
|----------------------|---------------------------|
| 2 - Half transparent | POW-BACKSTYLE-TRANSLUCENT |

## E.12 BackStyle Property (Shape, TextBox, Others)

---

| Value           | Constant                  |
|-----------------|---------------------------|
| 0 - Transparent | POW-BACKSTYLE-TRANSPARENT |
| 1 - Opaque      | POW-BACKSTYLE-OPAQUE      |

## E.13 BorderStyle Property (Form)

---

| Value             | Constant                |
|-------------------|-------------------------|
| 0 - Variable      | POW-BORDER-VARIABLE     |
| 1 - Fixed         | POW-BORDER-FIXED        |
| 2 - Dialog Frame  | POW-BORDER-DIALOG       |
| 3 - Variable Tool | POW-BORDER-VARIABLETOOL |
| 4 - Fixed Tool    | POW-BORDER-FIXEDTOOL    |
| 5 - No Frame      | POW-BORDER-NOFRAME      |

## E.14 BorderStyle Property (Frame/Shape/Others)

---

| Value     | Constant         |
|-----------|------------------|
| 0 - None  | POW-BORDER-NONE  |
| 1 - Solid | POW-BORDER-SOLID |

## E.15 BorderStyle Property (Shape)

---

| Value               | Constant              |
|---------------------|-----------------------|
| 2 - Dash            | POW-BORDER-DASH       |
| 3 - Dot             | POW-BORDER-DOT        |
| 4 - Dash dot        | POW-BORDER-DASHDOT    |
| 5 - Dash double dot | POW-BORDER-DASHDOTDOT |
| 6 - InsideFrame     | POW-BORDER-INSIDEFAME |

## E.16 ColorMap Property

---

| Value    | Constant         |
|----------|------------------|
| 0 - No   | POW-COLOMAP-NO   |
| 1 - Back | POW-COLOMAP-BACK |
| 2 - All  | POW-COLOMAP-ALL  |

## E.17 CommandButtonFunctionKeyMode

---

| Value                                  | Constant                   |
|--|----------------------------|
| 0 - Normal                             | POW-FUNCTIONKEYMODE-NORMAL |
| 1 - Set focus to CommandButton control | POW-FUNCTIONKEYMODE-FOCUS  |

## E.18 CommandType Property

---

| Value               | Constant                  |
|---------------------|---------------------------|
| 1 - adCmdText       | POW-ADODB-ADCMDTEXT       |
| 2 - adCmdTable      | POW-ADODB-ADCMDTABLE      |
| 4 - adCmdStoredProc | POW-ADODB-ADCMDSTOREDPROC |
| 8 - adCmdUnknown    | POW-ADODB-ADCMDUNKNOWN    |

## E.19 CommitMode Property

---

| Value         | Constant           |
|---------------|--------------------|
| 0 - Automatic | POW-DBCMMIT-AUTO   |
| 1 - Manual    | POW-DBCMMIT-MANUAL |

## E.20 ConcurrencyCursor Property

---

| Value                     | Constant                |
|---------------------------|-------------------------|
| 1 - SQL_CONCUR_READ_ONLY  | POW-DBCONCUR-READONLY   |
| 2 - SQL_CONCUR_LOCK       | POW-DBCONCUR-LOCK       |
| 3 - SQL_CONCUR_OPT_ROWVER | POW-DBCONCUR-OPTRROWVER |
| 4 - SQL_CONCUR_OPT_VALUES | POW-DBCONCUR-OPTVALUES  |

## E.21 ConnectMode Property

---

| Value                     | Constant                       |
|---------------------------|--------------------------------|
| 0 - adModeUnknown         | POW-ADODB-ADMODEUNKNOWN        |
| 1 - adModeRead            | POW-ADODB-ADMODEREAD           |
| 2 - adModeWrite           | POW-ADODB-ADMODEWRITE          |
| 3 - adModeReadWrite       | POW-ADODB-ADMODEREADWRITE      |
| 4 - adModeShareDenyRead   | POW-ADODB-ADMODESHAREDENYREAD  |
| 8 - adModeShareDenyWrite  | POW-ADODB-ADMODESHAREDENYWRITE |
| 12 - adModeShareExclusive | POW-ADODB-ADMODESHAREEXCLUSIVE |
| 16 - adModeShareDenyNone  | POW-ADODB-ADMODESHAREDENYNONE  |

## E.22 CursorLocation Property

---

| Value            | Constant               |
|------------------|------------------------|
| 2 - adUserServer | POW-ADODB-ADUSERSERVER |
| 3 - adUserClient | POW-ADODB-ADUSERCLIENT |

## E.23 CursorType Property (ADODDataSource)

---

| Value             | Constant                |
|-------------------|-------------------------|
| 1 - adOpenKeyset  | POW-ADODB-ADOPENKEYSET  |
| 2 - adOpenDynamic | POW-ADODB-ADOPENDYNAMIC |
| 3 - adOpenStatic  | POW-ADODB-ADOPENSTATIC  |

## E.24 CursorType Property (DBAccess)

---

| Value                        | Constant                  |
|------------------------------|---------------------------|
| 0 - SQL_CURSOR_FORWARD_ONLY  | POW-DBCURSOR-FORWARDONLY  |
| 1 - SQL_CURSOR_KEYSET_DRIVEN | POW-DBCURSOR-KEYSETDRIVEN |
| 2 - SQL_CURSOR_DYNAMIC       | POW-DBCURSOR-DYNAMIC      |
| 3 - SQL_CURSOR_STATIC        | POW-DBCURSOR-STATIC       |

## E.25 DateStyle Property

---

| Value             | Constant                      |
|-------------------|-------------------------------|
| 0 - Month dd yyyy | POW-DATESTYLE-MONTHDDYYYY     |
| 1 - yyyy/MM/dd    | POW-DATESTYLE-YYYYMMDD-SLASH  |
| 2 - yyyy.MM.dd    | POW-DATESTYLE-YYYYMMDD-PERIOD |
| 3 - MM/dd/yyyy    | POW-DATESTYLE-MMDDYYYY-SLASH  |
| 4 - MM.dd.yyyy    | POW-DATESTYLE-MMDDYYYY-PERIOD |
| 5 - Mon dd yyyy   | POW-DATESTYLE-MONDDYYYY       |
| 99 - Custom       | POW-DATESTYLE-CUSTOM          |

## E.26 DDEDataStyle Property

---

| Value       | Constant      |
|-------------|---------------|
| 10 - Text   | POW-DDETEXT   |
| 11 - Binary | POW-DDEBINARY |

## E.27 DDELinkStyle Property

---

| Value         | Constant        |
|---------------|-----------------|
| 1 - Hot Link  | POW-DDEHOTLINK  |
| 2 - Worm Link | POW-DDEWARMLINK |

## E.28 DisabledFocusAction Property

---

| Value                          | Constant                  |
|--------------------------------|---------------------------|
| 0 - Normal                     | POW-DFA-NORMAL            |
| 1 - Ignore option button value | POW-DFA-IGNOREOPTIONVALUE |

## E.29 DisabledImageType Property

---

| Value      | Constant                 |
|------------|--------------------------|
| 0 - None   | POW-DISABLEDIMAGE-NONE   |
| 1 - Simple | POW-DISABLEDIMAGE-SIMPLE |
| 2 - 3D     | POW-DISABLEDIMAGE-3D     |

## E.30 EdgeStyle Property

---

| Value            | Constant            |
|------------------|---------------------|
| 0 - Bump         | POW-EDGEBUMP        |
| 1 - Etched       | POW-EDGEETCHED      |
| 2 - Raised       | POW-EDGERAISED      |
| 3 - Sunken       | POW-EDGESUNKEN      |
| 4 - Raised Light | POW-EDGERAISEDLIGHT |



| Value            | Constant            |
|------------------|---------------------|
| 5 - Sunken Light | POW-EDGESUNKENLIGHT |

