



FUJITSU Software Interstage Studio



J Business Kit GUI Library User's Guide

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Preface

Purpose of this Document

The GUI library is a class library for realizing the graphical user interface (GUI) of the Java application.

The manual describes overview of GUI Library.

Structure of This Document

The structure of this manual is as follows:

- [Chapter 1 Overview of the GUI Libraries](#)

This section describes the overview of the GUI library.

- [Chapter 2 Basic GUI Libraries](#)

This section describes the Basic GUI library.

- [Chapter 3 Basic GUIBeans Library](#)

This section describes the Basic GUIBeans Library.

- [Chapter 4 UI Screen Control Library](#)

This section describes the UI Screen Control Library functions.

- UI Screen Control Facility

- Window Control Facility

- Object Control Facility

- [Chapter 5 Line Drawing Functions](#)

This section outlines the Line Drawing functions.

- Overview of line drawing functions

- Line Drawing Bean

- [Appendix A About the GUI Library switchover from former JBK for Windows](#)

Explains about the process to port JavaBeans developed with a former product to basic GUIBeans of this function.

- [Appendix B How to port UI Screen Control Library](#)

This section describes how to port UI Screen Control Library.

- [Appendix C About the supplementary characters](#)

This section describes the supplementary characters.

- [Appendix D About boundary analysis of word wrap function for the details](#)

This section describes about boundary analysis of word wrap function for the details.

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The symbols (R) and TM are omitted throughout this document.

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Chapter 1 Overview of the GUI Libraries

This chapter describes the overview of the GUI library.

1.1 GUI Library

The GUI library is a class library for realizing the graphical user interface (GUI) of the Java application. Using the GUI library improves expression and productivity by the creation of application form screens just with the graphical user interface provided by the JDK.

The GUI library has the class libraries shown below.

- Basic GUI Libraries

The basic GUI libraries are class libraries designed to improve expressiveness/productivity when creating application form screens by extending the graphical user interface (GUI) functions provided by JDK and adding functions not provided by JDK.

- Basic GUIBeans Library

The basic GUI libraries of the basic GUIBeans library now support the JavaBeans component.

- UI Screen Control Library

- It includes the UI Screen Control Library, which transfers screens while creating and deleting screens dynamically.

- Line Drawing Functions

The line drawing functions are used to draw graphics, e.g., lines, circles, and squares in applications or applets.

Chapter 2 Basic GUI Libraries

The basic GUI libraries are class libraries designed to improve expressiveness/productivity when creating application form screens by extending the graphical user interface (GUI) functions provided by JDK and adding functions not provided by JDK.

Main basic GUI library turned in the light weight.

2.1 List of Basic GUI Libraries

The following table shows a of Basic GUI Libraries.

Table 2.1 List of Basic GUI Libraries

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
Common function	JComponent	-	-	Y	-	-	Common component class for the basic GUI library. Displays the popup menu, displays the tool tip, and defines the border.
	JContainer	-	-	Y	-	-	Common container class for the basic GUI library. Displays the popup menu, displays the tool tip, and defines the border.
	JFAcceleration	-	-	-	-	-	Interface for the constant that indicates the display position.
	JFLineType	-	-	-	-	-	Interface for the constant that indicates the line shape.
	JFObjectToString	-	-	-	-	-	Interface for creating the display character string from the Object type data and creating objects to be set from the String type data.
	JFOrientation	-	-	-	-	-	Interface for the constant that indicates the direction.
	JFThresholdable	-	-	-	-	-	Interface for handling threshold values.
	JFCaretStyle	-	-	-	-	-	Interface for the fixed number of caret form.
	JFRuntimeEnvironment	-	-	-	-	-	Execution operating mode.
	JFFocusTraversalPolicy	Y	-	-	-	-	Class that defines the focus traverse sequence.
Calendar	JFCalendarView	-	-	Y	Y	Y	Functions such as memo and image setting and range selection have been added.

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
Cell	JFCell	-	-	-	Y	Y	Functions such as display and edit customization and image position size specification have been added.
	JFCellBorder	-	-	-	-	-	Retains the JFCell border information.
	JFInputCellObject	-	-	-	-	-	Interface for expanding the JFCell class. Changes the input field.
	JFPaintCellObject	-	-	-	-	-	Interface for expanding the JFCell class. Changes the display.
	JFStringCellObject	-	-	-	-	-	Interface for expanding the JFCell class. Changes the character string processing setting.
Checklist	JFCheckList	-	-	Y	Y	Y	List with check box.
	JFCheckEvent	-	-	-	-	-	Event generated when the JFCheckList checkbox is checked.
	JFCheckListener	-	-	-	-	-	Interface for receiving JFCheckEvent and processing the event.
Choice	JFChoice	-	-	Y	Y	Y	Item sorting (sort) and editing have been added to Choice.
Input/output field	JFField	-	Y	Y	-	-	Abstract class for each class of JFFieldDate, JFFieldDouble, JFFieldFilled, JFFieldLong, and JFFieldString.
	JFFieldDate	-	Y	Y	Y	Y	Date/time input-output field. Functions such as date and time data input, format and output, required input, and underline display have been added to TextField.
	JFFieldDouble	-	Y	Y	Y	Y	Real number input-output field. Functions such as real number data input-output, number of digits and range check, character type check, all digits input, required input, underline display, and cross out line display have been added to TextField.
	JFFieldFilled	-	Y	Y	Y	Y	Embedded character string field that can define the fixed section and variable section (input section).

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
Input/output common function	JFFieldFilledDate	-	Y	Y	Y	Y	Embedded Date/Time field that can define the fixed section and variable section (input section).
	JFFieldLong	-	Y	Y	Y	Y	Integer input-output field. Functions such as integer data input-output, number of columns and range check, character type check, all digits input, required input, underline display, and cross out line display have been added to TextField.
	JFFieldString	-	Y	Y	Y	Y	Character string input-output field. Functions such as character string data input limit, clipboard link, all digits input, required input, underline display, and cross out line display have been added to TextField.
	JFFieldRichString	-	Y	Y	Y	Y	Class with the extended display function of JFFieldString
Input/output common function	JFInputErrorEvent	-	-	-	-	-	Event that notifies of an error that occurs when a character string is input into the JFField field.
	JFInputErrorListener	-	-	-	-	-	Interface for describing the processing of JFInputErrorEvent that occurs when a character string is input into the JFField field.
	JTextEditKey	-	-	-	-	-	Registration of error processing and key customization are enabled for JFField.
	JFEnableType	-	-	-	-	-	Interface for the constant that indicates the character types that can be input in JFField.
	JTextInsertable	-	-	-	-	-	Interface for the component that can insert character strings in JFField.
	JTextInvokable	-	-	-	-	-	Interface that defines the user processing for the function key in JFField.
	JFExceptionType	-	-	-	-	-	Interface of a constant to indicate various exceptions

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
Text Input	JFMagnification	-	-	-	-	-	Interface to retain information on the character type and scaling factor
	JFAttributedFont	-	-	-	-	-	Class having double-size and color-coded display functions
	JFAttributeIterator	-	-	-	-	-	Class providing the function of the Iterator class to reference attribute information
	JFAttributeSet	-	-	-	-	-	Class retaining attribute information
	JFMagnificationFontMetrics	-	-	-	-	-	Extended class of the font metric class having normal/double size font information
	JTextInputWindow	-	-	-	-	-	The class indicates an input window in which character strings can be input
	JFUnicodeUtilities	-	-	-	-	-	The class for handling the Unicode value conversion function
	JFInputLimitation	-	-	-	-	-	The class specifies input restriction
	JFAutoEscapeEvent	Y	-	-	-	-	Event notified immediately before automatic exit in a JFField field.
List View	JFAutoEscapeListener	Y	-	-	-	-	Interface for describing the JFAutoEscapeEvent process that occurs immediately before automatic exit in a JFField field.
	JFGroupbox	-	-	Y	Y	Y	Labelled and framed panel
	JFLListView	-	-	Y	Y	Y	Class that displays data in the list format (table format). Functions such as image display in the second and subsequent columns and column switching have been added.
	JFLListViewItems	-	-	-	Y	Y	Class that handles data on JFLListView.
	JFMultiLineLabel	-	-	Y	Y	Y	Label that can display multiple lines.
	JFProgressbar	-	-	Y	Y	Y	Bar that indicates the operation progress status. Functions such as

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
							link with the progress bar have been added.
Slider	JFSlider	-	-	Y	Y	Y	Change the value by moving the slider with a mouse or key operation.
Status bar	JFStatusbar	-	-	Y	Y	Y	Bar that shows messages and status. Functions such as linkage to the progress bar have been added.
Image button	JFImageButton	-	Y	Y	Y	Y	Button with an image attached
Button	JFSpinButton	-	-	Y	Y	Y	Button that combines the two vertical and horizontal buttons.
on	JFButtonGroup	-	-	-	Y	-	Class which makes toggle button group
Toggle	JFToggleButton	-	-	Y	Y	Y	Button which expresses the condition of on and off

Function		Class name	Change from V6.1		Function category			Overview of Function
			New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
tt o n								
Table format	JTableView	-	-	Y	Y	Y		Class that displays and edits data in the table format. Functions such as cell connection and registration of various events have been added.
	JTableViewActionEvent	-	-	-	-	-		Event issued by JTableView.
	JPosition	-	-	-	-	-		Indicates the position expressed by (row, column).
	JTableViewActionListener	-	-	-	-	-		Interface for receiving the event issued by the JTableView class.
Tab panel	JTabPanel	-	-	Y	Y	Y		Panel that can switch the display of multiple components.
Pane1	JPanel	-	-	-	Y	Y		The panel which has a double buffering function.
Doubt	JApplet	-	-	-	Y	-		The applet class has the double buffering function
leB u ff e	JDialog	-	-	-	-	-		The dialog class has the double buffering function
ri ng	JFrame	-	-	-	Y	-		The frame class has the double buffering function
Wind ow	JWindow	-	-	-	-	-		The window class has the double buffering function

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
OffScreen	JFOffScreen	-	-	-	-	-	Interface for offscreen functions.
Light weight panel	JFLightPanel	-	-	Y	Y	Y	Light weight panel
Text area	JTextArea	-	Y	Y	Y	Y	Class which does editing of the multi-line text and display.
	JFMultiLineTextEditKey	-	-	-	-	-	In JTextArea, the class to register the management of the function key.
	JBreakIterator	-	-	-	-	-	The class provides methods to find the boundary position in the text.
Tool bar	JToolbar	-	-	Y	Y	Y	Displays the component location and tool tip.
Tool tip	JToolTip	-	-	Y	-	-	Displays the popup window that shows the tip.
Tree format	JTree	-	-	Y	Y	Y	Displays data in the tree format that supports multicolumn information (multicolumn).
	JTreeEvent	-	-	-	-	-	Event issued by JTree.
	JTreeNodeEvent	-	-	-	-	-	Event issued depending on the changed JTreeNode status.
	JFSimpleTreeNode	-	-	-	Y	Y	Class in which the JTreeNode interface, which is JTree data, is installed.
	JFSimpleTreeNode2	-	-	-	Y	Y	The class is sample class in JTreeNode2 interface of JTree class data.
	JTreeListener	-	-	-	-	-	Interface for receiving JTreeEvent.
	JTreeNode	-	-	-	-	-	Interface for the expression of JTree data.
	JTreeNode2	-	-	-	-	-	Interface for the expression of JTree data.

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
	JTreeNodeListener	-	-	-	-	-	Interface for receiving the JTreeNode change event.
	JTreeNodeListener2	-	-	-	-	-	Interface for receiving the JTreeNode2 change event.
Utilities	JFCalendar	-	-	-	-	-	Handles the date.
	JFDrawer	-	-	-	-	-	Draws dotted lines, groove lines, and frames.
	JFTimer	-	-	-	Y	-	Generates ActionEvent at the specified interval.
	JFBuzzer	-	-	-	-	-	Class sounding various buzzer sounds
	JF3DBorderColor	-	-	-	-	-	The Color specifies the color of 3D frame lines.

Function	Class name	Change from V6.1		Function category			Overview of Function
		New	Reinforce	Light weight component	Usable as bean	Property can be set with customizer	
d e r.							
Image	JFImageComponent	-	-	Y	-	-	Displays an image.

2.2 Note

- In classes that manage Image objects such as JFImageButton and JFLListView, images may not be displayed correctly immediately after activation because an Image object is set to the GU library even though image loading has not been completed.

To resolve this problem, use the java.awt.MediaTracker class to make a setting such that an image is set to the GUI library after image loading has been completed.



Example

```
image = getImage(getDocumentBase(),"image.gif");
MediaTracker tracker = new MediaTracker(component);
tracker.addImage(image ,0);
try{
    tracker.waitForID(0);
} catch(InterruptedException e){
    // failed
}
```

- When using GUI components, we recommend using the following or the class derived from the following as the container. GUI components use resources efficiently by linking to the container these classes or the derived class of these. These resources should be used to prevent component operations from being performed and to ensure maximum efficiency.
 - JPanel
 - JFWindow
 - JFApplet
 - JFDialog
 - JFFrame
- Define treatment in the following method when you do the drag & drops operation that it is provided with JDK toward JBK GUI component.
 - Create extends class which wants to drag & drops operation.
 - The interface of the drag & drops provided with JDK is mounted on the extends class, and the movement which is necessary for application or applet is defined.

For details on the drag & drops , see the JDK Documentation.

Chapter 3 Basic GUIBeans Library

The basic GUI libraries of the basic GUIBeans library now support the JavaBeans component.

The following class libraries support the JavaBeans components.

- Applet(com.fujitsu.jbk.gui.JFApplet)
- Button group(com.fujitsu.jbk.gui.JFButtonGroup)
- Calendar(com.fujitsu.jbk.gui.JFCalendarView)
- Cell(com.fujitsu.jbk.gui.JFCell)
- Checklist(com.fujitsu.jbk.gui.JFCheckList)
- Choice(com.fujitsu.jbk.gui.JFChoice)
- Input-output field
 - Date/time field(com.fujitsu.jbk.gui.JFFieldDate)
 - Real number field(com.fujitsu.jbk.gui.JFFieldDouble)
 - Embedded character string field(com.fujitsu.jbk.gui.JFFieldFilled)
 - Embedded date/time field(com.fujitsu.jbk.gui.JFFieldFilledDate)
 - Integral number field(com.fujitsu.jbk.gui.JFFieldLong)
 - Extended character string field(com.fujitsu.jbk.gui.JFFieldRichString)
 - Character string field(com.fujitsu.jbk.gui.JFFieldString)
- Frame(com.fujitsu.jbk.gui.JFFrame)
- Group box(com.fujitsu.jbk.gui.JFGroupbox)
- Image button(com.fujitsu.jbk.gui.JFImageButton)
- Light weight panel(com.fujitsu.jbk.gui.JFLightPanel)
- List format(com.fujitsu.jbk.gui.JFListView)
- List format item(com.fujitsu.jbk.gui.JFListViewItems)
- Multi-line label(com.fujitsu.jbk.gui.JFMultiLineLabel)
- Panel(com.fujitsu.jbk.gui.JFPanel)
- Progress bar(com.fujitsu.jbk.gui.JFProgressbar)
- Tree node(com.fujitsu.jbk.gui.JFSimpleTreeNode)
- Tree node offset(com.fujitsu.jbk.gui.JFSimpleTreeNode2)
- Slider(com.fujitsu.jbk.gui.JFSlider)
- Spin button(com.fujitsu.jbk.gui.JFSpinButton)
- Status bar(com.fujitsu.jbk.gui.JFStatusbar)
- Table format(com.fujitsu.jbk.gui.JFTableView)
- Tab panel(com.fujitsu.jbk.gui.JFTabPanel)
- Text area(com.fujitsu.jbk.gui.JFTextArea)
- Timer(com.fujitsu.jbk.gui.JFTimer)
- Toggle button(com.fujitsu.jbk.gui.JFToggleButton)
- Tool bar(com.fujitsu.jbk.gui.JFToolbar)

- Tree format(com.fujitsu.jbk.gui.JFTree)

JavaBeans components are called JavaBean or Bean and are standardized components based on the JavaBeans specifications. In many Beans, functions referred to as the property editor and customizer are implemented to facilitate changes in the properties (values) of Bean and to assist in the design of the layout.

The customizer provided by the Basic GUIBeans Library is a function designed to change the property values of Bean of instances currently being displayed and to generate a source for the change.

If the Basic GUIBeans Library is registered with the integrated development environment and is operated by the screen designer (function to edit the screen), the target to be generated as a source is basically an instance whose property values are displayed in the integrated development environment.

Thus, information in the instance being operated by the screen designer and changed using the customizer function and information in the generated program may be different.

Information on an instance changed using the customizer function can be stored using the serialize function in the integrated development environment. An instance can be created by describing a deserialize process of the stored object in a program.

For common items of the customizer of JavaBeans components, see "[3.35 Customizer \(common section\)](#)".

And, customizer decides value in the following method.

- Character input field

Press Enter key, and create source.

- Check box

Select or deselect the check box, and create source.

- Choice list

Select from list, and create source.

- Numeric input field with spin button

Press Enter key or move focus to other field, and create source.

- Button

Click by mouse or press Space key, and create source.

3.1 Applet Bean

The applet Bean has the following information.

- [Property information](#)
- [Event information](#)
- [Method information](#)



See

"[Package Guide](#)"- JFApplet

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color

Name	Type	Reference	Setting	Explanation
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
layout	java.awt.LayoutManager	Y	Y	Layout manager
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event.ContainerListener	addContainerListener removeContainerListener	componentAdded	Is issued when the pasted status changes.
			componentRemoved	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	

Name	Listener	Addition/removal	Method	Explanation
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

Name	Parameters	Explanation
add	java.awt Component	Adds the component.
add	java.awt Component	Adds the component.
	int	
add	java.awt Component	Adds the component.
	java.lang Object	
add	java.awt Component	Adds the component.
	java.lang Object	
	int	
destroy		To inform that it should destroy any resources that it has allocated.
getAppletContext		Determines this applet's context, which allows the applet to query and affect the environment in which it runs.
getAppletInfo		Returns information about this applet.
getAudioClip	java.net URL	Returns the AudioClip object.
getAudioClip	java.net URL	Returns the AudioClip object.
	java.lang String	
getCodeBase		Gets the base URL.
getDocumentBase		Returns an absolute URL naming the directory of the document in which the applet is embedded.
getImage	java.net URL	Returns an Image object that can then be painted on the screen.

Name	Parameters	Explanation
getImage	java.net URL	Returns an Image object that can then be painted on the screen.
	java.lang String	
getParameter	java.lang String	Returns the value of the named parameter in the HTML tag.
getParameterInfo		Returns information about the parameters than are understood by this applet.
getSharedOffscreen		Gets off screen image.
getSharedOffscreenBuffer	int	Creates off screen image.
	int	
getSharedOffscreenSize		Gets off screen image's size.
init		Called by the browser or applet viewer to inform this applet that it has been loaded into the system.
isActive		Determines if this applet is active.
newAudioClip	java.net URL	Get an audio clip from the given URL.
play	java.net URL	Plays the audio clip.
	java.lang String	
play	java.net URL	Plays the audio clip.
remove	java.awt Component	Deletes the component.
remove	int	Deletes the component.
removeAll		Deletes all components.
requestFocus		Requests an input focus.
setStub	java.applet AppletStub	Sets this applet's stub.
showStatus	java.lang String	Requests that the argument string be displayed in the "status window".
start		Called by the browser or applet viewer to inform this applet that it should start its execution.
stop		Called by the browser or applet viewer to inform this applet that it should stop its execution.
transferFocus		Moves the focus to the next component.

3.2 Button group Bean

Button group Bean has the following information.

- [Property information](#)



"Package Guide"- JButtonGroup

Property information

Name	Type	Reference	Setting	Explanation
selectedButton	com.fujitsu.jbk.gui.JFToggleButton	Y	Y	Selected toggle button

3.3 Calendar Bean

Calendar Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFCalendarView

Property information

Name	Type	Reference	Setting	Explanation
alignment	int	Y	Y	Display position of calendar header
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
calendarType	int	Y	Y	Display format
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
dateAlignment	int	Y	Y	Date display position
dayOfMonth	int	Y	Y	Day of the month
dayOfWeek	int	Y		Days of the week
displayDayOfWeek	boolean	Y	Y	Display or non-display of days of the week
displayHeader	boolean	Y	Y	Display or non-display of calendar header
displayMemo	boolean	Y	Y	Display or non-display of memo

Name	Type	Reference	Setting	Explanation
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
firstDayOfWeek	int	Y	Y	Days of the week displayed first
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
formatString	java.lang.String	Y	Y	Format character string of the character string displayed in the header
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
imageAlignment	int	Y	Y	Image display position
locale	java.util.Locale	Y	Y	Locale information
memo	com.fujitsu.jbk.gui.JFCalendarObjectProperty		Y	Memo
memoBackground	java.awt.Color	Y	Y	Memo background color
memoForeground	java.awt.Color	Y	Y	Memo foreground color
month	int	Y	Y	Month
name	java.lang.String	Y	Y	Name
otherBackground	java.awt.Color	Y	Y	Background color of other than the selected month
otherForeground	java.awt.Color	Y	Y	Foreground color of other than the selected month
remoteFont	boolean	Y		Whether the registered font is a remote font
saturdayBackground	java.awt.Color	Y	Y	Background color of Saturday
saturdayForeground	java.awt.Color	Y	Y	Foreground color of Saturday
selectionEnd	com.fujitsu.jbk.gui.JFCalendar	Y		Endpoint of range selection
selectionMode	int	Y	Y	Multiple selection, single selection, or range selection

Name	Type	Reference	Setting	Explanation
selectionStart	com.fujitsu.jbk.gui.JFCalendar	Y		Start point of range selection
sundayBackground	java.awt.Color	Y	Y	Background color of Sunday(in holiday use same background color)
sundayForeground	java.awt.Color	Y	Y	Foreground color of Sunday(in holiday use same foreground color)
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible
visibleMemoMarker	boolean	Y	Y	Display or non-display of the marker indicating that the memo is set
weekdayBackground	java.awt.Color	Y	Y	Background color of weekday
weekdayForeground	java.awt.Color	Y	Y	Foreground color of weekday
year	int	Y	Y	Year

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the date is double-clicked or the Enter key is pressed.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
item	java.awt.event.ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when the date is selected.
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	

Name	Listener	Addition/removal	Method	Explanation
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener	mouseDragged	Is issued when the mouse moves.
		removeMouseMotionListener	mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

Name	Parameters	Explanation
deselect	com.fujitsu.jbk.gui JFCalendar	Deselects the specified date.
deselectAll		Deselects all dates.
hideToolTip		Erases the tool tip.
moveDate	int	Moves to the relative day.
moveMonth	int	Moves to the relative month.
moveNextDay		Moves to the day after the currently selected day.
moveNextMonth		Moves to the next month.
moveNextYear		Moves to the next year.
movePreviousDay		Moves to the day before the currently selected day.
movePreviousMonth		Moves to the previous month.
movePreviousYear		Moves to the previous year.
moveToday		Moves to the current date.
moveYear	int	Moves to the relative year.
requestFocus		Requests an input focus.
select	com.fujitsu.jbk.gui JFCalendar	Selects the specified date.
select	com.fujitsu.jbk.gui JFCalendar	Selects the date in the specified range.
	com.fujitsu.jbk.gui JFCalendar	
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	

Name	Parameters	Explanation
transferFocus		Moves the focus to the next component.

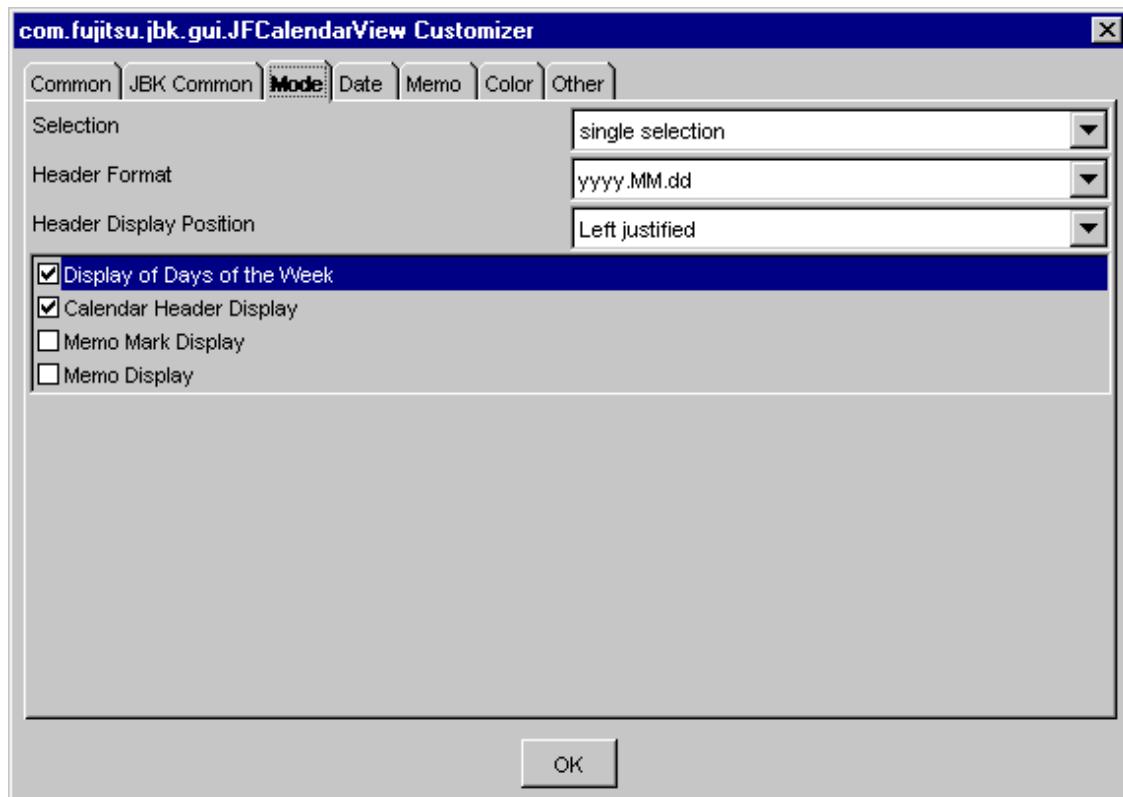
Customizer

- Component common property

- JBK GUI common property

- Mode

Set the display and operation mode of the calendar.



Selection

Select the date selection mode from among single selection, multiple selection, or range selection.

Header Format

Select or enter the header format of the calendar from among yyyy.MM.dd, yyyy/M/d, d-MMMM-yy, d-MMMM, or MMMM-yy.

Header Display Position

Select the header character string position of the calendar from among left justified, center, or right justified.

Display of Days of the Week

Set display or non-display of the days of the week. If this item is checked, the days of the week are displayed.

Calendar Header Display

Set display or non-display of the calendar header. If this item is checked, the calendar header is displayed.

Memo Mark Display

Set display or non-display of the memo mark. If this item is checked, the memo mark is displayed.

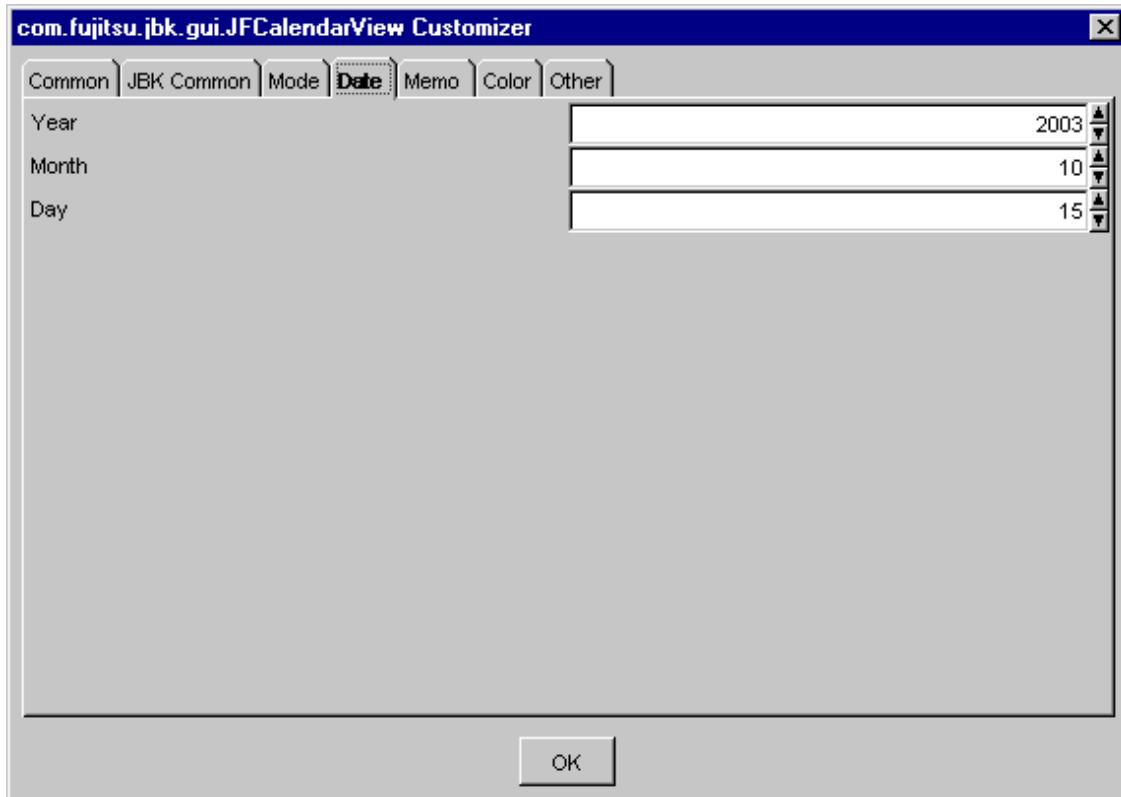
Memo Display

Set display or non-display of the memo. If this item is checked, the memo is displayed.

The memo is displayed when the cursor is positioned on the day where the memo is set.

- Date

Set the year, month, and day to be displayed in the calendar.



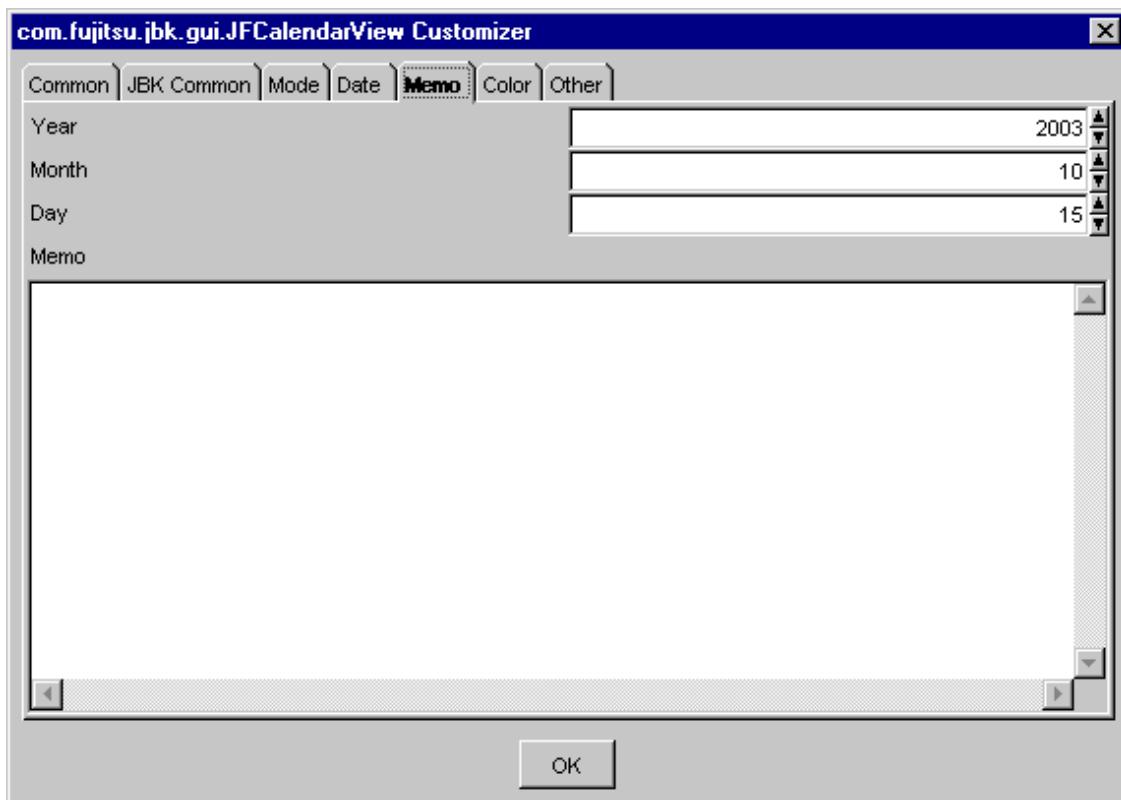
Year/Month/Day

Set the year, month, and day to be displayed in the calendar.

Specify from 1 to 9999 as the year, from 1 to 12 as the month, and from 1 to 31 as the day.

- Memo

Specify the year, month, and day, and set the memo.



Year/Month/Day

Set the year, month, and day to set the memo.

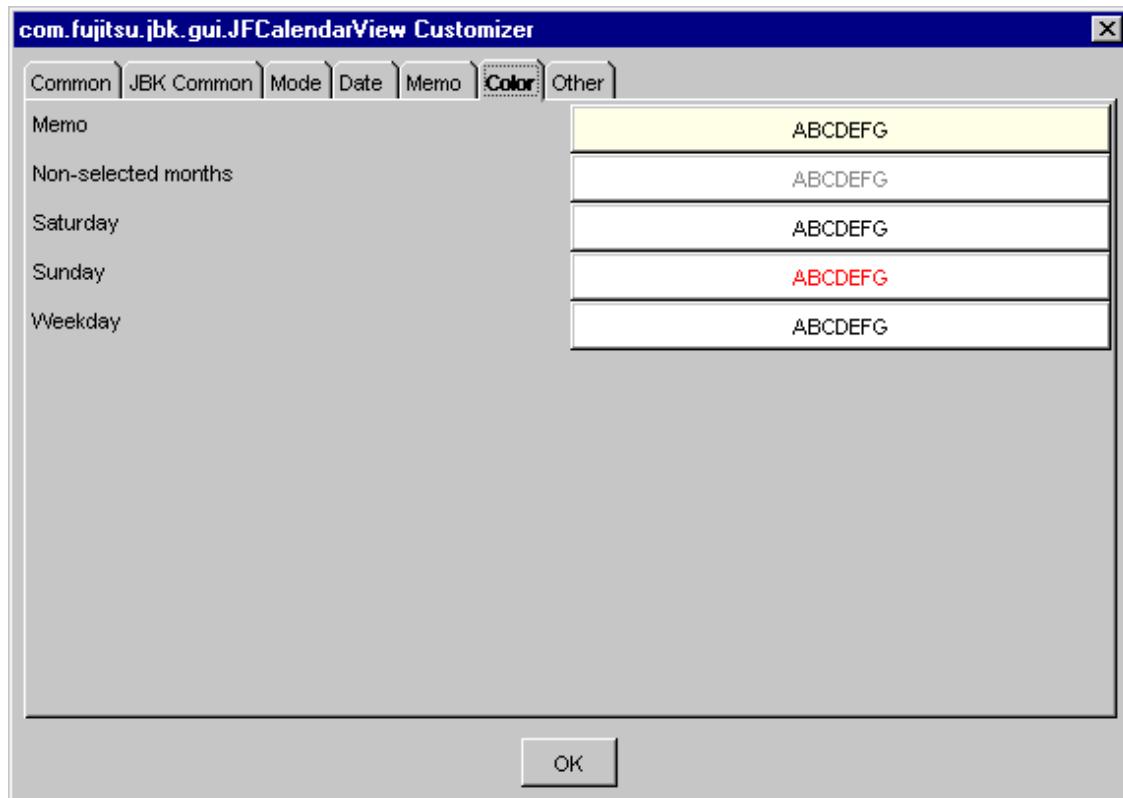
Specify from 1 to 9999 as the year, from 1 to 12 as the month, and from 1 to 31 as the day.

Memo

Set the memo.

- Color

Set the color used for the calendar.



Memo

Set the foreground color and background color of the memo. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Non-selected months

Set the foreground color and background color of the previous and subsequent months of the displayed month. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Saturday

Set the foreground color and background color of Saturday. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Sunday

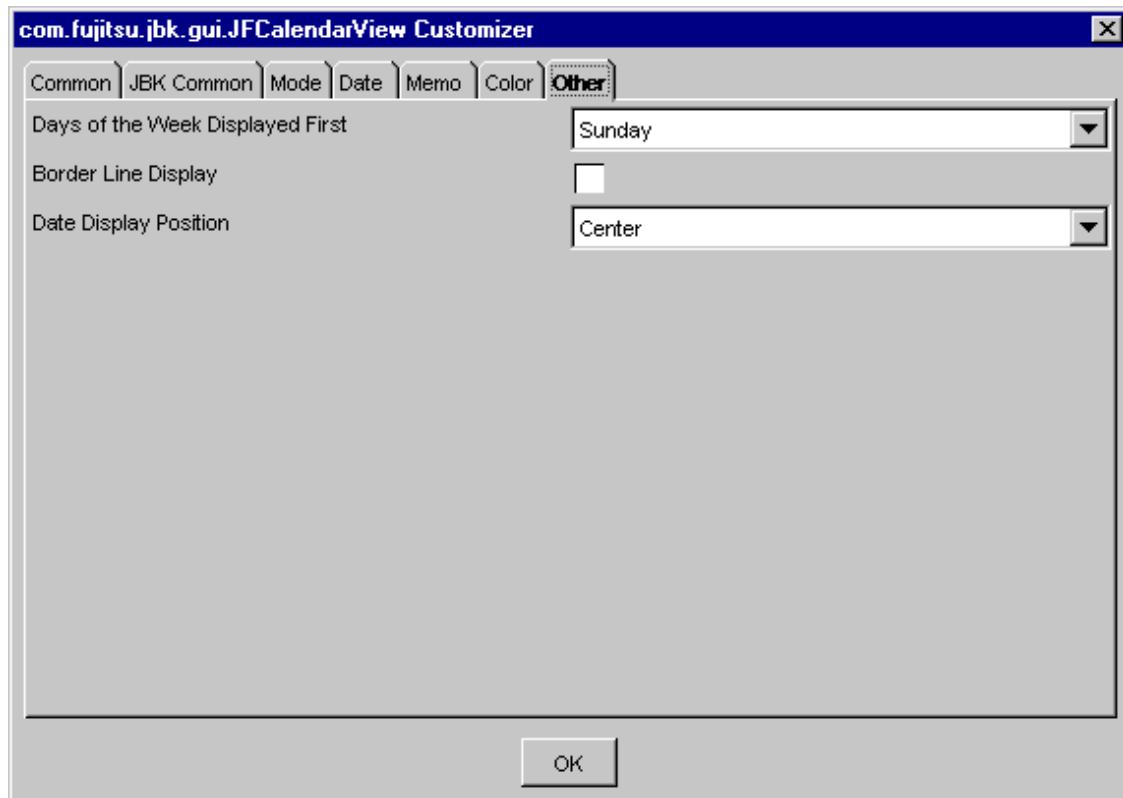
Set the foreground color and background color of Sunday. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Weekday

Set the foreground color and background color of weekday. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

- Other

Set other information.



Days of the Week Displayed First

Select the days of the week to be displayed at the beginning of the week.

Border Line Display

Set display or non-display of border lines. If this item is checked, borderlines are displayed.

Date Display Position

Select the date display position from among Top Left, Top Center, Top Right, Center Left, Center, Center Right, Bottom Left, Bottom Center, or Bottom Right.

3.4 Cell Bean

The cell Bean has the following information and [Customizer](#) functions.

- [Property information](#)



See

"Package Guide"- JFCell

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Horizontal character display position of cells

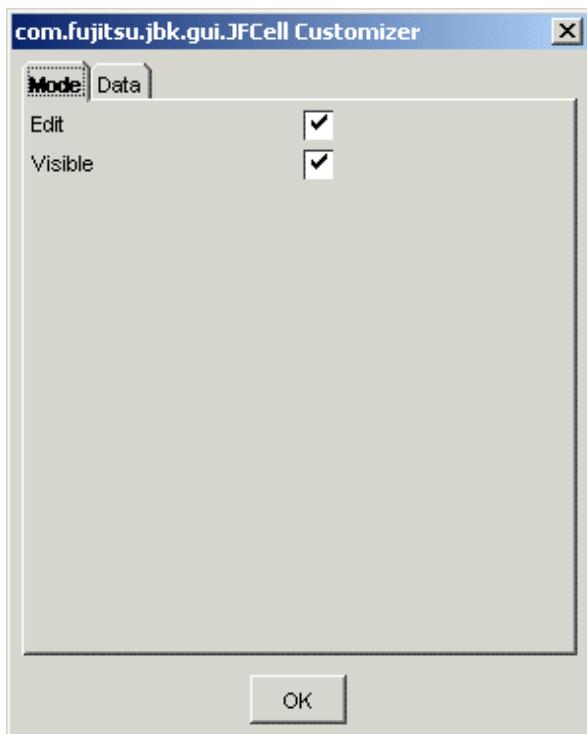
Name	Type	Reference	Setting	Explanation
alignmentVertical	int	Y	Y	Vertical character display position of cells
background	java.awt.Color	Y	Y	Background color of cells
borderColor	java.awt.Color	Y	Y	Border color of cells
borderType	int	Y	Y	Border type of cells
borderWidth	int	Y	Y	Border width of cells
editable	boolean	Y	Y	Cell editable/not editable
font	java.awt.Font	Y	Y	Cell font
foreground	java.awt.Color	Y	Y	Foreground color of cells
selectBackground	java.awt.Color	Y	Y	Background color of a selected cell
selectForeground	java.awt.Color	Y	Y	Foreground color of a selected cell
string	java.lang.String	Y	Y	Character string in a cell
visible	boolean	Y	Y	Display/non-display of cells

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the mode of cells.