### E.31 FileType Property

---

| Value                   | Constant                 |
|-------------------------|--------------------------|
| 0 - Standard Text File  | POW-FILETYPE-NORECORD    |
| 1 - CSV Format          | POW-FILETYPE-CSV         |
| 2 - Fixed Length Format | POW-FILETYPE-FIXEDLENGTH |

### E.32 FillStyle Property

---

| Value                 | Constant                 |
|-----------------------|--------------------------|
| 0 - None              | POW-FILLSTYLE-NONE       |
| 1 - Solid             | POW-FILLSTYLE-SOLID      |
| 2 - Horizontal        | POW-FILLSTYLE-HORIZONTAL |
| 3 - Vertical          | POW-FILLSTYLE-VERTICAL   |
| 4 - Backward diagonal | POW-FILLSTYLE-BDIAGONAL  |
| 5 - Forward diagonal  | POW-FILLSTYLE-FDIAGONAL  |
| 6 - Cross             | POW-FILLSTYLE-CROSS      |
| 7 - Diagonal cross    | POW-FILLSTYLE-DIAGONAL   |

### E.33 FrameStyle Property

---

| Value        | Constant           |
|--------------|--------------------|
| 0 - GroupBox | POW-FRAME-GROUPBOX |
| 1 - Panel    | POW-FRAME-PANEL    |

### E.34 GraphStyle Property

---

| Value              | Constant                     |
|--------------------|------------------------------|
| 0 - Vertical Bar   | POW-GRAPHSTYLE-VERTICALBAR   |
| 1 - Horizontal Bar | POW-GRAPHSTYLE-HORIZONTALBAR |
| 2 - Line           | POW-GRAPHSTYLE-LINE          |
| 3 - Pie            | POW-GRAPHSTYLE-PIE           |

### E.35 Icon Property

---

| Value           | Constant             |
|-----------------|----------------------|
| 0 - Default     | POW-ICON-DEFAULT     |
| 1 - Application | POW-ICON-APPLICATION |
| 2 - Hand        | POW-ICON-HAND        |

| Value           | Constant             |
|-----------------|----------------------|
| 3 - Question    | POW-ICON-QUESTION    |
| 4 - Exclamation | POW-ICON-EXCLAMATION |
| 5 - Asterisk    | POW-ICON-ASTERISK    |
| 6 - Winlogo     | POW-ICON-WINLOGO     |
| 99 - Custom     | POW-ICON-CUSTOM      |

## E.36 ImageMode Property

---

| Value        | Constant               |
|--------------|------------------------|
| 0 - Standard | POW-IMAGEMODE-STANDARD |
| 1 - Stretch  | POW-IMAGEMODE-STRETCH  |
| 2 - Auto     | POW-IMAGEMODE-AUTO     |
| 3 - Adjust   | POW-IMAGEMODE-ADJUST   |

## E.37 IMEMode Property

---

| Value             | Constant            |
|-------------------|---------------------|
| 0 - None          | POW-IMENOOOPERATION |
| 1 - On            | POW-IMEON           |
| 2 - Off           | POW-IMEOFF          |
| 3 - Disable       | POW-IMEDISABLE      |
| 4 - Hiragana Full | POW-IMEDBCSHIRAGANA |
| 5 - Katakana Full | POW-IMEDBCSKATAKANA |
| 6 - Katakana Half | POW-IMESBCSKATAKANA |
| 7 - Alphabet Full | POW-IMEDBCSALPHABET |
| 8 - Alphabet Half | POW-IMESBCSALPHABET |

## E.38 Layout Property

---

| Value          | Constant              |
|----------------|-----------------------|
| 0 - Horizontal | POW-LAYOUT-HORIZONTAL |
| 1 - Vertical   | POW-LAYOUT-VERTICAL   |

## E.39 LockType Property

---

| Value                     | Constant                        |
|---------------------------|---------------------------------|
| -1 - adLockUnspecified    | POW-ADODB-ADLOCKSPECIFIED       |
| 1 - adLockReadOnly        | POW-ADODB-ADLOCKREADONLY        |
| 2 - adLockPessimistic     | POW-ADODB-ADLOCKPESSIMISTIC     |
| 3 - adLockOptimistic      | POW-ADODB-ADLOCKOPTIMISTIC      |
| 4 - adLockBatchOptimistic | POW-ADODB-ADLOCKBATCHOPTIMISTIC |

## E.40 LVStyle Property

---

| Value          | Constant              |
|----------------|-----------------------|
| 0 - Large Icon | POW-LVSTYLE-LARGEICON |
| 1 - Small Icon | POW-LVSTYLE-SMALLICON |
| 2 - List       | POW-LVSTYLE-LIST      |
| 3 - Report     | POW-LVSTYLE-REPORT    |

## E.41 MenuBreak Property

---

| Value             | Constant     |
|-------------------|--------------|
| 0 - Not MenuBreak | POW-NOBREAK  |
| 1 - MenuBreak     | POW-BREAK    |
| 2 - MenuBarBreak  | POW-BARBREAK |

## E.42 MouseButton Parameter (MouseDown, MouseMove, MouseUp events)

---

| Value             | Constant          |
|-------------------|-------------------|
| 1 - Left button   | POW-MOUSE-LBUTTON |
| 2 - Right button  | POW-MOUSE-RBUTTON |
| 3 - Middle button | POW-MOUSE-MBUTTON |

[Mouse Left button]      POW-KEY-LBUTTON      Same as POW-MOUSE-LBUTTON  
[Mouse Right button]      POW-KEY-RBUTTON      Same as POW-MOUSE-RBUTTON  
[Mouse Middle button]      POW-KEY-MBUTTON      Same as POW-MOUSE-MBUTTON

## E.43 MousePointer Property

---

| Value        | Constant        |
|--------------|-----------------|
| 0 - Default  | POW-MP-DEFAULT  |
| 1 - Arrow    | POW-MP-ARROW    |
| 2 - Cross    | POW-MP-CROSS    |
| 3 - Ibeam    | POW-MP-IBEAM    |
| 4 - Icon     | POW-MP-ICON     |
| 5 - Size     | POW-MP-SIZE     |
| 6 - SizeNESW | POW-MP-SIZENESW |
| 7 - SizeNS   | POW-MP-SIZENS   |
| 8 - SizeNWSE | POW-MP-SIZENWSE |
| 9 - SizeWE   | POW-MP-SIZEWE   |
| 10 - UpArrow | POW-MP-UPARROW  |
| 11 - Wait    | POW-MP-WAIT     |

| Value            | Constant           |
|------------------|--------------------|
| 12 - AppStarting | POW-MP-APPSTARTING |
| 13 - No          | POW-MP-NO          |
| 14 - SizeAll     | POW-MP-SIZEALL     |
| 15 - Help        | POW-MP-HELP        |
| 99 - Custom      | POW-MP-CUSTOM      |

## E.44 MultiSelect Property (FileList/ListBox)

---

| Value               | Constant                 |
|---------------------|--------------------------|
| 0 - Single select   | POW-MULTISELECT-NONE     |
| 1 - Multiple select | POW-MULTISELECT-SIMPLE   |
| 2 - Extended select | POW-MULTISELECT-EXTENDED |

## E.45 OptionButtonClickMode Property

---

| Value                           | Constant                  |
|---------------------------------|---------------------------|
| 0 - Normal                      | POW-CLICKMODE-NORMAL      |
| 1 - When left button is pressed | POW-CLICKMODE-LBUTTONDOWN |

## E.46 Orientation Property (Others)

---

| Value          | Constant                   |
|----------------|----------------------------|
| 0 - Horizontal | POW-ORIENTATION-HORIZONTAL |
| 1 - Vertical   | POW-ORIENTATION-VERTICAL   |

## E.47 Orientation Property (Tab)

---

| Value      | Constant                   |
|------------|----------------------------|
| 0 - Top    | POW-TAB-ORIENTATION-TOP    |
| 1 - Bottom | POW-TAB-ORIENTATION-BOTTOM |
| 2 - Left   | POW-TAB-ORIENTATION-LEFT   |
| 3 - Right  | POW-TAB-ORIENTATION-RIGHT  |

## E.48 PageNoFormat Property

---

| Value          | Constant        |
|----------------|-----------------|
| 0 - None       | POW-NOPAGENO    |
| 1 - Page       | POW-CURRENTPAGE |
| 2 - Page/Total | POW-CURRENTTOT  |

## E.49 PaperOrientation Property

---

| Value         | Constant               |
|---------------|------------------------|
| 0 - Auto      | POW-DEFAULTORIENTATION |
| 1 - Portrait  | POW-PORTRAIT           |
| 2 - Landscape | POW-LANDSCAPE          |

## E.50 PaperScaleUnit Property

---

| Value    | Constant |
|----------|----------|
| 0 - mm   | POW-MM   |
| 1 - Inch | POW-INCH |

## E.51 PaperType Property

---

| Value                                    | Constant        |
|--|-----------------|
| 0 - Auto                                 | POW-DEFAULTSIZE |
| 1 - Letter 216x279 mm/Letter 8.5x11 inch | POW-PAPERLETTER |
| 5 - Legal 216x356 mm/Legal 8.5x14 inch   | POW-PAPERLEGAL  |
| 8 - A3 297x420 mm/A3 11.5x16.5 inch      | POW-PAPERA3     |
| 9 - A4 210x297 mm/A4 8.2x11.5 inch       | POW-PAPERA4     |
| 11 - A5 148x210 mm/5.8x8.2 inch          | POW-PAPERA5     |
| 12 - B4 257x364 mm/10x14.3 inch          | POW-PAPERB4     |
| 13 - B5 182x257 mm/7x10 inch             | POW-PAPERB5     |

## E.52 PcdColorType Property

---

| Value                    | Constant                    |
|--------------------------|-----------------------------|
| 0 - 24bit color          | POW-PCDCOLORTYPE-24BITCOLOR |
| 1 - 256 color            | POW-PCDCOLORTYPE-256COLOR   |
| 2 - 16 color             | POW-PCDCOLORTYPE-16COLOR    |
| 3 - 256 gray scale color | POW-PCDCOLORTYPE-256GRAY    |

## E.53 PcdResolution Property

---

| Value                        | Constant                       |
|------------------------------|--------------------------------|
| 0 - BASE_OVER_64 (64 x 96)   | POW-PCDRESOLUTION-BASE-OVER-64 |
| 1 - BASE_OVER_16 (128 x 192) | POW-PCDRESOLUTION-BASE-OVER-16 |
| 2 - BASE_OVER_4 (256 x 384)  | POW-PCDRESOLUTION-BASE-OVER-4  |
| 3 - BASE (512 x 768)         | POW-PCDRESOLUTION-BASE         |
| 4 - 4BASE (1024 x 1526)      | POW-PCDRESOLUTION-4BASE        |
| 5 - 16BASE (2048 x 3072)     | POW-PCDRESOLUTION-16BASE       |

## E.54 RenderStyle Property

---

| Value             | Constant                     |
|-------------------|------------------------------|
| 0 - Standard      | POW-RENDERSTYLE-STANDARD     |
| 1 - COBOL PICTURE | POW-RENDERSTYLE-COBOLPICTURE |
| 2 - Date          | POW-RENDERSTYLE-DATE         |

## E.55 ScaleMode Property

**ScaleModeIn/ScaleModeOut Parameters (ConvertScale method),**  
**ScaleMode Parameters (GetScreenSize/GetWorkArea methods)**

---

| Value          | Constant           |
|----------------|--------------------|
| 0 - Pixels     | POW-SCALEPIXELS    |
| 1 - 1/100mm    | POW-SCALEHIMETRIC  |
| 2 - 1/1000inch | POW-SCALEHIENGLISH |
| 3 - 1/20Points | POW-SCALETWIPS     |

## E.56 ScalingStyle Property

---

| Value                                      | Constant                     |
|--|------------------------------|
| 0 - None                                   | POW-SCALING-NONE             |
| 1 - Resize only                            | POW-SCALING-SIZE             |
| 2 - Reposition only                        | POW-SCALING-POSITION         |
| 3 - Resize and reposition                  | POW-SCALING-SIZEPOSITION     |
| 5 - Resize with resize font                | POW-SCALING-SIZEFONT         |
| 7 - Resize and reposition with resize font | POW-SCALING-SIZEPOSITIONFONT |

## E.57 ShapeStyle Property

---

| Value         | Constant                 |
|---------------|--------------------------|
| 0 - Rectangle | POW-SHAPESTYLE-RECTANGLE |
| 1 - Square    | POW-SHAPESTYLE-SQUARE    |
| 2 - Circle    | POW-SHAPESTYLE-CIRCLE    |
| 3 - Ellipse   | POW-SHAPESTYLE-ELLIPSE   |

## E.58 ShiftState Parameter (KeyDown, KeyUp, PreKeyDown, PreKeyUp, MouseDown, MouseMove, MouseUp events)

---

| Value     | Constant             |
|-----------|----------------------|
| 1 - Shift | POW-SHIFTSTATE-SHIFT |

| Value    | Constant            |
|----------|---------------------|
| 2 - Ctrl | POW-SHIFTSTATE-CTRL |
| 4 - Alt  | POW-SHIFTSTATE-ALT  |

## E.59 SortKind Property

---

| Value       | Constant             |
|-------------|----------------------|
| 0 - Text    | POW-SORTKIND-TEXT    |
| 1 - Numeric | POW-SORTKIND-NUMERIC |

## E.60 SortOrder Property

---

| Value          | Constant           |
|----------------|--------------------|
| 0 - None       | POW-SORTORDER-NONE |
| 1 - Ascending  | POW-SORTORDER-ASC  |
| 2 - Descending | POW-SORTORDER-DESC |

## E.61 Source Property

---

| Value       | Constant                |
|-------------|-------------------------|
| 0 - Default | POW-PRINTSOURCE-DEFAULT |

## E.62 StartUpPosition Property

---

| Value               | Constant                 |
|---------------------|--------------------------|
| 0 - Auto            | POW-STARTUPPOS-AUTO      |
| 1 - Center Owner    | POW-STARTUPPOS-CENTEROWN |
| 2 - Center Screen   | POW-STARTUPPOS-CENTERSCR |
| 3 - Windows Default | POW-STARTUPPOS-DEFAULT   |
| 4 - Manual          | POW-STARTUPPOS-MANUAL    |

## E.63 Style Property (Button)

---

| Value                | Constant                      |
|----------------------|-------------------------------|
| 0 - Normal           | POW-TBAR-BTN-STYLE-NORMAL     |
| 1 - Separator        | POW-TBAR-BTN-STYLE-SEPARATOR  |
| 2 - CheckButton      | POW-TBAR-BTN-STYLE-CHECK      |
| 3 - CheckButtonGroup | POW-TBAR-BTN-STYLE-CHECKGROUP |
| 4 - DropDownButton   | POW-TBAR-BTN-STYLE-DROPDOWN   |

## E.64 Style Property (ComboBox)

---

| Value            | Constant                     |
|------------------|------------------------------|
| 0 - Simple       | POW-COMBO-STYLE-SIMPLE       |
| 1 - DropDown     | POW-COMBO-STYLE-DROPDOWN     |
| 2 - DropDownList | POW-COMBO-STYLE-DROPDOWNLIST |

## E.65 Style Property (Tab)

---

| Value       | Constant              |
|-------------|-----------------------|
| 0 - Tabs    | POW-TAB-STYLE-TABS    |
| 1 - Buttons | POW-TAB-STYLE-BUTTONS |

## E.66 Style Property (Toolbar)

---

| Value        | Constant                |
|--------------|-------------------------|
| 0 - Normal   | POW-TBAR-STYLE-NORMAL   |
| 1 - Flat     | POW-TBAR-STYLE-FLAT     |
| 2 - FlatList | POW-TBAR-STYLE-FLATLIST |