Edit

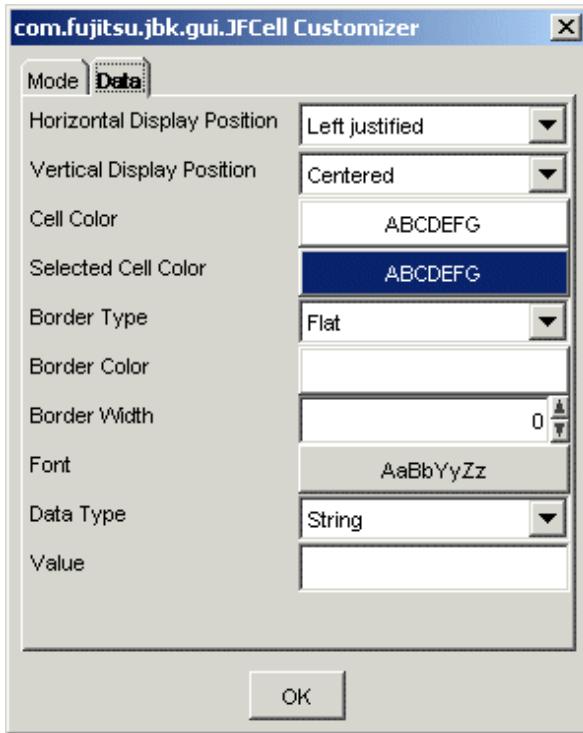
Set whether editing is enabled. If this item is checked, editing is enabled.

Visible

Set display/no display for the value. If this item is checked, the value is displayed.

- Data

Set the cell data.



Horizontal Display Position

Select the horizontal display position of the strings from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Cell Color

Set the foreground color and background color of the cell. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Selected Cell Color

Set the foreground color and background color of the selected cell. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed

Border Type

Set the border type from among Flat, Convex, or Concave.

Border Color

Set the border color. When the button is pressed, [Color setting dialog](#) is displayed.

Border Width

Set the border width with a pixel value. Specify from 0 to 5 as the border width.

Font

Set the font. When the button is pressed, [\[Font\] setting dialog](#) is displayed.

Data Type

Select the data type from among String, Numeric or Boolean. The input field of 'Value' depends on 'Data Type'.

Value

Set the value of the selected node column. The set value is set as the following object class.

- String type: java.lang.String
- Numeric type: java.lang.Long
- Boolean type: java.lang.Boolean

3.5 Checklist Bean

The checklist Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFCheckList

Property information

Name	Type	Reference	Setting	Explanation
add	java.lang.String		Y	Additional string
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
checkboxBackground	java.awt.Color	Y	Y	Background color of check box
checkboxForeground	java.awt.Color	Y	Y	Foreground color of check box
checkboxPosition	int	Y	Y	Display position of check box
checkedIndexes	int[]	Y		Array of checked indexes
checkedItemCount	int	Y		Number of checked items
checkedItems	java.lang.String[]	Y		Array of checked items
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
deselect	int		Y	Deselection
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available

Name	Type	Reference	Setting	Explanation
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
indexSelected	(Array) boolean	(Array) Y		Whether the specified index is selected
insert	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Inserted string
interlockMode	boolean	Y	Y	Whether the cursor interlocks with the selection status and the check status
item	(Array) java.lang.String	(Array) Y		Item
itemCount	int	Y		Number of items
items	java.lang.String[]	Y		Item
locale	java.util.Locale	Y	Y	Locale information
multipleMode	boolean	Y	Y	Multiple selection mode/single selection mode
name	java.lang.String	Y	Y	Name
preferredColorDisplay	boolean	Y	Y	Whether display the preferred color
remoteFont	boolean	Y		Whether the registered font is a remote font
remove	int		Y	Removed string
replace	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Item replacement
rowHeight	int	Y	Y	Height of row
rows	int	Y	Y	Number of displayed lines
select	int		Y	Selection
selectedIndex	int	Y		Selected index
selectedItem	java.lang.String	Y		Selected item
selectedObjects	java.lang.Object[]	Y		Array of selected objects
selectviewMode	boolean	Y	Y	Whether the selected item is highlight or not

Name	Type	Reference	Setting	Explanation
state	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Status
toolTipText	java.lang.String	Y	Y	Tool tip text
topIndex	int	Y	Y	Index displayed first
viewMode	boolean	Y	Y	Whether the mode is view mode
visible	boolean	Y	Y	Whether visible
wheelScrollingEnabled	boolean	Y	Y	Whether to enable scrollbar operation with mouse wheel

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the mouse is double-clicked or when the Enter key is pressed.
check	com.fujitsu.jbk.gui.JFCheckListener	addCheckListener removeCheckListener	itemStateChanged	Is issued when the check box value is changed.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.eventFocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.eventInputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
item	java.awt.eventItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when a line is selected.
key	java.awt.eventKeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	

Name	Listener	Addition/removal	Method	Explanation
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

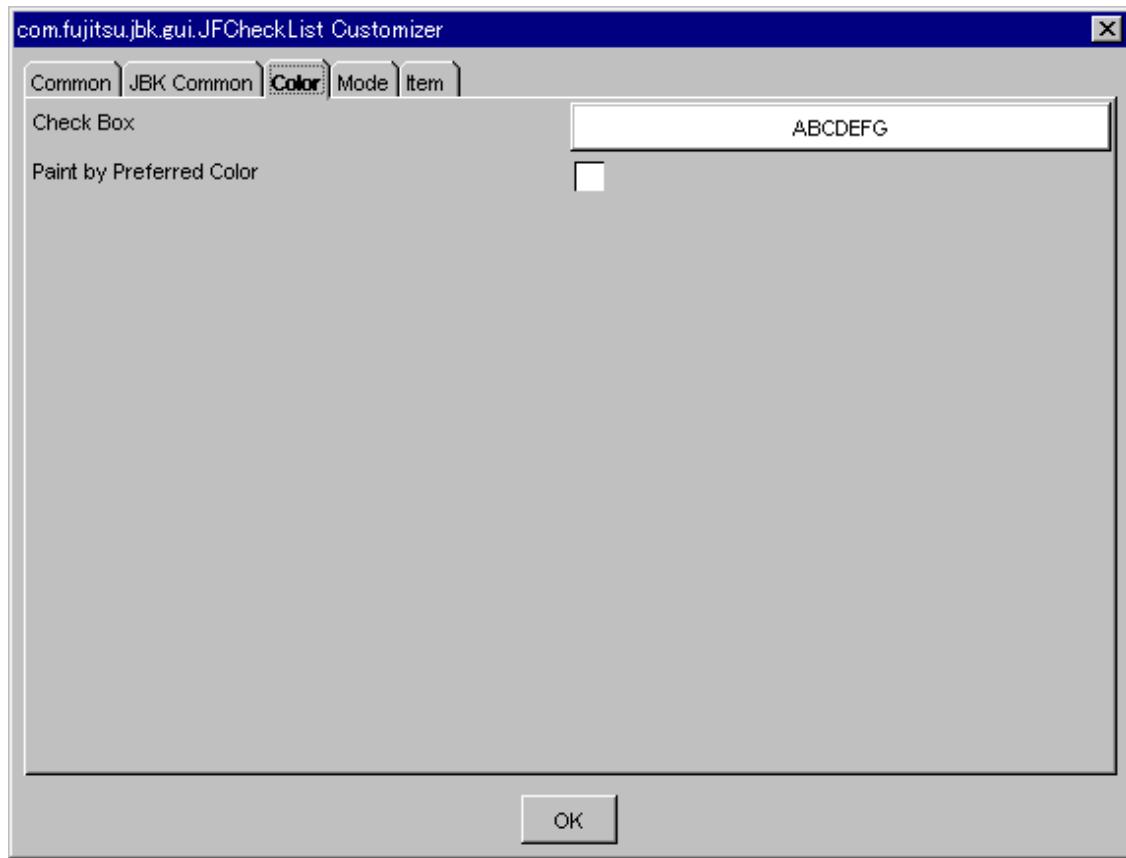
Name	Parameters	Explanation
add	java.lang.String	Adds an item.
deselect	int	Deselects the specified index.
deselectAll		Deselects all items.
hideToolTip		Erases the tool tip.
insert	int	Inserts an item in the specified index.
	java.lang.String	
remove	int	Deletes the specified index.
removeAll		Deletes all items.
replace	int	Replaces the specified index item.
	java.lang.String	
requestFocus		Requests an input focus.
select	int	Selects the specified index.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
sort	boolean	Specifies ascending or descending order and sorts.
transferFocus		Moves the focus to the next component.

Customizer

- Component common property
- JBK GUI common property

- Color

Set the color to be used in the checklist.



Check Box

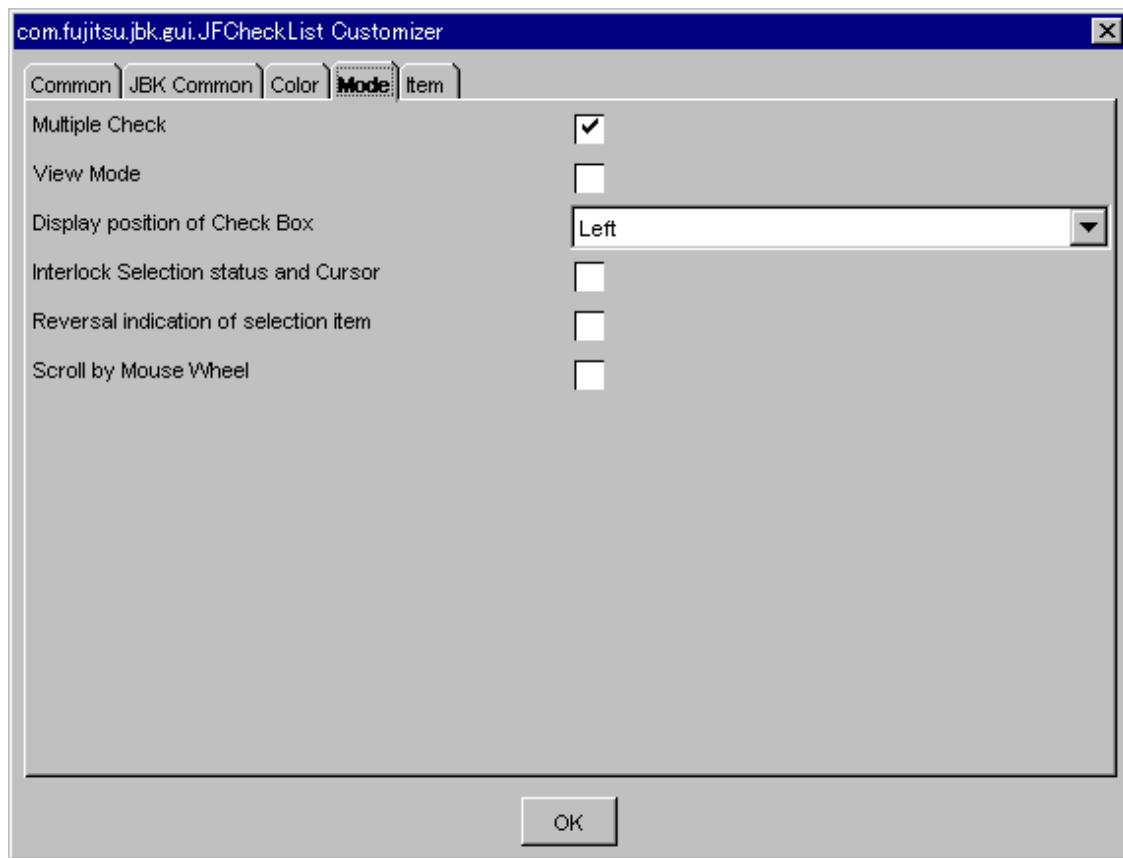
Set the foreground color and background color of the check box. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Paint by Preferred Color

Set to paint by preferred color or usual color. If this item is checked, paint by preferred color (when to be not use, paint by impossibility color).

- Mode

Set information concerning the checklist status.



Multiple Check

Set multiple check/single check on the check list. If checked, multiple check is enabled. In unchecked, single check is enabled.

View Mode

Set whether to set/not set the view mode. If checked, the view mode is set such that the check list cannot be checked or selected.

Display position of Check Box

Select the display position of the check box from Top/Left/Bottom/Right.

Interlock Selection status and Cursor

Set whether the cursor interlocks with the selection status and the check status. If checked, the check status is linked.

Reversal indication of the selection item

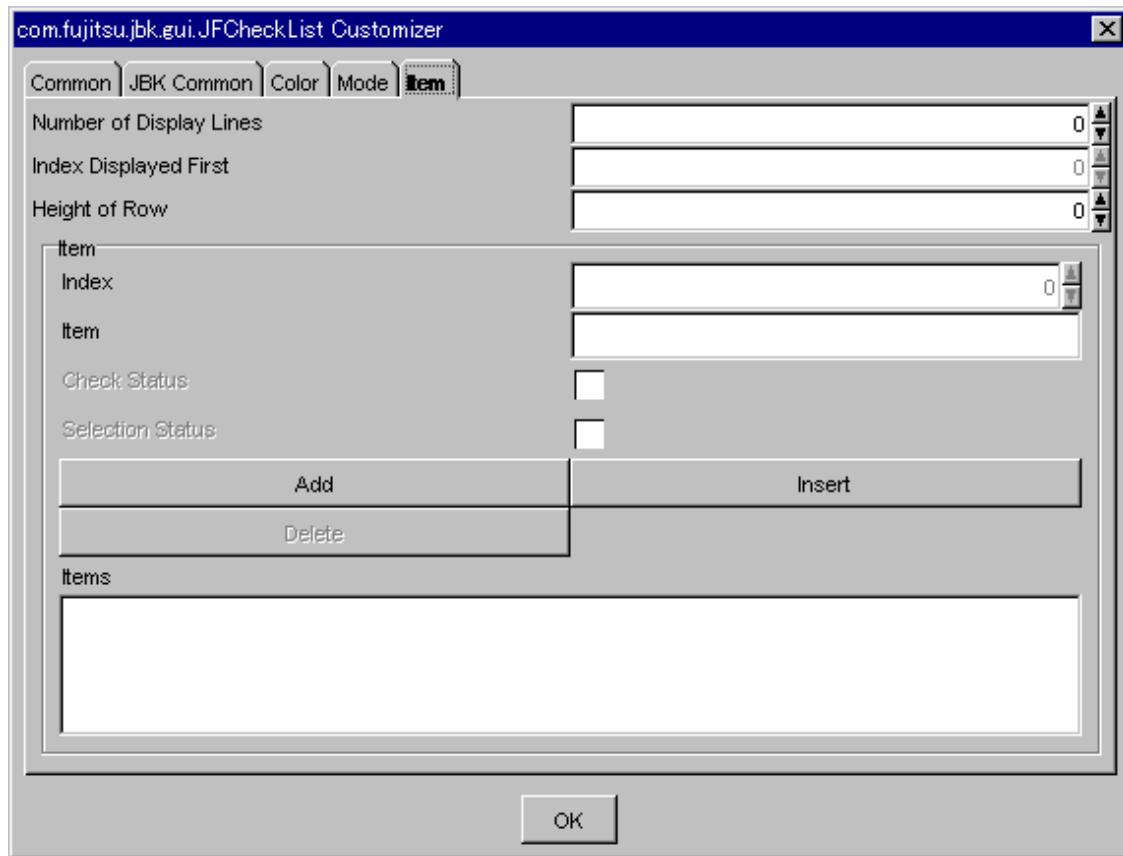
Set whether to display the selected item in the inversion mode. If checked, an item, even if selected, is not displayed in the inversion mode.

Scroll by Mouse Wheel

Set whether to enable scrolling with mouse wheel. If checked, scrolling with mouse wheel operation is enabled.

- Item

Set information concerning the checklist items.



In the initial status, items cannot be set. First, add a null item using the <Add> button, then set information concerning each item. To edit an item, specify the line index to be edited.

Number of Display Lines

Set the number of checklist display lines. Specify from 0 to 2147483647 as the display lines.

Index Displayed First

Set the first index of the checklist display screen. For the first index of the checklist, set a series of positive integers starting at 0. The maximum value of the first index of the checklist is the number of display rows minus 1.



In case of these methods may be called before time the check list is displayed, it is error.

If you used the screen designer of the integrated development environment, these methods specified by 'Index Displayed First' may be called before time the check list is displayed.

Because such a situation leads to an error, use the source editor of the integrated development environment to change the order of calling methods.

Height of Row

Set the height of row. Specify the positive integer for height of the row.

Index

Set the checklist line index. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of display rows minus 1.

Item

Set the item of the line specified in the index.

Check Status

Set the check status or unchecked status of the line specified in the index. If this item is checked, the status becomes checked.

Selection Status

Sets the selection status or deselection status of the line selected in the index. If this item is checked, the status becomes selected.

Add

Add a null line to the end of the checklist.

Insert

Add a null line immediately before the line specified in the index.

Delete

Delete the line specified in the index.

Items

Displays the data specified for the items.

3.6 Choice Bean

The choice Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFChoice

Property information

Name	Type	Reference	Setting	Explanation
add	java.lang.String		Y	Additional string
alignmentHorizontal	int	Y	Y	Horizontal position of items
autoIME	boolean	Y	Y	Automatic change of input mode
autoSort	boolean	Y	Y	Automatic sort/no automatic sort
background	java.awt.Color	Y	Y	Background color
backgroundItems	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Background color of item
borderColor	java.awt.Color	Y	Y	Border line color
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
compoundEventManager	boolean	Y	Y	Whether to fire the start/finish event of edit field

Name	Type	Reference	Setting	Explanation
drawOffset	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Sets the offset to the horizontal display start position.
editable	boolean	Y	Y	Editing enabled/disabled
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
excludeTaskbarArea	boolean	Y	Y	Disables display of a popup menu in the taskbar area.
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
foregroundItems	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Foreground color of item
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
image	(Array) java.awt.Image	(Array) Y	(Array) Y	Image
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
inputAssist	int	Y	Y	Input assist method
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insert	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Inserted string
interLockMode	boolean	Y	Y	Whether to select the item interlocked with the searched item
item	(Array) java.lang.String	(Array) Y		Specified index item
ItemCount	int	Y		Number of added items
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name

Name	Type	Reference	Setting	Explanation
notFollowCursor	boolean	Y	Y	Whether the selection on the popup menu changes following the movement of the mouse cursor
popupInputMode	boolean	Y	Y	Whether the editing is enabled while the popup list is displayed
popupReduceFontMinimumSize	int	Y	Y	Minimum size of the reduced font size in the popup list
popupReduceFontMode	boolean	Y	Y	Whether the font size is reduced in accordance with the width of the popup list or not
popupVariableWidthMode	boolean	Y	Y	Whether the width is variable in accordance with the maximum width of items
popupVisible	boolean	Y		Whether the popup list is visible or not
remoteFont	boolean	Y		Whether the registered font is a remote font
remove	int		Y	Removed string
screenInsets	java.awt.Insets	Y	Y	screen insets
searchable	boolean	Y	Y	Search in accordance with the input/no
selectByAction	boolean	Y	Y	Whether selects the items synchronizing with the notice of the ActionEvent when editing.
selectedIndex	int	Y		Selected item index
selectedItem	java.lang.String	Y		Selected item
selectedObjects	java.lang.Object[]	Y		Selected object
selectviewMode	boolean	Y	Y	Whether the selected item is highlight or not
spreadMode	boolean	Y	Y	Whether show adjusting to the class's size.
text	java.lang.String	Y	Y	Character string input in the edit field
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible
wheelScrollingEnabled	boolean	Y	Y	Whether to enable scrollbar operation with mouse wheel

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed on the edit field.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
compound	com.fujitsu.jbk.gui.JCompoundEventListener	addCompoundEventListener removeCompoundEventListener	startProcessEvent endProcessEvent	Is issued when the event of edit field is fired.
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
item	java.awt.event.ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when an item is selected.
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event.MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
popup	com.fujitsu.jbk.gui.JPopupListener	addPopupListener removePopupListener	popupVisible	Is issued when the popup list is displayed or closed.
			popupInvisible	
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event.TextListener	addTextListener removeTextListener	textValueChanged	Is issued when character string changes in editing field.

Method information

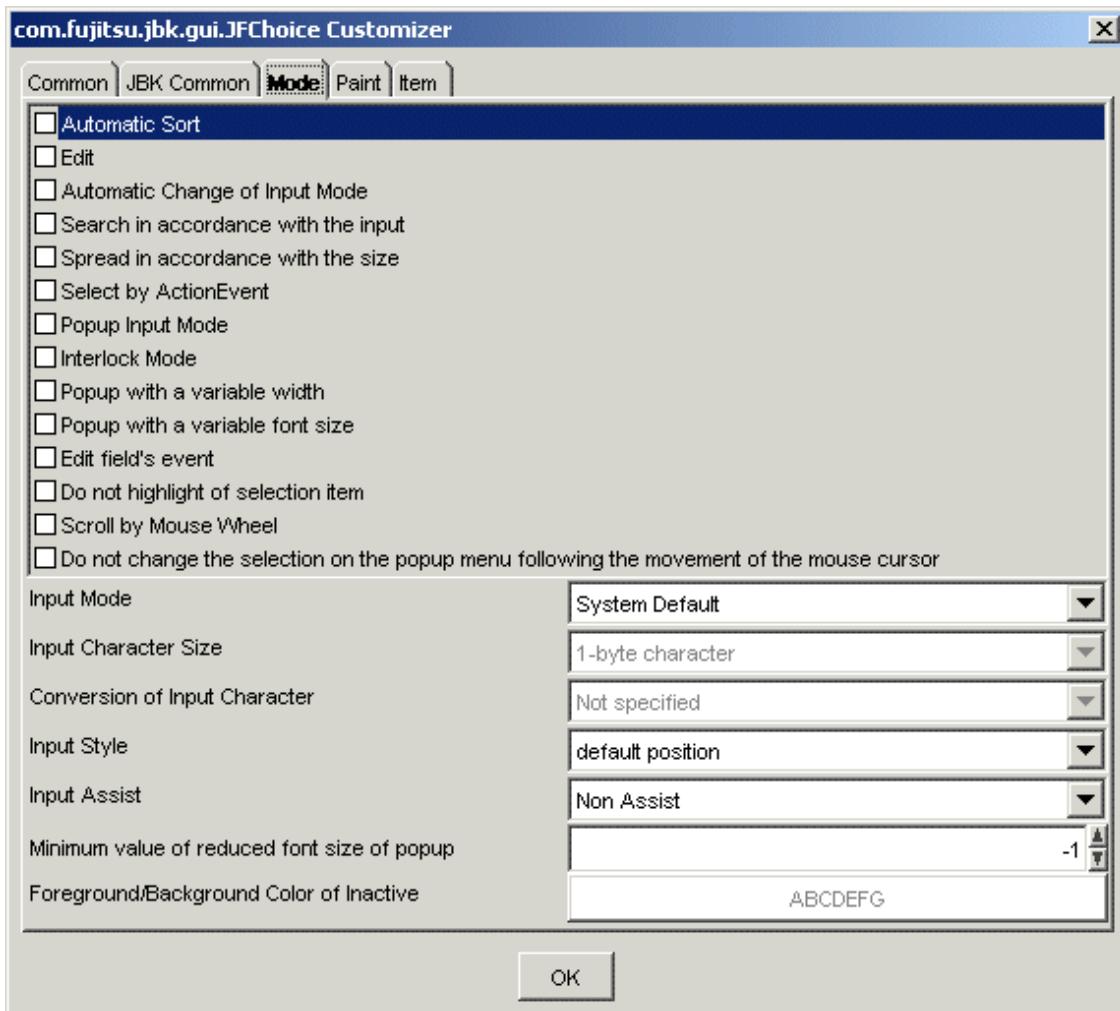
Name	Parameters	Explanation
add	java.lang String	Adds an item.
hideToolTip		Erases the tool tip.
insert	int	Adds an item at the specified position.
	java.lang String	
remove	int	Deletes the specified index item.
remove	java.lang String	Deletes the specified item.
removeAll		Deletes all items.
requestFocus		Requests an input focus.
select	int	Selects the index at the specified position.
select	java.lang String	Selects the specified item.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
sortItem	int	Sorts added items.
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the choice operation mode.



Automatic Sort

Set whether or not to sort automatically. If checked, automatic sort is performed.

Edit

Set whether or not editing is enabled. If checked, selected items of choice can be edited directly. The result of editing is reflected on the edit field, but not reflected on the item.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Search in accordance with the input

Set whether to search items according to the input string in the edit field. If checked, the item is incrementally searched with the input. This is available only when 'Edit' is checked.

Spread in accordance with the size

Specifies whether shows the selected items adjusting to the preferred size of font or shows adjusting to the size of this class. If checked, shows adjusting to the size of this class.

Select by ActionEvent

Sets whether selects the items of edit field with the notice of the ActionEvent. If this item is checked, select when the ActionEvent is notified by pressing the Enter key.

Popup Input Mode

Set whether or not editing is enabled while the popup list is displayed. If checked, editing is enabled while the popup list is displayed.
This is available only when 'Edit' is checked.

Interlock Mode

Set whether or not to select the item interlocked with the searched item. If checked, the item is selected with the searched item.
This is available only when 'Search in accordance with the input' is checked.

Popup with a variable width

Set whether or not the width of popup list is variable. If checked, the width of popup list is fitted to the most width of items.

Popup with a variable font size

Set whether or not the font size is reduced, when the width of the string item is longer than the popup list. If checked, the font size is reduced. This is available only when 'Popup with a variable width' is checked.

Edit field's event

Set whether to fire the start/finish event of edit field. If checked, the event is fired.

Do not highlight of selection item

Set whether or not to highlight the selected item. If checked, the selected item is not highlighted.

Do not change the selection on the popup menu following the movement of the mouse cursor

The item selection does not change following the mouse cursor on the popup menu.

Scroll by Mouse Wheel

Set whether to enable scrolling of Popup with operations of mouse wheel. If checked, scrolling with mouse wheel operation is enabled.

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Minimum value of reduced font size of popup

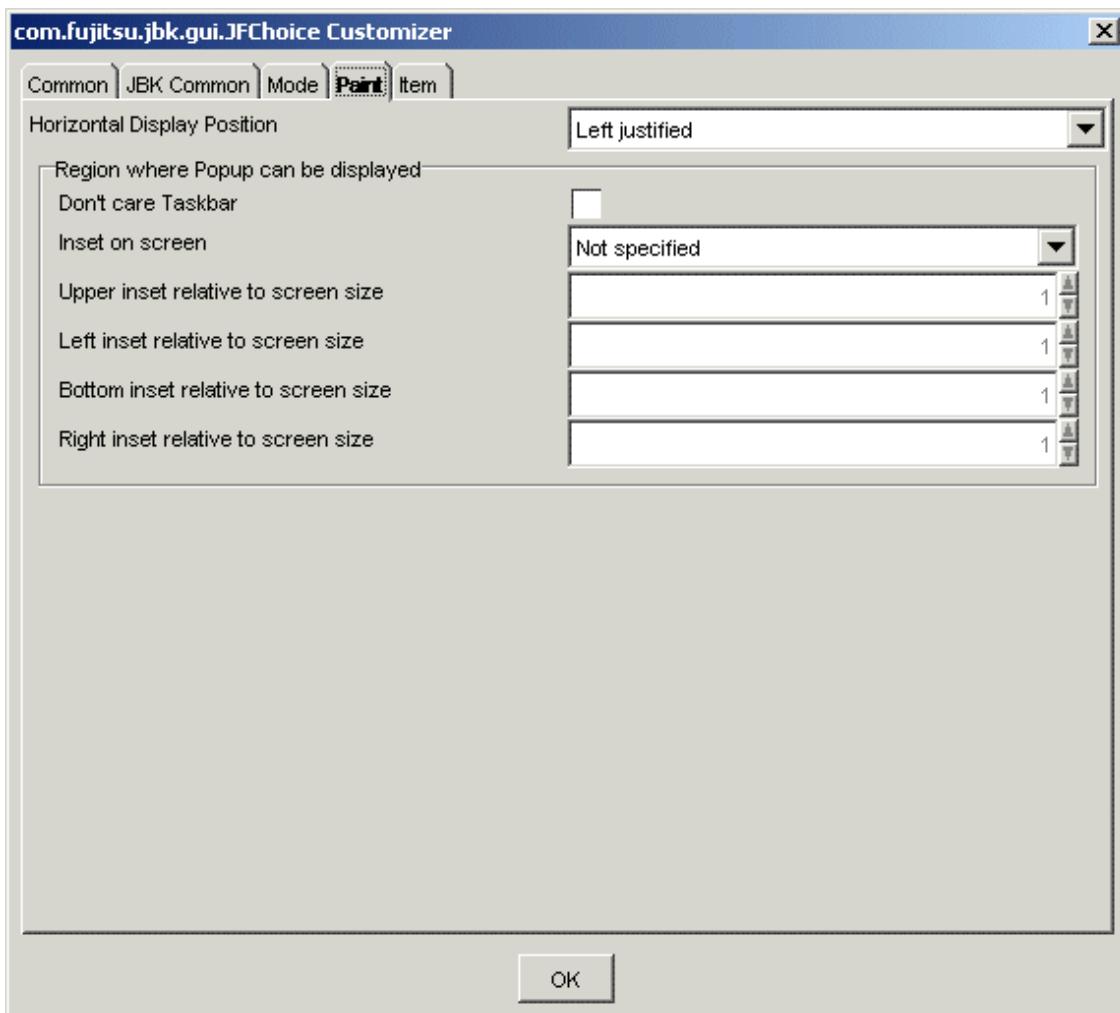
Sets (update) the minimum value of reduced font size, when the 'Popup with a variable font size' is checked. Specify from -1 to 2147483647 as the minimum value of reduced font size.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

- Paint

Set information concerning choice display.



Horizontal position

Select the horizontal display position of items from left-justified, centered, and right-justified.

Disables display of a popup menu in the taskbar area.

The popup menu cannot be displayed in the taskbar area.

Inset on screen

Select whether or not to set insets relative to screen size.

Upper inset relative to screen size

Set the upper inset with a pixel value relative to screen size. Specify a value ranging from -2147483648 to 2147483647.

Left inset relative to screen size

Set the left inset with a pixel value relative to screen size. Specify a value ranging from -2147483648 to 2147483647.

Bottom inset relative to screen size

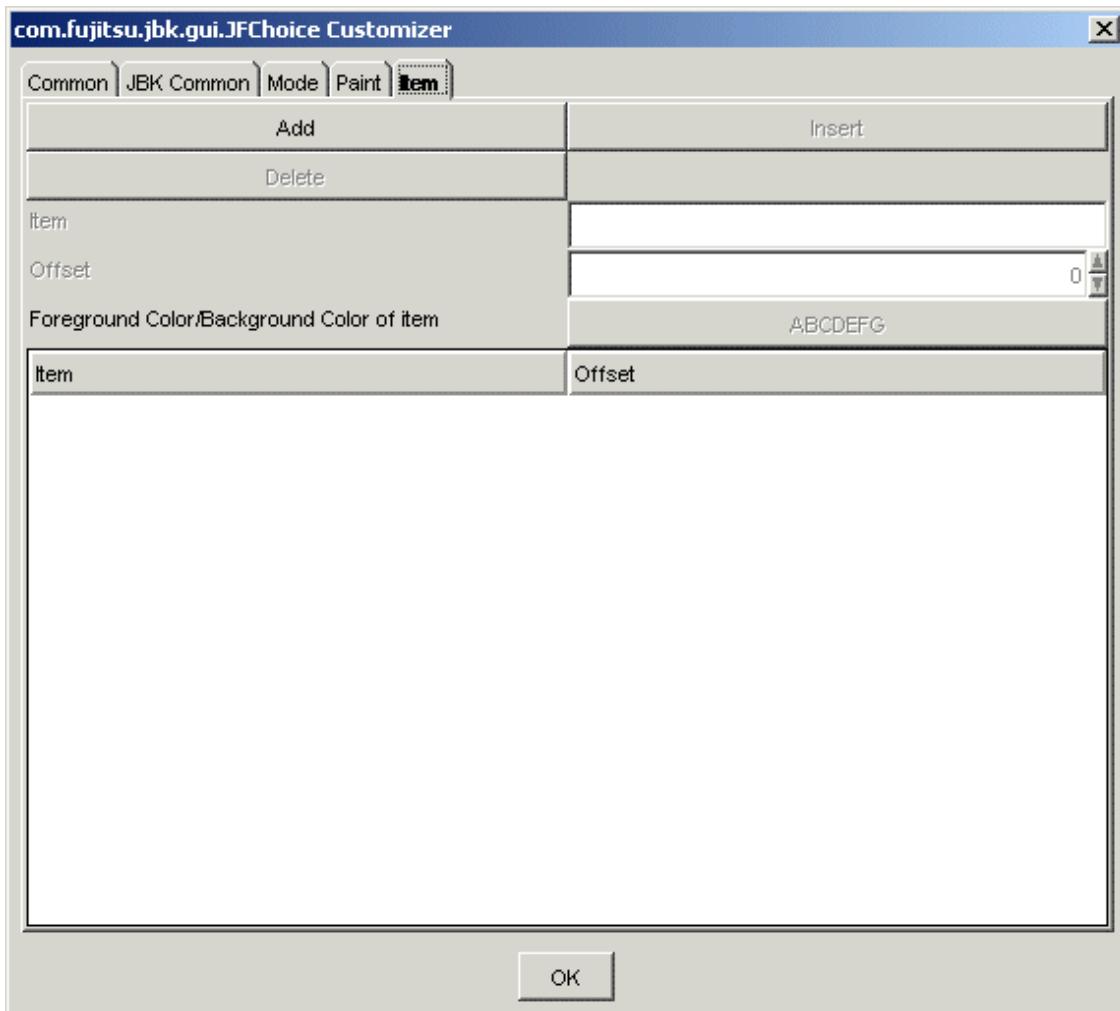
Set the bottom inset with a pixel value relative to screen size. Specify a value ranging from -2147483648 to 2147483647.

Right inset relative to screen size

Set the right inset with a pixel value relative to screen size. Specify a value ranging from -2147483648 to 2147483647.

- Item

Set information concerning choice items.



In the initial status, items cannot be set. First, add a null item using the <Add> button, and then set information concerning each item. To edit an item, select the (index of) item to be edited.

Add

Adds a null item to the end of the choice.

Insert

Insert a null item before the specified index.

Delete

Deletes the specified index.

Item

Select the index to be set from the list and set (update) the item.

Offset

Sets (update) the offset to the horizontal display start position of the selected index from list. Specify from 0 to 2147483647 as the offset.

Foreground Color/Background Color of item

Set the foreground/background color of item of the selected index from list. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

3.7 Date/time field Bean

The date/time field Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFFieldDate

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Display position of horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	boolean	Y	Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
byteLength	int	Y		Byte length of character string
caretBlink	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input caret blink
caretPosition	int	Y	Y	Caret position
caretStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
columns	int	Y	Y	Number of display characters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language

Name	Type	Reference	Setting	Explanation
date	java.util Date	Y	Y	Date
echoChar	char	Y	Y	Character display at password input
editable	boolean	Y	Y	Editing enabled/disabled
enableChars	char[]	Y	Y	Input-enabled character array
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	int	Y	Y	Input-enabled character set
enabled	boolean	Y	Y	Whether enabled
errorBeep	int	Y	Y	Error types for which a warning is sounded
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt Font	Y	Y	Font
foreground	java.awt Color	Y	Y	Foreground color
formatTiming	int	Y	Y	Timing to perform formatting for the display
fullField	boolean	Y	Y	Whether to check all digit input
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt Color	Y	Y	Background color when inactive
inactiveForeground	java.awt Color	Y	Y	Foreground color when inactive
indispensableField	boolean	Y	Y	Whether to check the required input
inputAssist	int	Y	Y	Input assist method
inputFormatPatterns	java.lang String[]	Y		Input format pattern array
inputFormats	java.text DateFormat[]	Y		Input format array
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
insets	java.awt Insets	Y	Y	Inset
length	int	Y		Character string length
locale	java.util Locale	Y	Y	Locale information

Name	Type	Reference	Setting	Explanation
maxByteLength	int	Y	Y	Maximum number of input-enabled bytes
maxLength	int	Y	Y	Maximum number of input-enabled characters
name	java.lang.String	Y	Y	Name
outputFormatPattern	java.lang.String	Y	Y	Display format pattern
plainTextEditing	boolean	Y	Y	Whether the format function is enabled during input
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not
selectedText	java.lang.String	Y		Selected character string
selectionEnd	int	Y	Y	Selection end position
selectionStart	int	Y	Y	Select start position
sendTextEventBySetText	boolean	Y	Y	Whether the TextEvent issue is done, when setText() is called
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputError	com.fujitsu.jbk.gui JFInputErrorListener	addInputErrorListener removeInputErrorListener	inputError	Is issued when a character string input error occurs.
inputMethod	java.awt.event InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListener	textValueChanged	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addEnableChar	char	Adds an input enabled character.
addInputFormat	java.text DateFormat	Adds the input format.
addInputFormatPattern	java.lang String	Adds the input format pattern.

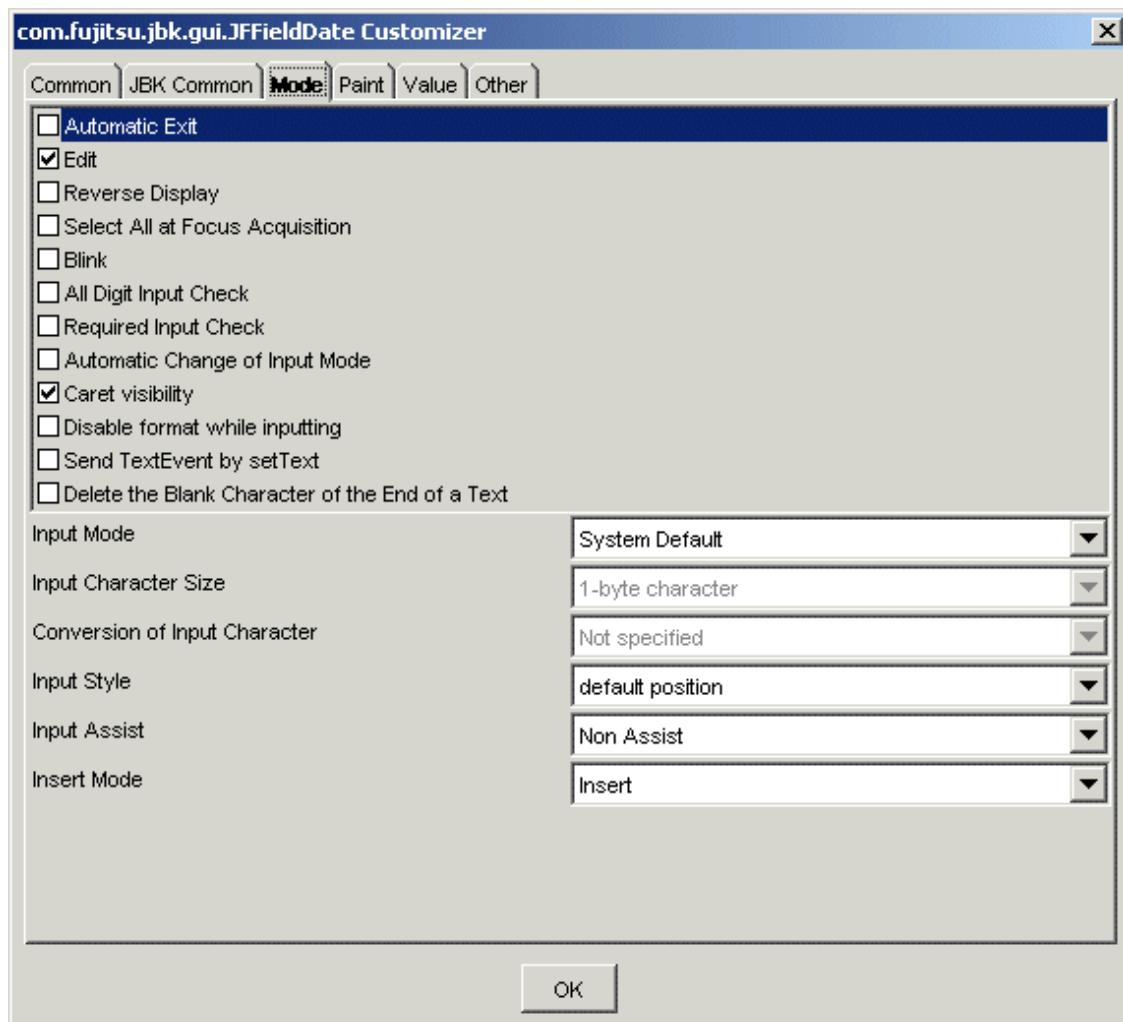
Name	Parameters	Explanation
canCopy		Returns whether copy is possible.
canCut		Returns whether cut is possible.
canPaste		Returns whether paste is possible.
checkFullField		Checks all digit inputting.
checkIndispensableField		Checks the required inputting.
copy		Copies the selected character string onto the clipboard.
cut		Cuts the selected character string onto the clipboard.
echoCharIsSet		Returns whether password input function is set up.
getPreferredSize	int	Returns the optimum size toward number of the specified characters.
getStringForRange	int	Returns the partial character string.
	int	
hideToolTip		Erases the tool tip.
insertText	java.lang.String	Inserts the character string into the selected area.
paste		Pastes from the clipboard.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int	Partially selects the character string.
	int	
selectAll		Selects the entire character string.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- Component common property
- JBK GUI common property

- Mode

Set the operation mode in the date/time field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed.

Edit

Set whether to enable editing. If this item is checked, editing is enabled.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

All Digit Input Check

Set whether the field is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Disable format while inputting

Set whether to disable the format function when data is input. If checked, the format function during input is disabled.

Send TextEvent by setText

Set whether the issue of TextEvent does when setText() is called. If checked, the TextEvent is issued.

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

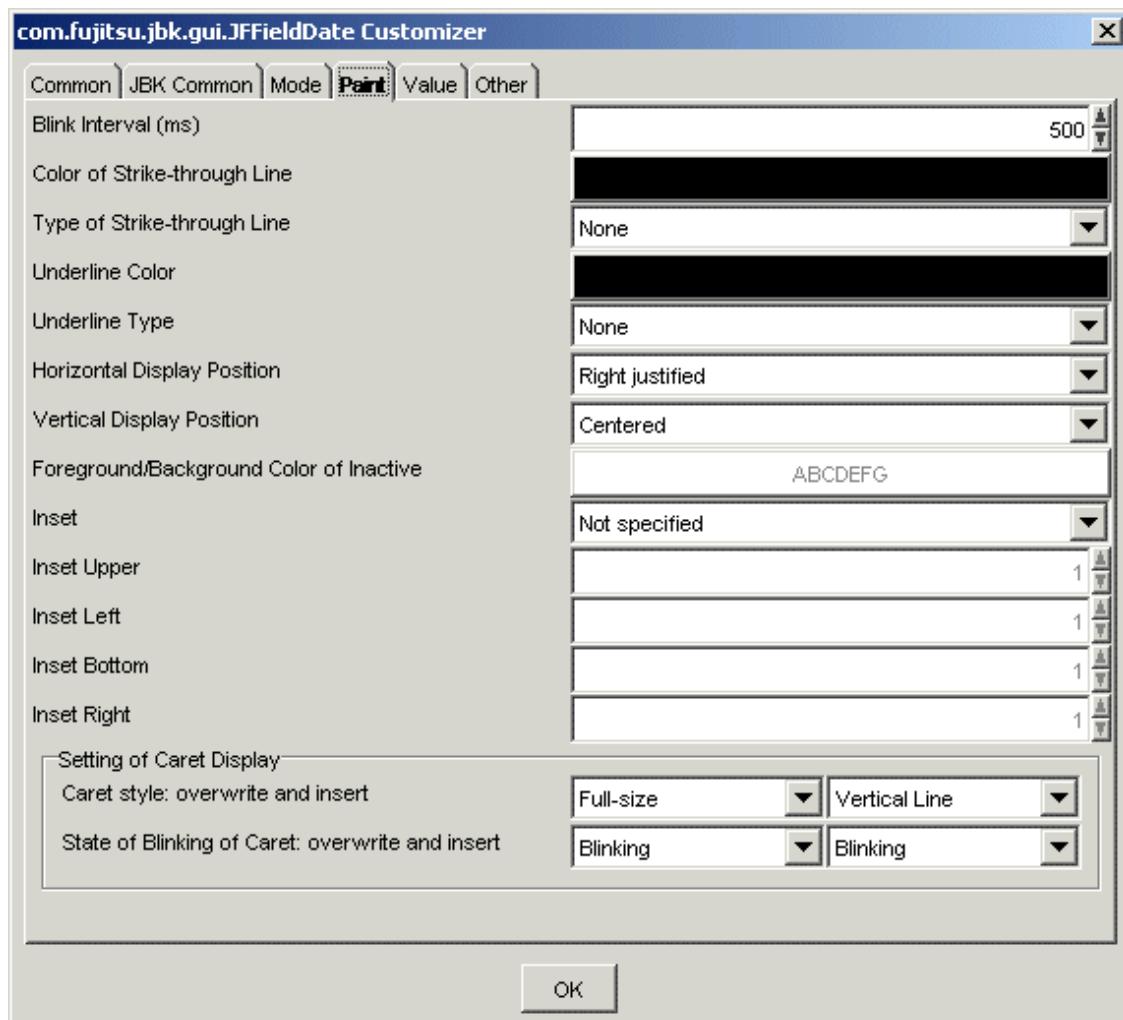
Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Select the input mode from Insert/Overwrite.

- Paint

Set information about the date/time field display.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 0 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines).

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Inset

Set whether or not to specify an inset.

Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Caret style: overwrite and insert

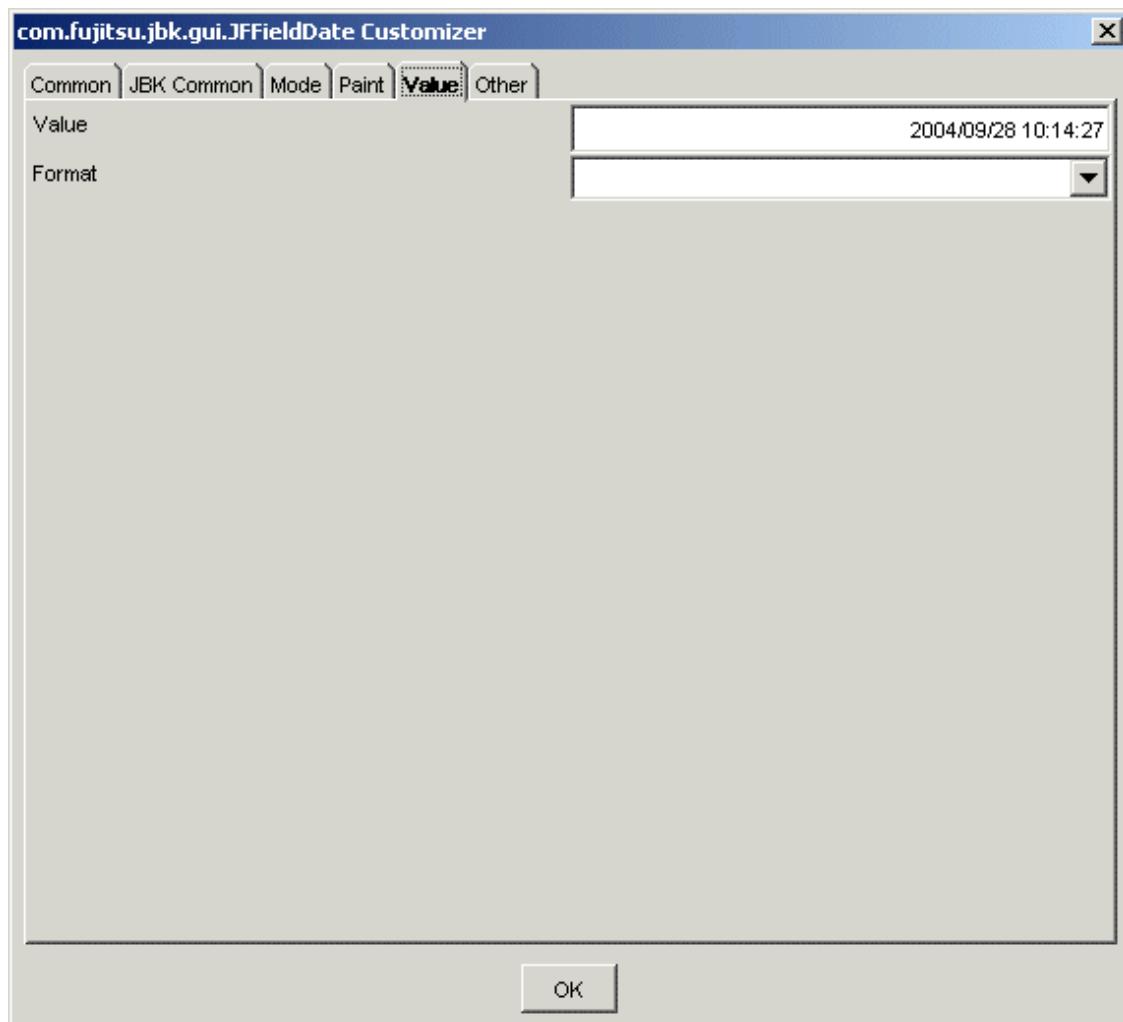
Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

State of Blinking of Caret: overwrite and insert

Set whether or not the caret blinks. A different status can be set for each input mode: overwrite and insert.

- Value

Set the value of the date/time field.



Value

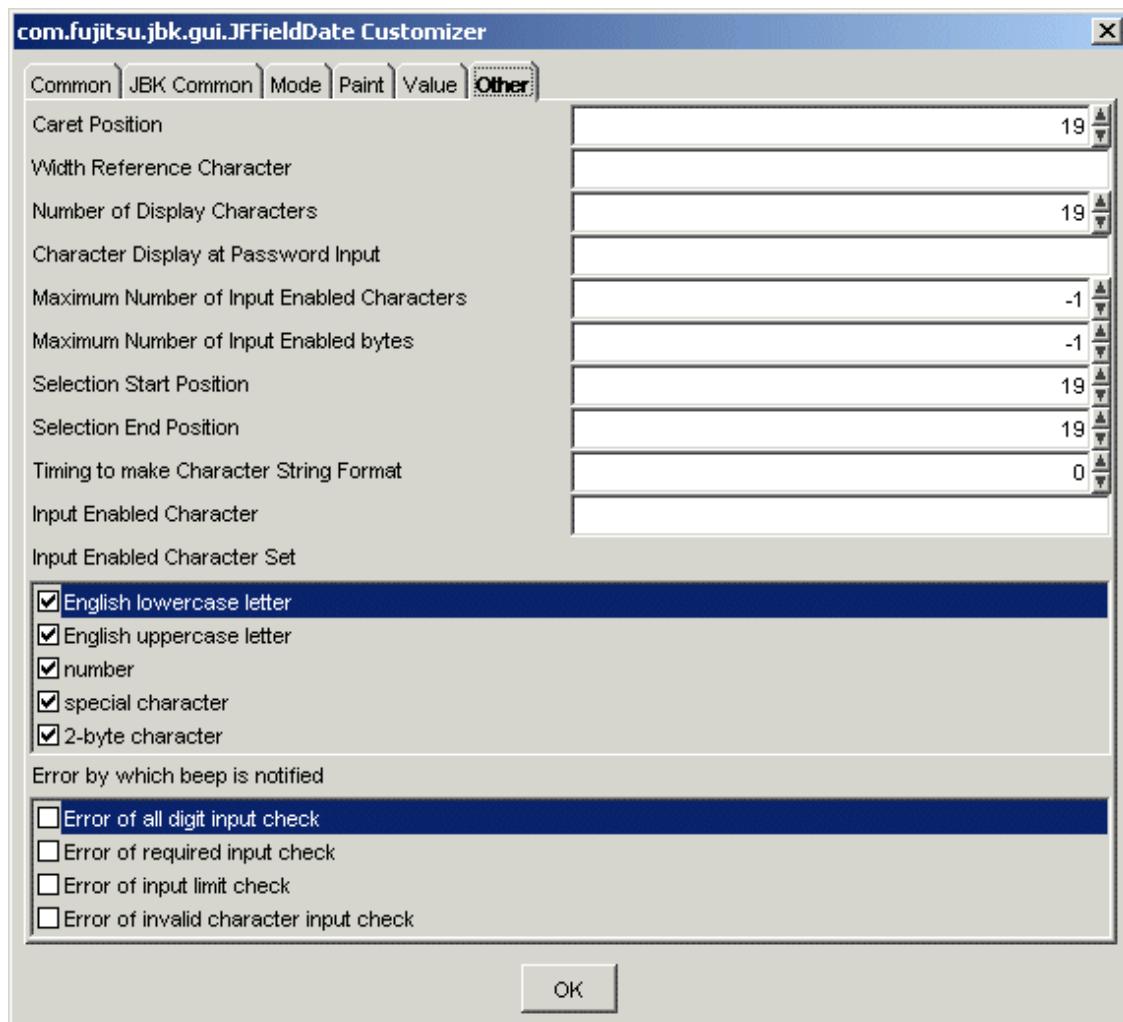
Set the date/time according to the format. The initial status is "yyyy/MM/dd HH:mm:ss".

Format

Set the format for the input/display from among yyyy.MM.dd, yyyy/M/d, d-MMMM-yy, d-MMMM, MMMM-yy, h:mm a, h:mm:ss a, or H:mm. When the corresponding format does not exist, set the format pattern directly in the selection field.

- Other

Set other information.



Caret Position

Set the caret position. Specify from 0 to (the number of character according to the format) as the caret position.

Width Reference Character

Set the character which is used to decide the size of the component.

Number of Display Characters

Set the number of display characters. Specify from 0 to 2147483647 as the number of display characters.

Character Display at Password Input

Set the character to display for the password input and displaying.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input input-enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Selection Start Position

Set the selection start position. Specify from 0 to (the number of characters according to the format) as the selection start position.

Selection End Position

Set the selection end position. Specify from 0 to (the number of characters according to the format) as the selection end position.

Timing to make Character String Format

Set the timing to perform the display format. Formatting is performed when the keys are pressed the specified number of times. Specify from 0 to 2147483647 as the timing to perform the display format.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Enabled Character Set

Select the available character set for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input. To partially enable the input of the character set, set to 'Input Enabled Character'.

Error by which beep is notified

Select the error types for which the warning is sounded from among Error of all digit input check, Error of required input check, Error of input limit check, or Error of invalid character input check.

3.8 Real number field Bean

The real number field Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFFieldDouble

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Display position of horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
alwaysFormat	boolean	Y	Y	Whether to format always or not
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	boolean	Y	Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string

Name	Type	Reference	Setting	Explanation
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
byteLength	int	Y		Byte length of character string
caretBlink	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input caret blink
caretPosition	int	Y	Y	Caret position
caretStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
columns	int	Y	Y	Number of display characters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
echoChar	char	Y	Y	Character display at password input
editable	boolean	Y	Y	Editing enabled/disabled
enableChars	char[]	Y	Y	Input-enabled character array
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	int	Y	Y	Input-enabled character set
enabled	boolean	Y	Y	Whether enabled
equalBackground	java.awt.Color	Y	Y	Background color for an input value equal to the threshold value
equalForeground	java.awt.Color	Y	Y	Foreground color for an input value equal to the threshold value
errorBeep	int	Y	Y	Error types for which a warning is sounded
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set.
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
formatTiming	int	Y	Y	Timing to perform formatting for the display
fullField	boolean	Y	Y	Whether to check all digit input

Name	Type	Reference	Setting	Explanation
greaterBackground	java.awt.Color	Y	Y	Background color for an input value greater than the threshold value
greaterForeground	java.awt.Color	Y	Y	Foreground color for an input value greater than the threshold value
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
indispensableField	boolean	Y	Y	Whether to check the required input
initialValueDisplay	boolean	Y	Y	Whether to display initial value
inputAssist	int	Y	Y	Input assist method
inputFormatPatterns	java.lang.String[]	Y		Input format pattern array
inputFormats	java.text.NumberFormat[]	Y		Input format array
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
insets	java.awt.Insets	Y	Y	Inset
length	int	Y		Character string length
lessBackground	java.awt.Color	Y	Y	Background color for an input value smaller than the threshold value
lessForeground	java.awt.Color	Y	Y	Foreground color for an input value smaller than the threshold value
locale	java.util.Locale	Y	Y	Locale information
maxByteLength	int	Y	Y	Maximum number of input-enabled bytes
maxDecimalDigit	int	Y	Y	Maximum number of digits in the decimal section
maxIntegerDigit	int	Y	Y	Maximum number of digits in the integer section
maxLength	int	Y	Y	Maximum number of input-enabled characters
maximumValue	double	Y	Y	Maximum value
minimumValue	double	Y	Y	Minimum value
name	java.lang.String	Y	Y	Name

Name	Type	Reference	Setting	Explanation
outputFormatPattern	java.lang.String	Y	Y	Display format pattern
plainTextEditing	boolean	Y	Y	Whether the format function is enabled during input
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not
selectedText	java.lang.String	Y		Selected character string
selectionEnd	int	Y	Y	Selection end position
selectionStart	int	Y	Y	Select start position
sendTextEventBySetText	boolean	Y	Y	Whether the TextEvent issue is done, when setText() is called
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
threshold	double	Y	Y	Threshold value
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
value	double	Y	Y	Value
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	

Name	Listener	Addition/removal	Method	Explanation
		removeComponentListener	componentShown	
			componentHidden	
focus	java.awt.event FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputError	com.fujitsu.jbk.gui JFInputErrorListener	addInputErrorListener removeInputErrorListener	inputError	Is issued when a character string input error occurs.
inputMethod	java.awt.event InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListener	textValueChanged	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addEnableChar	char	Adds an input enabled character.
addInputFormat	java.text NumberFormat	Adds the input format.
addInputFormatPattern	java.lang String	Adds the input format pattern.
canCopy		Returns whether copy is possible.
canCut		Returns whether cut is possible.
canPaste		Returns whether paste is possible.

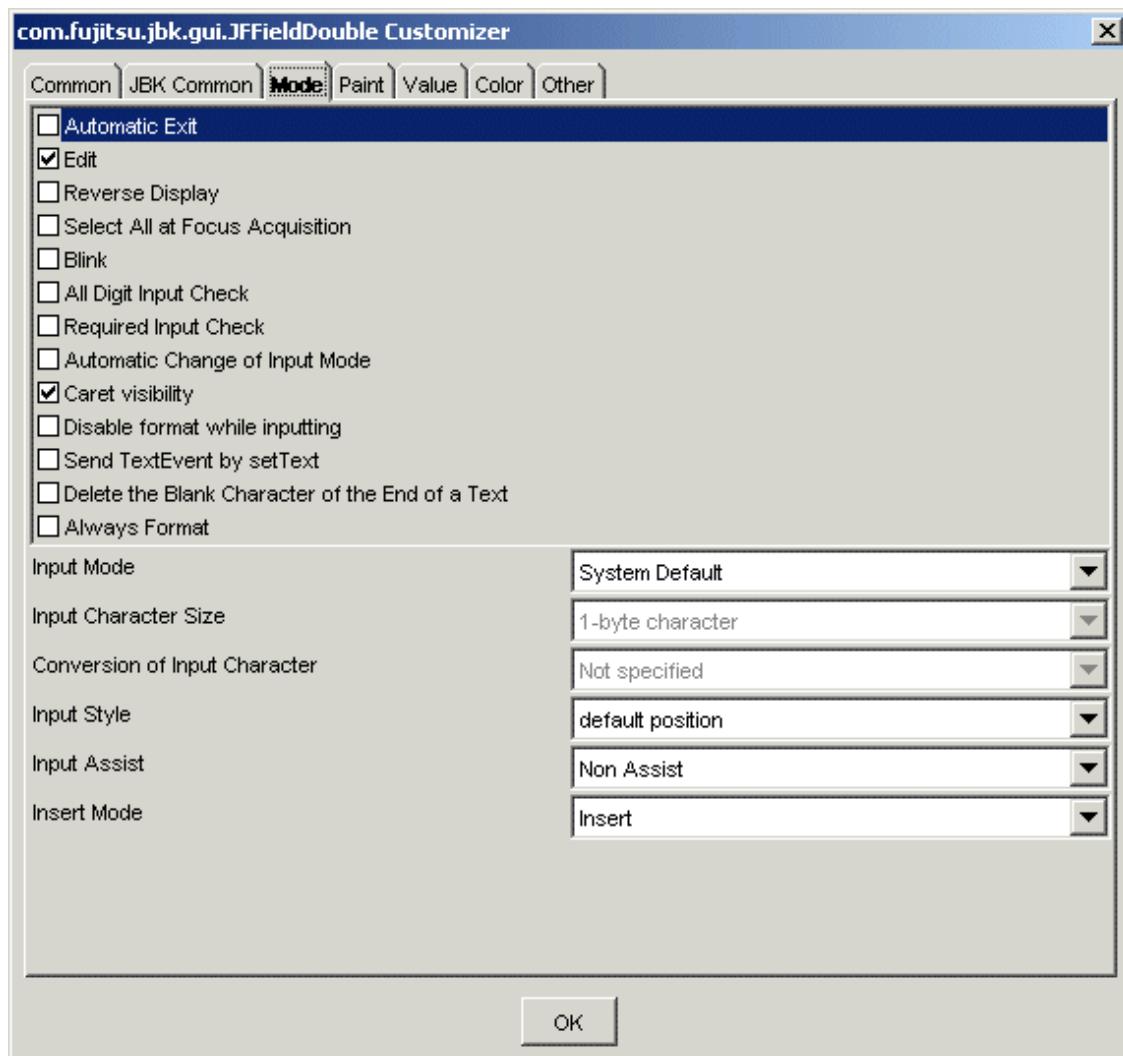
Name	Parameters	Explanation
checkFullField		Checks all digit inputting.
checkIndispensableField		Checks the required inputting.
copy		Copies the selected character string onto the clipboard.
cut		Cuts the selected character string onto the clipboard.
echoCharIsSet		Returns whether password input function is set up.
getPreferredSize	int	Returns the optimum size toward number of the specified characters.
getStringForRange	int	Returns the partial character string.
	int	
hideToolTip		Erases the tool tip.
insertText	java.lang.String	Inserts the character string into the selected area.
paste		Pastes from the clipboard.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int	Partially selects the character string.
	int	
selectAll		Selects the entire character string.
setValues	double	Set up the value, minimum value, maximum value at the same time.
	double	
	double	
setValues	double	Set up the value, minimum value, maximum value, threshold value at the same time.
	double	
	double	
	double	
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the operation mode in the real number field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed.

Edit

Set whether to enable editing. If this item is checked, editing is enabled.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

All Digit Input Check

Set whether the field is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Disable format while inputting

Set whether to disable the format function when data is input. If checked, the format function during input is disabled.

Send TextEvent by setText

Set whether the issue of TextEvent does when setText() is called. If checked, the TextEvent is issued.

Always Format

Set whether to format always or not. If checked, always do a format process.

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

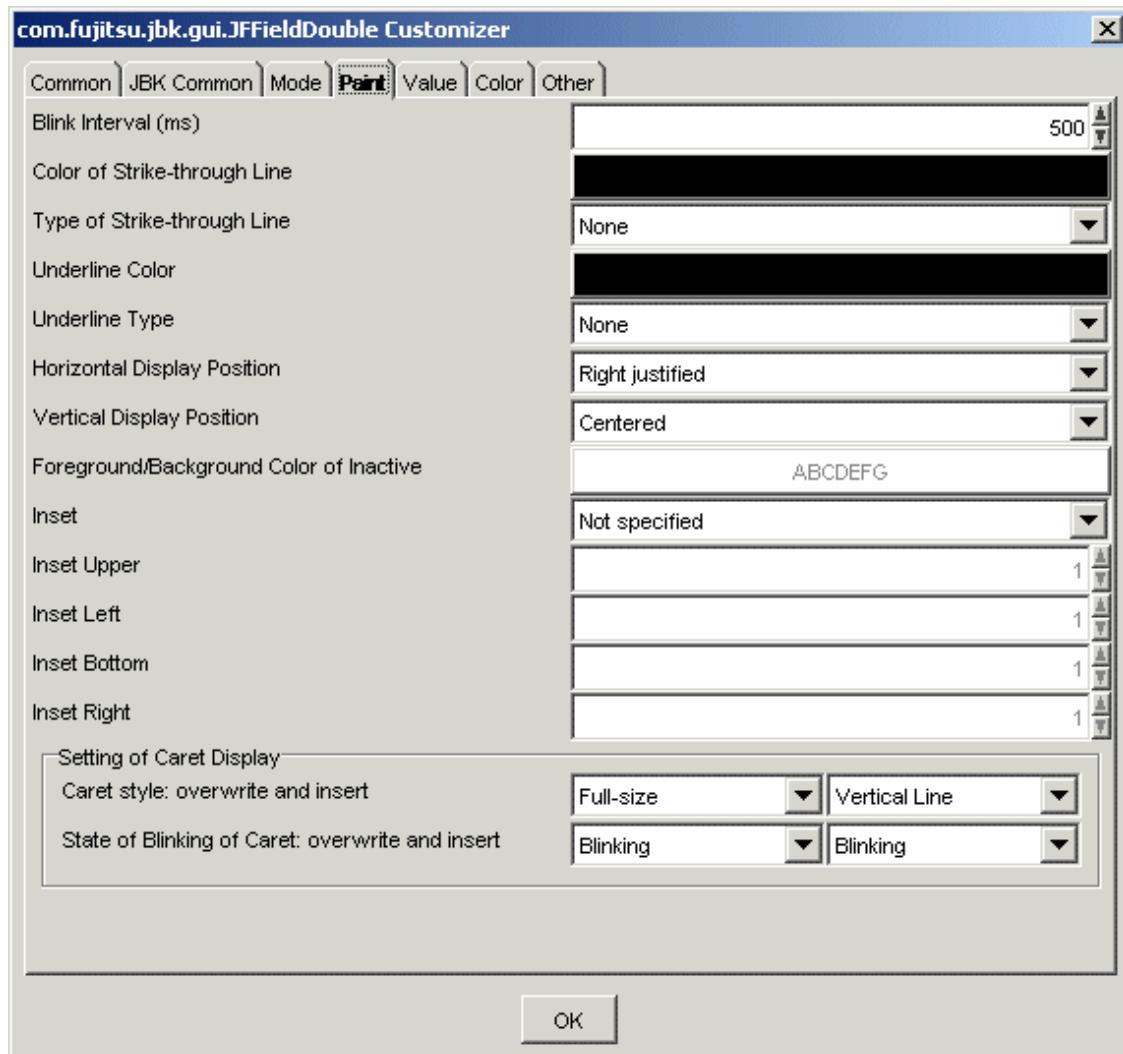
Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Set the insert mode of strings. Select the insert mode from Insert/Overwrite.

- Paint

Set information concerning the real number field display.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 0 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines).

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Inset

Set whether or not to specify an inset.

Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Caret style: overwrite and insert

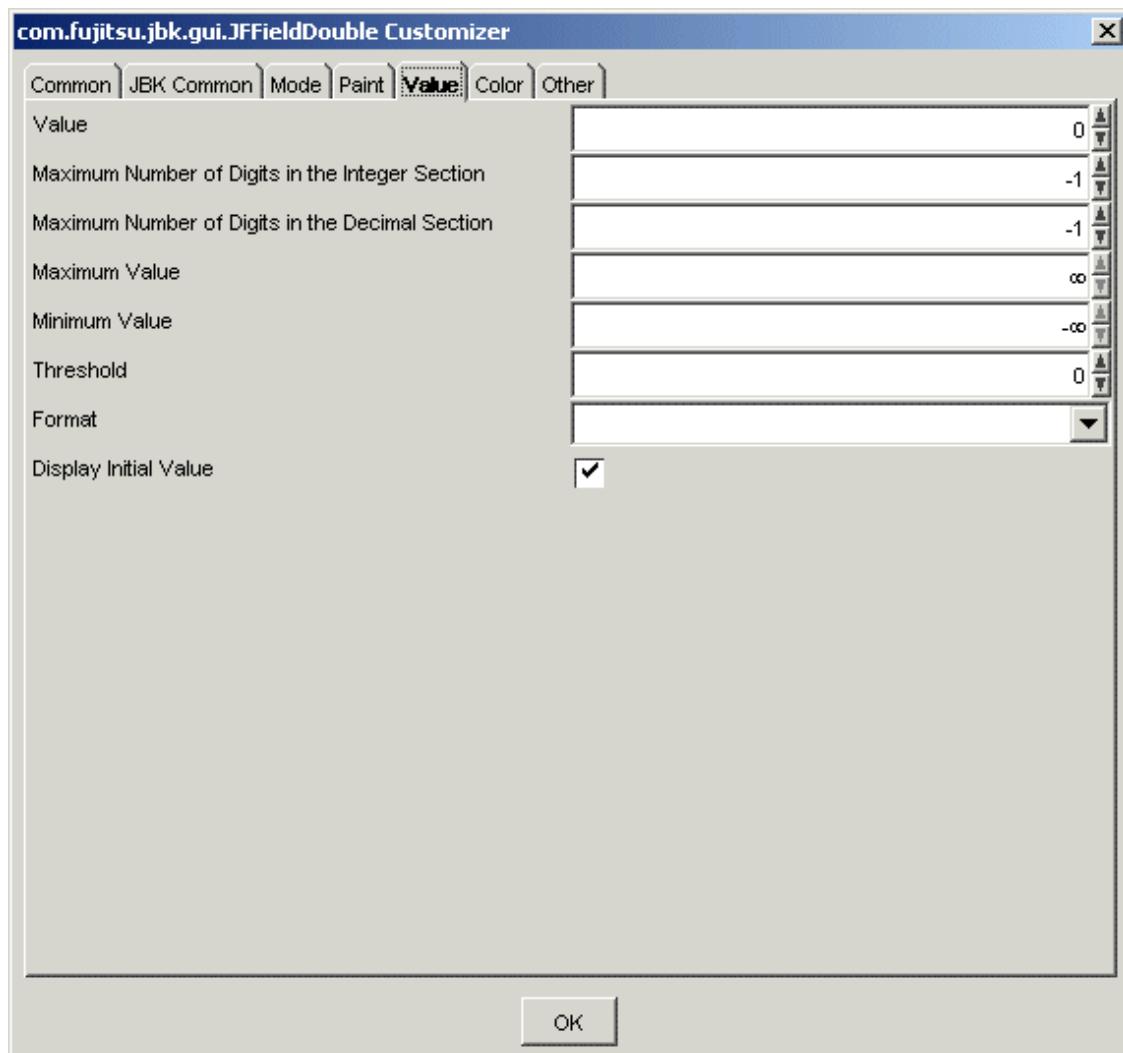
Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

State of Blinking of Caret: overwrite and insert

Set whether or not the caret blinks. A different status can be set for each input mode: overwrite and insert.

- Value

Set the real number field value.



Value

Set the value to be displayed in the real number field. The value is displayed according to the selected format. Specify from 0 to the maximum value as the value.

Maximum Number of Digits in the Integer Section

Set the maximum number of digits in the integer section of the real number field. When -1 is set, the number of digits is unlimited. When the maximum number of digits in the integer section is set, formatting is not performed. Specify from -1 to 2147483647 as the maximum number of digits in the integer section.

Maximum Number of Digits in the Decimal Section

Set the maximum number of digits in the decimal section of the real number field. When -1 is set, the number of digits is unlimited. When the maximum number of digits in the decimal section is set, formatting is not performed. Specify from -1 to 2147483647 as the maximum number of digits in the decimal section.

Maximum Value

Set the maximum value that can be input in the real number field. Specify from negative infinity to infinity as the maximum value.

Minimum Value

Set the minimum value that can be input in the real number field. Specify from negative infinity to infinity as the minimum value.

Threshold

Set the threshold. Specify from negative infinity to infinity as the threshold.

Format

Select the format to be displayed from among #0, #0.00, #,##0, #,##0.00, #,000, #,##0.00, \$#,##0, \$#.##0.00, #0%, or #0.00%.

When the corresponding format does not exist, set the format pattern directly in the selection field.

Display Initial Value

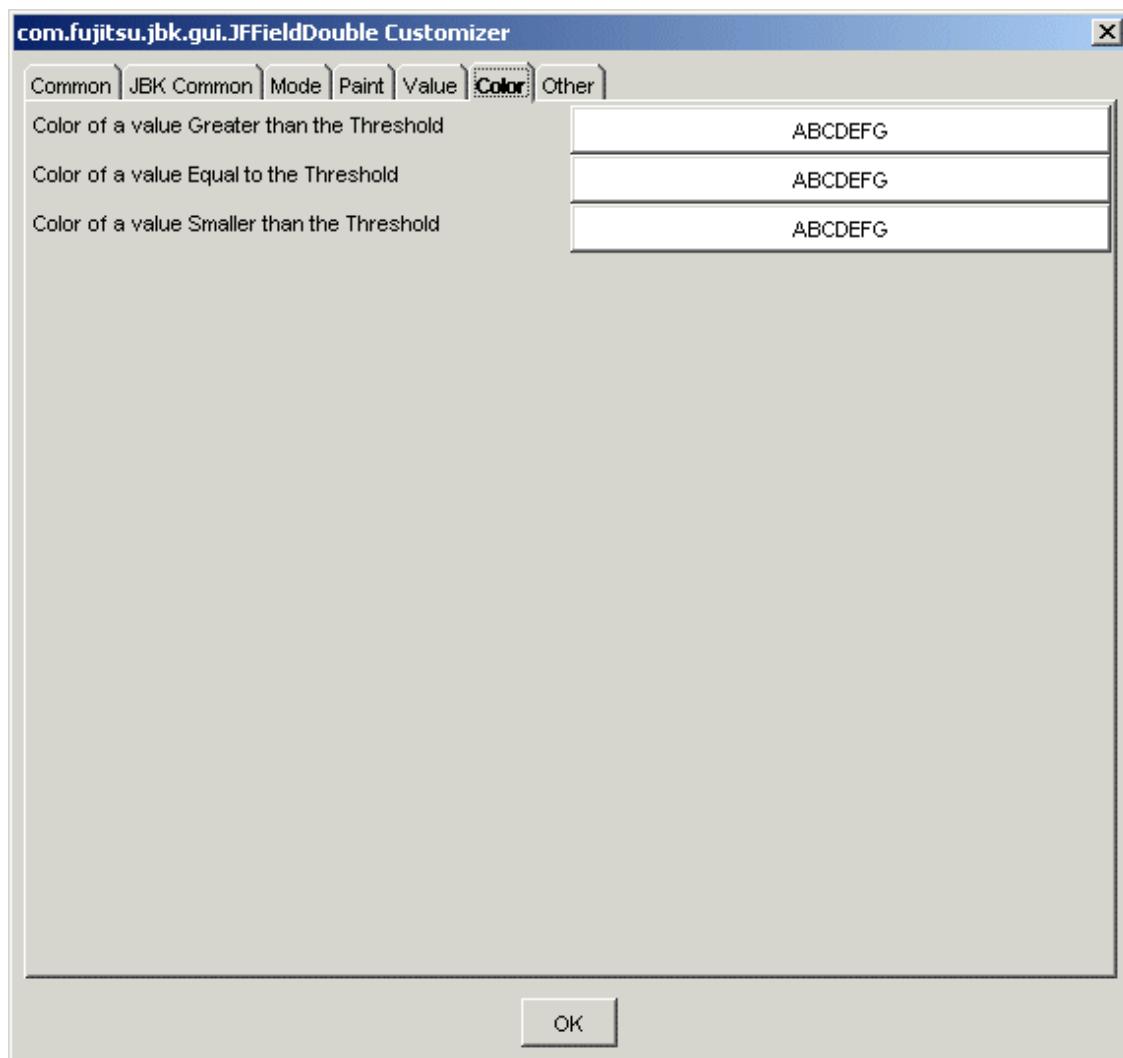
Select the display initial value. If this item is checked, the initial value is displayed.

The initial value is specified value when constructing this class. When the initial value is not specified when constructing this class, 0 is assumed.

If this field is set the initial value isn't displayed, the value is changed from initial value and it is display.

- Color

Set the color used for the threshold.



Color of a value Greater than the Threshold

Set the foreground color and background color for the input value that is greater than the threshold. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Color of a value Equal to the Threshold

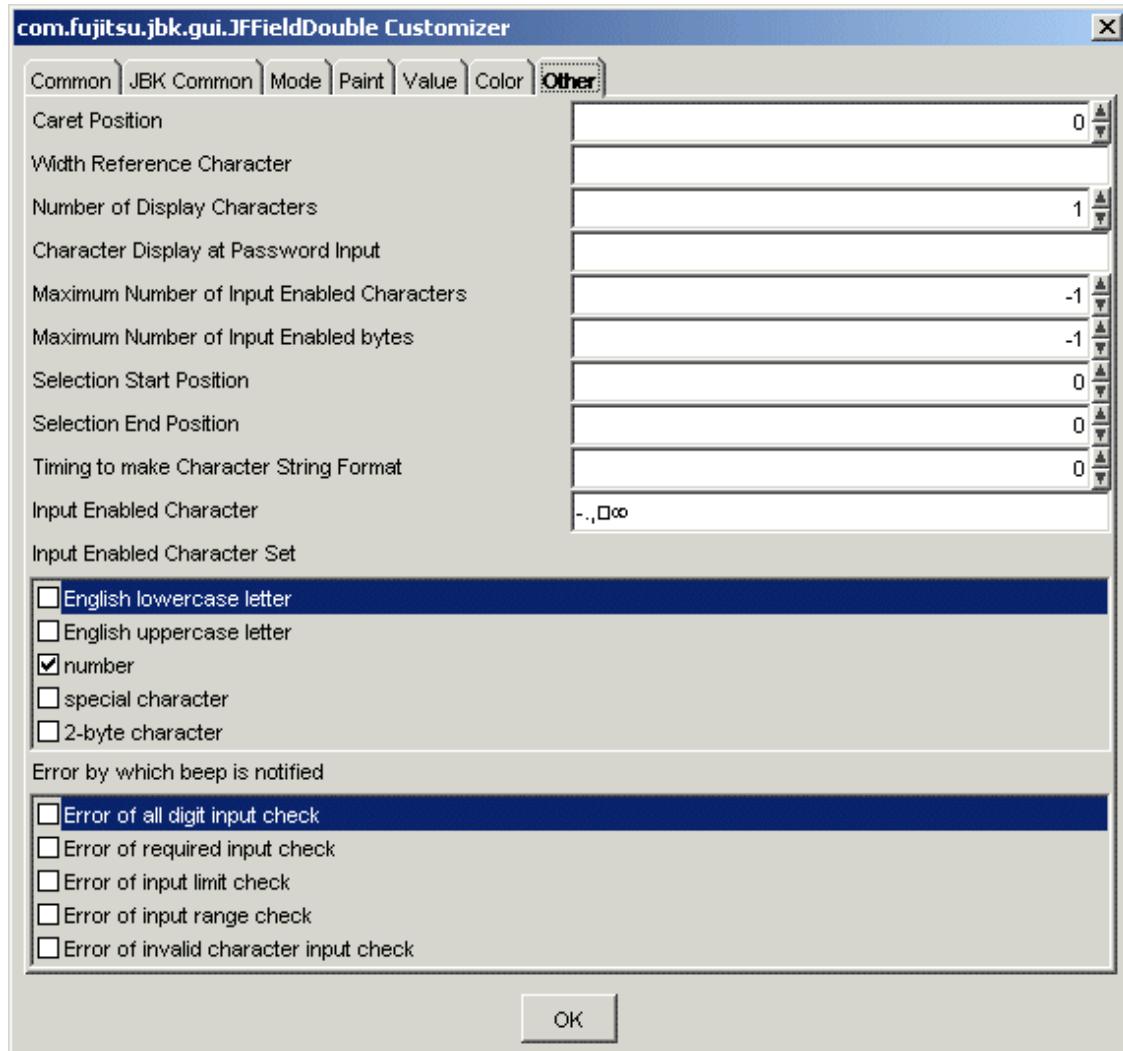
Set the foreground color and background color for the input value that is equal to the threshold. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Color of a value Smaller than the Threshold

Set the foreground color and background color for the input value that is smaller than the threshold. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

- Other

Set other information.



Caret Position

Set the caret position. Specify from 0 to (the number of character according to the format) as the caret position.

Width Reference Character

Set the character which is used to decide the size of the component.

Number of Display Characters

Set the number of display characters. Specify from 0 to 2147483647 as the number of display characters.

Character Display at Password Input

Set the character to display for the password input and displaying.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Selection Start Position

Set the selection start position. Specify from 0 to (the number of characters according to the format) as the selection start position.

Selection End Position

Set the selection end position. Specify from 0 to (the number of characters according to the format) as the selection end position.

Timing to make Character String Format

Set the timing to perform the display format. Formatting is performed when the keys are pressed the specified number of times. Specify from 0 to 2147483647 as the timing to perform the display format.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Enabled Character Set

Select the available character set for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input. To partially enable the input of the character set, set to 'Input Enabled Character'.

Error by which beep is notified

Select the error types for which the warning is sounded from among Error of all digit input check, Error of required input check, Error of input limit check, Error of input range check, or Error of invalid character input check.

3.9 Embedded character string field Bean

The embedded character string field Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- **JFFieldFilled**

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Display position of the field horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color

Name	Type	Reference	Setting	Explanation
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string and caret
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
caretPosition	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret position in the field
caretStyle	(Array) int	(Array) Y	(Array) Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
combinedText	java.lang.String	Y	Y	The whole string including the delimiters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
echoChar	char	Y	Y	Echo character
editable	boolean	Y	Y	Whether editing is enabled
enableChars	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input-enabled character of the specified field
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input-enabled character set of the field
enabled	boolean	Y	Y	Whether enabled
fieldCount	int	Y	Y	Number of fields
focusField	int	Y	Y	Field index that has input focus
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
fullField	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether the item is all-digit input item

Name	Type	Reference	Setting	Explanation
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
indispensableField	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether the item is a required input item
inputAssist	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input assist method
inputMode	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Character set and character size
inputStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
locale	java.util.Locale	Y	Y	Locale information
maxLength	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Maximum number of characters in the field
maximumValue	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Maximum value in the field
minimumValue	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Minimum value in the field
name	java.lang.String	Y	Y	Name
numericalField	(Array) boolean	(Array) Y		Whether the field is a numeric field
pattern	java.lang.String	Y	Y	Pattern
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not
selectionEnd	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Field selection end position
selectionStart	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Field selection start position
selectviewMode	boolean	Y	Y	Multiple fields selection
showSeparator	boolean	Y	Y	Whether the separator is shown or not

Name	Type	Reference	Setting	Explanation
signedNumerical	boolean	Y	Y	Whether or not to permit for the user to enter the numeric sign to the field
staticText	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Character string in the delimiter character string area
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
text	(Array) java.lang.String	(Arra y) Y	(Arra y) Y	Field character string
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
value	(Array) int	(Arra y) Y	(Arra y) Y	Field value
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized componentMoved componentShown componentHidden	Is issued when the component status changes.
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained focusLost	Is issued when the focus moves.