## E.67 TabWidthStyle Property

---

| Value      | Constant             |
|------------|----------------------|
| 0 - Normal | POW-TAB-STYLE-NORMAL |
| 1 - Fixed  | POW-TAB-STYLE-FIXED  |

## E.68 TargetType Property

---

| Value          | Constant                 |
|----------------|--------------------------|
| 0 - Table/View | POW-TARGETTYPE-TABLE     |
| 1 - Procedure  | POW-TARGETTYPE-PROCEDURE |

## E.69 TextCase Property

---

| Value         | Constant               |
|---------------|------------------------|
| 0 - Normal    | POW-TEXTCASE-NORMAL    |
| 1 - UpperCase | POW-TEXTCASE-UPPERCASE |
| 2 - LowerCase | POW-TEXTCASE-LOWERCASE |

## E.70 TickStyle Property

---

| Value            | Constant                  |
|------------------|---------------------------|
| 0 - No Ticks     | POW-TICKSTYLE-NOTICKS     |
| 1 - Bottom/Right | POW-TICKSTYLE-BOTTOMRIGHT |
| 2 - Top/Left     | POW-TICKSTYLE-TOPLEFT     |



| Value    | Constant           |
|----------|--------------------|
| 3 - Both | POW-TICKSTYLE-BOTH |

## E.71 TimeFormat Property

---

| Value                          | Constant                  |
|--------------------------------|---------------------------|
| 0 - Millisecond                | POW-MCIFORMATMILLISECONDS |
| 2 - Minute/second/frame        | POW-MCIFORMATMSF          |
| 3 - Frame                      | POW-MCIFORMATFRAMES       |
| 10 - Track/minute/second/frame | POW-MCIFORMATTMSF         |

## E.72 TVLineStyle Property

---

| Value         | Constant                  |
|---------------|---------------------------|
| 0 - TreeLines | POW-TVLINESTYLE-TREELINES |
| 1 - RootLines | POW-TVLINESTYLE-ROOTLINES |

## E.73 TVStyle Property

---

| Value                                     | Constant                       |
|---|--------------------------------|
| 0 - Text Only                             | POW-TVSTYLE-TEXTONLY           |
| 1 - Image and Text                        | POW-TVSTYLE-IMAGE              |
| 2 - Plus/Minus and Text                   | POW-TVSTYLE-PLUSMINUS          |
| 3 - Plus/Minus, Image and Text            | POW-TVSTYLE-PLUSMINUSIMAGE     |
| 4 - TreeLines and Text                    | POW-TVSTYLE-LINE               |
| 5 - TreeLines, Image and Text             | POW-TVSTYLE-LINEIMAGE          |
| 6 - TreeLines, Plus/Minus and Text        | POW-TVSTYLE-LINEPLUSMINUS      |
| 7 - TreeLines, Plus/Minus, Image and Text | POW-TVSTYLE-LINEPLUSMINUSIMAGE |

## E.74 Value Property (CheckBox)

---

| Value         | Constant               |
|---------------|------------------------|
| 0 - Unchecked | POW-TRISTATE-UNCHECKED |
| 1 - Checked   | POW-TRISTATE-CHECKED   |
| 2 - Gray      | POW-TRISTATE-GRAY      |

## E.75 Weight Property

---

| Value  | Constant              |
|--------|-----------------------|
| Normal | POW-FONTWEIGHT-NORMAL |
| Bold   | POW-FONTWEIGHT-BOLD   |

## E.76 WindowAdjustment Property

---

| Value                     | Constant                       |
|---------------------------|--------------------------------|
| 0 - Standard              | POW-MCIWINADJUST-STANDARD      |
| 1 - Adjust Control Window | POW-MCIWINADJUST-CONTROLWINDOW |
| 2 - Adjust Device Frame   | POW-MCIWINADJUST-DEVICEFRAME   |

## E.77 WindowState Property

---

| Value        | Constant                 |
|--------------|--------------------------|
| 0 - Normal   | POW-WINDOWSTATE-NORMAL   |
| 1 - Maximize | POW-WINDOWSTATE-MAXIMIZE |
| 2 - Minimize | POW-WINDOWSTATE-MINIMIZE |

## E.78 Zorder Method

---

| Value  | Constant         |
|--|------------------|
| 0 - Puts the control at the top of the order.    | POW-ZORDER-FRONT |
| 1 - Puts the control at the bottom of the order. | POW-ZORDER-BACK  |

## Appendix F Shortcut Keys

This appendix lists the shortcut keys available in the following areas of the development environment:

- Project Window
  - Common Operations
  - Object Tree
  - Property List
  - Build View
  - Debug View
- Form Edit Window
- Tab Order Setting Window
- PowerCOBOL Editor Window

### F.1 Common Keyboard Operations of the Project window

| Key         | Description   |
|-------------|---|
| Ctrl + N    | Execute the "New Project" function in the File menu.    |
| Ctrl + O    | Execute the "Open" function in the File menu.           |
| Ctrl + S    | Execute the "Save" function in the File menu.           |
| F1          | Execute the "Help Topic" function in the Help menu.     |
| F2          | Execute the "Build All" function in the Project menu.   |
| Ctrl + F2   | Execute the "Rebuild All" function in the Project menu. |
| F3          | Execute the "Build" function in the Project menu.       |
| Ctrl + F3   | Execute the "Rebuild" function in the Project menu.     |
| F5          | Execute the "Debug" function in the Project menu.       |
| Ctrl + F5   | Execute the "Execute" function in the Project menu.     |
| Tab         | Move focus to the next window in the view.              |
| Shift + Tab | Move focus to the previous window in the view.          |

### F.2 Object Tree Keys in the Design View of the Project Window

| Key         | Description  |
|-------------|--|
| Ctrl + C    | Execute the "Copy" function in the Edit menu.  |
| Ctrl + V    | Execute the "Paste" function in the Edit menu.   |
| Ctrl + X    | Execute the "Cut" function in the Edit menu.   |
| Delete      | Execute the "Delete" function in the Edit menu.  |
| Enter       | Execute the same action as when the selected item is double-clicked.<br>The action for the double-click is selected in the Design property page. |
| Alt + Enter | Execute the "Properties" function in the Edit menu.  |

### F.3 Property List Keys in the Design View of the Project Window

---

| Key         | Description   |
|-------------|---|
| Ctrl + C    | Copy the value of the selected property to clipboard.           |
| Ctrl + V    | Set the value copied to the clipboard to the selected property. |
| Enter       | Move focus between property name and value part.                |
| Alt + Enter | Execute the "Properties" function in the Edit menu.             |

### F.4 Build View Keys of the Project Window

---

| Key       | Description   |
|-----------|---|
| Ctrl + A  | Execute the "Select All" function in the Edit menu.     |
| Ctrl + C  | Execute the "Copy" function in the Edit menu.           |
| Ctrl + F  | Execute the "Find" function in the Edit menu.           |
| F4        | Execute the "Next error" function in the Edit menu.     |
| Ctrl + F4 | Execute the "Previous error" function in the Edit menu. |

### F.5 Debug View Keys of the Project Window

---

| Key        | Description   |
|------------|---|
| Ctrl + B   | Execute the "Set Break Point" function in the Debug menu. |
| Ctrl + W   | Execute the "Watch" function in the Debug menu.           |
| F5         | Execute the "Go" function in the Debug menu.              |
| Shift + F5 | Execute the "Rerun" function in the Debug menu.           |
| F7         | Execute the "Run to Cursor" function in the Debug menu.   |
| Shift + F7 | Execute the "Run to Exit" function in the Debug menu.     |
| F8         | Execute the "Step Into" function in the Debug menu.       |
| Shift + F8 | Execute the "Step Over" function in the Debug menu.       |
| Shift + F9 | Execute the "Quick Watch" function in the Debug menu.     |
| Esc        | Execute the "Break" function in the Debug menu.           |