Name	Listener	Addition/removal	Method	Explanation
inputError	com.fujitsu.jbk.gui.JFInputErrorListene r	addInputErrorListener removeInputErrorListene r	inputError	Is issued when a character string input error occurs.
inputMeth od	java.awt.event InputMethodListene r	addInputMethodListener removeInputMethodList ener	caretPositionC hanged	Is issued when the input method status changes.
			inputMethodT extChanged	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseRelease d	
			mouseEntered	
			mouseExited	
mouseMo tion	java.awt.event MouseMotionListene r	addMouseMotionListene r removeMouseMotionLis tener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWh eel	java.awt.event MouseWheelListene r	addMouseWheelListener removeMouseWheelList ener	mouseWheel Moved	Is issued by mouse wheel operation.
propertyC hange	java.beans PropertyChangeList ener	addPropertyChangeLis tener removePropertyChangeL istener	propertyChang e	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListener	textValueChan ged	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addEnableChar	int	Adds the input enabled character to the field.
	char	
checkFullField		Checks all-digit input in all fields.
checkFullField	int	Checks all-digit input in the specified field.
checkIndispensableField		Checks the required input in all fields.
checkIndispensableField	int	Checks the required input in the specified field.
copy	int	Copies the selected area of the specified field onto the clipboard.
cut	int	Copies the selected area of the specified field onto the clipboard and deletes it.
hideToolTip		Erases the tool tip.

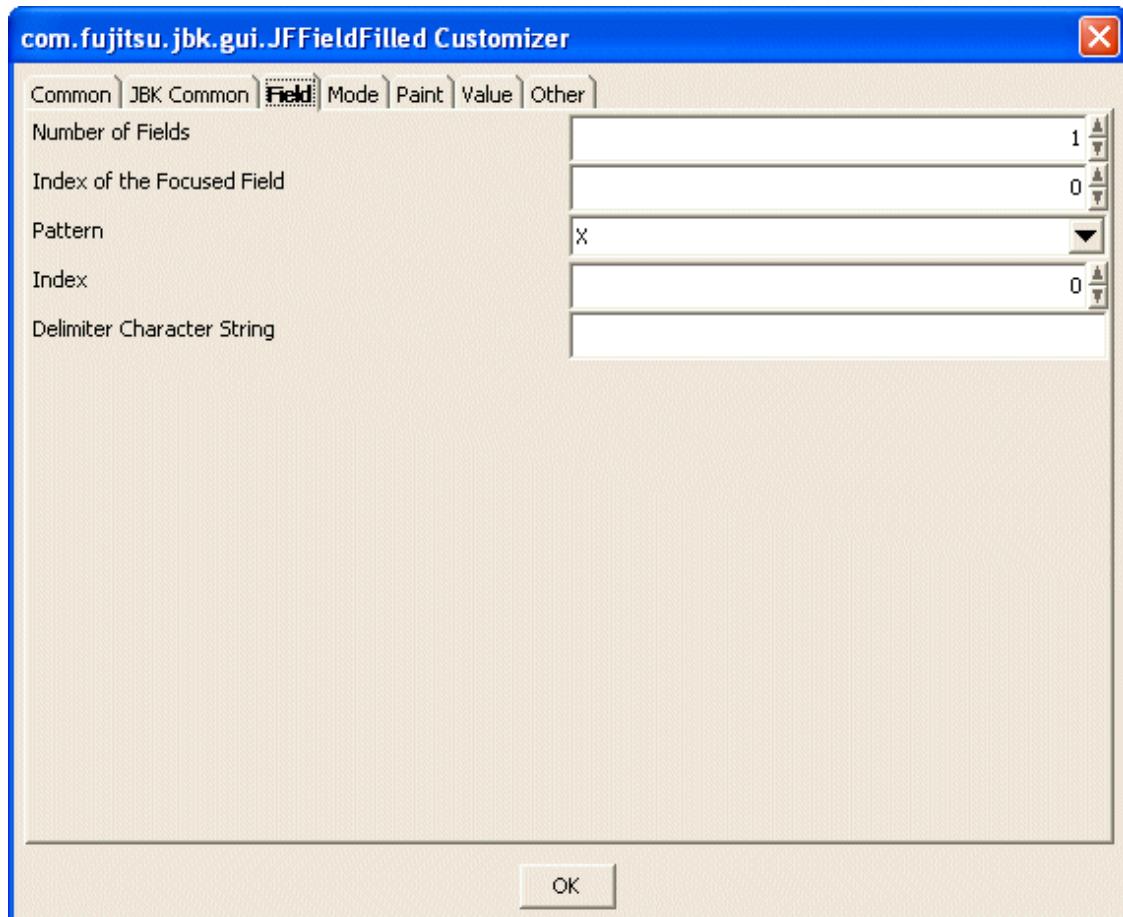
Name	Parameters	Explanation
insertText	java.lang.String	Inserts the character string into the selected area.
paste	int	Replaces the character string in the specified field selection area with the character string in the clipboard.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int int int	Selects the specified field.
showToolTip	java.lang.String java.awt.Point java.awt.Dimension long	Displays the tool tip.
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Field

Set the field delimiter character string and number of fields.



Number of Fields

Set the number of fields to be created. Specify from 1 to 2147483647 as the number of fields.

Index of the Focused Field

Set the index of the field that has the input focus. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Pattern

Set a format pattern from among XXXXXXXX(the number of fields), XXhXXmXXs, XXXX/XX/XX, 255.XXX.XXX.XXX, (03)XXXX-XXXX, XXX-XXXX, or XXX is XXXX.. This enables the delimiter character strings and fields to be set together.

Index

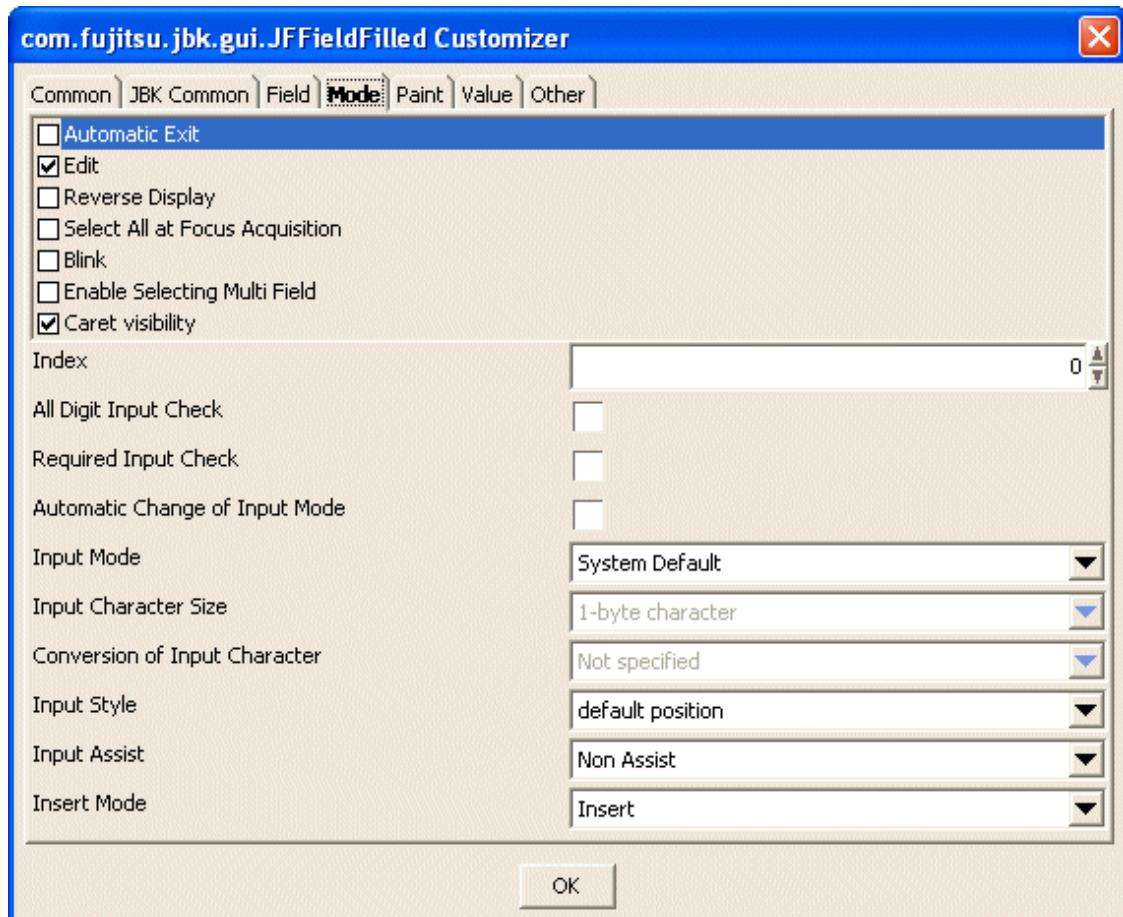
Set the index of a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields.

Delimiter Character String

Set the delimiter character string at the position set by 'Index'.

- Mode

Set the operation mode in the embedded character string field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed. This item is valid for the entire embedded character string field.

Edit

Set whether to enable editing. If this item is checked, editing is enabled. This item is valid for the entire embedded character string field.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode. This item is valid for the entire embedded character string field.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected. This item is valid for the entire embedded character string field.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property. This item is valid for the entire embedded character string field.

Enable Selecting Multi Field

Set whether to enable selecting multiple field. If this item is checked, the multiple selecting is enabled.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Index

Set the index of the field delimited by a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

All Digit Input Check

Set whether the field specified with 'Index' is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field specified with 'Index' is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the input focus moves to the field set with 'Index'. If checked, the input mode will be changed.

Input Mode

Select the input mode of the field set by 'Index' from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field set by 'Index' from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the string conversion window of the field set with 'Index' from default position/component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

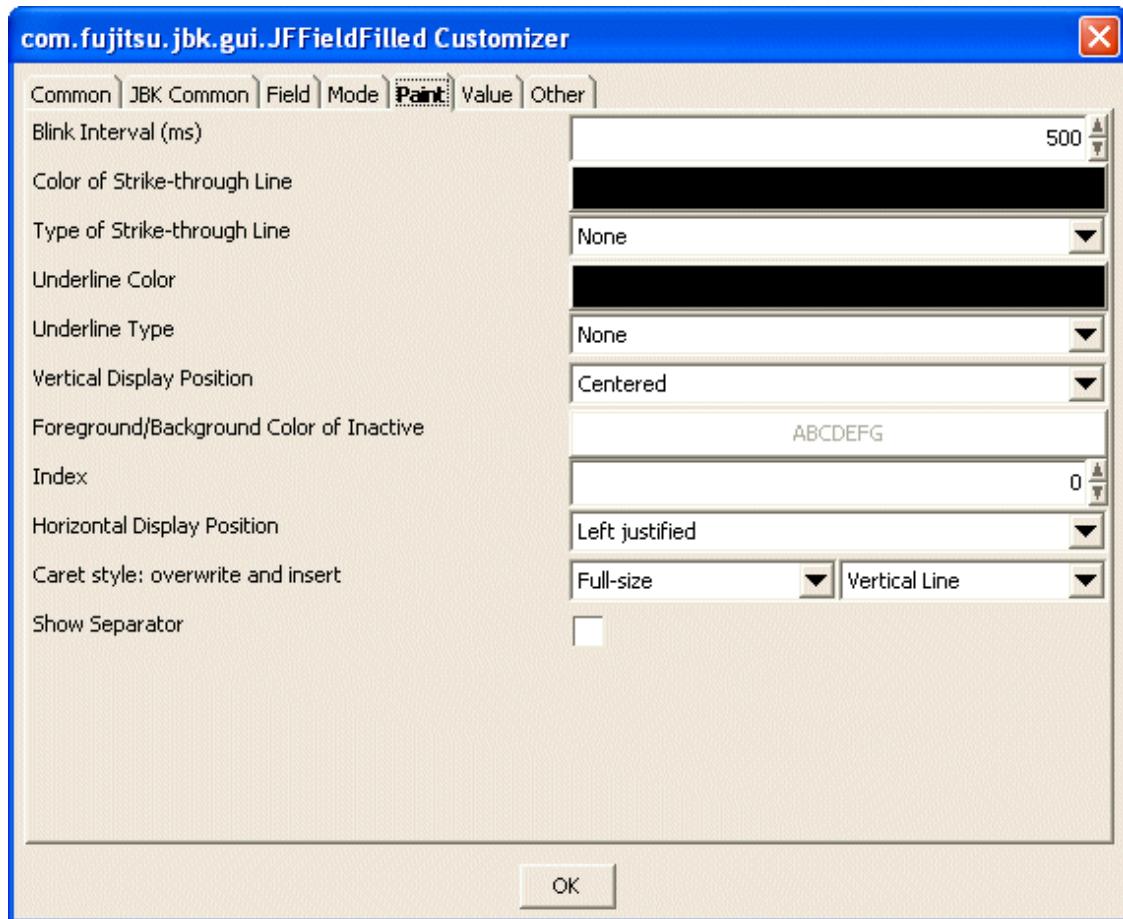
Set whether to assist input of characters in the field set with 'Index' using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Set the insert mode of strings. Select the insert mode from Insert/Overwrite.

- Paint

Set the information concerning the embedded character string field display.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). This item is valid for the entire embedded character string field. Specify from 1 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed. This item is valid for the entire embedded character string field.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines). This item is valid for the entire embedded character string field.

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed. This item is valid for the entire embedded character string field.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat. This item is valid for the entire embedded character string field.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified. This item is valid for the entire embedded character string field.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed. This item is valid for the entire embedded character string field.

Index

Set the index of the field delimited by a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Caret style: overwrite and insert

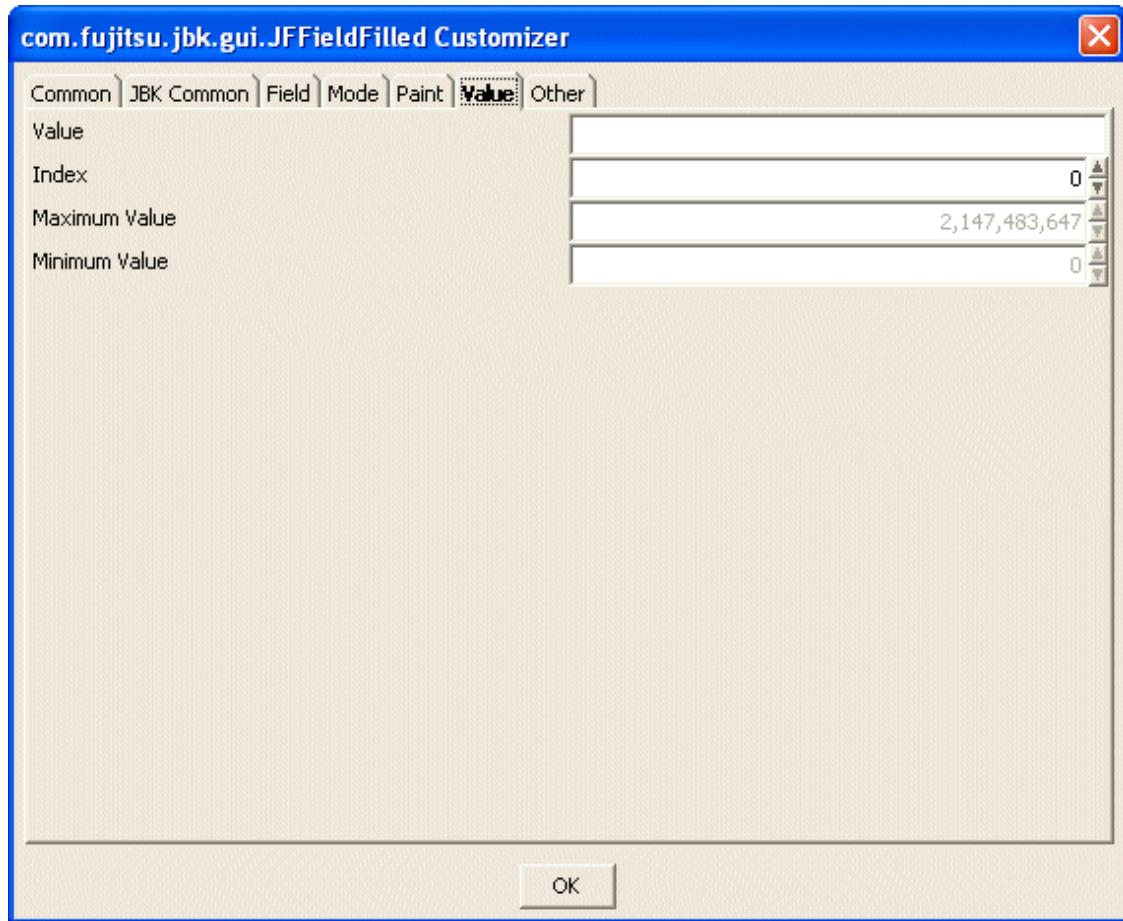
Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

Show Separator

Set whether to show separator. If this item is checked, separator is shown.

- Value

Set the value of the embedded character string field.



Value

Set the value in the field.

Index

Set the field index. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Maximum Value

Set the maximum value that can be input into the field. The maximum value becomes valid in the numeric field (field that only allows numeric input). Specify from -2147483648 to 2147483647 as the maximum value.

When the minus value is input in the numeric field, set to enable to input the minus sign (the 'Presence of sign' is checked and the 'Input Enabled Character' is "-", in the 'Other' property).

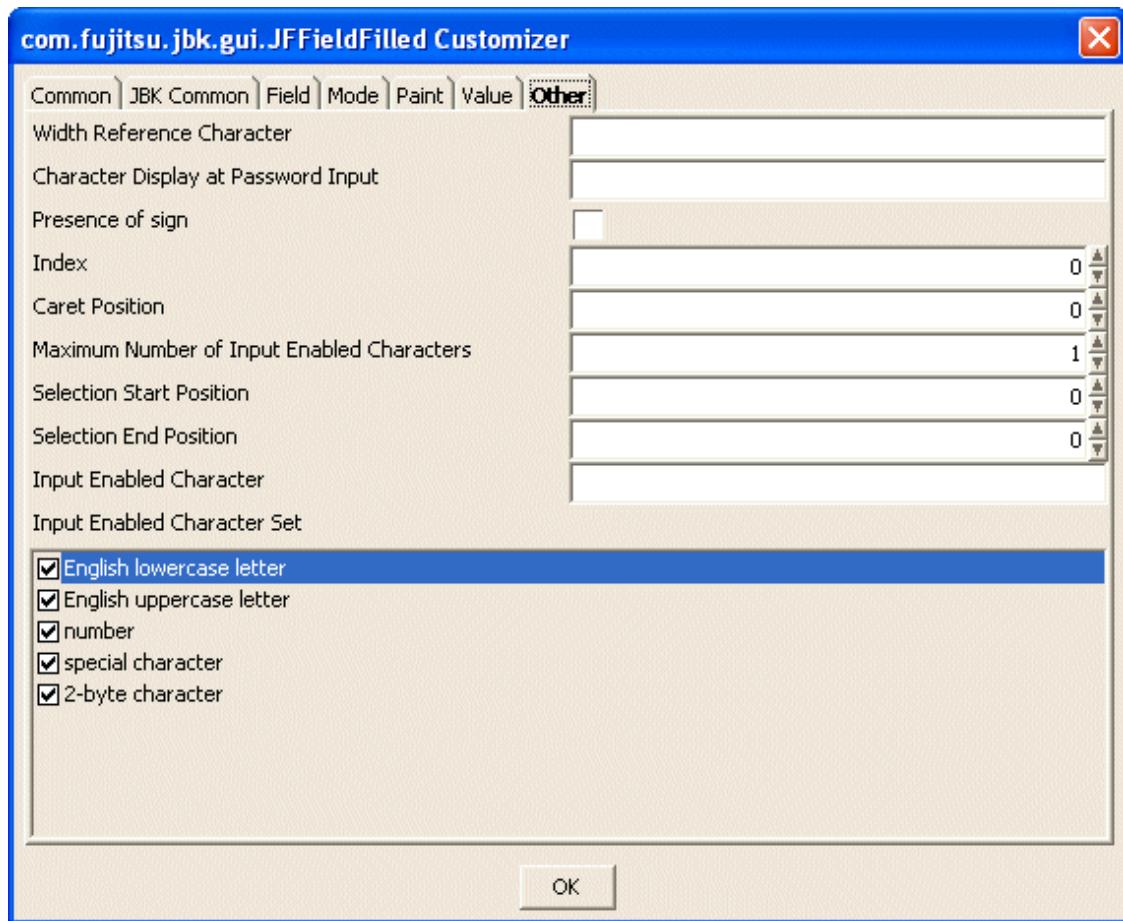
Minimum Value

Set the minimum value that can be input into the field. The minimum value becomes valid in the numeric field. Specify from -2147483648 to 2147483647 as the minimum value.

When the minus value is input in the numeric field, set to enable to input the minus sign (the 'Presence of sign' is checked and the 'Input Enabled Character' is "-", in the 'Other' property).

- Other

Set other information.



Width Reference Character

Set the character which is used to decide the size of the component. This item is valid for the entire embedded character string field.

Character Display at Password Input

Set the character to display for the password input and displaying. This item is valid for the entire embedded character string field.

Presence of sign

Set whether or not the sign of minus enable input to field. If checked, the sign of minus is enabled input. This setup is effective only at the time the 'Input Enabled Character' is "-".

Index

Set the index of the field delimited by a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Caret Position

Set the caret position of the field set by 'Index'. Specify from 0 to format pattern (the number of X) as the caret position.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters of the field set by 'Index'. When -1 is set, the maximum number of input enabled characters is not checked. Specify from 1 to 2147483647 as the maximum number of input enabled characters.

Selection Start Position

Set the selection start position of the field specified by 'Index'. Specify from 0 to format pattern (the number of X) as the selection start position.

Selection End Position

Set the selection end position of the field specified by 'Index'. Specify from 0 to format pattern (the number of X) as the selection end position.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Enabled Character Set

Select the available character set of the field set by 'Index' for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input. To partially enable the input of an input disabled character set, set it in the 'Input Enabled Character'.

3.10 Embedded date/time field Bean

The embedded date/time field Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- **JFFieldFilledDate**

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Display position of the field horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color

Name	Type	Reference	Setting	Explanation
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string and caret
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
caretPosition	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret position in the field
caretStyle	(Array) int	(Array) Y	(Array) Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
combinedText	java.lang.String	Y	Y	The whole string including the delimiters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
echoChar	char	Y	Y	Echo character
editable	boolean	Y	Y	Whether editing is enabled
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusField	int	Y	Y	Field index that has input focus
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
fullField	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether the item is all-digit input item
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
indispensableField	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether the item is a required input item

Name	Type	Reference	Setting	Explanation
inputAssist	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input assist method
inputMode	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Character set and character size
inputStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
numericalField	(Array) boolean	(Array) Y		Whether the field is a numeric field
pattern	java.lang.String	Y	Y	Pattern
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not
selectionEnd	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Field selection end position
selectionStart	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Field selection start position
showSeparator	boolean	Y	Y	Whether the separator is shown or not
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
text	(Array) java.lang.String	(Array) Y	(Array) Y	Field character string
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
value	(Array) int	(Array) Y	(Array) Y	Field value
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
fieldChanged	com.fujitsu.jbk.gui.JFFieldFilledChangeListener	addJFFieldFilledChangedListener removeJFFieldFilledChangedListener	fieldChanged	Is issued when the character string changes.
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputError	com.fujitsu.jbk.gui.JFInputErrorListener	addInputErrorListener removeInputErrorListener	inputError	Is issued when a character string input error occurs.
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.

Name	Listener	Addition/removal	Method	Explanation
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event.TextListener	addTextListener removeTextListener	textValueChanged	Is issued when a character is input

Method information

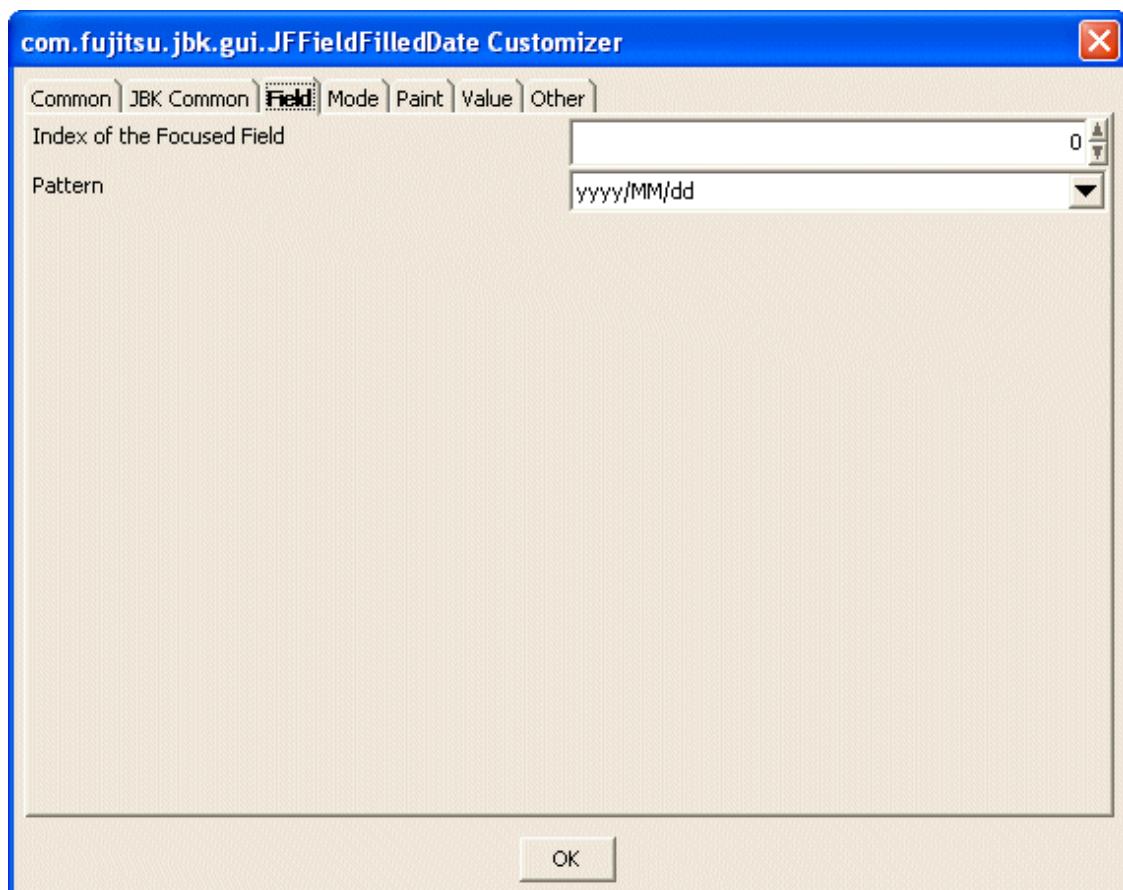
Name	Parameters	Explanation
checkFullField		Checks all-digit input in all fields.
checkFullField	int	Checks all-digit input in the specified field.
checkIndispensableField		Checks the required input in all fields.
checkIndispensableField	int	Checks the required input in the specified field.
copy	int	Copies the selected area of the specified field onto the clipboard.
cut	int	Copies the selected area of the specified field onto the clipboard and deletes it.
getDay		Value of the day field.
getDayIndex		Index of the day field.
getGregorianYear		Index of the year field.
getHour		Value of the hour field.
getHourIndex		Index of the hour field.
getMaximumValue	int	Maximum value of the specified field.
getMinute		Value of the minute field.
getMinuteIndex		Index of the minute field.
getMonth		Value of the month field.
getMonthIndex		Index of the month field.
getSecond		Value of the second field.
getSecondIndex		Index of the second field.
getYearIndex		Index of the year field.
hideToolTip		Erases the tool tip.
insertText	java.lang.String	Inserts the character string into the selected area.
isLeapYear	int	Whether the year is leap year.
paste	int	Replaces the character string in the specified field selection area with the character string in the clipboard.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int	Selects the specified field.
	int	
	int	

Name	Parameters	Explanation
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)
- Field

The field with focus and the pattern of the field are set.



Index of the Focused Field

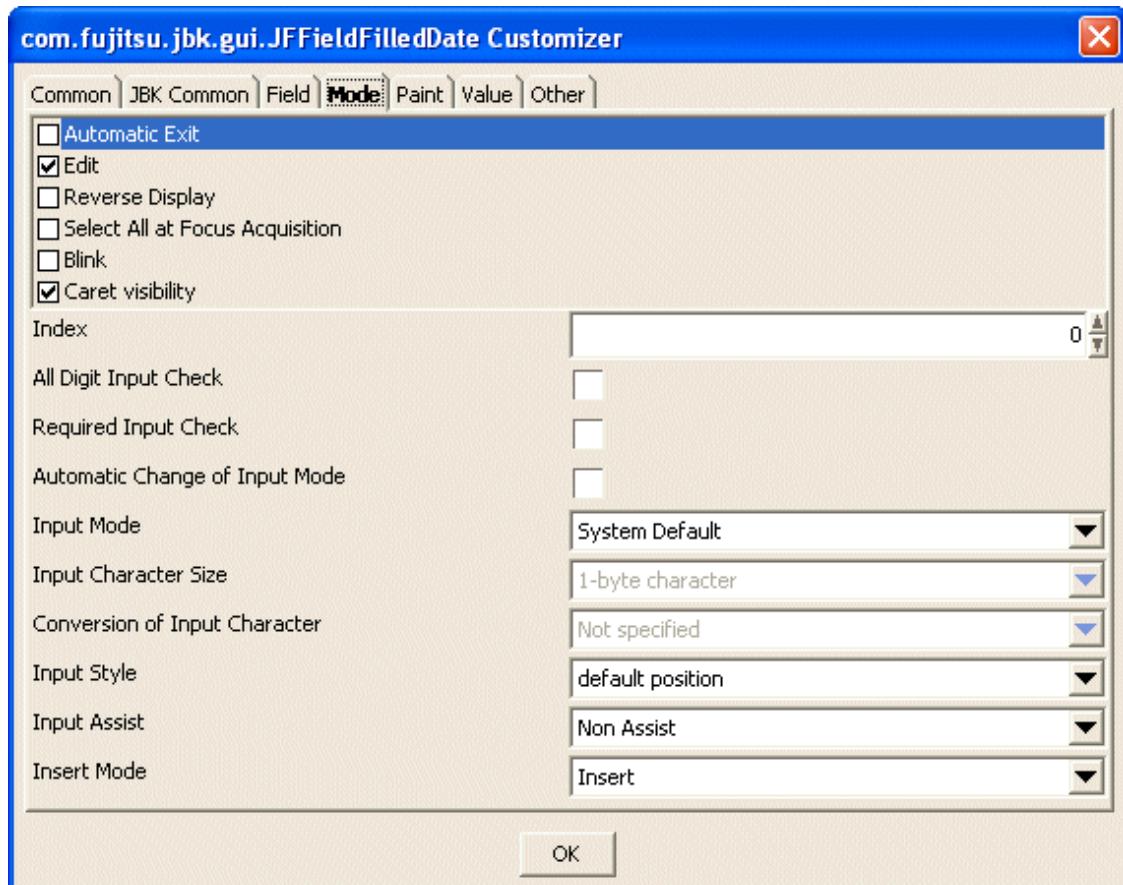
Set the index of the field that has the input focus. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Pattern

Set the format pattern from among yyyy/MM/dd, yy/MM/dd, yyyy/MM/dd HH:mm:ss, yy/MM/dd HH:mm:ss, MM/dd, or MM/dd/yy. Both the delimiters and fields can be specified at the same time.

- Mode

Set the operation mode in the embedded date/time field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed. This item is valid for the entire embedded date/time field.

Edit

Set whether to enable editing. If this item is checked, editing is enabled. This item is valid for the entire embedded date/time field.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode. This item is valid for the entire embedded date/time field.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected. This item is valid for the entire embedded date/time field.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property. This item is valid for the entire embedded date/time field.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Index

Set the index of the field delimited by a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

All Digit Input Check

Set whether the field specified with 'Index' is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field specified with 'Index' is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the input focus moves to the field set with 'Index'. If checked, the input mode will be changed.

Input Mode

Select the input mode of the field set by 'Index' from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field set by 'Index' from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the string conversion window of the field set with 'Index' from default position/component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

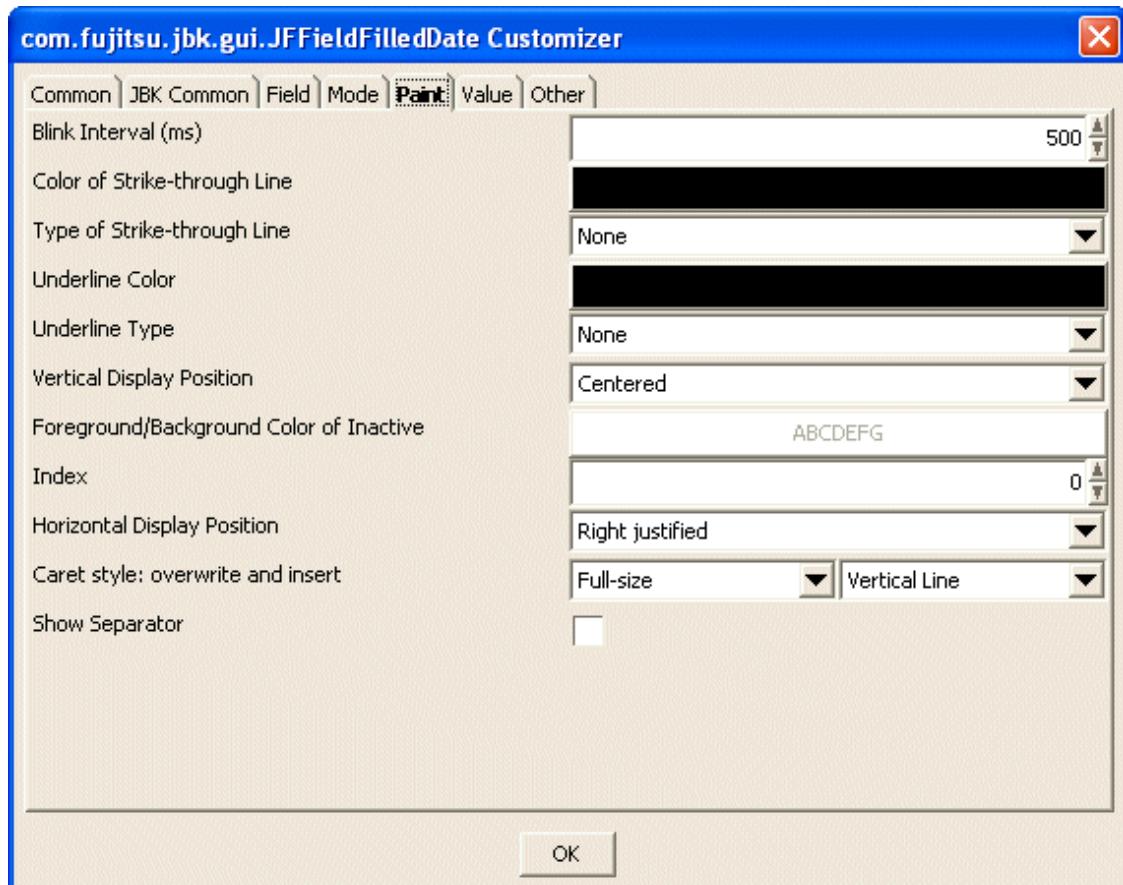
Set whether to assist input of characters in the field set with 'Index' using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Set the insert mode of strings. Select the insert mode from Insert/Overwrite.

- Paint

Set the information concerning the embedded date/time field display.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). This item is valid for the entire embedded date/time field. Specify from 1 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed. This item is valid for the entire embedded date/time field.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines). This item is valid for the entire embedded date/time field.

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed. This item is valid for the entire embedded date/time field.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat. This item is valid for the entire embedded date/time field.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified. This item is valid for the entire embedded date/time field.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed. This item is valid for the entire embedded date/time field.

Index

Set the index of the field delimited by a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Caret style: overwrite and insert

Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

Show Separator

Set whether to show separator. If this item is checked, separator is shown.

- Value

Set the value of the embedded date/time field.

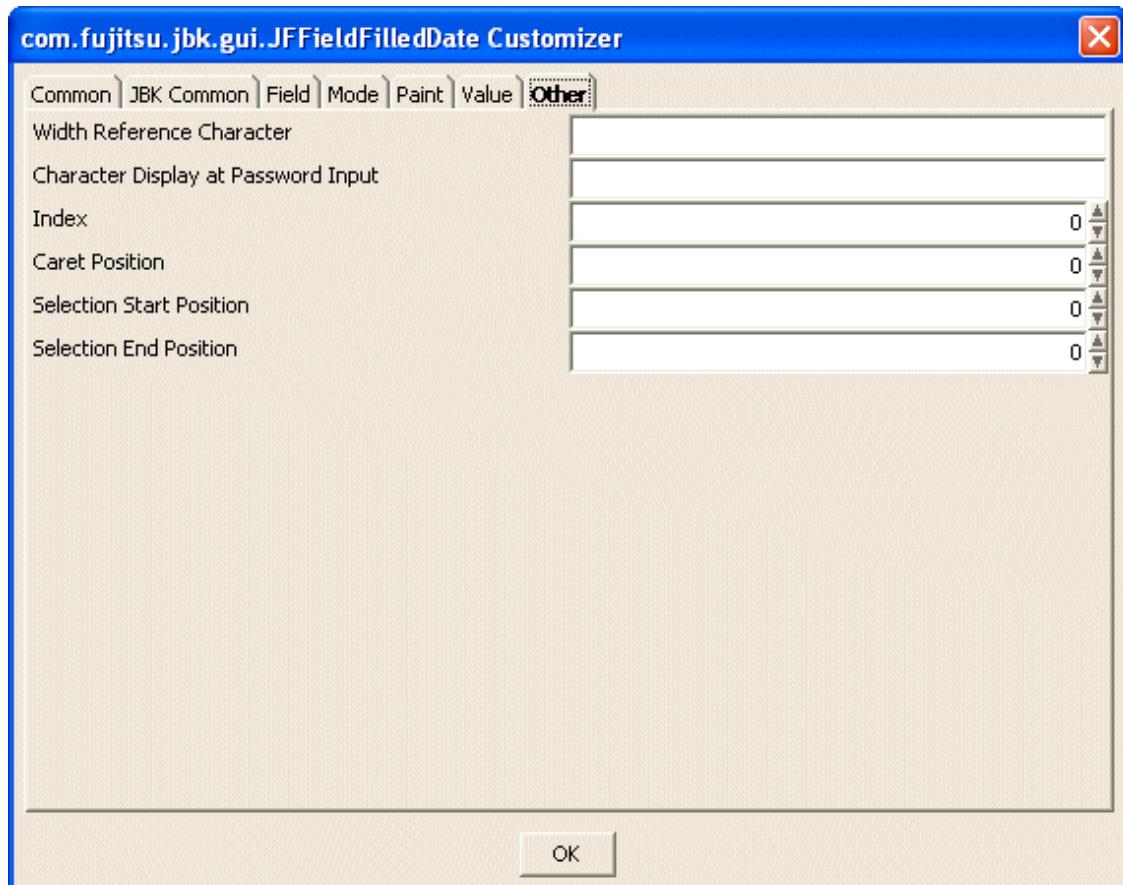


Value

Set the value in the field.

- Other

Set other information.



Width Reference Character

Set the character which is used to decide the size of the component. This item is valid for the entire embedded date/time field.

Character Display at Password Input

Set the character to display for the password input and displaying. This item is valid for the entire embedded date/time field.

Index

Set the index of the field delimited by a delimiter character string. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of fields minus 1.

Caret Position

Set the caret position of the field set by 'Index'. Specify from 0 to the number of 'y', 'M', 'd', 'H', 'm' and 's' in the format as the caret position.

Selection Start Position

Set the selection start position of the field specified by 'Index'. Specify from 0 to the number of 'y', 'M', 'd', 'H', 'm' and 's' in the format as the selection start position.

Selection End Position

Set the selection end position of the field specified by 'Index'. Specify from 0 to the number of 'y', 'M', 'd', 'H', 'm' and 's' in the format as the selection end position.

3.11 Integral number field Bean

The Integral number field Bean has the following information and [Customizer](#) functions.