### F.6 Keyboard Operation of the Form Edit Window

---

The following are the keyboard operations of the Form Edit window:

| Key              | Description   |
|------------------|---|
| Ctrl + A         | Execute the "Select All" function in the Edit menu.       |
| Ctrl + C         | Execute the "Copy" function in the Edit menu.             |
| Ctrl + Shift + M | Execute the "Menu Edit" function in the Tools menu.       |
| Ctrl + P         | Execute the "Print" function in the File menu.            |
| Ctrl + Shift + T | Execute the "Tab Order" function in the Layout menu.      |
| Ctrl + X         | Execute the "Cut" function in the Edit menu.              |
| Ctrl + Shift + X | Execute the "Custom Controls" function in the Tools menu. |

| Key              | Description   |
|------------------|---|
| Ctrl + V         | Execute the "Paste" function in the Edit menu.              |
| F1               | Execute the "Contents and Index" function in the Help menu. |
| Ctrl + F4        | Execute the "Close" function in the File menu.              |
| F5               | Execute the "Preview" function in the Layout menu.          |
| Delete           | Execute the "Delete" function in the Edit menu.             |
| Alt + Enter      | Execute the "Properties" function in the Edit menu.         |
| Ctrl + Tab       | Move focus between the form and Menu edit windows.          |
| Ctrl + ←         | Move the selected control to left by 1 grid unit.           |
| Ctrl + →         | Move the selected control to right by 1 grid unit.          |
| Ctrl + ↓         | Move the selected control down by 1 grid unit.              |
| Ctrl + ↑         | Move the selected control up by 1 grid unit.                |
| Shift + ←        | Reduce the width of the selected control by 1 grid unit.    |
| Shift + →        | Increase the width of the selected control by 1 grid unit.  |
| Shift + ↓        | Reduce the height of the selected control by 1 grid unit.   |
| Shift + ↑        | Increase the height of the selected control by 1 grid unit. |
| Ctrl + Shift + ← | Move the selected control to the left by 2 grid units.      |
| Ctrl + Shift + → | Move the selected control to the right by 2 grid units.     |
| Ctrl + Shift + ↓ | Move the selected control down by 2 grid units.             |
| Ctrl + Shift + ↑ | Move the selected control up by 2 grid units.               |

## F.7 Keyboard Operation of the Tab Order Setting Window

The following are the keyboard operations of the Tab Order-Setting window:

| Key          | Description   |
|--------------|---|
| F5           | Refresh the list.   |
| F6           | Switch whether the list is displayed according to the tab index or tab group. |
| F7           | Switch whether or not the tab index is displayed on the form.                 |
| Space        | Change the tab stop checking of the selected control.                         |
| Ctrl + Space | Change the tab group checking of the selected control.                        |
| Alt + ↑      | Move the selected control up in the list.                                     |
| Alt + ↓      | Move the selected control down in the list.                                   |

## F.8 Keyboard Operation of the PowerCOBOL Editor Window

The following are the keyboard operations of the PowerCOBOL Editor window:

| Key      | Description  |
|----------|--|
| Ctrl + A | Execute the "Select All" function in the Edit menu.        |
| Ctrl + B | Execute the "Set Break Points" function in the Debug menu. |
| Ctrl + C | Execute the "Copy" function in the Edit menu.              |
| Ctrl + F | Execute the "Find" function in the Edit menu.              |

| <b>Key</b>          | <b>Description</b>   |
|---------------------|--|
| Ctrl + G            | Execute the "Go To" function in the Edit menu.   |
| Ctrl + P            | Execute the "Print" function in the File menu.   |
| Ctrl + R            | Execute the "Replace" function in the Edit menu.   |
| Ctrl + S            | Execute the "Save" function in the File menu.  |
| Ctrl + V            | Execute the "Paste" function in the Edit menu.   |
| Ctrl + W            | Execute the "Watch" function in the Debug menu.  |
| Ctrl + X            | Execute the "Cut" function in the Edit menu.   |
| Ctrl + Z            | Execute the "Undo" function in the Edit menu.  |
| F1                  | Execute the "Contents and Index" function in the Help menu.  |
| F3                  | Search forward for the next occurrence of the string defined in the Find box on the toolbar, with no case matching.      |
| Shift + F3          | Search backward for the previous occurrence of the string defined in the Find box on the toolbar, with no case matching. |
| F5                  | Execute the "Run" function in the Debug menu.  |
| Shift + F5          | Execute the "Rerun" function in the Debug menu.  |
| F7                  | Execute the "Run to Cursor" function in the Debug menu.  |
| Shift + F7          | Execute the "Run to Exit" function in the Debug menu.  |
| F8                  | Execute the "Step Into" function in the Debug menu.  |
| Shift + F8          | Execute the "Step Over" function in the Debug menu.  |
| Shift + F9          | Execute the "Quick Watch" function in the Debug menu.  |
| Esc                 | Execute the "Break" function in the Debug menu.  |
| Insert              | Switch whether to input characters with insert mode or over-type mode.   |
| Delete              | Delete the selected string, or the character to the right of the cursor.   |
| Backspace           | Delete the selected string or the character to the left of the cursor.   |
| Shift + Tab         | Switches focus between windowpanes when the edit window is split.  |
| Home                | Move the cursor to the beginning of the line.  |
| Ctrl + Home         | Move the cursor to the first line of the code.   |
| Shift + Home        | Expand the selected area to the beginning of the line.   |
| Ctrl + Shift + Home | Expand the selected area to the first line of the code   |
| End                 | Move the cursor to the end of the line   |
| Ctrl + End          | Move the cursor to the last line of the code.  |
| Shift + End         | Expand the selected area to the end of the line.   |
| Ctrl + Shift + End  | Expand the selected area to the last line of the code.   |
| ←                   | Move the cursor left one character.  |
| Ctrl + ←            | Move the cursor to the beginning of the previous word.   |
| Shift + ←           | Expand the selected area by 1 character to the left.   |
| Ctrl + Shift + ←    | Expand the selected area to the beginning of the previous word.  |
| ®                   | Move the cursor one character to the right.  |
| Ctrl + ®            | Move the cursor to the beginning of the next word.   |
| Shift + ®           | Expand the selected area one character to the right.   |

| Key              | Description   |
|------------------|---|
| Ctrl + Shift + Ⓢ | Expand the selected area to the beginning of the next word. |
|                  | Move the cursor to the previous line.                       |
| Shift +          | Expand the selected area to the previous line.              |
| -                | Move the cursor to the next line.                           |
| Shift + -        | Expand the selected area to the next line.                  |
| PageUp           | Move the cursor to the previous page.                       |
| Shift + PageUp   | Expand the selected area to the previous page.              |
| PageDown         | Move the cursor to the next page.                           |
| Shift + PageDown | Expand the selected area to the next page.                  |

# Index

| [A]  |     |
|--|-----|
| AccessMode Property.....                   | 43  |
| Activate Method.....                       | 183 |
| ActiveControl Property.....                | 44  |
| Active Property.....                       | 44  |
| Add Method.....                            | 184 |
| AddString Method.....                      | 185 |
| AddTick Method.....                        | 185 |
| ADODataSource control.....                 | 13  |
| AdviseDDE Method.....                      | 186 |
| Alarm Method.....                          | 187 |
| Alignment Property.....                    | 46  |
| Align Property.....                        | 45  |
| Animation control.....                     | 14  |
| Appearance Property.....                   | 47  |
| Archive Property.....                      | 48  |
| Arrange Property.....                      | 48  |
| Array property.....                        | 48  |
| AutoChange Property.....                   | 49  |
| AutoEdit Property.....                     | 49  |
| AutoHScroll Property.....                  | 50  |
| AutoLoadFile Property.....                 | 50  |
| AutoOpen Property.....                     | 50  |
| AutoPlay Property.....                     | 51  |
| AutoRowHeight Property.....                | 51  |
| AutoSize Property.....                     | 51  |
| AutoTick Property.....                     | 52  |
| [B]  |     |
| BackColor Property.....                    | 52  |
| BackStyle Property.....                    | 53  |
| BeforeClick Event.....                     | 246 |
| BlankSuppress Property.....                | 54  |
| Bold Property.....                         | 54  |
| BookName Property.....                     | 54  |
| Boolean constants.....                     | 281 |
| BorderColor Property.....                  | 55  |
| BorderRound Property.....                  | 55  |
| BorderStyle Property.....                  | 56  |
| BorderWidth Property.....                  | 56  |
| BottomMargin Property.....                 | 57  |
| ButtonClick Event.....                     | 247 |
| Button object.....                         | 5   |
| Buttons Property.....                      | 57  |
| [C]  |     |
| CallForm2 Method.....                      | 189 |
| CallForm Method.....                       | 187 |
| Cancel Property.....                       | 58  |
| CaptionBackGray Property.....              | 59  |
| Caption Property.....                      | 58  |
| CellLines Property.....                    | 59  |
| ChangeDDEItem Method.....                  | 189 |
| Change Event.....                          | 247 |
| Charset Property.....                      | 59  |
| CheckBox control.....                      | 14  |
| Check Property.....                        | 60  |
| Child Property (Array).....                | 60  |
| CHVisible Property.....                    | 61  |
| ClassMajorVersion Property.....            | 61  |
| ClassMinorVersion Property.....            | 61  |
| ClassProgID Property.....                  | 62  |
| ClearList Method.....                      | 191 |
| Clear Method.....                          | 190 |
| ClearSelect Method.....                    | 191 |
| ClearTable Method.....                     | 191 |
| ClearTicks Method.....                     | 192 |
| ClickColumn Property.....                  | 62  |
| Click Event.....                           | 248 |
| ClickRow Property.....                     | 62  |
| ClientHeight Property.....                 | 63  |
| ClientLeft Property.....                   | 63  |
| ClientTop Property.....                    | 63  |
| ClientWidth Property.....                  | 64  |
| CloseBook Method.....                      | 192 |
| CloseChild Event.....                      | 249 |
| CloseCursor Method.....                    | 192 |
| CloseDB Method.....                        | 193 |
| CloseDDE Method.....                       | 193 |
| Closed Event.....                          | 249 |
| CloseDevice Method.....                    | 193 |
| CloseForm Method.....                      | 194 |
| Collapse Event.....                        | 249 |
| color constants.....                       | 274 |
| ColorMap Property.....                     | 64  |
| ColumnCaption Property.....                | 65  |
| ColumnClick Event.....                     | 250 |
| ColumnCount Property.....                  | 65  |
| Column object.....                         | 6   |
| Column Property.....                       | 65  |
| Columns Property (Array).....              | 66  |
| ComboBox control.....                      | 15  |
| CommandButton control.....                 | 17  |
| CommandButtonFunctionKeyMode Property..... | 66  |
| CommandLine Property.....                  | 67  |
| Command Property.....                      | 66  |
| CommandText Property.....                  | 67  |
| CommandType Property.....                  | 67  |
| CommitDB Method.....                       | 195 |
| CommitMode Property.....                   | 68  |
| Component Object Model (COM).....          | 3   |
| ConcurrencyCursor Property.....            | 68  |
| Condition Property.....                    | 69  |
| Connection Property.....                   | 69  |
| ConnectionString Property.....             | 70  |
| ConnectionTimeout Property.....            | 70  |
| Connect Method.....                        | 195 |
| ConnectMode Property.....                  | 70  |
| Container Property.....                    | 71  |
| containers.....                            | 5   |
| ControlBox Property.....                   | 71  |



|                              |     |                                      |       |
|------------------------------|-----|--------------------------------------|-------|
| Controls object.....         | 6   | DisplayRate Property.....            | 87    |
| Controls Property.....       | 72  | DisplayText Property.....            | 88    |
| ConvertScale Method.....     | 195 | DisplayText Property (ListItem)..... | 88    |
| Count Property.....          | 72  | Divider Property.....                | 88    |
| CurFieldNo Property.....     | 72  | DoModal2 Method.....                 | 202   |
| CurrencySign Property.....   | 73  | DoModal Method.....                  | 201   |
| CurrentPage Property.....    | 73  | DriveList control.....               | 21,22 |
| CursorLocation Property..... | 73  | Driver Property.....                 | 89    |
| CursorType Property.....     | 74  | DropDown Event.....                  | 251   |
| Custom control.....          | 18  | DropEnabled Property.....            | 89    |

[D]

|  |     |
|--|-----|
| DataBase Property.....                   | 75  |
| DataBinding object.....                  | 6   |
| DataBindings Collection object.....      | 7   |
| DataBindings Property.....               | 75  |
| DataColor Property (Array).....          | 75  |
| DataCount Property.....                  | 76  |
| DataField Property.....                  | 76  |
| DataMember Property.....                 | 77  |
| DataSource Property.....                 | 77  |
| Data Types.....                          | 278 |
| DateFormat Property.....                 | 78  |
| DateStyle Property.....                  | 79  |
| DBAccess control.....                    | 18  |
| DblClick Event.....                      | 250 |
| DDE (Dynamic Data Exchange) control..... | 21  |
| DDEChange Event.....                     | 250 |
| DDEDataLength Property.....              | 80  |
| DDEDataOffset Property.....              | 80  |
| DDEData Property.....                    | 79  |
| DDEDataStyle Property.....               | 80  |
| DDEFormat Property.....                  | 81  |
| DDEItem Property.....                    | 81  |
| DDELinkStyle Property.....               | 82  |
| DDEService Property.....                 | 82  |
| DDETimeout Property.....                 | 82  |
| DDETopic Property.....                   | 83  |
| Deactivate Method.....                   | 196 |
| DecimalPointIsComma Property.....        | 83  |
| DecisionMaxString Property.....          | 83  |
| Default Property.....                    | 84  |
| DefaultRowHeight Property.....           | 84  |
| DelayedFocusEvent Property.....          | 85  |
| DeleteCurRecord Method.....              | 197 |
| Delete Method.....                       | 196 |
| DeleteRecord Method.....                 | 198 |
| DeleteString Method.....                 | 198 |
| DeleteTick Method.....                   | 198 |
| Device Property.....                     | 85  |
| Diffuse Property.....                    | 85  |
| DisableCommit Method.....                | 199 |
| DisabledFocusAction Property.....        | 86  |
| DisabledImageList Property.....          | 86  |
| DisabledImageType Property.....          | 87  |
| Disconnect Method.....                   | 199 |
| DisplayMessage Method.....               | 199 |

[E]

|                                  |     |
|----------------------------------|-----|
| EdgeStyle Property.....          | 89  |
| EditableLabel Property.....      | 90  |
| Edit control.....                | 22  |
| Edit Event.....                  | 251 |
| EditWhenGotFocus property.....   | 90  |
| Element Property.....            | 91  |
| Element property.....            | 91  |
| EnableCommit Method.....         | 203 |
| Enabled Property.....            | 91  |
| EnableOwnerName Property.....    | 92  |
| EndAnimation Event.....          | 251 |
| End Method.....                  | 203 |
| EndOfRecordset Event.....        | 252 |
| EndScroll Event.....             | 252 |
| EnsureVisible Method.....        | 203 |
| ExcelConnection control.....     | 23  |
| ExecuteDDECommand Method.....    | 205 |
| Execute Method.....              | 204 |
| ExecuteProcedure Method.....     | 206 |
| ExecuteSync Method.....          | 207 |
| ExpandedImageIndex Property..... | 92  |
| Expanded Property.....           | 92  |
| Expand Event.....                | 252 |