- Property information
- Event information
- Method information



"Package Guide"- JFFieldLong

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Display position of horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
alwaysFormat	boolean	Y	Y	Whether to format always or not
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	boolean	Y	Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
byteLength	int	Y		Byte length of character string
caretBlink	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input caret blink
caretPosition	int	Y	Y	Caret position
caretStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
columns	int	Y	Y	Number of display characters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
echoChar	char	Y	Y	Character display at password input
editable	boolean	Y	Y	Editing enabled/disabled

Name	Type	Reference	Setting	Explanation
enableChars	char[]	Y	Y	Input-enabled character array
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	int	Y	Y	Input-enabled character set
enabled	boolean	Y	Y	Whether enabled
equalBackground	java.awt.Color	Y	Y	Background color for an input value equal to the threshold value
equalForeground	java.awt.Color	Y	Y	Foreground color for an input value equal to the threshold value
errorBeep	int	Y	Y	Error types for which a warning is sounded
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
formatTiming	int	Y	Y	Timing to perform formatting for the display
fullField	boolean	Y	Y	Whether to check all digit input
greaterBackground	java.awt.Color	Y	Y	Background color for an input value greater than the threshold value
greaterForeground	java.awt.Color	Y	Y	Foreground color for an input value greater than the threshold value
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
indispensableField	boolean	Y	Y	Whether to check the required input
initialValueDisplay	boolean	Y	Y	Whether to display initial value
inputAssist	int	Y	Y	Input assist method
inputFormatPatterns	java.lang.String[]	Y		Input format pattern array
inputFormats	java.text.NumberFormat[]	Y		Input format array
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insertMode	int	Y	Y	Input mode

Name	Type	Reference	Setting	Explanation
insets	java.awt.Insets	Y	Y	Inset
length	int	Y		Character string length
lessBackground	java.awt.Color	Y	Y	Background color for an input value smaller than the threshold value
lessForeground	java.awt.Color	Y	Y	Foreground color for an input value smaller than the threshold value
locale	java.util.Locale	Y	Y	Locale information
maxByteLength	int	Y	Y	Maximum number of input-enabled bytes
maxIntegerDigit	int	Y	Y	Maximum number of digits
maxLength	int	Y	Y	Maximum number of input-enabled characters
maximumValue	long	Y	Y	Maximum value
minimumValue	long	Y	Y	Minimum value
name	java.lang.String	Y	Y	Name
outputFormatPattern	java.lang.String	Y	Y	Display format pattern
plainTextEditing	boolean	Y	Y	Whether the format function is enabled during input
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not
selectedText	java.lang.String	Y		Selected character string
selectionEnd	int	Y	Y	Selection end position
selectionStart	int	Y	Y	Select start position
sendTextEventBySetText	boolean	Y	Y	Whether the TextEvent issue is done, when setText() is called
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
threshold	long	Y	Y	Threshold value
toolTipText	java.lang.String	Y	Y	Tool tip text

Name	Type	Reference	Setting	Explanation
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
value	long	Y	Y	Value
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputError	com.fujitsu.jbk.gui.JFInputErrorListener	addInputErrorListener removeInputErrorListener	inputError	Is issued when a character string input error occurs.
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	

Name	Listener	Addition/removal	Method	Explanation
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListener	textValueChanged	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addEnableChar	char	Adds an input enabled character.
addInputFormat	java.text NumberFormat	Adds the input format.
addInputFormatPattern	java.lang String	Adds the input format pattern.
canCopy		Returns whether copy is possible.
canCut		Returns whether cut is possible.
canPaste		Returns whether paste is possible.
checkFullField		Checks all digit inputting.
checkIndispensableField		Checks the required inputting.
copy		Copies the selected character string onto the clipboard.
cut		Cuts the selected character string onto the clipboard.
echoCharIsSet		Returns whether password input function is set up.
getPreferredSize	int	Returns the optimum size toward number of the specified characters.
getStringForRange	int	Returns the partial character string.
	int	
hideToolTip		Erases the tool tip.
insertText	java.lang String	Inserts the character string into the selected area.
paste		Pastes from the clipboard.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int	Partially selects the character string.
	int	
selectAll		Selects the entire character string.

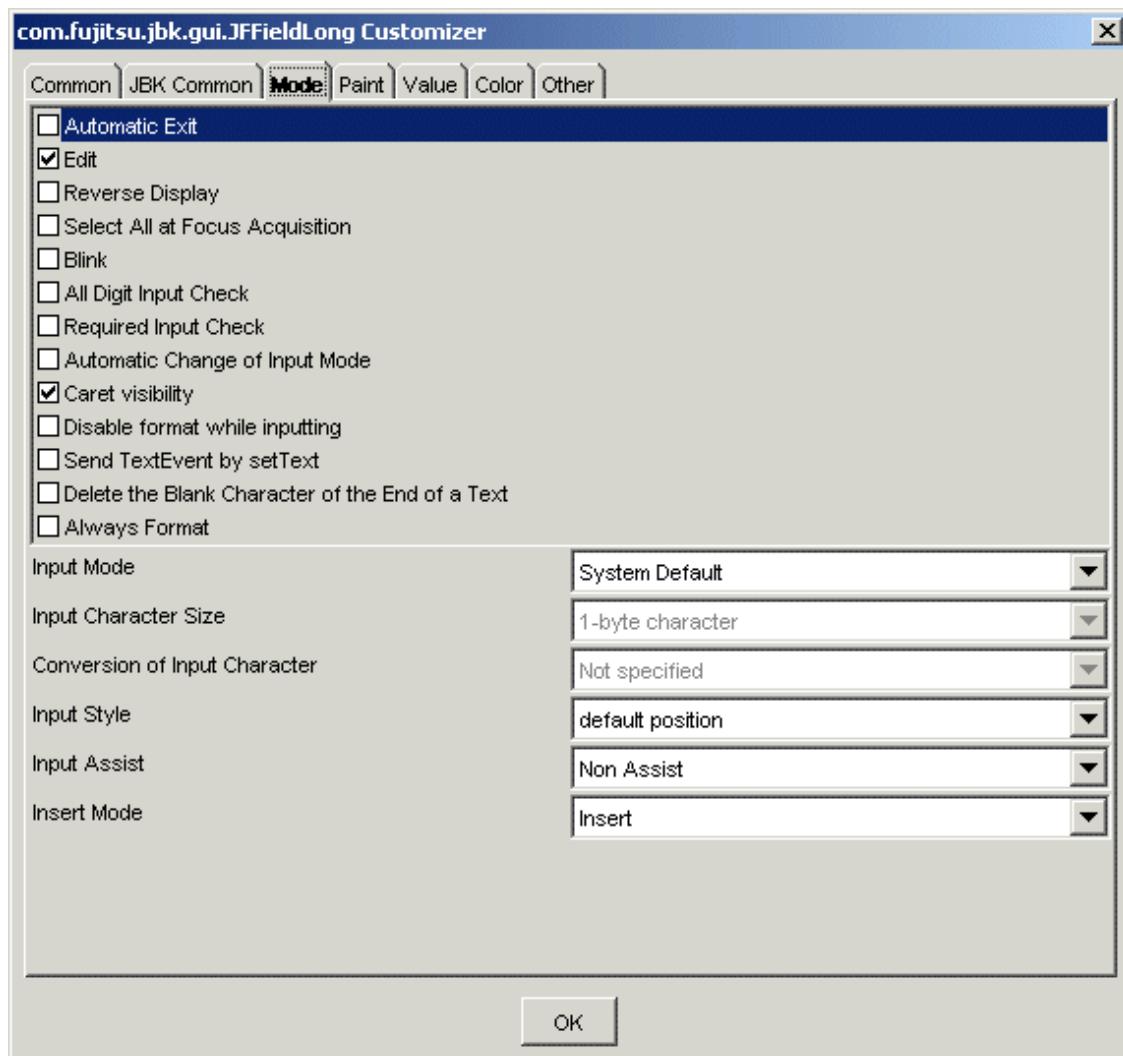
Name	Parameters	Explanation
setValues	long	Set up the value, minimum value, maximum value at the same time.
	long	
	long	
setValues	long	Set up the value, minimum value, maximum value, threshold value at the same time.
	long	
	long	
	long	
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the operation mode in the integer field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed.

Edit

Set whether to enable editing. If this item is checked, editing is enabled.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

All Digit Input Check

Set whether the field is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Disable format while inputting

Set whether to disable the format function when data is input. If checked, the format function during input is disabled.

Send TextEvent by setText

Set whether the issue of TextEvent does when setText() is called. If checked, the TextEvent is issued.

Always Format

Set whether to format always or not. If checked, always do a format process.

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

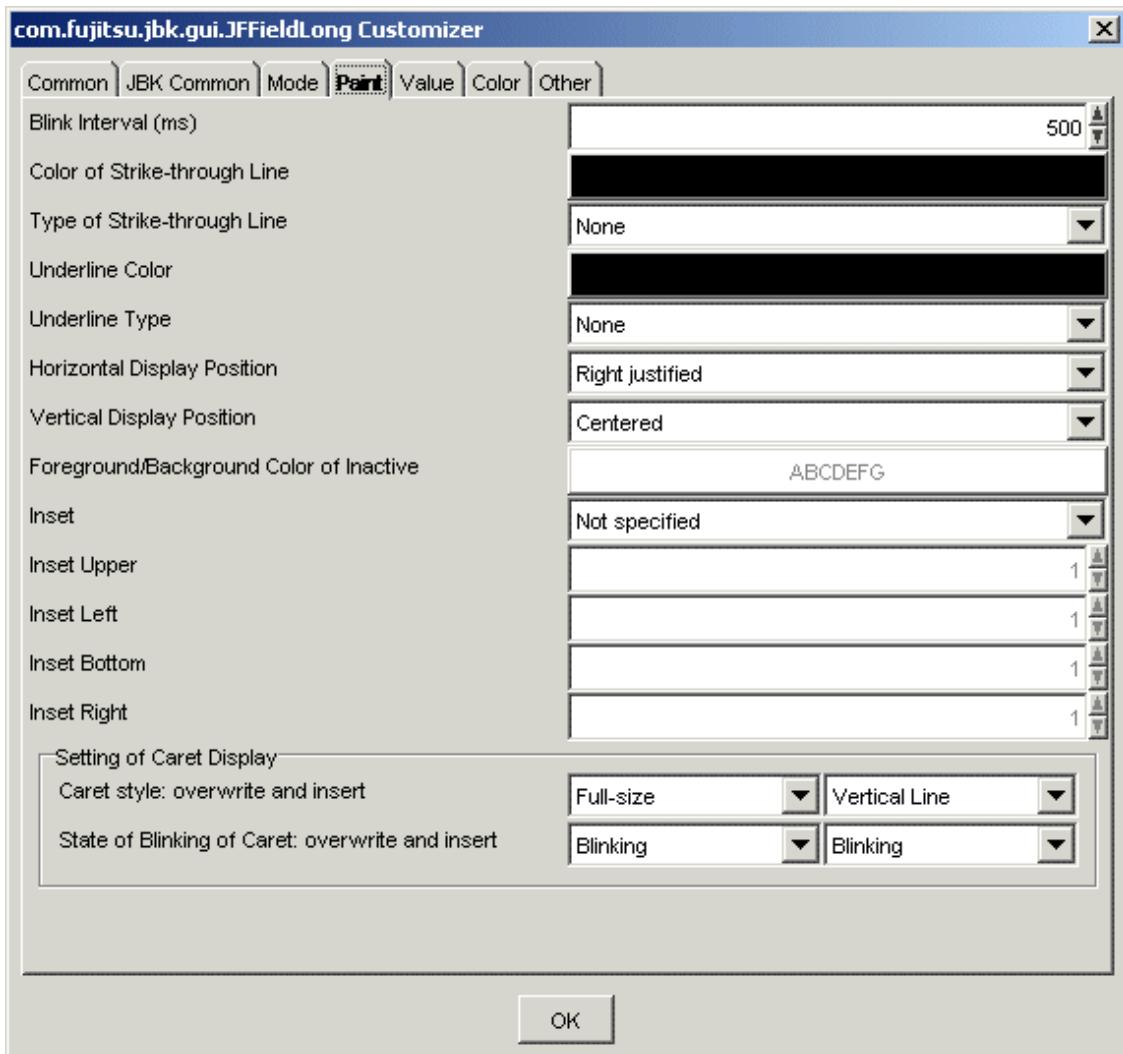
Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Set the insert mode of strings. Select the insert mode from Insert/Overwrite.

- Paint

Set the integer field display information.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 1 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines).

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Inset

Set whether or not to specify an inset.

Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Caret style: overwrite and insert

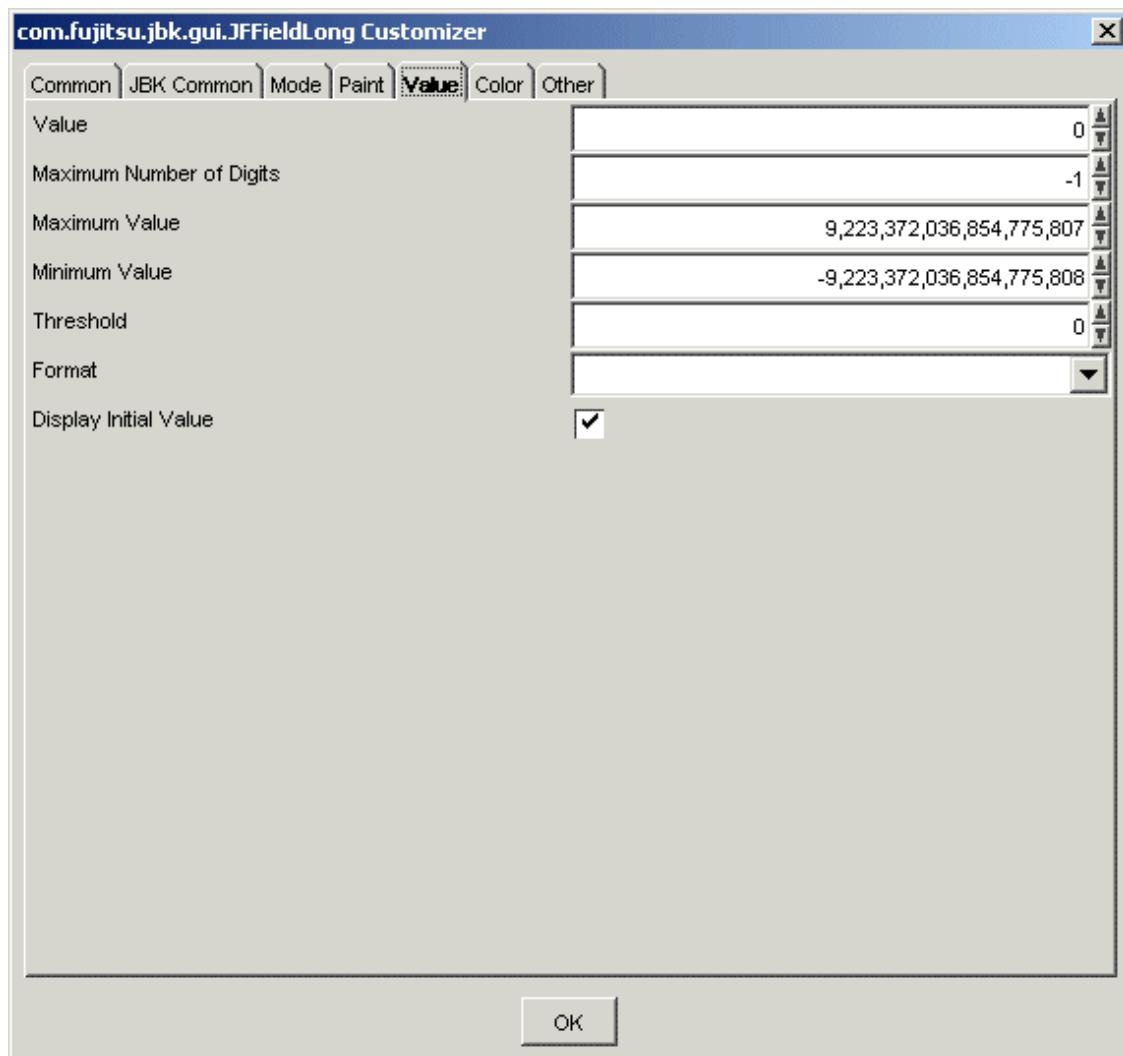
Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

State of Blinking of Caret: overwrite and insert

Set whether or not the caret blinks. A different status can be set for each input mode: overwrite and insert.

- Value

Set the integer field value.



Value

Set the value displayed in the integer field. The value is displayed according to the selected format. Specify from -9223372036854775808 to 9223372036854775807 as the value.

Maximum Number of Digits

Set the maximum number of digits in the integer field. When the value is -1, the number of digits is unrestricted. When the maximum number of digits is set, formatting is not performed. Specify from -1 to 2147483647 as the maximum number of digits.

Maximum Value

Set the maximum value that can be input into the integer field. Specify from -9223372036854775808 to 9223372036854775807 as the maximum value.

Minimum Value

Set the minimum value that can be input into the integer field. Specify from -9223372036854775808 to 9223372036854775807 as the minimum value.

Threshold

Set the threshold. Specify from -9223372036854775808 to 9223372036854775807 as the threshold.

Format

Select the format to be displayed from among #0, #,##0, #,##0, #,000, \$#,##0, or #0%. When the corresponding format does not exist, set the format pattern directly in the selection field.

Display Initial Value

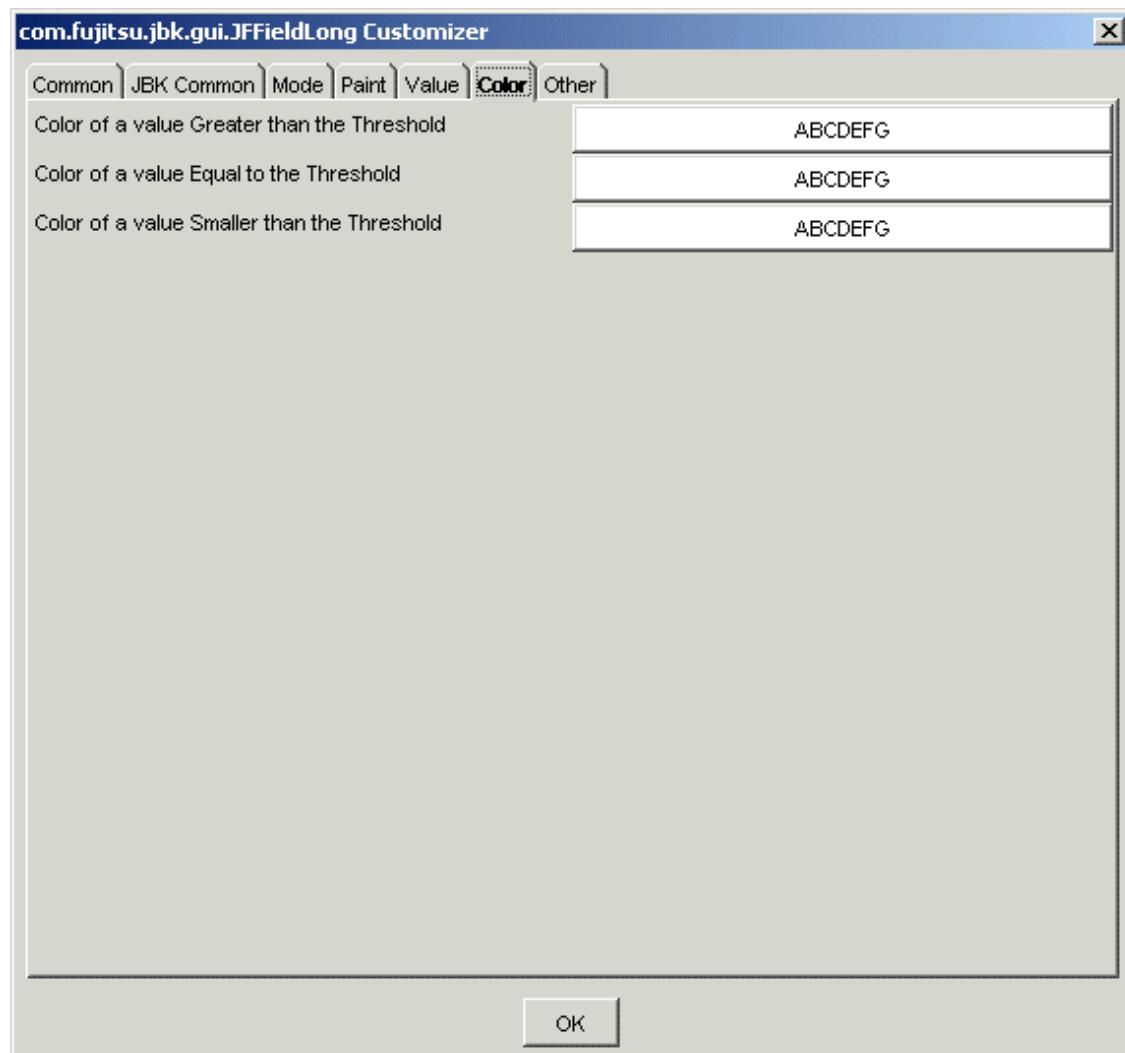
Select the display initial value. If this item is checked, the initial value is displayed.

The initial value is specified value when constructing this class. When the initial value is not specified when constructing this class, 0 is assumed.

If this field is set the initial value isn't displayed, the value is changed from initial value and it is display.

- Color

Set the color used for the threshold.



Color of a value Greater than the Threshold

Set the foreground color and background color for the input value that is greater than the threshold. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Color of a value Equal to the Threshold

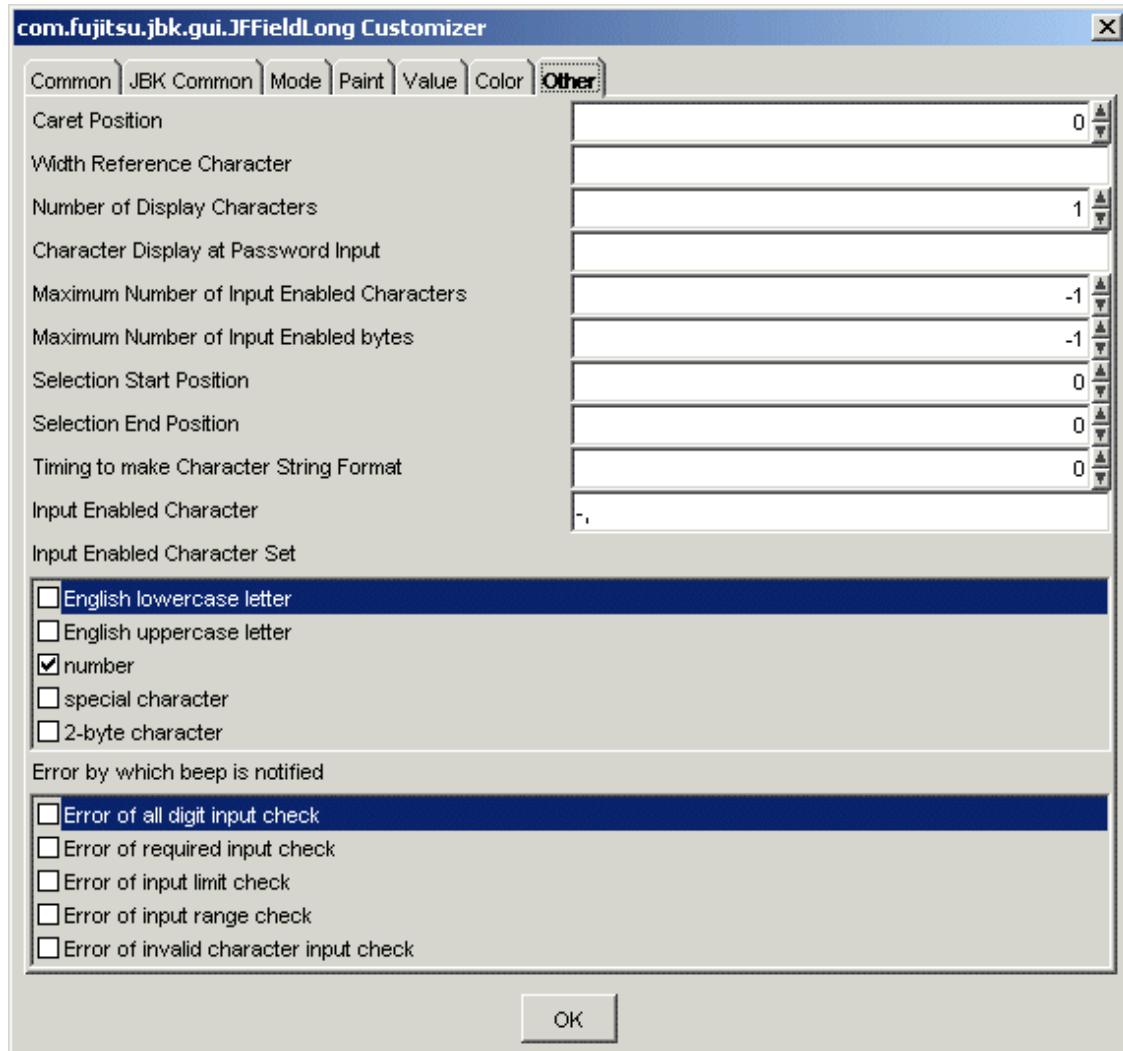
Set the foreground color and background color for the input value that is equal to the threshold. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Color of a value Smaller than the Threshold

Set the foreground color and background color for the input value that is smaller than the threshold. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

- Other

Set other information.



Caret Position

Set the caret position. Specify from 0 to the number of value's characters as the caret position.

Width Reference Character

Set the character which is used to decide the size of the component.

Number of Display Characters

Set the number of display characters. Specify from 0 to 2147483647 as the number of display characters.

Character Display at Password Input

Set the character to display for the password input and displaying.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Selection Start Position

Set the selection start position. Specify from 0 to the number of value's characters as the selection start position.

Selection End Position

Set the selection end position. Specify from 0 to the number of value's characters as the selection end position.

Timing to make Character String Format

Set the timing to perform the display format. Formatting is performed when the keys are pressed the specified number of times. Specify from 0 to 2147483647 as the timing to perform the display format.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Enabled Character Set

Select the available character set for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input. To partially enable the input of the character set, set to 'Input Enabled Character'.

Error by which beep is notified

Select the error types for which the warning is sounded from among Error of all digit input check, Error of required input check, Error of input limit check, Error of input range check, or Error of invalid character input check.

3.12 Extended character string field Bean

The extended character string field Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



["Package Guide"- JFFieldRichString](#)

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Display position of horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	boolean	Y	Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color

Name	Type	Reference	Setting	Explanation
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
byteLength	int	Y		Byte length of character string
caretBlink	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input caret blink
caretPosition	int	Y	Y	Caret position
caretStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
characterCodeMapped	boolean	Y	Y	Whether to convert incompatible character code
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
columns	int	Y	Y	Number of display characters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
echoChar	char	Y	Y	Character display at password input
editable	boolean	Y	Y	Editing enabled/disabled
enableChars	char[]	Y	Y	Input-enabled character array
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	int	Y	Y	Input-enabled character set
enabled	boolean	Y	Y	Whether enabled
errorBeep	int	Y	Y	Error types for which a warning is sounded
errorStringDisplayed	boolean	Y	Y	Whether to set a string that causes an error as it is
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font

Name	Type	Reference	Setting	Explanation
foreground	java.awt.Color	Y	Y	Foreground color
formatTiming	int	Y	Y	Timing to perform formatting for the display
fullField	boolean	Y	Y	Whether to check all digit input
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
indispensableField	boolean	Y	Y	Whether to check the required input
inputAssist	int	Y	Y	Input assist method
inputLimitation	com.fujitsu.jbk.gui.JFInputLimitation	Y	Y	Input restriction
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
insets	java.awt.Insets	Y	Y	Inset
length	int	Y		Character string length
locale	java.util.Locale	Y	Y	Locale information
magnification	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Character display magnification
maxByteLength	int	Y	Y	Maximum number of input-enabled bytes
maxLength	int	Y	Y	Maximum number of input-enabled characters
name	java.lang.String	Y	Y	Name
plainTextEditing	boolean	Y	Y	Whether the format function is enabled during input
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not

Name	Type	Reference	Setting	Explanation
selectedText	java.lang.String	Y		Selected character string
selectionEnd	int	Y	Y	Selection end position
selectionStart	int	Y	Y	Select start position
sendTextEventBySetText	boolean	Y	Y	Whether the TextEvent issue is done, when setText() is called
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
text	java.lang.String	Y	Y	Character string
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/ removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized componentMoved componentShown componentHidden	Is issued when the component status changes.
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained focusLost	Is issued when the focus moves.

Name	Listener	Addition/ removal	Method	Explanation
inputError	com.fujitsu.jbk.gui.JFInputErrorListener	addInputError Listener removeInputEr rorListener	inputError	Is issued when a character string input error occurs.
inputMethod	java.awt.event InputMethodListener	addInputMeth odListener removeInputM ethodListener	caretPositionCha nged	Is issued when the input method status changes.
			inputMethodText Changed	
key	java.awt.event KeyListene r	addKeyListene r removeKeyLis tener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseList ener removeMouse Listener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListene r	addMouseMot ionListener removeMouse MotionListene r	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListene r	addMouseWhe elListener removeMouse WheelListener	mouseWheelMo ved	Is issued by mouse wheel operation.
propertyChan ge	java.beans PropertyChangeListene r	addPropertyCh angeListener removePropert yChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListene r	addTextListene r removeTextLi stener	textValueChange d	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addAttributedCharacter	char	Sets the display attribute information of the specified character.
	com.fujitsu.jbk.gu i JFAttributeSet	
addEnableChar	char	Adds an input enabled character.
canCopy		Returns whether copy is possible.
canCut		Returns whether cut is possible.
canPaste		Returns whether paste is possible.

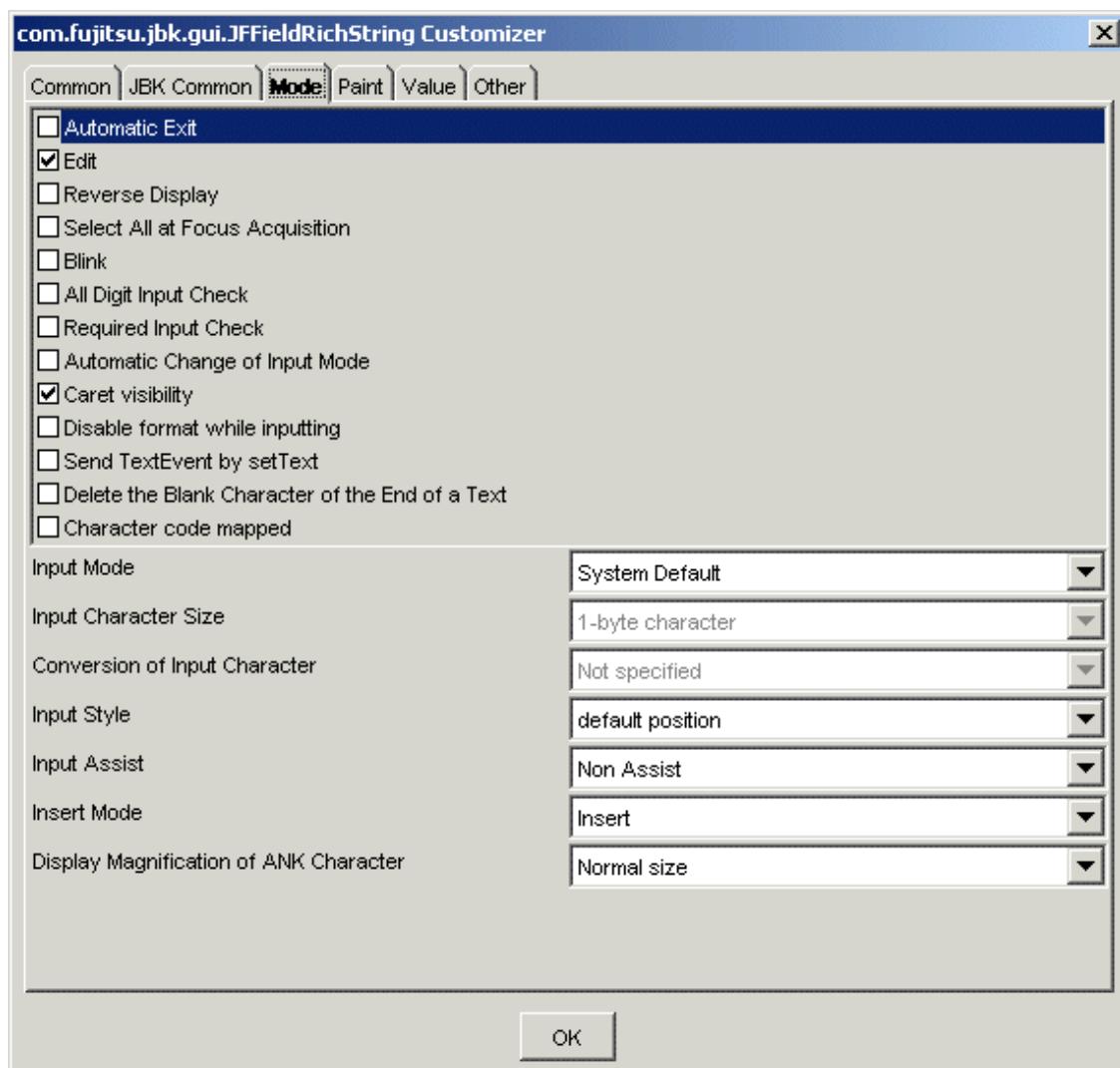
Name	Parameters	Explanation
checkFullField		Checks all digit inputting.
checkIndispensableField		Checks the required inputting.
copy		Copies the selected character string onto the clipboard.
cut		Cuts the selected character string onto the clipboard.
echoCharIsSet		Returns whether password input function is set up.
getAttributeIterator		Returns a display attribute information object.
getPreferredSize	int	Returns the optimum size toward number of the specified characters.
getStringForRange	int	Returns the partial character string.
	int	
hideToolTip		Erases the tool tip.
insertText	java.lang.String	Inserts the character string into the selected area.
paste		Pastes from the clipboard.
removeAttributedCharacter	char	Removes the specified character and corresponding display attribute information.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int	Partially selects the character string.
	int	
selectAll		Selects the entire character string.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- Component common property
- JBK GUI common property

- Mode

Set the operation mode in the character string field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed.

Edit

Set whether to enable editing. If this item is checked, editing is enabled.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

All Digit Input Check

Set whether the field is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Disable format while inputting

Set whether to disable the format function when data is input. If checked, the format function during input is disabled.

Send TextEvent by setText

Set whether the issue of TextEvent does when setText() is called. If checked, the TextEvent is issued.

Character code mapped

Set whether to convert YEN SIGN. If checked, character code conversion is performed.

For the character codes to be converted, see the following table:

SJIS	Unicode	Microsoft
0x815F	0x005C[REVERSE SOLIDUS]	[Unicode]U+00A5[YEN SIGN]

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

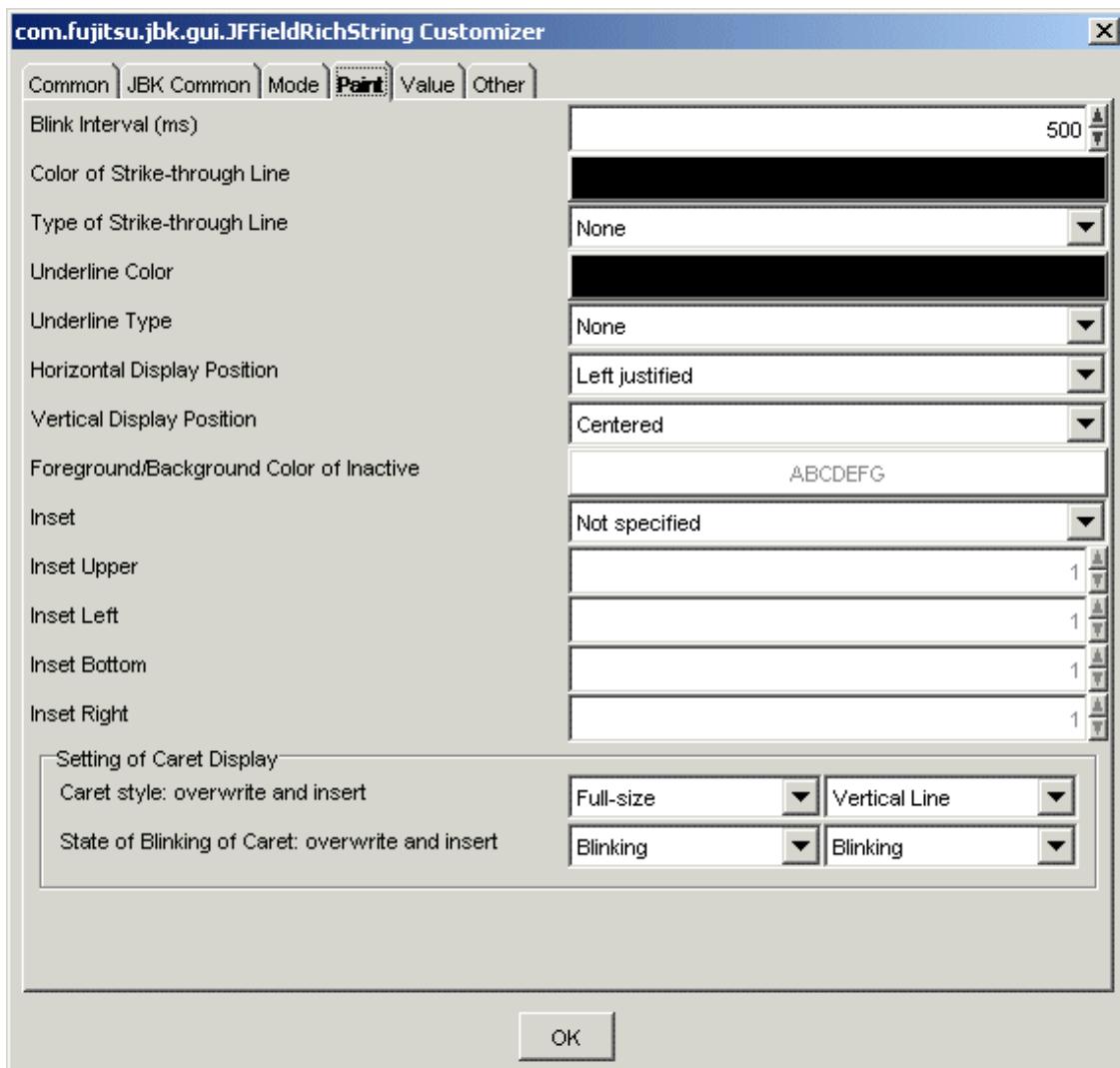
Set the insert mode of strings. Select the insert mode from Insert/Overwrite.

Display Magnification of ANK Character

Select the display magnification of ANK characters from Normal size/Horizontal Double size.

- Paint

Set the character string field display information.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 1 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines).

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Inset

Set whether or not to specify an inset.

Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Caret style: overwrite and insert

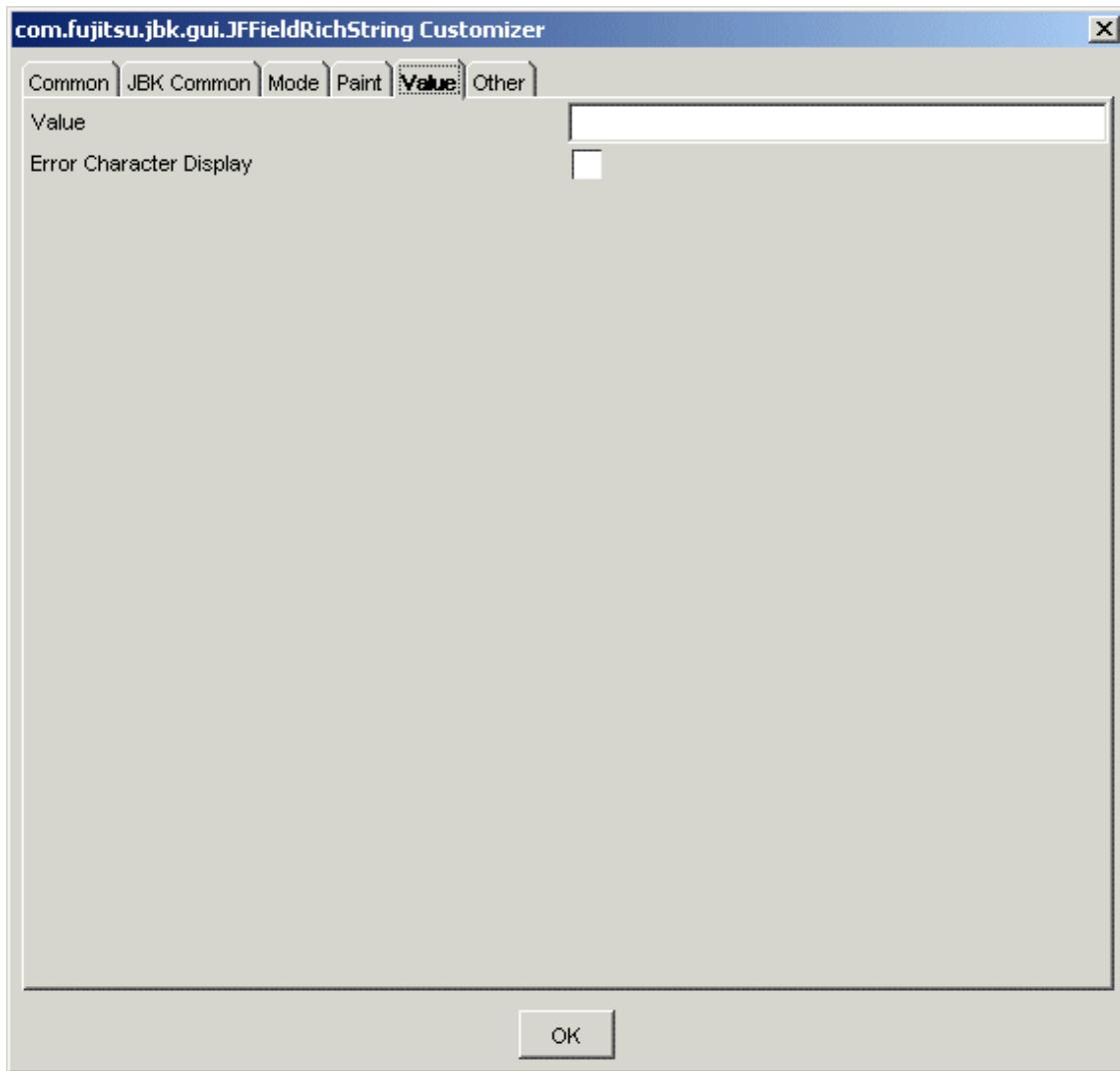
Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

State of Blinking of Caret: overwrite and insert

Set whether or not the caret blinks. A different status can be set for each input mode: overwrite and insert.

- Value

Set the value of the character string field.



Value

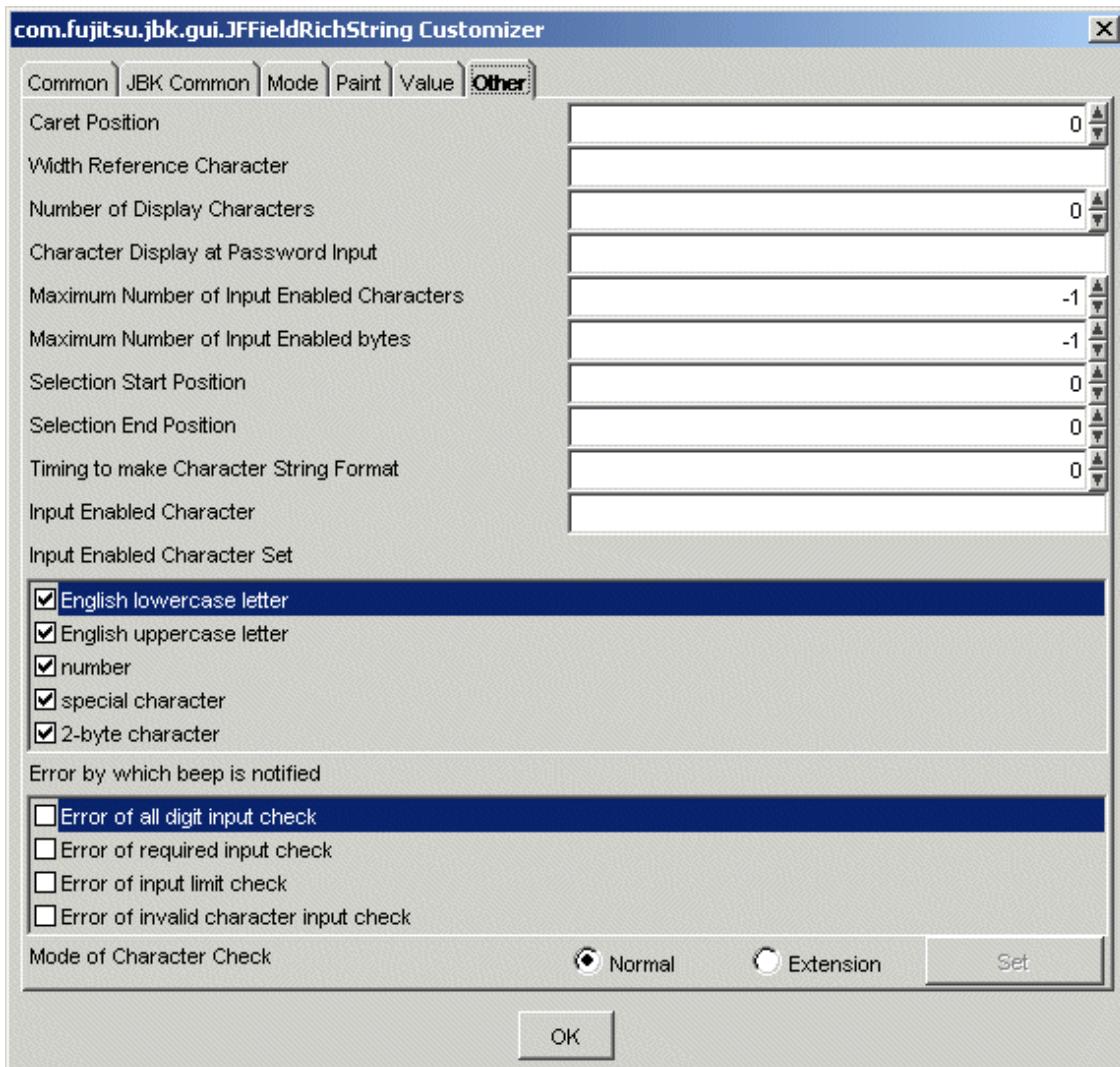
Set the value to be displayed in the character string field.

Error Character Display

Set the operation when a character that will cause an error is contained in the string. If checked, no restriction is imposed on the string to be set.

- Other

Set other information.



Caret Position

Set the caret position. Specify from 0 to the number of value's characters as the caret position.

Width Reference Character

Set the character which is used to decide the size of the component.

Number of Display Characters

Set the number of display characters. Specify from 0 to 2147483647 as the number of display characters.

Character Display at Password Input

Set the character to display for the password input and displaying.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input input-enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Selection Start Position

Set the selection start position. Specify from 0 to the number of value's characters as the selection start position.

Selection End Position

Set the selection end position. Specify from 0 to the number of value's characters as the selection end position.

Timing to make Character String Format

Set the timing to perform the display format. Formatting is performed when the keys are pressed the specified number of times. Specify from 0 to 2147483647 as the timing to perform the display format.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Enabled Character Set

Select the available character set for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input. To partially enable the input of the character set, set to 'Input Enabled Character'.

Error by which beep is notified

Select the error types for which the warning is sounded from among Error of all digit input check, Error of required input check, Error of input limit check, or Error of invalid character input check.

Mode of Character Check

Select the input restriction from Normal and Extension.

In case of Normal, specifies input restriction with 'Maximum Number of Input Enabled Characters', 'Maximum Number of Input Enabled bytes', 'Input Enabled Character', and 'Input Enabled Character Set'.

In case of Extension, specifies input restriction with the <Set> button is pressed, [Input Limitation] setting dialog is displayed.

When Extension is specified, each input restriction becomes invalid when it is set in Normal . And, when Normal is specified, each input restriction becomes invalid when it is set in Extension.

3.13 Character string field Bean

The character string field Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFFieldString

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Display position of horizontal character string
alignmentVertical	int	Y	Y	Display position of vertical character string
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid

Name	Type	Reference	Setting	Explanation
autoIME	boolean	Y	Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
byteLength	int	Y		Byte length of character string
caretBlink	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input caret blink
caretPosition	int	Y	Y	Caret position
caretStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
characterCodeMapped	boolean	Y	Y	Whether to convert incompatible character code
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
columns	int	Y	Y	Number of display characters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
echoChar	char	Y	Y	Character display at password input
editable	boolean	Y	Y	Editing enabled/disabled
enableChars	char[]	Y	Y	Input-enabled character array
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	int	Y	Y	Input-enabled character set
enabled	boolean	Y	Y	Whether enabled
errorBeep	int	Y	Y	Error types for which a warning is sounded
errorStringDisplayed	boolean	Y	Y	Whether to set a string that causes an error as it is
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set

Name	Type	Reference	Setting	Explanation
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
formatTiming	int	Y	Y	Timing to perform formatting for the display
fullField	boolean	Y	Y	Whether to check all digit input
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
indispensableField	boolean	Y	Y	Whether to check the required input
inputAssist	int	Y	Y	Input assist method
inputLimitation	com.fujitsu.jbk.gui.JFInputLimitation	Y	Y	Input restriction
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
insets	java.awt.Insets	Y	Y	Inset
length	int	Y		Character string length
locale	java.util.Locale	Y	Y	Locale information
maxByteLength	int	Y	Y	Maximum number of input-enabled bytes
maxLength	int	Y	Y	Maximum number of input-enabled characters
name	java.lang.String	Y	Y	Name
plainTextEditing	boolean	Y	Y	Whether the format function is enabled during input
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not

Name	Type	Reference	Setting	Explanation
selectedText	java.lang.String	Y		Selected character string
selectionEnd	int	Y	Y	Selection end position
selectionStart	int	Y	Y	Select start position
sendTextEventBySetText	boolean	Y	Y	Whether the TextEvent issue is done, when setText() is called
strikeColor	java.awt.Color	Y	Y	Color of strike-through line
strikeType	int	Y	Y	Type of strike-through line
text	java.lang.String	Y	Y	Character string
textEditKey	com.fujitsu.jbk.gui.JFTextEditKey	Y	Y	Function key manager
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the Enter key is pressed or when the component is out of focus automatically.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputError	com.fujitsu.jbk.gui.JFInputErrorListener	addInputErrorListener removeInputErrorListener	inputError	Is issued when a character string

Name	Listener	Addition/removal	Method	Explanation
				input error occurs.
inputMethod	java.awt.event InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListener	textValueChanged	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addEnableChar	char	Adds an input enabled character.
canCopy		Returns whether copy is possible.
canCut		Returns whether cut is possible.
canPaste		Returns whether paste is possible.
checkFullField		Checks all digit inputting.
checkIndispensableField		Checks the required inputting.
copy		Copies the selected character string onto the clipboard.
cut		Cuts the selected character string onto the clipboard.
echoCharIsSet		Returns whether password input function is set up.
getPreferredSize	int	Returns the optimum size toward number of the specified characters.
getStringForRange	int	Returns the partial character string.
	int	
hideToolTip		Erases the tool tip.

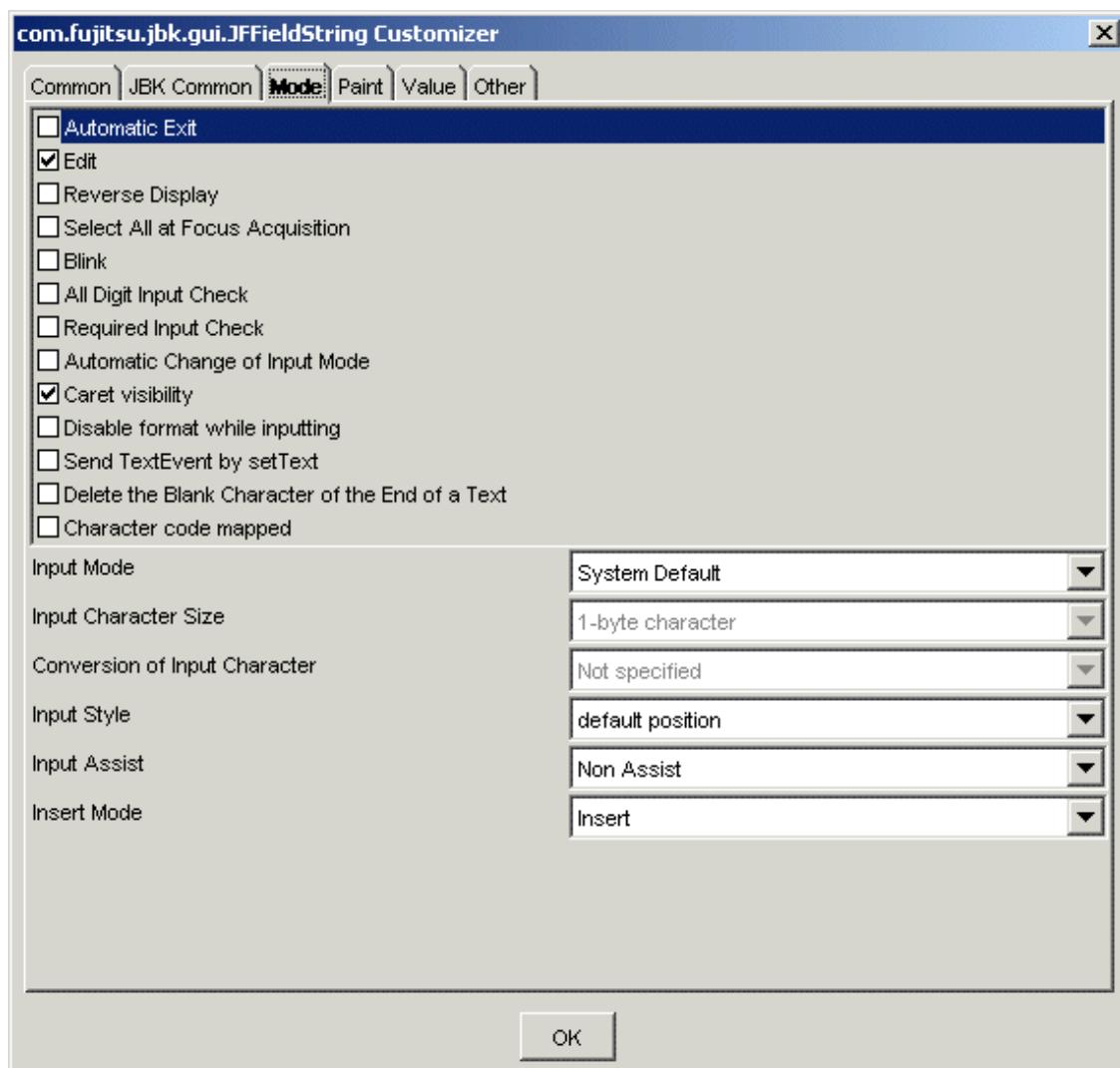
Name	Parameters	Explanation
insertText	java.lang.String	Inserts the character string into the selected area.
paste		Pastes from the clipboard.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
select	int int	Partially selects the character string.
selectAll		Selects the entire character string.
showToolTip	java.lang.String java.awt.Point java.awt.Dimension long	Displays the tool tip.
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the operation mode in the character string field.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed.

Edit

Set whether to enable editing. If this item is checked, editing is enabled.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

All Digit Input Check

Set whether the field is checked if all digits are input or not. If checked, the field is checked if all digits are input.

Required Input Check

Set whether the field is checked if the required field is input or not. If checked, the field is checked if the required field is input.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Disable format while inputting

Set whether to disable the format function when data is input. If checked, the format function during input is disabled.

Send TextEvent by setText

Set whether the issue of TextEvent does when setText() is called. If checked, the TextEvent is issued.

Character code mapped

Set whether to convert YEN SIGN. If checked, character code conversion is performed.

For the character codes to be converted, see the following table:

SJIS	Unicode	Microsoft
0x815F	0x005C[REVERSE SOLIDUS]	[Unicode]U+00A5[YEN SIGN]

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

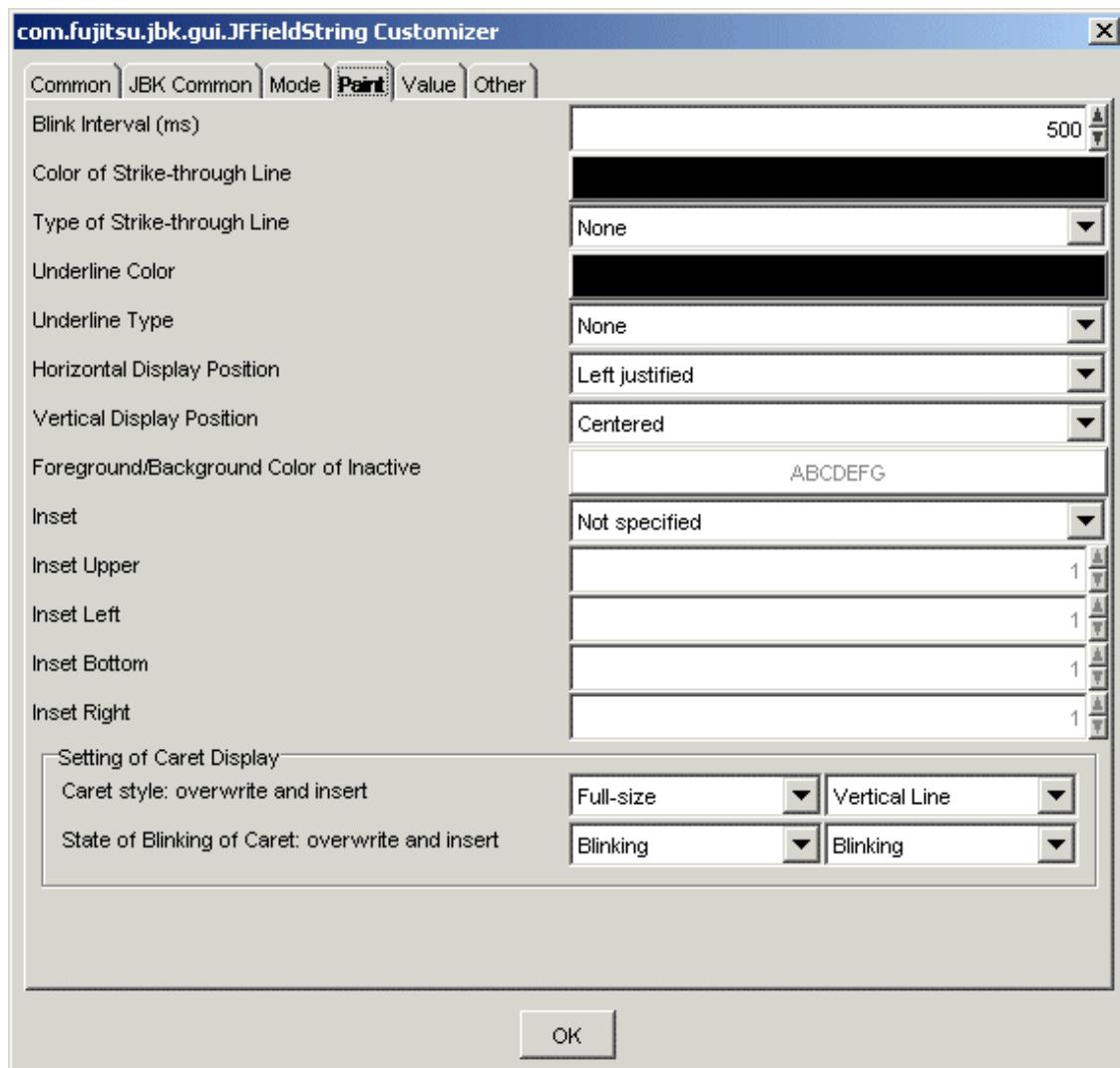
Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Set the insert mode of strings. Select the insert mode from Insert/Overwrite.

- Paint

Set the character string field display information.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 1 to 9223372036854775807 as the blink interval.

Color of Strike-through Line

Set the color of the strike-through line. When the button is pressed, [Color setting dialog](#) is displayed.

Type of Strike-through Line

Select the type of the strike-through lines from among None, -(single line) or =(double lines).

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Horizontal Display Position

Select the horizontal display position of the strings in the field set by 'Index' from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Inset

Set whether or not to specify an inset.

Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Caret style: overwrite and insert

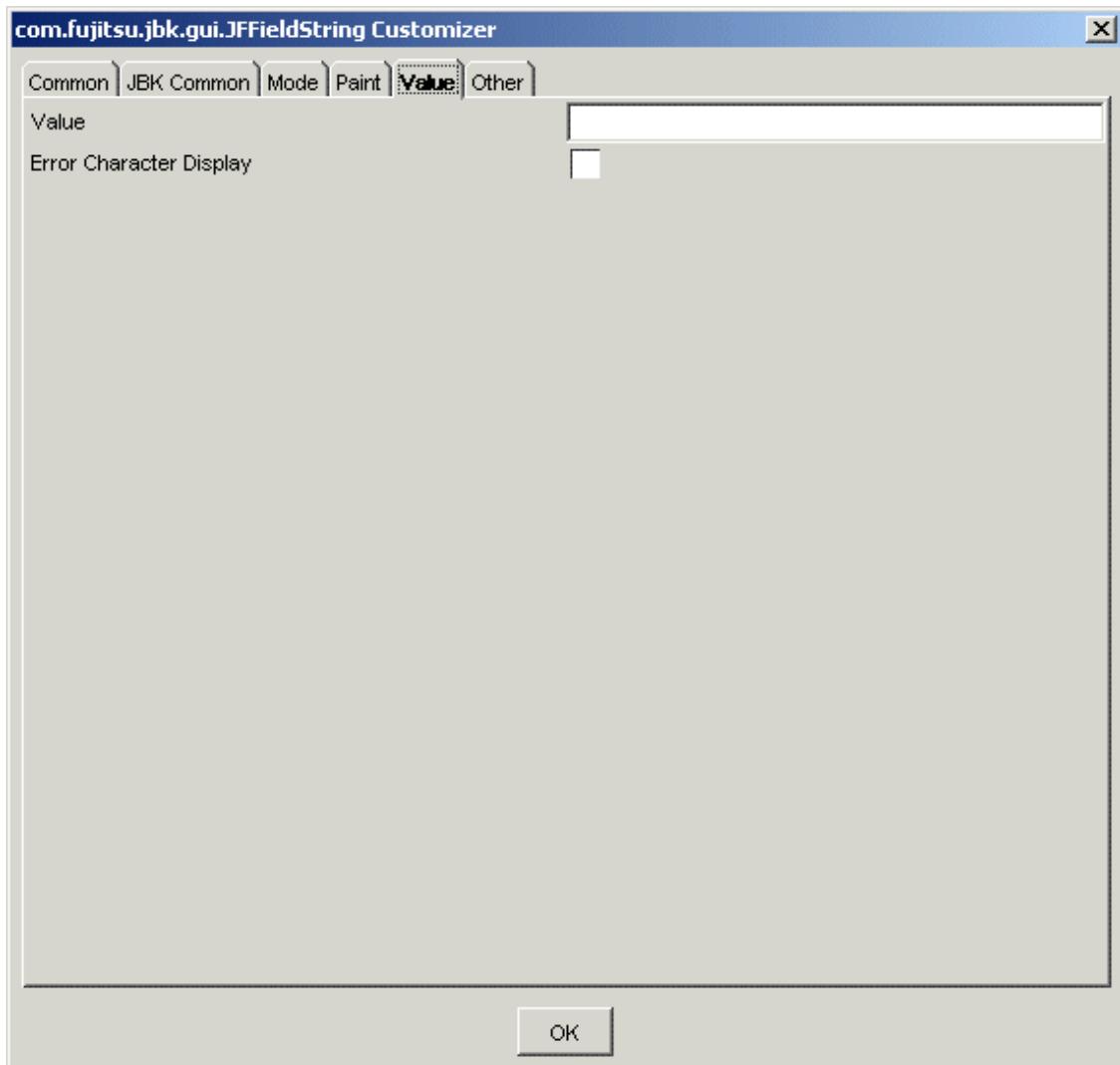
Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

State of Blinking of Caret: overwrite and insert

Set whether or not the caret blinks. A different status can be set for each input mode: overwrite and insert.

- Value

Set the value of the character string field.



Value

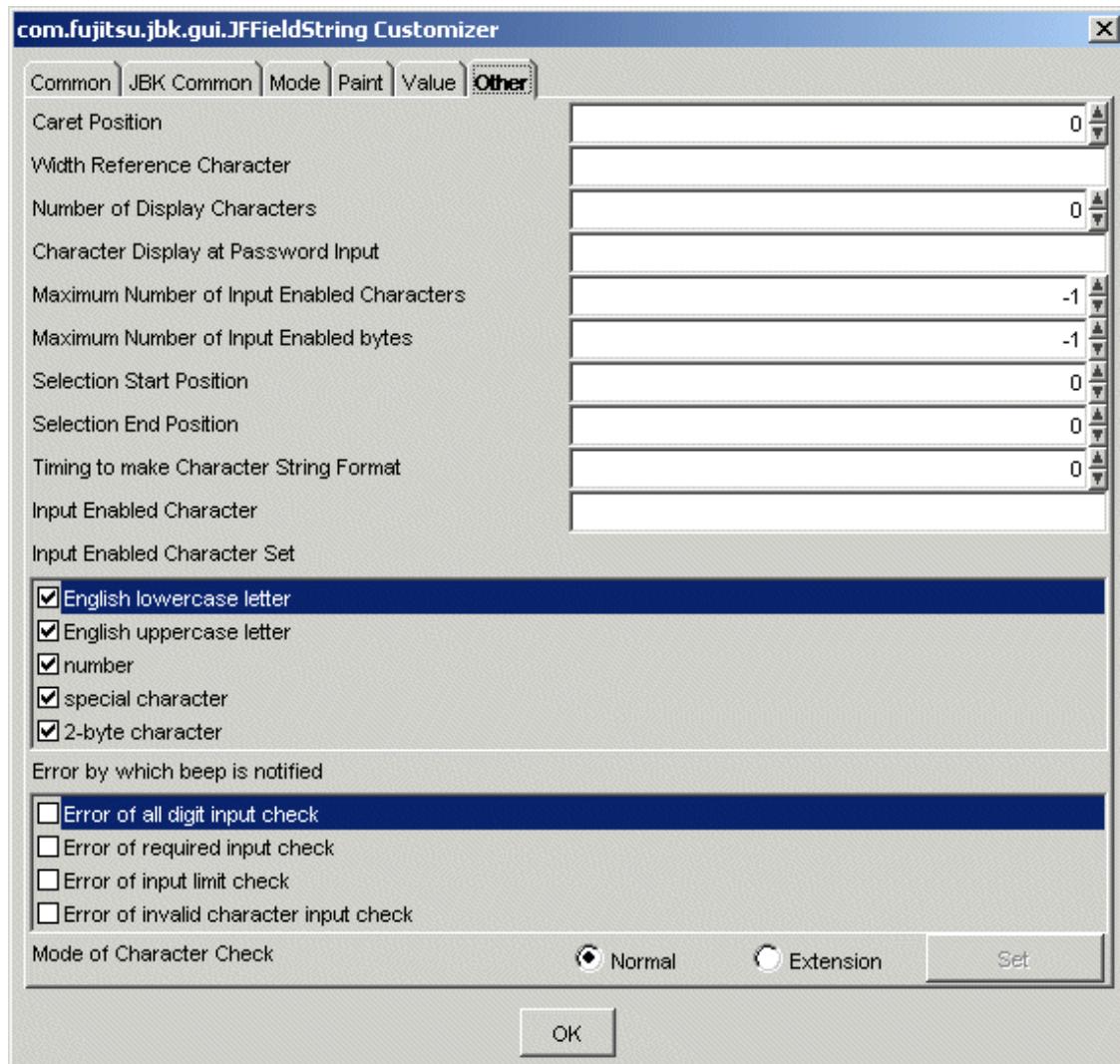
Set the value to be displayed in the character string field.

Error Character Display

Set the operation when a character that will cause an error is contained in the string. If checked, no restriction is imposed on the string to be set.

- Other

Set other information.



Caret Position

Set the caret position. Specify from 0 to the number of value's characters as the caret position.

Width Reference Character

Set the character which is used to decide the size of the component.

Number of Display Characters

Set the number of display characters. Specify from 0 to 2147483647 as the number of display characters.

Character Display at Password Input

Set the character to display for the password input and displaying.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input input-enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Selection Start Position

Set the selection start position. Specify from 0 to the number of value's characters as the selection start position.

Selection End Position

Set the selection end position. Specify from 0 to the number of value's characters as the selection end position.

Timing to make Character String Format

Set the timing to perform the display format. Formatting is performed when the keys are pressed the specified number of times. Specify from 0 to 2147483647 as the timing to perform the display format.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Enabled Character Set

Select the available character set for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input. To partially enable the input of the character set, set to 'Input Enabled Character'.

Error by which beep is notified

Select the error types for which the warning is sounded from among Error of all digit input check, Error of required input check, Error of input limit check, or Error of invalid character input check.

Mode of Character Check

Select the input restriction from Normal and Extension.

In case of Normal, specifies input restriction with 'Maximum Number of Input Enabled Characters', 'Maximum Number of Input Enabled bytes', 'Input Enabled Character', and 'Input Enabled Character Set'.

In case of Extension, specifies input restriction with the <Set> button is pressed, [Input Limitation] setting dialog is displayed.

When Extension is specified, each input restriction becomes invalid when it is set in Normal . And, when Normal is specified, each input restriction becomes invalid when it is set in Extension.

3.14 Frame Bean

The frame Bean has the following information.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFFrame

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enabled	boolean	Y	Y	Whether enabled
extendedState	int	Y	Y	Frame status

Name	Type	Reference	Setting	Explanation
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
iconImage	java.awt.Image	Y	Y	Image of icon
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
layout	java.awt.LayoutManager	Y	Y	Layout manager
locale	java.util.Locale	Y	Y	Locale information
maximizedBounds	java.awt.Rectangle	Y	Y	Boundary when maximized
menuBar	java.awt.MenuBar	Y	Y	Menu bar
name	java.lang.String	Y	Y	Name
resizable	boolean	Y	Y	Whether resizable
state	int	Y	Y	Status
title	java.lang.String	Y	Y	Title
undecorated	boolean	Y	Y	Whether decorated
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event.ContainerListener	addContainerListener removeContainerListener	componentAdded	Is issued when the pasted status changes.
			componentRemoved	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
input Method	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.

Name	Listener	Addition/removal	Method	Explanation
			inputMethodTextChanged	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouse Motion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouse Wheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
window	java.awt.event WindowListener	addWindowListener removeWindowListener	windowActivated	Is issued when the window status changes.
			windowClosed	
			windowClosing	
			windowDeactivated	
			windowDeiconified	
			windowIconified	
			windowOpened	
windowFocus	java.awt.event WindowFocusListener	addWindowFocusListener removeWindowFocusListener	windowGainedFocus	Issued when the status of the window focus changes.
			windowLostFocus	
windowState	java.awt.event WindowStateListener	addWindowStateListener removeWindowStateListener	windowStateChanged	Issued when the window status changes.

Method information

Name	Parameters	Explanation
add	java.awt Component	Adds the component.
add	java.awt Component	Adds the component.
	int	

Name	Parameters	Explanation
add	java.awt Component	Adds the component.
	java.lang Object	
add	java.awt Component	Adds the component.
	java.lang Object	
	int	
applyResourceBundle	java.util ResourceBundle	Apply the settings in the given ResourceBundle to this Window.
applyResourceBundle	java.lang String	Load the ResourceBundle with the given name using the default locale and apply its settings to this window.
createBufferStrategy	int	Creates a new multi-buffering method for the component.
createBufferStrategy	int	Creates a new multi-buffering method for the component.
	java.awt BufferCapabilities	
dispose		Releases all of the native screen resources.
getFocusOwner		Returns the child component of this Window which has focus if and only if this Window is active.
getFrames		Returns an array containing all Frames.
getOwnedWindows		Return an array containing all the windows this window currently owns.
getOwner		Return an owner.
getSharedOffscreen		Gets off screen image.
getSharedOffscreenBuffer	int	Creates off screen image.
	int	
getSharedOffscreenSize		Gets off screen image's size.
getWarningString		Gets the warning string that is displayed with this window.
pack		Causes this Window to be sized to fit the preferred size and layouts of its subcomponents.
remove	java.awt Component	Deletes the component.
remove	int	Deletes the component.
removeAll		Deletes all components.
requestFocus		Requests an input focus.
toBack		Sends this window to the back.
toFront		Sends this window to the front.
transferFocus		Moves the focus to the next component.

3.15 Group box Bean

The group box Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFGroupbox

Property information

Name	Type	Ref ere nce	Set tin g	Explanation
alignment	int	Y	Y	Display position of label character string
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
controlEnabled	boolean	Y	Y	Whether to operation of the possible/impossibility of the added component
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
label	java.lang.String	Y	Y	Label character string
layout	java.awt.LayoutManager	Y	Y	Layout manager
locale	java.util.Locale	Y	Y	Locale information

name	java.lang.String	Y	Y	Name
remoteFont	boolean	Y		Whether the registered font is a remote font
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event.ContainerListener	addContainerListener removeContainerListener	componentAdded	Is issued when the pasted status changes.
			componentRemoved	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

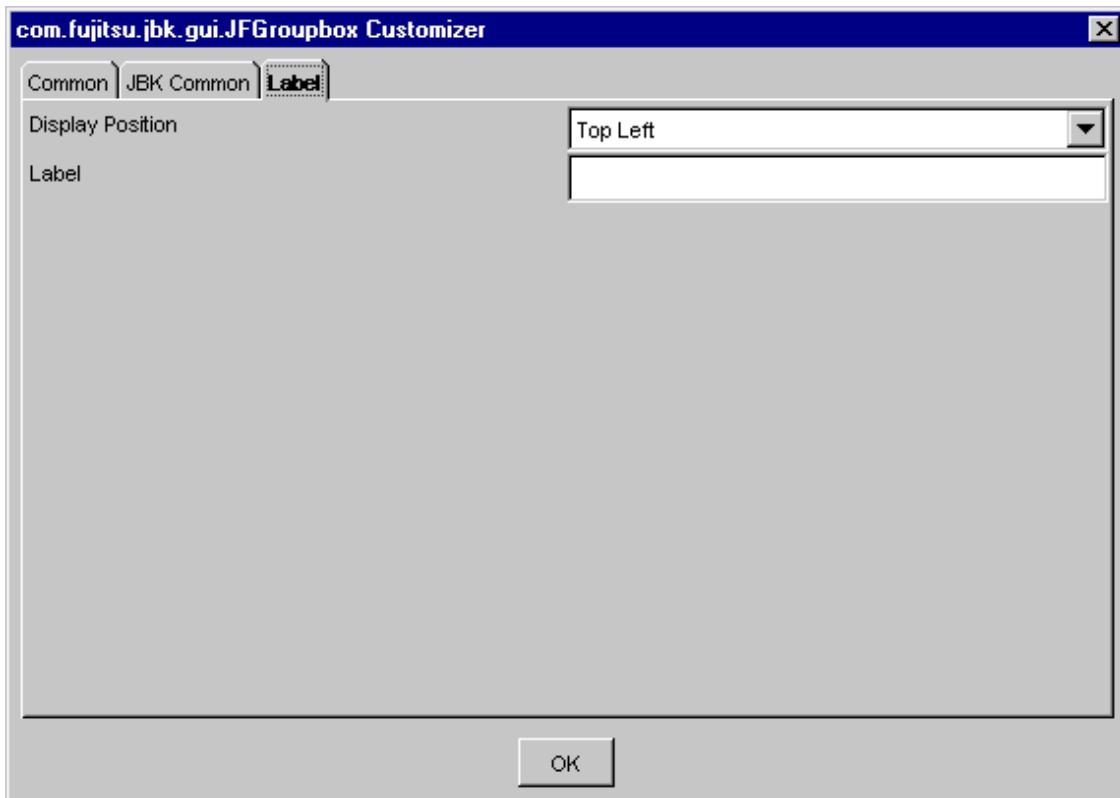
Name	Parameters	Explanation
add	java.awt Component	Adds the component.
add	java.awt Component	Adds the component.
	int	
add	java.awt Component	Adds the component.
	java.lang Object	
add	java.awt Component	Adds the component.
	java.lang Object	
	int	
hideToolTip		Erases the tool tip.
remove	int	Deletes the component.
remove	java.awt Component	Deletes the component.
removeAll		Deletes all components.
requestFocus		Requests an input focus.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Label

Sets the group box label.



Display Position

Select the label display position from among Top Left, Top Center, Top Right, Bottom Left, Bottom Center, or Bottom Right..

Label

Set the label to be displayed in the group box.

3.16 Image button Bean

The image button Bean has the following information and [Customizer](#) functions.

- [Event information](#)
- [Event information](#)
- [Method information](#)



See

"Package Guide"- [JFImageButton](#)

Property information

Name	Type	Reference	Setting	Explanation
alignmentHorizontal	int	Y	Y	Horizontal display position of image
alignmentVertical	int	Y	Y	Vertical display position of image

Name	Type	Reference	Setting	Explanation
autoTurn	boolean	Y	Y	Automatic loopback/no automatic loopback
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
buttonDisplay	int	Y	Y	Button display mode (image, label, image and label)
buttonType	int	Y	Y	Button type (pushbutton, switch button)
characterCodeMapped	boolean	Y	Y	Whether to convert incompatible character code
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
enableDoubleClick	boolean	Y	Y	Whether to enable double-click
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
imageRegion	java.awt.Rectangle	Y	Y	the rectangle which does drawing of the image
imageURL	java.net.URL	Y	Y	URL of image
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
label	java.lang.String	Y	Y	Button label
labelPosition	java.awt.Point	Y	Y	Position of label
locale	java.util.Locale	Y	Y	Locale information

Name	Type	Reference	Setting	Explanation
name	java.lang.String	Y	Y	Name
remoteFont	boolean	Y		Whether the registered font is a remote font
state	boolean	Y	Y	Value for switch button
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the button is pressed by the mouse or key.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

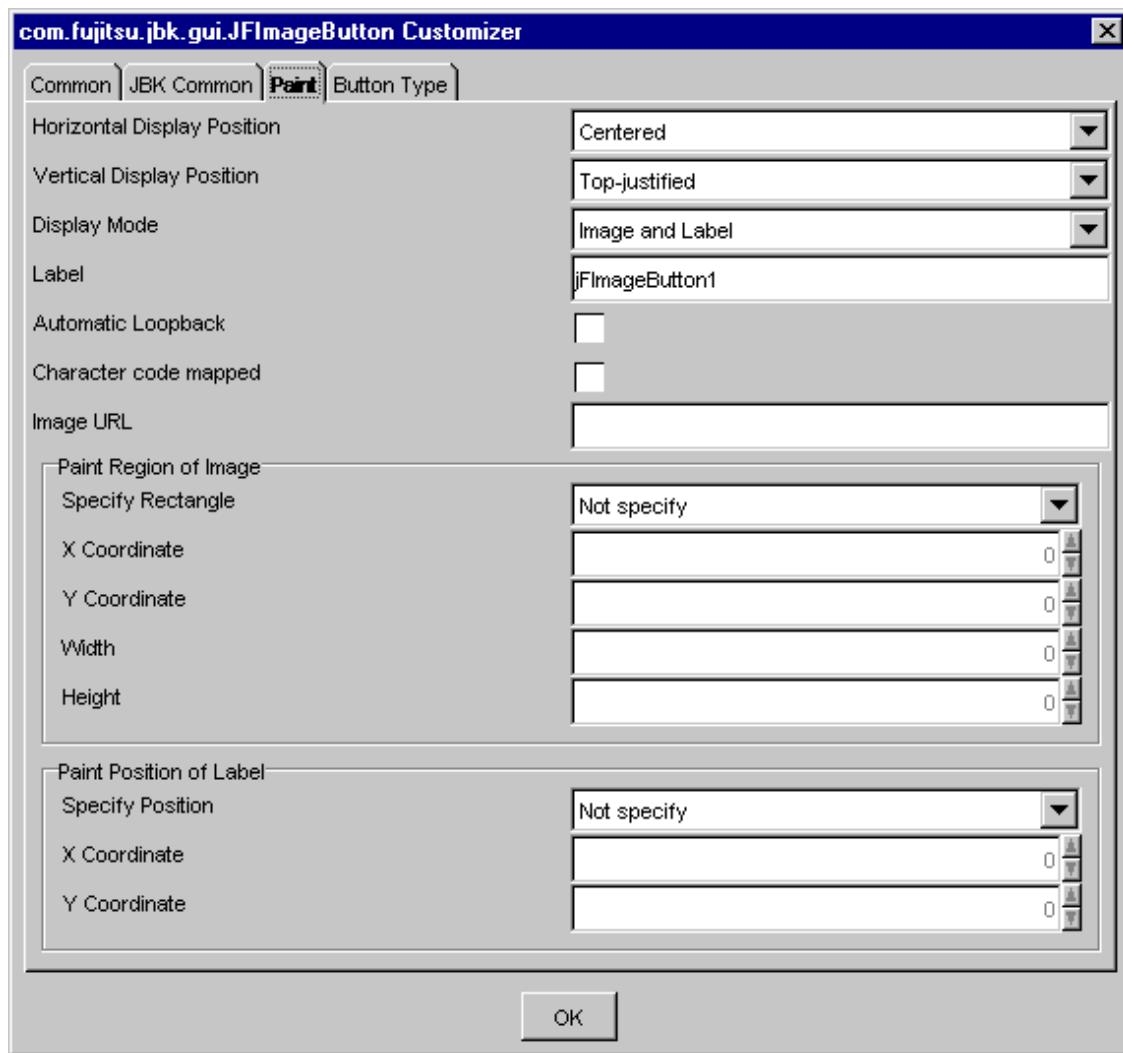
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
requestFocus		Requests an input focus.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Paint

Set the image button display information.



Horizontal Display Position

Select the horizontal display position of the strings of the image button from among Left justified, Centered or Right justified. This specification is valid for simultaneous display of the image or the label.

Vertical Display Position

Select the vertical display position of the strings of the image button from among Top-justified, Centered or Bottom-justified. This specification is valid for simultaneous display of the image or the label.

Display Mode

Select the image button display mode from among Image, Label, or Image and Label.

Label

Set the label of the image button when 'Display Mode' is "Label" or "Image and Label".

Automatic Loopback

Set whether to fold the label string automatically or not. If checked, the label is automatically folded.

Character code mapped

Set whether to convert YEN SIGN. If checked, character code conversion is performed.

For the character codes to be converted, see the following table:

SJIS	Unicode	Microsoft
0x815F	0x005C[REVERSE SOLIDUS]	[Unicode]U+00A5[YEN SIGN]

Image URL

Set the URL where the image displayed in the image button is stored.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Specify Rectangle

Set whether to set the rectangle which does drawing of the image.

X Coordinate

Set the x coordinate of the rectangle. A rectangle is specified by the relative coordinate on the component. Specify from -2147483648 to 2147483647 as the x coordinate.

Y Coordinate

Set the y coordinate of the rectangle. A rectangle is specified by the relative coordinate on the component. Specify from -2147483648 to 2147483647 as the y coordinate.