[F]

|                                |     |
|--------------------------------|-----|
| FieldChangeComplete Event..... | 253 |
| FileList Control.....          | 23  |
| FileName Property.....         | 93  |
| FileType Property.....         | 93  |
| FillColor Property.....        | 93  |
| FillStyle Property.....        | 94  |
| FolderList control.....        | 24  |
| Font object.....               | 8   |
| Font Property.....             | 94  |
| ForeColor Property.....        | 95  |
| Form object.....               | 8   |
| Frame control.....             | 25  |
| FramePath Property.....        | 96  |
| FrameStyle Property.....       | 96  |

[G]

|                           |     |
|---------------------------|-----|
| GetFileName Method.....   | 208 |
| GetFolderName Method..... | 209 |
| GetHotData Method.....    | 210 |
| GetScreenSize Method..... | 211 |
| GetWorkArea Method.....   | 212 |

|  |     |   |       |
|--|-----|---|-------|
| Ghosted Property.....                      | 96  | KeysetSize Property.....                          | 112   |
| GotFocus Event.....                        | 253 | KeyUp Event.....                                  | 256   |
| Graph control.....                         | 26  |   |       |
| GraphStyle Property.....                   | 97  | [L]   |       |
| GroupBox control.....                      | 27  | Label control.....                                | 28    |
|  |     | LabelEdit Property.....                           | 112   |
| [H]  |     | LabelWrap Property.....                           | 112   |
| HeaderText Property.....                   | 97  | LargeStep Property.....                           | 113   |
| HeadText Property.....                     | 97  | Layout Property.....                              | 113   |
| Height Property.....                       | 98  | LeftMargin Property.....                          | 114   |
| Hidden Property.....                       | 98  | Left Property.....                                | 113   |
| HideSelection Property.....                | 99  | ListCount Property.....                           | 114   |
| HighlightColor Property.....               | 100 | ListIndex Property.....                           | 115   |
| Highlight Property.....                    | 99  | ListItem object.....                              | 9     |
| HotImageList Property.....                 | 100 | ListItems Property (Array).....                   | 115   |
| HScrollBar Property.....                   | 101 | ListString Property (Array).....                  | 115   |
|  |     | ListView control.....                             | 30    |
| [I]  |     | LoadFile Method.....                              | 216   |
| IconIndex Property.....                    | 102 | LockType Property.....                            | 116   |
| IconName Property.....                     | 102 | LostFocus Event.....                              | 257   |
| Icon Property.....                         | 101 | Lower Property.....                               | 116   |
| Icons Property.....                        | 102 | LVStyle Property.....                             | 117   |
| Image control.....                         | 27  |   |       |
| ImageCount Property.....                   | 103 | [M]   |       |
| ImageHeight Property.....                  | 103 | MaxButton Property.....                           | 118   |
| ImageIndex Property.....                   | 103 | MaxLength Property.....                           | 118   |
| ImageLeft Property.....                    | 104 | Max Property.....                                 | 117   |
| ImageList Property.....                    | 104 | MCI (Media Control Interface) control.....        | 31    |
| ImageMode Property.....                    | 105 | MediaLength Property.....                         | 118   |
| ImageName Property.....                    | 105 | MediaLength Sample Code.....                      | 119   |
| ImageTop Property.....                     | 106 | MediaPosition Property.....                       | 119   |
| ImageWidth Property.....                   | 106 | MenuBarName Property.....                         | 120   |
| IMEMode Property.....                      | 106 | MenuBreak Property.....                           | 120   |
| Indentation Property.....                  | 107 | MenuItem object.....                              | 10    |
| Index Property.....                        | 107 | Menu object.....                                  | 10    |
| InitiateDDE Method.....                    | 213 | Microsoft Transaction Server Support control..... | 28,31 |
| InputFormat Property.....                  | 108 | MinButton Property.....                           | 121   |
| InsertListItem Method.....                 | 214 | Min Property.....                                 | 120   |
| Insert Method.....                         | 213 | MouseDown Event.....                              | 257   |
| InsertString Method.....                   | 215 | MouseIconName Property.....                       | 121   |
| Interval Property.....                     | 109 | MouseMove Event.....                              | 258   |
| Introduction to PowerCOBOL Properties..... | 43  | MousePointer Property.....                        | 122   |
| Invoking Methods.....                      | 4   | MouseUp Event.....                                | 260   |
| IsCallerInRole Method.....                 | 215 | Moveable Property.....                            | 122   |
| IsCheckBtn Property.....                   | 109 | MoveComplete Event.....                           | 261   |
| IsChecked Property.....                    | 110 | MoveForm Method.....                              | 218   |
| IsInTransaction Method.....                | 216 | Move Method.....                                  | 217   |
| IsQuery Property.....                      | 110 | MultiLine Property.....                           | 123   |
| IsSecurityEnabled Method.....              | 216 | MultipleInstance Property.....                    | 123   |
| IsSelected Property (Array).....           | 110 | MultiSelect Property.....                         | 124   |
| Italic Property.....                       | 111 |   |       |
| ItemClick Event.....                       | 253 | [N]   |       |
| Item Property (Array).....                 | 111 | Name Property.....                                | 124   |
|  |     | Naming Attributes.....                            | 3     |
| [K]  |     | NewBook Method.....                               | 219   |
| Key Code Constants.....                    | 276 | NodeClick Event.....                              | 262   |
| KeyDown Event.....                         | 254 | Node object.....                                  | 10    |
| KeyPress Event.....                        | 255 | Normal Property.....                              | 125   |

|   |     |
|---|-----|
| Numeric property (ExcelConnection)..... | 125 |
| Numeric Property (ListItem).....        | 125 |

[O]

|                                     |     |
|-------------------------------------|-----|
| OpenBook Method.....                | 220 |
| OpenDB Method.....                  | 221 |
| OpenDDE Method.....                 | 221 |
| OpenDevice Method.....              | 221 |
| Opened Event.....                   | 262 |
| OpenForm Method.....                | 222 |
| operating the product.....          | 3   |
| OptionButtonClickMode Property..... | 126 |
| OptionButton control.....           | 32  |
| Orientation Property.....           | 126 |

[P]

|                                |     |
|--------------------------------|-----|
| PageCaption Property.....      | 127 |
| PageCount Property.....        | 127 |
| PageNoFormat Property.....     | 127 |
| PageTooltip Property.....      | 128 |
| PaperOrientation Property..... | 128 |
| PaperScaleUnit Property.....   | 128 |
| PaperType Property.....        | 129 |
| Parent Property.....           | 129 |
| PasswordChar Property.....     | 130 |
| Password Property.....         | 130 |
| PathChange Event.....          | 262 |
| Path Property.....             | 131 |
| PathSeparator Property.....    | 131 |
| PatternChange Event.....       | 262 |
| Pattern Property.....          | 132 |
| PauseAnimation Method.....     | 223 |
| PauseDevice Method.....        | 223 |
| PcdColorType Property.....     | 132 |
| PcdResolution Property.....    | 132 |
| PictureString Property.....    | 133 |
| PlayAnimation Method.....      | 224 |
| PlayDevice Method.....         | 224 |
| PlaySound Method.....          | 224 |
| PokeData Method.....           | 225 |
| PopupMenu Method.....          | 226 |
| POW-FALSE.....                 | 281 |
| POW-TRUE.....                  | 281 |
| PowerBroadcast Event.....      | 262 |
| PowerCOBOL Project Files.....  | 4   |
| PreKeyDown Event.....          | 264 |
| PreKeyPress Event.....         | 265 |
| PreKeyUp Event.....            | 265 |
| Printable Property.....        | 133 |
| Print control.....             | 32  |
| PrintDate Property.....        | 134 |
| PrinterName Property.....      | 134 |
| PrintForm Method.....          | 227 |
| PrintTitle Property.....       | 134 |
| ProgressIndicator control..... | 33  |
| ProgressStep Method.....       | 227 |
| PropertyName Property.....     | 135 |
| PunchMargin Property.....      | 135 |

[Q]

|                           |     |
|---------------------------|-----|
| QueryClose Event.....     | 266 |
| QueryString Property..... | 135 |