Width

Set the width of the rectangle. A rectangle is specified by the relative coordinate on the component. Specify from -2147483648 to 2147483647 as the width.

Height

Set the height of the rectangle. A rectangle is specified by the relative coordinate on the component. Specify from -2147483648 to 2147483647 as the height.



Note

A system sometimes becomes unstable when very big value is established in the rectangle that is specify from 'X Coordinate', 'Y Coordinate', 'Width', and 'Height'.

Specify Position

Set whether to set the position of drawing of the label.

X Coordinate

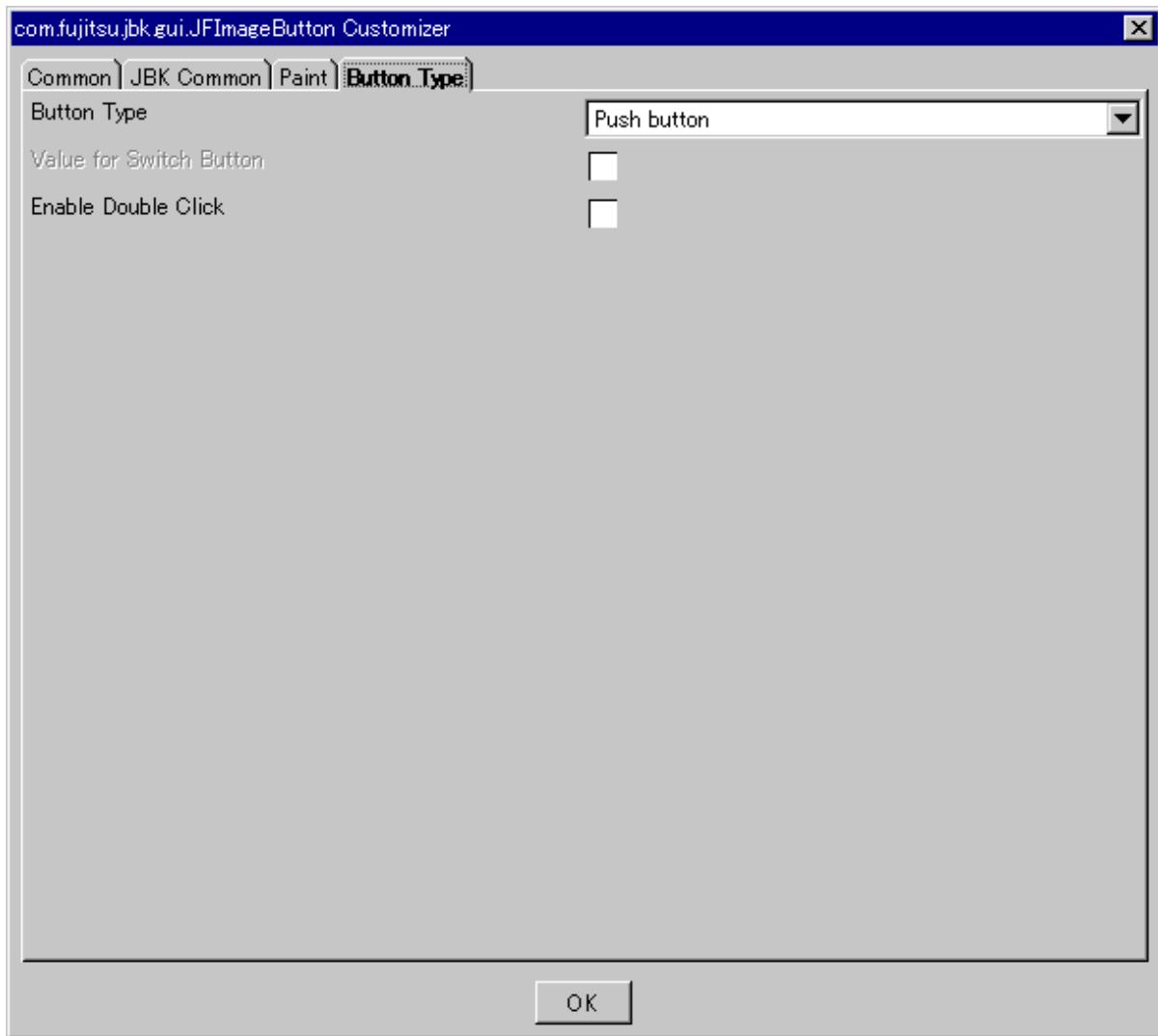
Set the x coordinate of the label. A position is specified by the relative coordinate on the part. Specify from -2147483648 to 2147483647 as the x coordinate.

Y Coordinate

Set the y coordinate of the label. A position is specified by the relative coordinate on the part. Specify from -2147483648 to 2147483647 as the y coordinate.

- **Button Type**

Set the button type of the image button.



Button Type

Select the image button type from among Push button, or Switch button.

Value for Switch Button

Set the ON/OFF status for the switch button when the image button type is switch button. If this item is checked, the status becomes ON. If this item is unchecked, the status becomes OFF.

Enable Double Click

Specifies whether to enable double-click. If this item is checked, double-click is enabled.

3.17 Light weight panel Bean

The light weight panel Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFLightPanel

Property information

Name	Type	Reference	Setting	Explanation
autoFocus	boolean	Y	Y	Set focus function valid/invalid
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
controlEnabled	boolean	Y	Y	Whether to operation of the possible/impossibility of the added component
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
firstFocusComponent	java.awt.Component	Y	Y	Component focused first
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
layout	java.awt.LayoutManager	Y	Y	Layout manager
locale	java.util.Locale	Y	Y	Locale information

Name	Type	Referencing	Setting	Explanation
name	java.lang.String	Y	Y	Name
remoteFont	boolean	Y		Whether the registered font is a remote font
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible
wrapAround	boolean	Y	Y	Whether to set wraparound of the focus movement

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event.ContainerListener	addContainerListener removeContainerListener	componentAdded	Is issued when the pasted status changes.
			componentRemoved	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	

Name	Listener	Addition/removal	Method	Explanation
mouseWheelEvent	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

Name	Parameters	Explanation
add	java.awt.Component	Adds the component.
add	java.awt.Component	Adds the component.
	int	
add	java.awt.Component	Adds the component.
	java.lang.Object	
add	java.awt.Component	Adds the component.
	java.lang.Object	
	int	
drawViewImage	java.awt.Graphics	Draws the panel screen image.
drawViewImage	java.awt.Graphics	Draws the panel screen image in a specified size.
	java.awt.Rectangle	
hideToolTip		Erases the tool tip.
remove	java.awt.Component	Deletes the component.
remove	int	Deletes the component.
removeAll		Deletes all components.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

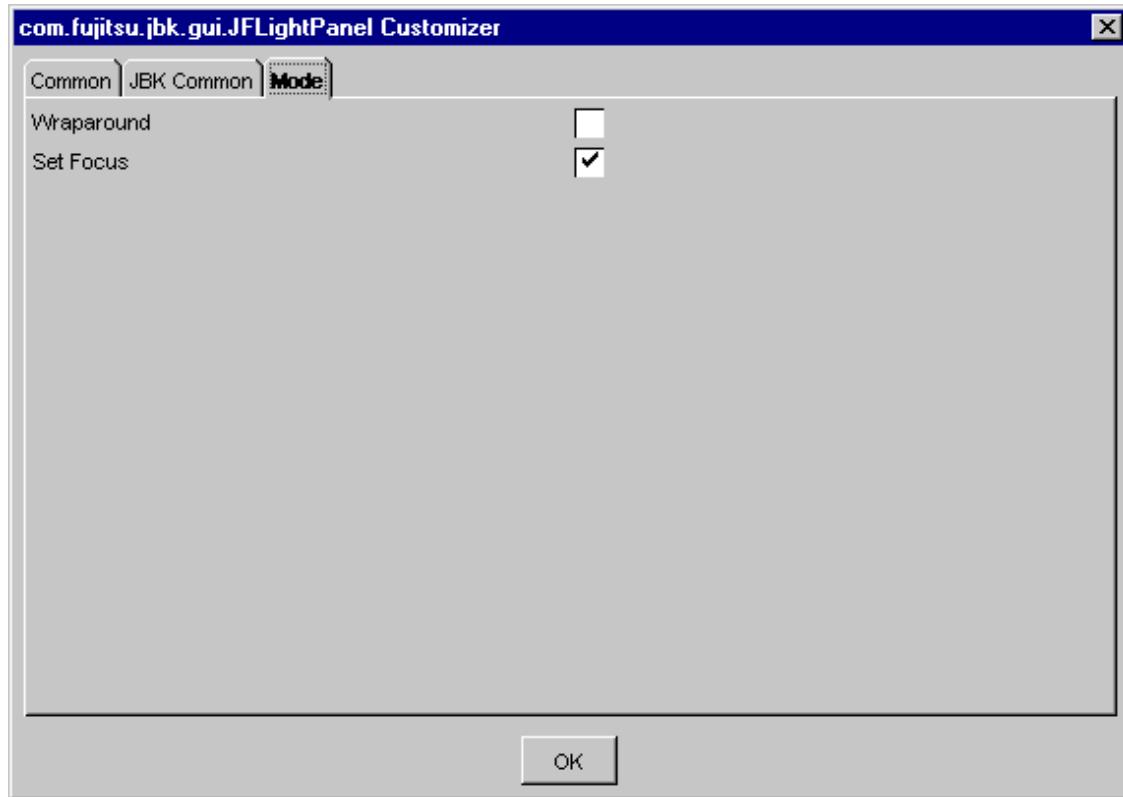
Customizer

- Component common property

- JBK GUI common property

- Mode

Set the panel mode.



Wraparound

Set wraparound for the focus movement. If checked, the focus moves by wrapping around.

Set Focus

Set valid/invalid to set focus function. If this item is checked, focus is set up in component arranged by one when it draws at first.

3.18 List format Bean

The list format Bean has the following information and [Customizer](#) functions.

- Property information

- Event information

- Method information



"Package Guide"- JFListView

Property information

Name	Type	Reference	Setting	Explanation
addDataRows	com.fujitsu.jbk.gui JFListViewItems		Y	Adds the data of the specified rows and columns after the last row
adjustHeader	boolean	Y	Y	Whether to display the dummy column header
alignment	com.fujitsu.jbk.gui JFCCellObjectProperty		Y	Display position of the specified column character string
background	java.awt Color	Y	Y	Background color
borderColor	java.awt Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
cellBackground	com.fujitsu.jbk.gui JFCCellObjectProperty		Y	Background color
cellForeground	com.fujitsu.jbk.gui JFCCellObjectProperty		Y	Foreground color
columnAlignment	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Display position of the string of the whole specified column
columnCount	int	Y	Y	Number of data columns
columnWidth	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Column width of the specified column
columns	int	Y	Y	Number of display columns
componentOrientation	java.awt ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
cursorIndex	int	Y	Y	Line where the cursor is
deselect	int		Y	Deselection
enableChangeWidth	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Changing of the display width of the specified column enabled/disabled
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableSort	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Sorting with the specified column data as key enabled/disabled
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt Font	Y	Y	Font
foreground	java.awt Color	Y	Y	Foreground color
headerAlignment	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Display position of the string of the specified header

Name	Type	Reference	Setting	Explanation
headerHeight	int	Y	Y	Height of column header
headerImage	(Array) java.awt Image	(A rr ay) Y	(A rr ay) Y	Image displayed in the column header specified by the column
headerObject	(Array) java.lang Object	(A rr ay) Y	(A rr ay) Y	Object of the column header specified by the column
headerObjectToString	(Array) com.fujitsu.jbk.gui JFObjectToString	(A rr ay) Y	(A rr ay) Y	Object for setting the character string set in the column header
headerString	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Character string displayed in the column header specified by the column
horizontalUnitIncrement	int	Y	Y	Unit increment value of horizontal scrollbar
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
locale	java.util Locale	Y	Y	Locale information
multipleMode	boolean	Y	Y	Multiple selection mode/single selection mode
name	java.lang String	Y	Y	Name
preferredColumnWidth	(Array) int	(A rr ay) Y		Optimum column width of the specified column
remoteFont	boolean	Y		Whether the registered font is a remote font
rowCount	int	Y	Y	Number of data lines
rowHeight	int	Y	Y	Height of one line in data area
rows	int	Y	Y	Number of lines displayed in the data area
select	int		Y	Selection
selectBackground	java.awt Color	Y	Y	Background color of a selected cell
selected	(Array) boolean	(A rr ay		Whether the specified line is selected

Name	Type	Reference	Setting	Explanation
) Y		
selectedCount	int	Y		Number of lines in the selected status
selectedIndex	int	Y		Selected line
selectedIndexes	int[]	Y		Array of all lines in the selected status
selectedObjects	java.lang.Object[]	Y		First object array on the line in the selected status
selectForeground	java.awt.Color	Y	Y	Foreground color of a selected cell
string	com.fujitsu.jbk.gui.JCellObjectProperty		Y	Character string
toolTipText	java.lang.String	Y	Y	Tool tip text
topIndex	int	Y	Y	Line displayed at the beginning
viewMode	boolean	Y	Y	Whether the mode is view mode
visible	boolean	Y	Y	Whether visible
visibleHScrollbar	boolean	Y		Horizontal scroll bar display/no display
visibleHeader	boolean	Y	Y	Column header display/no display
visibleVScrollbar	boolean	Y		Vertical scroll bar display/no display
wheelScrollingEnabled	boolean	Y	Y	Whether to enable scrollbar operation with mouse wheel

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the mouse is double-clicked or when the Enter key is pressed.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	

Name	Listener	Addition/removal	Method	Explanation
item	java.awt.event ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when the line is selected/ deselected.
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListene r removeMouseMotionLis tener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelList ener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

Name	Parameters	Explanation
addRow		Adds null line data to the end of the line.
deselect	int	Deselects the specified line.
exchangeColumn	int	Replaces the specified column.
	int	
exchangeRow	int	Replaces the specified line.
	int	
getSelectForeground	int	Returns the foreground color of a cell when it is selected.
	int	
getSelectBackground	int	Returns the background color of a cell when it is selected.
	int	
hideToolTip		Erases the tool tip.
insertRow	int	Inserts a null line data into the specified line.
removeRow	int	Deletes the line data of the specified line.
requestFocus		Requests an input focus.
search	char	Moves the cursor and selection process onto the line that begins with the specified character.
select	int	Selects the specified line.

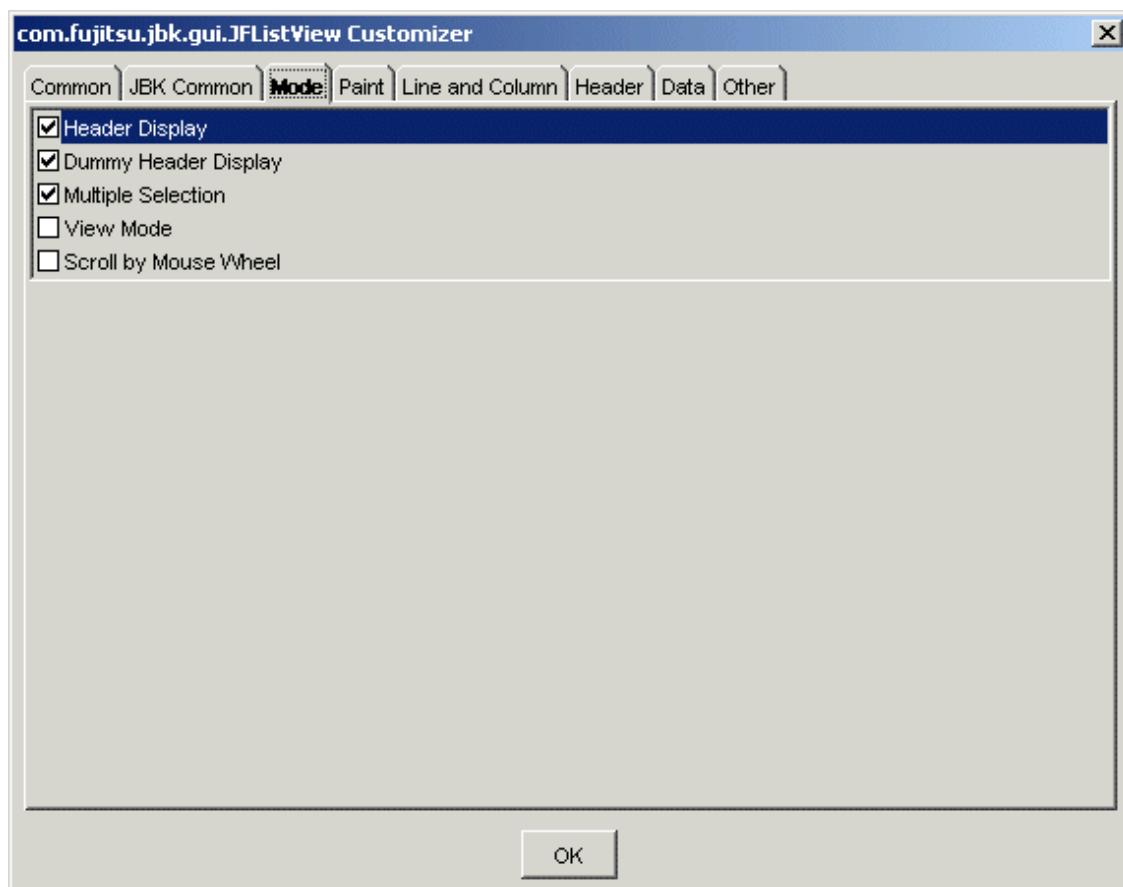
Name	Parameters	Explanation
setColumnSelectBackground	int	Returns the background color of a column when it is selected.
	java.awt.Color	
setColumnSelectForeground	int	Returns the foreground color of a column when it is selected.
	java.awt.Color	
setRowSelectBackground	int	Returns the background color of a row when it is selected.
	java.awt.Color	
setRowSelectForeground	int	Returns the foreground color of a row when it is selected.
	java.awt.Color	
setSelectBackground	int	Sets the background color of a cell when it is selected.
	int	
	java.awt.Color	
setSelectForeground	int	Sets the foreground color of a cell when it is selected.
	int	
	java.awt.Color	
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
sort	int	Uses the information of the specified column to sort lines.
	boolean	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the list mode.



Header Display

Set display/no display for the header. If this item is checked, the header is displayed.

Dummy Header Display

Set dummy header display/no display. If this item is checked, the dummy header is displayed.

Multiple Selection

Set multiple selection/single selection. If this item is checked, multiple selection is enabled. If this item is unchecked, single selection is enabled.

View Mode

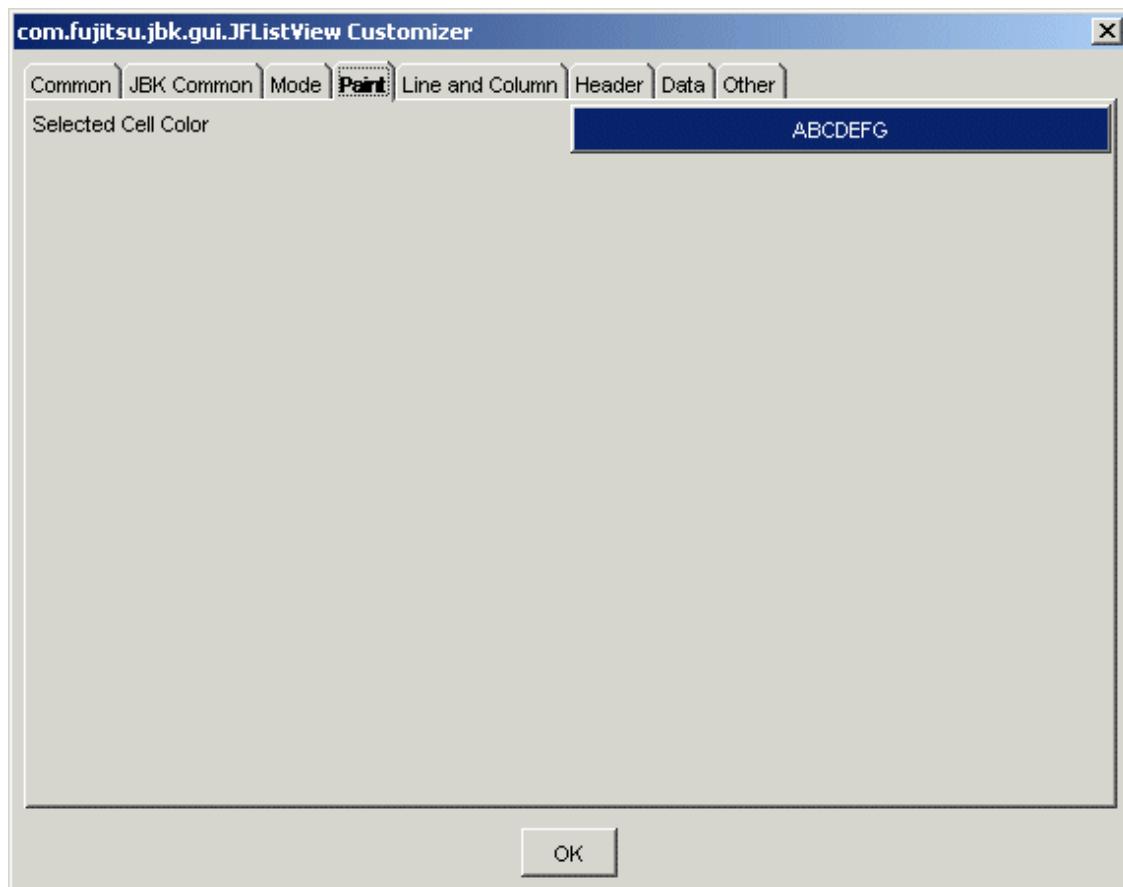
Set view mode/no view mode. If this item is checked, the mode becomes view mode and editing in the list is disabled.

Scroll by Mouse Wheel

Set whether to enable scrolling with mouse wheel. If checked, scrolling with mouse wheel operation is enabled.

- Paint

Set the information relating to list display.

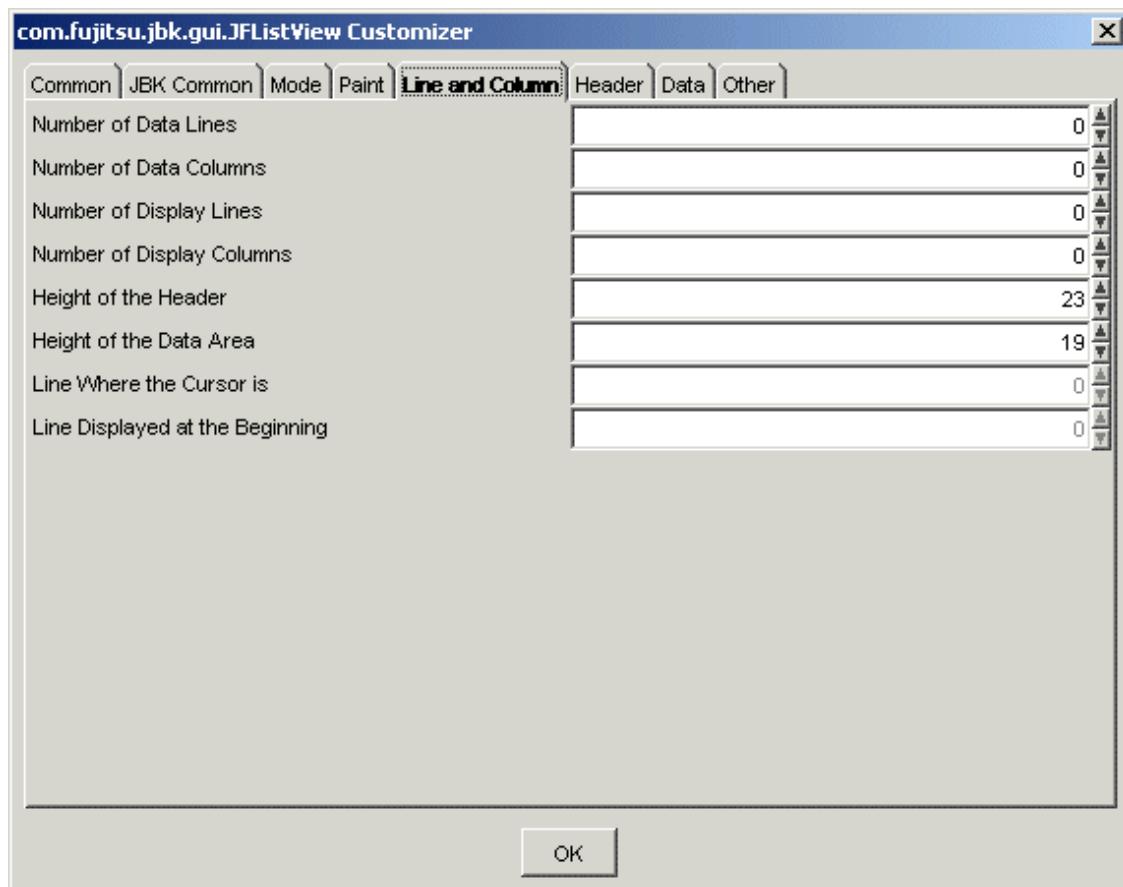


Selected Cell Color

Set the foreground color and background color of the selected cell. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

- Line and Column

Set the list line and column information.



Number of Data Lines

Set the number of data lines. Specify from 0 to 2147483647 as the number of data lines.

Number of Data Columns

Set the number of data columns. Specify from 0 to 2147483647 as the number of data columns.

Number of Display Lines

Set the number of display lines. Specify from 0 to 2147483647 as the number of display lines.

Number of Display Columns

Set the number of display columns. Specify from 0 to 2147483647 as the number of display columns.

Height of the Header

Set the height of the header with a pixel value. Specify from 0 to 2147483647 as the height of the header.

Height of the Data Area

Set the height of the data area with a pixel value. Specify from 0 to 2147483647 as the height of the data area.

Line Where the Cursor is

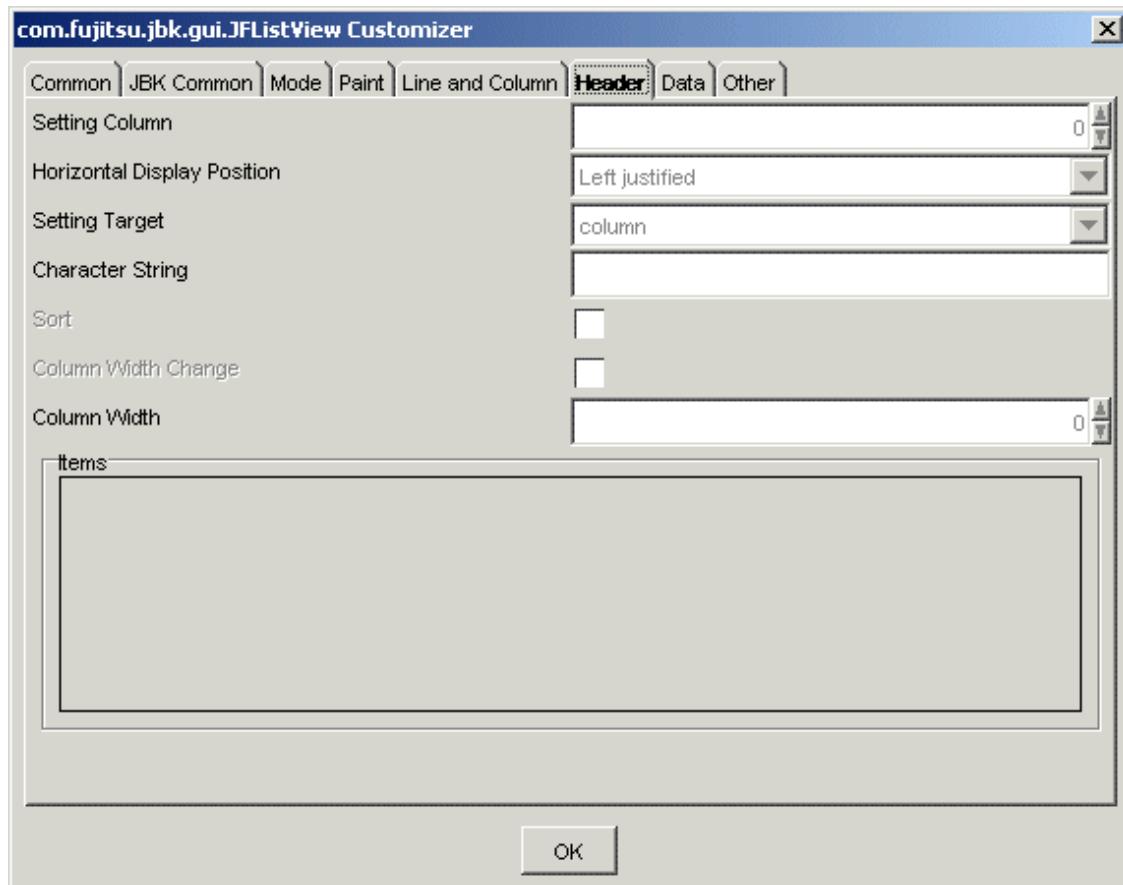
Set the line to display the cursor. For the line, set a series of positive integers starting at 0. The maximum value of the line is the number of data lines minus 1.

Line Displayed at the Beginning

Set the line to display at the beginning. For the line, set a series of positive integers starting at 0. The maximum value of the line is the number of data lines minus 1.

- Header

Set the list header.



In the initial status, header property cannot be set because the list sizes (number of lines and number of columns) are not defined. First, set the number of lines and number of columns in the 'Line and Column' property, then set the value in each header. To edit the header, specify the index of the edit column.

Setting Column

Set the header column. For the header column, set a series of positive integers starting at 0. The maximum value of the header column is the number of data columns minus 1.

Horizontal Display Position

Select the horizontal display position of the strings of the header from among Left justified, Centered or Right justified.

Setting Target

Select the valid range of the horizontal display position from Entire column/Header.

Character String

Set the header character string.

Sort

Set whether to enable sorting. If this item is checked, sorting is enabled.

Column Width Change

Set whether to enable the changing of the column width. If this item is checked, the column width can be changed.

When the mouse pointer is positioned on the column boundary while changing is enabled, the mouse pointer changes its form. Dragging in that status can change the column width.

Column Width

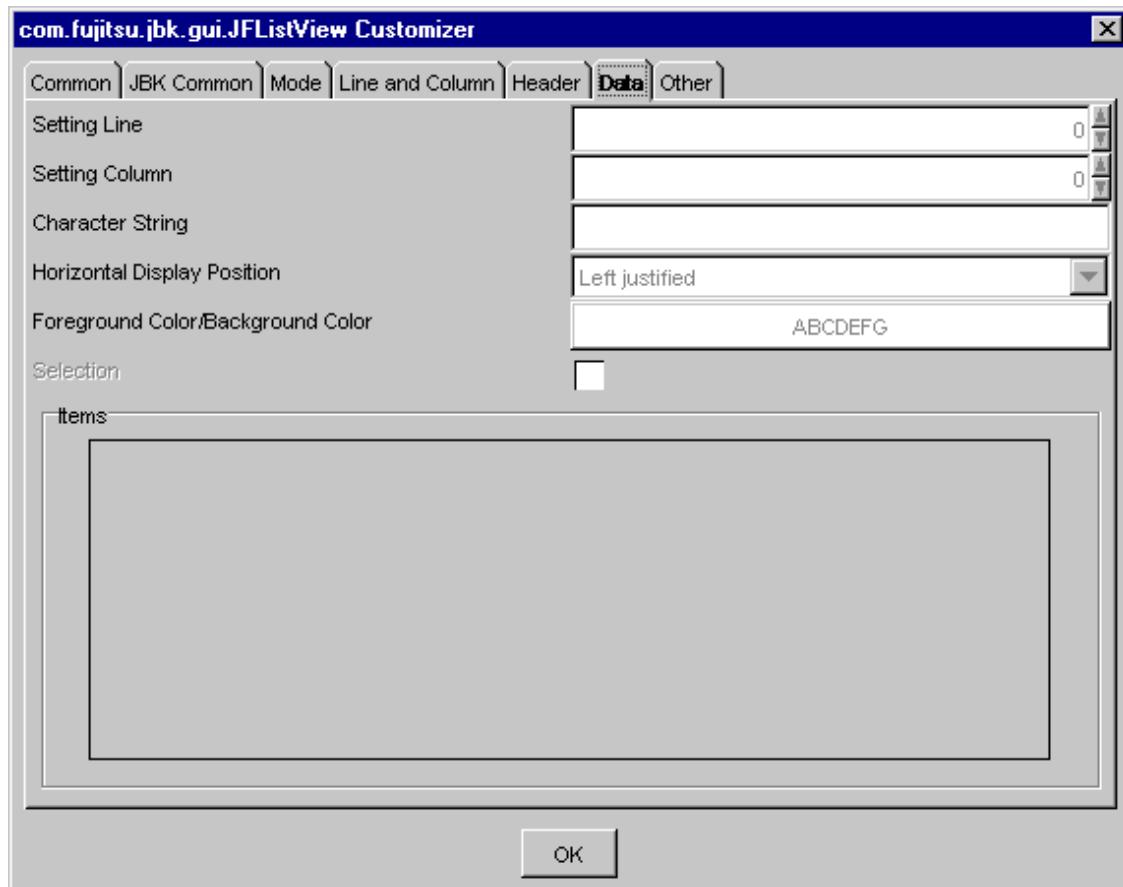
Set the column width with a pixel value. Specify from 0 to 2147483647 as the column width.

Items

Displays the data specified for the items.

- Data

Set the list data.



In the initial status, the data cannot be set because the list sizes (the number of lines and number of columns) are not defined. First, set the number of lines and number of columns in the 'line and column' property, then set data on each line and column. To edit data, specify the (index of the) line and column to be edited.

Setting Line

Set the data setting line. For the data setting line, set a series of positive integers starting at 0. The maximum value of the data setting line is the number of display rows minus 1.

Setting Column

Set the data setting column. For the data setting column, set a series of positive integers starting at 0. The maximum value of the data setting column is the number of display columns minus 1.

Character String

Set the character string to be set.

Horizontal Display Position

Select the horizontal display position of the strings of the data from among Left justified, Centered or Right justified.

Foreground Color/Background Color

Set the foreground color/background color of data. When the button is pressed, the Foreground Color/Background Color setting dialog is displayed.

Selection

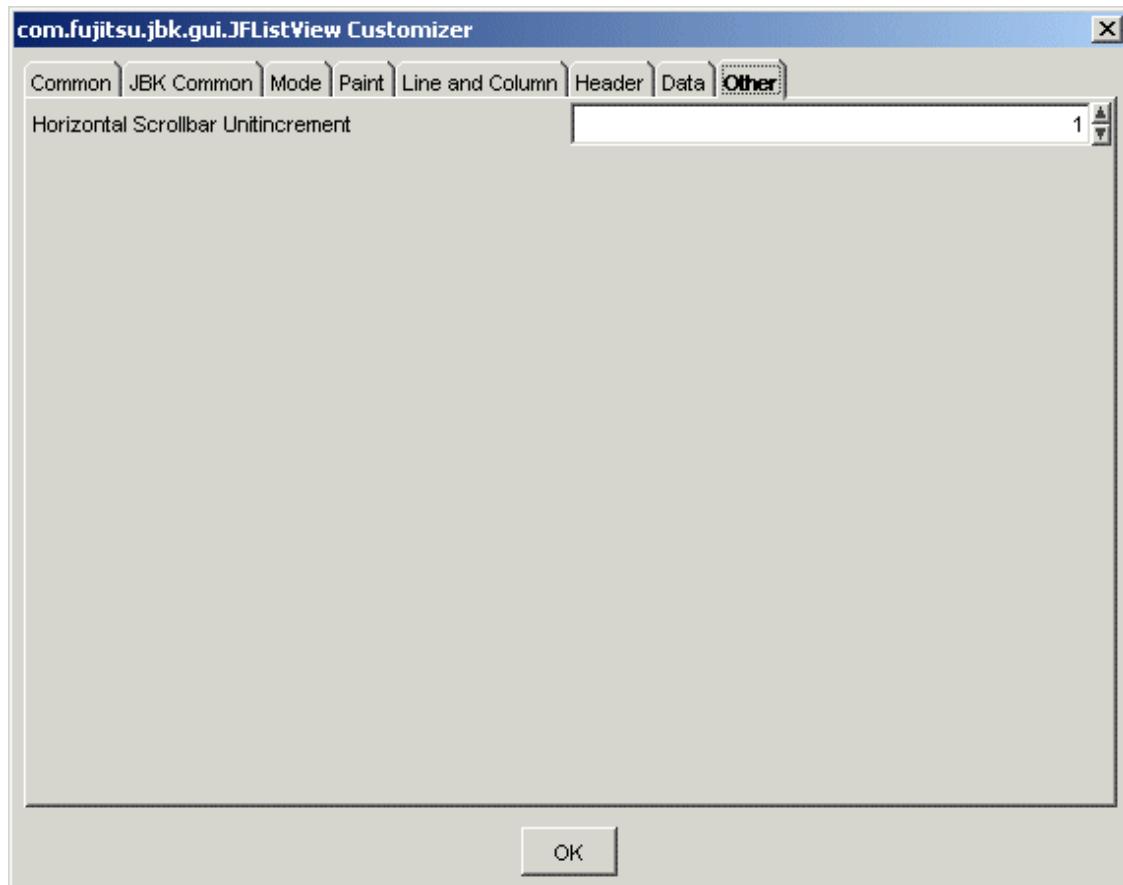
Set the line specified in 'Setting Line' to the selected status/deselected status. If this item is checked, the status becomes selected.

Items

Displays the data specified for the items.

- Other

Set other information.



Horizontal Scrollbar Unitincrement

Set the unit increment value of the horizontal scrollbar. Specify from 1 to 2147483647 as the value.

3.19 List format item Bean

The list format item Bean has the following information and [Customizer](#) functions.

- Property information



"Package Guide"- [JListViewItems](#)

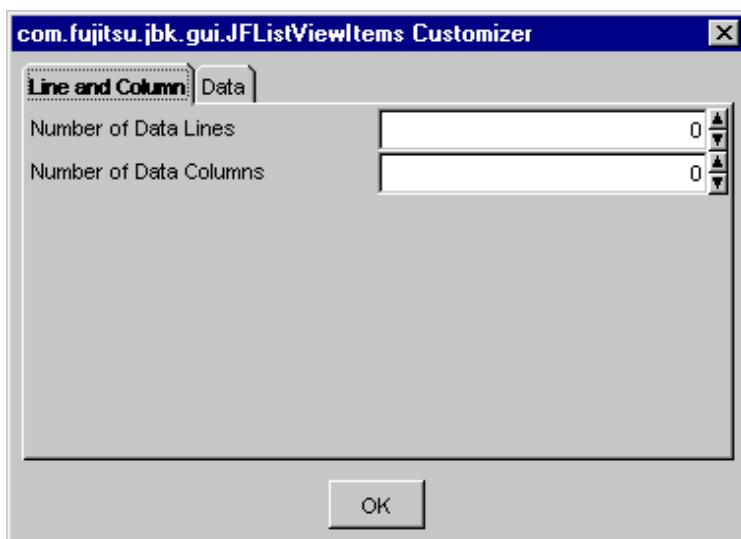
Property information

Name	Type	Ref er- ence	Set ting	Explanation
background	com.fujitsu.jbk.gui JFCCellObjectProperty		Y	Background color
columnCount	int	Y	Y	Number of data columns
foreground	com.fujitsu.jbk.gui JFCCellObjectProperty		Y	Foreground color
rowCount	int	Y	Y	Number of data lines
string	com.fujitsu.jbk.gui JFCCellObjectProperty		Y	Character string

Customizer

- Line and Column

Set the list line and column information.



Number of Data Lines

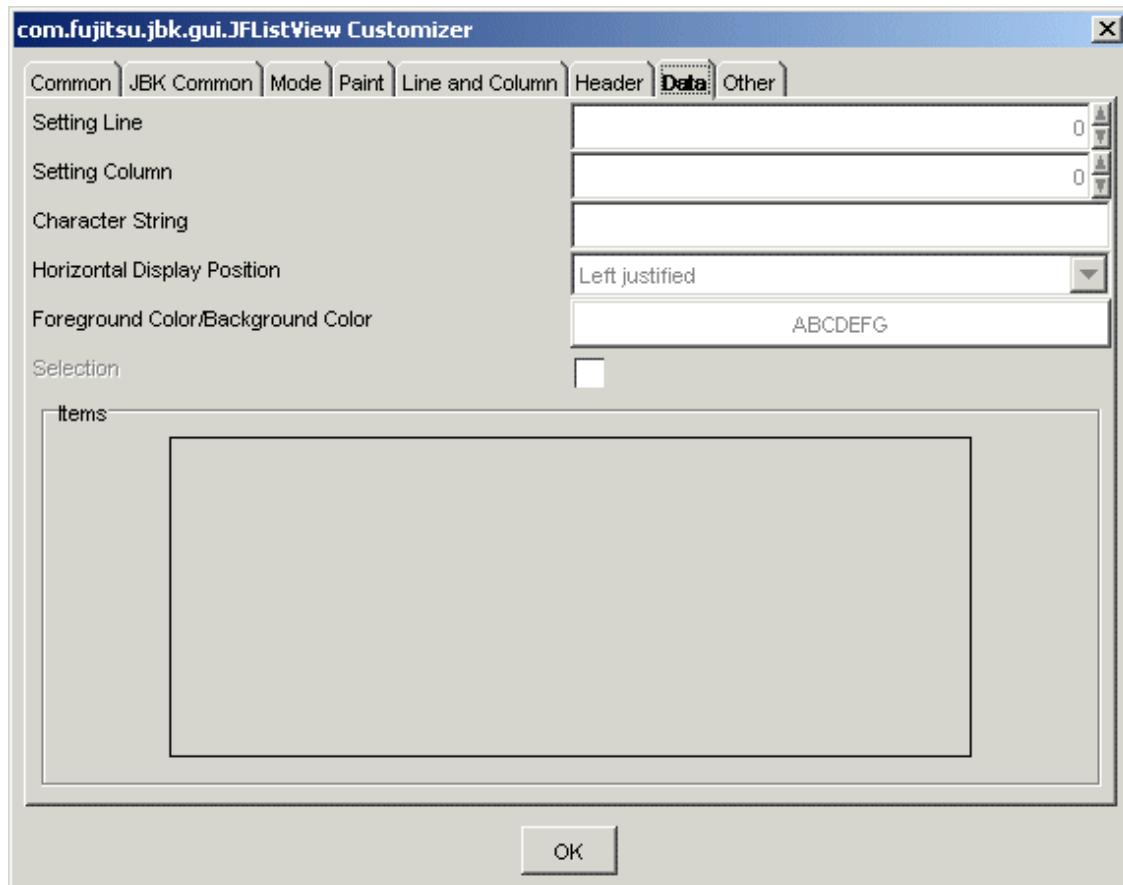
Set the number of data lines. Specify from 0 to 2147483647 as the number of data lines.