[R]

|  |                 |
|--|-----------------|
| RangeSelect Property.....                  | 136             |
| Rate Property.....                         | 136             |
| ReadFirstRecord Method.....                | 227             |
| ReadLastRecord Method.....                 | 228             |
| ReadNextRecord Method.....                 | 228             |
| ReadOnly Property.....                     | 136             |
| ReadPreviousRecord Method.....             | 228             |
| Receive Property.....                      | 137             |
| RecordChangeComplete Event.....            | 266             |
| RecordForm property.....                   | 137             |
| RecordsetChangeComplete Event.....         | 267             |
| Recordset Property.....                    | 137             |
| Refresh Method.....                        | 229             |
| RenderStyle Property.....                  | 138             |
| RenderText object.....                     | 11              |
| RenderText Property.....                   | 138             |
| Repeat Property.....                       | 139             |
| RequestData Method.....                    | 229             |
| Resized Event.....                         | 268             |
| Resource Property.....                     | 139             |
| RestoreFocusWhenEnablingForm Property..... | 140             |
| ResumeDevice Method.....                   | 230             |
| Return Event.....                          | 268             |
| ReturnWhenEnterKey property.....           | 140,141         |
| ReturnWhenLostFocus property.....          | 142             |
| ReturnWhenMaxText property.....            | 142             |
| RewriteCurRecord Method.....               | 231             |
| RewriteRecord Method.....                  | 231             |
| RightMargin Property.....                  | 140,141,142,174 |
| RollbackDB Method.....                     | 232             |
| Root Property (Array).....                 | 142             |
| RowCaption Property.....                   | 143             |
| RowCount Property.....                     | 143             |
| Row Property.....                          | 143             |

[S]

|                                  |     |
|----------------------------------|-----|
| SaveAsBook Method.....           | 232 |
| SaveBook Method.....             | 233 |
| SaveFile Method.....             | 233 |
| Scalable Property.....           | 144 |
| ScaleMode Property.....          | 145 |
| Scale Property.....              | 144 |
| ScalingStyle Property.....       | 145 |
| ScrollBar control.....           | 34  |
| ScrollLock Property.....         | 146 |
| ScrollPage Property.....         | 146 |
| SelChange Event.....             | 269 |
| SelectCell Method.....           | 234 |
| SelectClose Event.....           | 270 |
| SelectedImageIndex Property..... | 147 |
| Selected Property.....           | 147 |
| SelectEnd Property.....          | 147 |
| Select Event.....                | 270 |

|                                |     |
|--------------------------------|-----|
| SelectRecords Method.....      | 234 |
| SelectStart Property.....      | 148 |
| SelectText Property.....       | 148 |
| SelField Property (Array)..... | 149 |
| SelItemIndex Property.....     | 149 |
| SelItem Property.....          | 149 |
| SelNode Property.....          | 150 |
| SelString Property.....        | 150 |
| SetAbort Method.....           | 235 |
| SetComplete Method.....        | 236 |
| SetFocus Method.....           | 236 |
| SetMCICommand Method.....      | 236 |
| SetPage Method.....            | 237 |
| SetPrinter Method.....         | 238 |
| Shape control.....             | 34  |
| ShapeStyle Property.....       | 150 |
| ShowExcel Property.....        | 151 |
| ShowForm Method.....           | 238 |
| ShowStatusbar Property.....    | 151 |
| ShowToolTips Property.....     | 152 |
| Size Property.....             | 152 |
| Slider control.....            | 35  |
| SmallIconIndex Property.....   | 152 |
| SmallIcons Property.....       | 153 |
| SmallStep Property.....        | 153 |
| Smooth Property.....           | 153 |
| SortColumn Property.....       | 154 |
| Sorted Property.....           | 154 |
| SortKind Property.....         | 155 |
| SortOrder Property.....        | 155 |
| Source Property.....           | 156 |
| StartAnimation Event.....      | 270 |
| StartEdit Method.....          | 239 |
| Start Method.....              | 239 |
| StartPosition Property.....    | 156 |
| StaticText control.....        | 35  |
| StatusText Property.....       | 156 |
| Stepped Event.....             | 270 |
| Step Property.....             | 157 |
| StopDevice Method.....         | 239 |
| Strikethrough Property.....    | 157 |
| Style Property.....            | 158 |
| System Property.....           | 159 |

[T]

|  |     |
|--|-----|
| Tab control.....                                 | 36  |
| TabFixedHeight Property.....                     | 159 |
| TabFixedWidth Property.....                      | 159 |
| TabGroup Property.....                           | 160 |
| TabIndex Property.....                           | 160 |
| TableCell object.....                            | 11  |
| TableCells Property (Two-Dimensional-Array)..... | 161 |
| TableColumn object.....                          | 12  |
| TableColumns Property (Array).....               | 161 |
| Table control.....                               | 37  |
| TabStop Property.....                            | 162 |
| TabWidthStyle Property.....                      | 162 |

|                                      |     |
|--------------------------------------|-----|
| TargetName Property.....             | 163 |
| TargetType Property.....             | 163 |
| TerminateDDE Method.....             | 239 |
| testing for TRUE or FALSE.....       | 281 |
| TextBox control.....                 | 39  |
| TextCase Property.....               | 165 |
| Text Property.....                   | 163 |
| Text Property (ExcelConnection)..... | 164 |
| Text Property (ListItem).....        | 164 |
| ThreeStates Property.....            | 165 |
| ThruEvents Method.....               | 240 |
| ThumbVisible Property.....           | 166 |
| TickCount Property.....              | 166 |
| TickFrequency Property.....          | 166 |
| TickPosition Property (Array).....   | 167 |
| TickStyle Property.....              | 167 |
| TimeFormat Property.....             | 168 |
| Timer control.....                   | 40  |
| Timer Event.....                     | 270 |
| TitleBar Property.....               | 168 |
| ToolBar control.....                 | 40  |
| ToolboxBitmap Property.....          | 169 |
| TooltipText Property.....            | 169 |
| TopMargin Property.....              | 170 |
| Topmost Property.....                | 171 |
| Top Property.....                    | 170 |
| TotalCount Property.....             | 171 |
| TreeView control.....                | 42  |
| TVLineStyle Property.....            | 171 |
| TVStyle Property.....                | 172 |

[U]

|                                   |     |
|-----------------------------------|-----|
| UnacceptableDefault Property..... | 172 |
| UnadviseDDE Method.....           | 242 |
| Underline Property.....           | 172 |
| UpdateRecord Method.....          | 243 |
| updates to terminology.....       | 2   |
| Upper Property.....               | 173 |
| UseCaption Property.....          | 173 |
| UseControlWindow Property.....    | 173 |
| UseDefaultDate Property.....      | 174 |
| UseMnemonic property.....         | 174 |
| UsePalette Property.....          | 175 |
| UserID Property.....              | 175 |
| UserName Property.....            | 175 |
| UseSystemColor Property.....      | 176 |

[V]

|                             |     |
|-----------------------------|-----|
| Value Property.....         | 176 |
| Value Property (Graph)..... | 178 |
| ValueTips Property.....     | 178 |
| Visible Property.....       | 178 |
| VScrollBar Property.....    | 179 |
| VT_BOOL.....                | 281 |

[W]

|                      |     |
|----------------------|-----|
| Weight Property..... | 179 |
| Width Property.....  | 179 |

|                                |     |
|--------------------------------|-----|
| WillChangeField Event.....     | 271 |
| WillChangeRecord Event.....    | 271 |
| WillChangeRecordset Event..... | 272 |
| WillMoveEvent.....             | 273 |
| WindowAdjustment Property..... | 180 |
| WindowState Property.....      | 181 |
| WordWrap Property.....         | 181 |
| Wrapable Property.....         | 181 |
| Writable Property.....         | 182 |
| WriteRecord Method.....        | 244 |

[Z]

|                    |     |
|--------------------|-----|
| ZOrder Method..... | 244 |
|--------------------|-----|