Number of Data Columns

Set the number of data columns. Specify from 0 to 2147483647 as the number of data columns.

- Data

Set the list data.



In the initial status, the data cannot be set because the list sizes (the number of lines and number of columns) are not defined. First, set the number of lines and number of columns in the 'line and column' property, then set data on each line and column. To edit data, specify the (index of the) line and column to be edited.

Setting Line

Set the data setting line. For the data setting line, set a series of positive integers starting at 0. The maximum value of the data setting line is the number of display rows minus 1.

Setting Column

Set the data setting column. For the data setting column, set a series of positive integers starting at 0. The maximum value of the data setting column is the number of display columns minus 1.

Character String

Set the character string to be set.

Foreground Color/Background Color

Set the foreground color/background color of data. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

3.20 Multi-line label Bean

The multi-line label Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)

- Method information



"Package Guide"- JFMultiLineLabel

Property information

Name	Type	R e f er en ce	S e tting	Explanation
alignmentHorizontal	int	Y	Y	Horizontal display position of character string
alignmentVertical	int	Y	Y	Vertical display position of character string
autoTurn	boolean	Y	Y	Automatic loopback/no automatic loopback
background	java.awt Color	Y	Y	Background color
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Interval of blinking the character string
borderColor	java.awt Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
characterCodeMapped	boolean	Y	Y	Whether to convert incompatible character code
componentOrientation	java.awt ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
equality	boolean	Y	Y	Proportional display/no proportional display
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt Font	Y	Y	Font

Name	Type	R e f er en ce	S e tting	Explanation
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
insets	java.awt.Insets	Y	Y	Inset
linePitch	int	Y	Y	Line spacing
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
text	java.lang.String	Y	Y	Character string
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
visible	boolean	Y	Y	Whether visible
wordWrap	boolean	Y	Y	Word wrap/no word wrap

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	

Name	Listener	Addition/removal	Method	Explanation
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

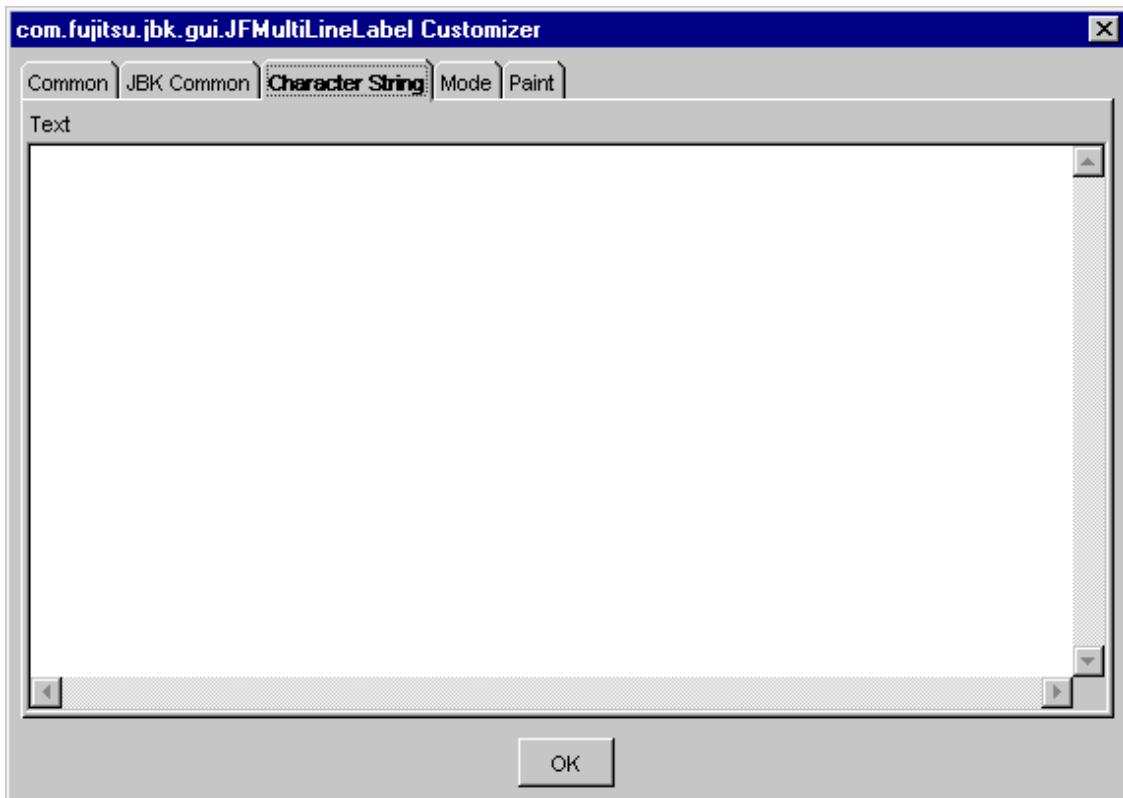
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Character String

Set the character string to be displayed in the multi-line label.

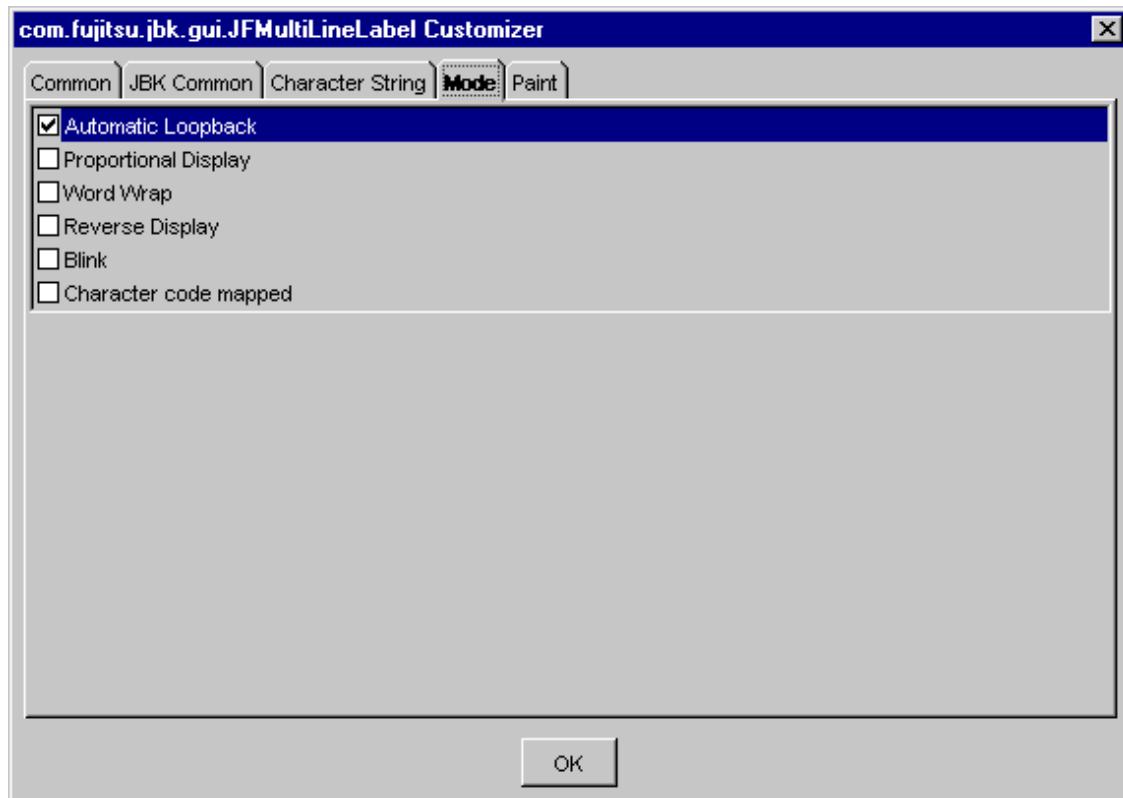


Text

Set the character string to be displayed in the multi-line label.

- Mode

Set the multi-line label mode.



Automatic Loopback

Set whether to fold the label string automatically or not. If checked, the label is automatically folded.

Proportional Display

Set proportional display/no proportional display. If this item is checked, proportional display is used.

Word Wrap

Set word wrap/no word wrap. If this item is checked, words are wrapped.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

Character code mapped

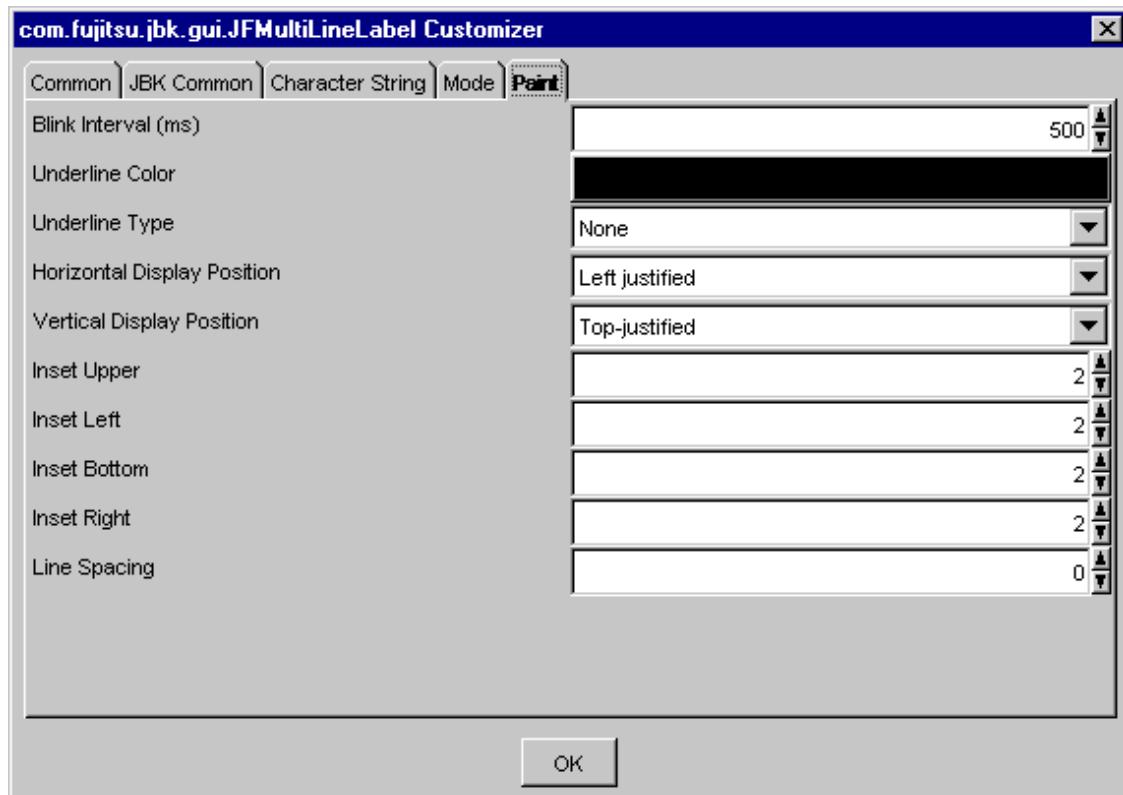
Set whether to convert YEN SIGN. If checked, character code conversion is performed.

For the character codes to be converted, see the following table:

SJIS	Unicode	Microsoft
0x815F	0x005C[REVERSE SOLIDUS]	[Unicode]U+00A5[YEN SIGN]

- Paint

Set the multi-line label display information.



Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 1 to 2147483647 as the blink interval.

Underline Color

Set the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Horizontal Display Position

Select the horizontal display position of the strings from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Line Spacing

Set the line spacing with a pixel value. Specify from 0 to 2147483647 as the line spacing.

3.21 Panel Bean

The panel Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFPanel

Property information

Name	Type	Reference	Setting	Explanation
autoFocus	boolean	Y	Y	Set focus function valid/invalid
background	java.awt.Color	Y	Y	Background color
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enabled	boolean	Y	Y	Whether enabled
firstFocusComponent	java.awt.Component	Y	Y	Component focused first
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
layout	java.awt.LayoutManager	Y	Y	Layout manager
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
visible	boolean	Y	Y	Whether visible
wrapAround	boolean	Y	Y	Whether to set wraparound of the focus movement

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event ContainerListener	addContainerListener removeContainerListener	componentAdded	Is issued when the container status changes.
			componentRemoved	
focus	java.awt.event FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

Name	Parameters	Explanation
add	java.awt Component	Adds the component.
add	java.awt Component	Adds the component.
	int	
add	java.awt Component	Adds the component.
	java.lang Object	
add	java.awt Component	Adds the component.

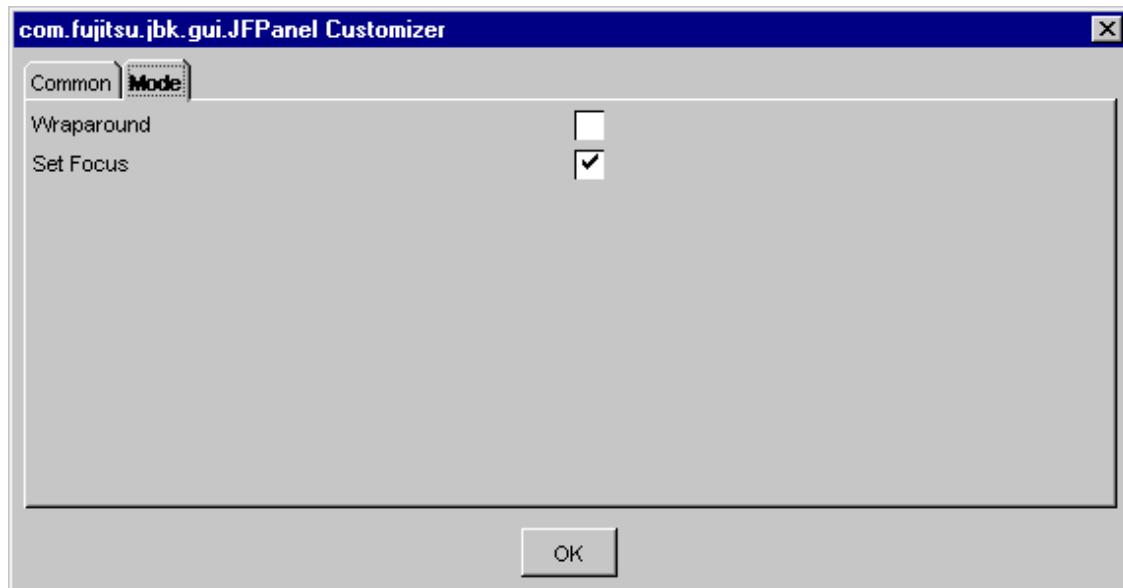
Name	Parameters	Explanation
	java.lang Object	
	int	
drawViewImage	java.awt Graphics	Draws the panel screen image.
drawViewImage	java.awt Graphics	Draws the panel screen image in a specified size.
	java.awt Rectangle	
remove	int	Deletes the component.
remove	java.awt Component	Deletes the component.
removeAll		Deletes all components.
removeNotify		Notifies a component that it has been removed from the container. If a peer exists, it is destroyed.
requestFocus		Requests an input focus.
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)

- Mode

Set the panel mode.



Wraparound

Set wraparound for the focus movement. If checked, the focus moves by wrapping around.

Set Focus

Set valid/invalid to set focus function. If this item is checked, focus is set up in component arranged by one when it draws at first.

3.22 Progress bar Bean

The progress bar Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"[Package Guide](#)"- JFProgressbar

Property information

Name	Type	Reference	Setting	Explanation
alignment	int	Y	Y	Display position of percentage
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
current	int	Y	Y	Current position
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
freeText	java.lang.String	Y	Y	Character string displayed in the free format
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
locale	java.util.Locale	Y	Y	Locale information
maximum	int	Y	Y	Upper limit
minimum	int	Y	Y	Lower limit
name	java.lang.String	Y	Y	Name

Name	Type	Reference	Setting	Explanation
offset	int	Y	Y	Increment value
orientation	int	Y	Y	Orientation
remoteFont	boolean	Y		Whether the registered font is a remote font
returnable	boolean	Y	Y	Loopback/no loopback
style	int	Y	Y	Display format
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible
visiblePercentage	boolean	Y	Y	Percentage display/no display

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

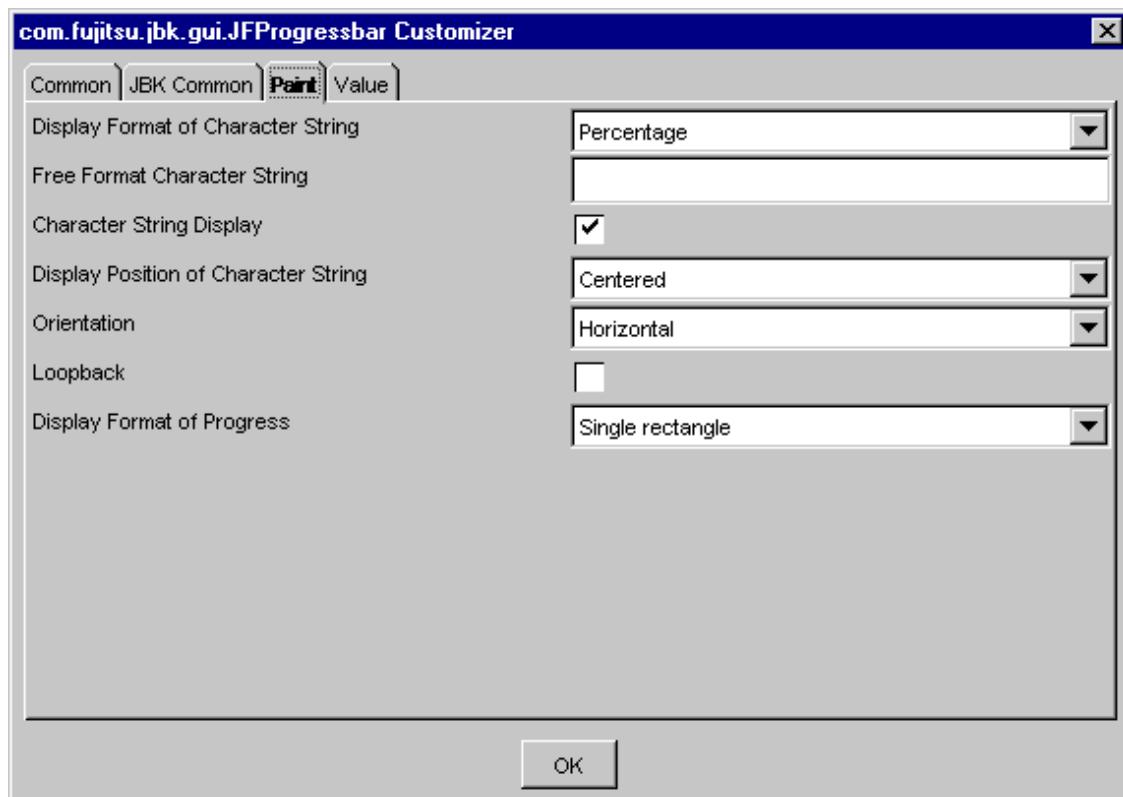
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
requestFocus		Requests an input focus.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
step		Advances the current position only as much as the set increment.
step	int	Advances the current position only as much as the specified value.
step	int	Displays the specified character string and advances the current position only as much as the specified value.
	java.lang String	
step	java.lang String	Displays the character string and advances the current position only as much as the set increment.
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Paint

Set the progress bar display information.



Display Format of Character String

Select the progress status character string from Percentage/Free format.

Free Format Character String

Specify the character string for when the free format is selected in 'Display Format of Character String'.

Character String Display

Set display/no display for the progress status character string. If this item is checked, the character string is displayed.

Display Position of Character String

Select the display position of the progress-status character string from among Left-justified, Centered, or Right-justified.

Orientation

Select the orientation of the progress bar from Vertical/Horizontal.

Loopback

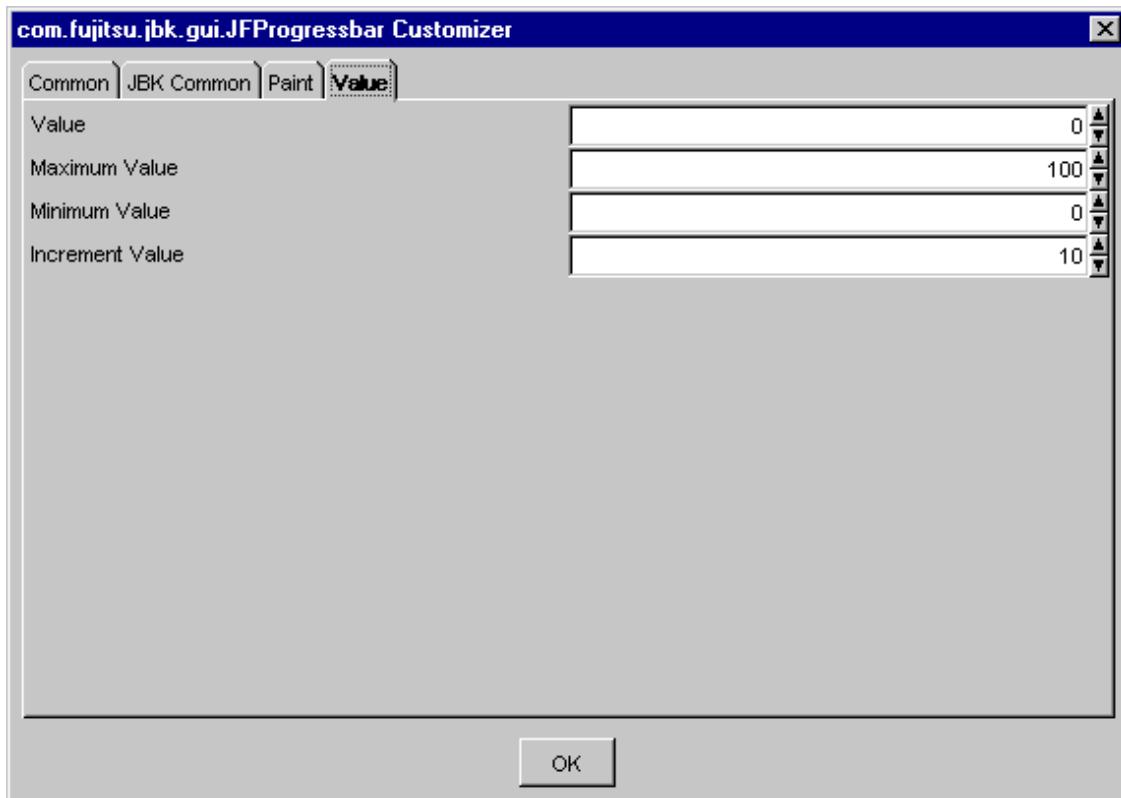
Normally, when the current value exceeds the upper limit, the upper limit is set. If this item is checked, the value that exceeds the upper limit is looped back and displayed. For example, when the value is advanced by 10 if the current value is 95 and the upper limit is 100, the current value becomes 5.

Display Format of Progress

Select the display format of progress from Single rectangle/Multiple rectangle.

- Value

Set the progress bar value information.



Value

Set the current value. Specify from 0 to 2147483647 as the value.

Maximum Value

Set the maximum value. Specify from 1 to 2147483647 as the maximum value.

Minimum Value

Set the minimum value. For the minimum value, set a series of positive integers starting at 0. The maximum value of the minimum value is the maximum value minus 1.

Increment Value

Set the increment value. Specify from 0 to 2147483647 as the increment value.

3.23 Tree node Bean

The tree node Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)



See

"Package Guide"- JFSimpleTreeNode

Property information

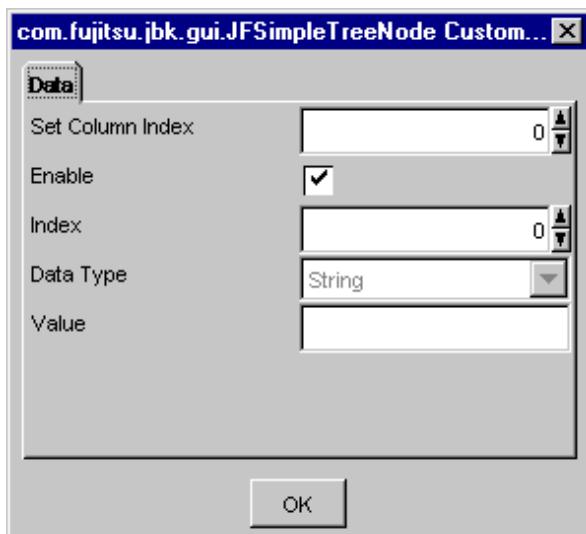
Name	Type	Reference	Setting	Explanation
add	com.fujitsu.jbk.gui.JFTreeNode		Y	Addition of nodes
columnCount	int		Y	Number of columns
columnObject	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Information on the columns and column values
enabled	boolean	Y	Y	Whether enabled
remove	com.fujitsu.jbk.gui.JFTreeNode		Y	Removal of nodes

Event information

Name	Listener	Addition/removal	Method	Explanation
treenode	com.fujitsu.jbk.gui.JFTreeNodeListener	addTreeNodeListener removeTreeNodeListener	nodeAdded	Issued when the contents of the node is changed.
			nodeImageChanged	
			nodeInserted	
			nodeObjectUpdated	
			nodeRefreshed	
			nodeRemoved	

Customizer

- Component common property
- JBK GUI common property
- Data



Set Column Index

Sets the number of columns. Specify from 0 to 2147483647 as the column.

Enable

Set whether selecting and editing the tree node is enabled. If this item is checked, set to enable the tree node. If this item is unchecked, the tree node cannot be operated via GUI, but can be operated by calling the methods.

Index

Specify the index of the column of which you want to set 'Data type' and 'Value' below. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of columns minus 1.

Data Type

Select the data type of the selected column from among String, Numeric or Boolean. The input field of 'Value' depends on 'Data Type'.

Value

Set the value of the selected node column. The set value is set as the following object class.

- String type: java.lang.String
- Numeric type: java.lang.Long
- Boolean type: java.lang.Boolean

3.24 Tree node offset Bean

The tree node offset Bean has the following information and [Customizer](#) functions.

- [Property information](#)

- [Event information](#)



"Package Guide"- JFSimpleTreeNode2

Property information

Name	Type	Reference	Setting	Explanation
add	com.fujitsu.jbk.gui JFTreeNode		Y	Addition of nodes
columnCount	int		Y	Number of columns
columnObject	com.fujitsu.jbk.gui JFIndexObjectProperty		Y	Information on the columns and column values
enabled	boolean		Y	Whether enabled
offset	int	Y	Y	the number of offset hierarchies for displaying nodes
remove	com.fujitsu.jbk.gui JFTreeNode		Y	Removal of nodes

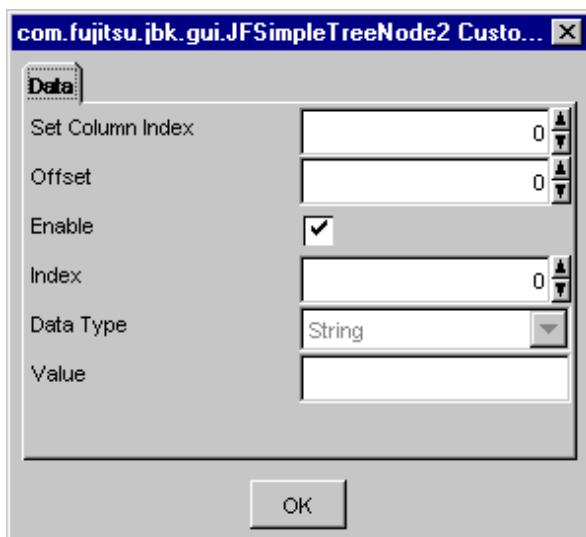
Event information

Name	Listener	Addition/removal	Method	Explanation
treenode	com.fujitsu.jbk.gui JFTreeNodeListener	addTreeNodeListener removeTreeNodeListener	nodeAdded	Issued when the contents
			nodeImageChanged	

Name	Listener	Addition/removal	Method	Explanation
			nodeInserted	of the node is changed.
			nodeObjectUpdated	
			nodeRefreshed	
			nodeRemoved	

Customizer

- [Component common property](#)
- [JBK GUI common property](#)
- Data



Set Column Index

Sets the number of columns. Specify from 0 to 2147483647 as the column.

Offset

Specifies the number of offset hierarchies for displaying nodes. Displays a node by shifting it to the right from the parent node for the specified offset hierarchies. Specify from 0 to 2147483647 as the offset.

Enabled

Set whether selecting and editing the tree node is enabled. If this item is checked, set to enable the tree node. If this item is unchecked, the tree node cannot be operated via GUI, but can be operated by calling the methods.

Index

Specify the index of the column of which you want to set 'Data type' and 'Value' below. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of columns minus 1.

Data Type

Select the data type of the selected column from among String, Numeric or Boolean. The input field of 'Value' depends on 'Data Type'.

Value

Set the value of the selected node column. The set value is set as the following object class.

- String type: java.lang.String
- Numeric type: java.lang.Long

- Boolean type: java.lang.Boolean

3.25 Slider Bean

The slider Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFSlider

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
blockIncrement	int	Y	Y	Amount of knob moved by key operation
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
drawFocus	boolean	Y	Y	Whether to draw focus border
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
graduationInterval	int	Y	Y	Scale value interval
graduationStyle	int	Y	Y	Scale display style
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
knobHeight	int	Y	Y	Knob height
knobStyle	int	Y	Y	Knob display style
knobWidth	int	Y	Y	Knob width
locale	java.util.Locale	Y	Y	Locale information
maximum	int	Y	Y	Maximum value
minimum	int	Y	Y	Minimum value

Name	Type	Reference	Setting	Explanation
name	java.lang.String	Y	Y	Name
numGraduation	int	Y		Number of scales
orientation	int	Y	Y	Orientation
remoteFont	boolean	Y		Whether the registered font is a remote font
selectEnd	int	Y	Y	Last value in the selected range
selectRange	boolean	Y	Y	Range selection enabled/disabled
selectStart	int	Y	Y	First value in the selected range
sliderSpace	int	Y	Y	Between the component boundary and slider
toolTipText	java.lang.String	Y	Y	Tool tip text
unitIncrement	int	Y	Y	Amount of knob moved by mouse operation
value	int	Y	Y	Value pointed to by the knob
visible	boolean	Y	Y	Whether visible
visibleAmount	int	Y	Y	Length selected from the beginning of the range
wheelScrollingEnabled	boolean	Y	Y	Whether to enable knob's operations of mouse wheel

Event information

Name	Listener	Addition/removal	Method	Explanation
adjustment	java.awt.event.AdjustmentListener	addAdjustmentListener removeAdjustmentListener	adjustmentValueChanged	Is issued when the value is changed by the mouse or key.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	

Name	Listener	Addition/removal	Method	Explanation
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

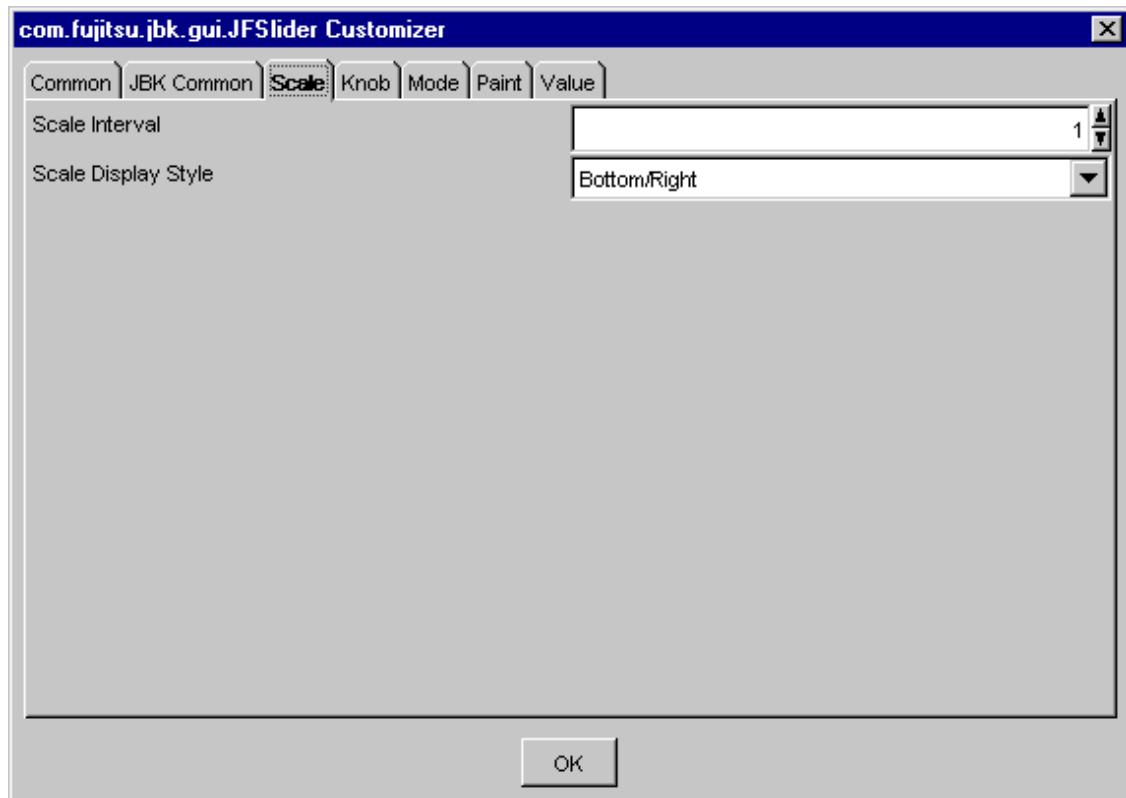
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
requestFocus		Requests an input focus.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- Component common property
- JBK GUI common property

- Scale

Set the slider scale.



Scale Interval

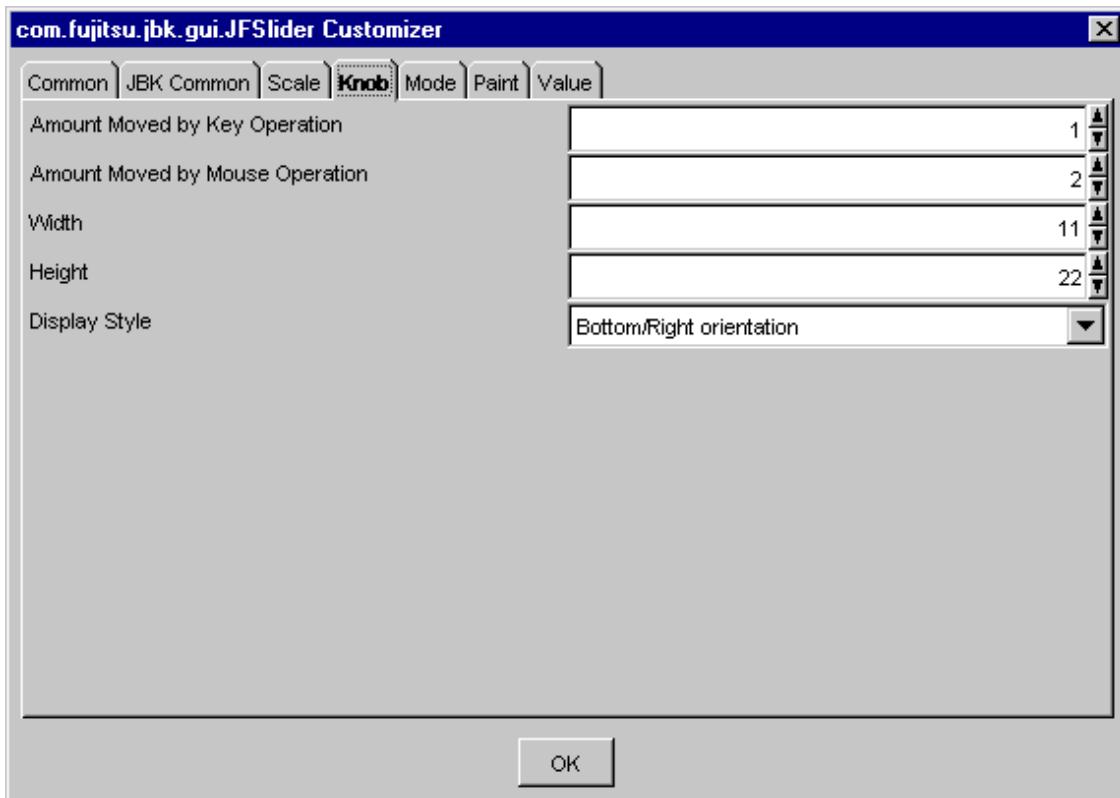
Set the slider scale interval. Specify from 1 to (maximum value minus minimum value) as the slider scale interval.

Scale Display Style

Select the slider scale display position from Top/Left, Bottom/Right, Both, and None.

- Knob

Set the slider knob information.



Amount Moved by Key Operation

Set the amount of knob moved by key operation. Specify from 1 to 2147483647 as the amount of knob moved by key operation.

Amount Moved by Mouse Operation

Set the amount of knob moved by mouse operation. Specify from 1 to 2147483647 as the amount of knob moved by mouse operation.

Width

Set the knob width with a pixel value. Specify from 1 to 2147483647 as the knob width.



A system sometimes becomes unstable when very big value is established in the knob width.

Height

Set the knob height with a pixel value. Specify from 1 to 2147483647 as the knob height.



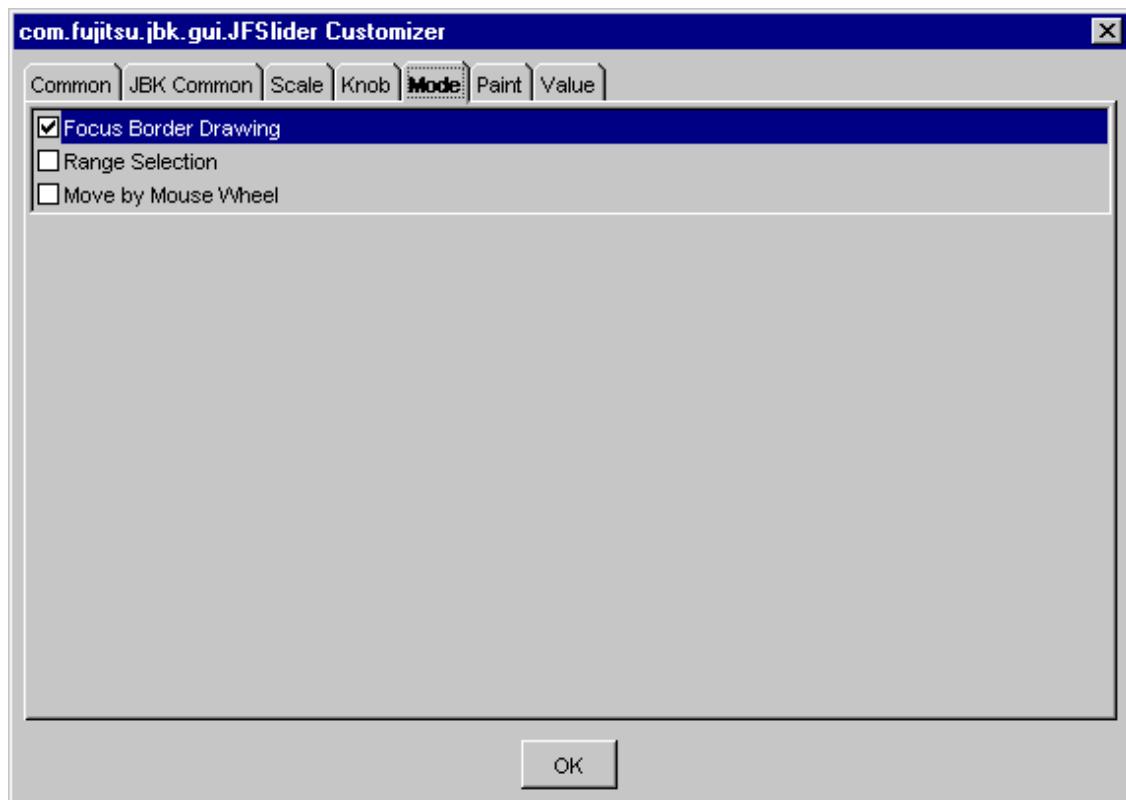
A system sometimes becomes unstable when very big value is established in the knob height.

Display Style

Select the display style of knob from Top/Left orientation, Bottom/Right orientation, Both orientations, and Rectangle.

- Mode

Set the slider mode.



Focus Border Drawing

Set whether to draw the focus border. If this item is checked, the focus border is drawn.

Range Selection

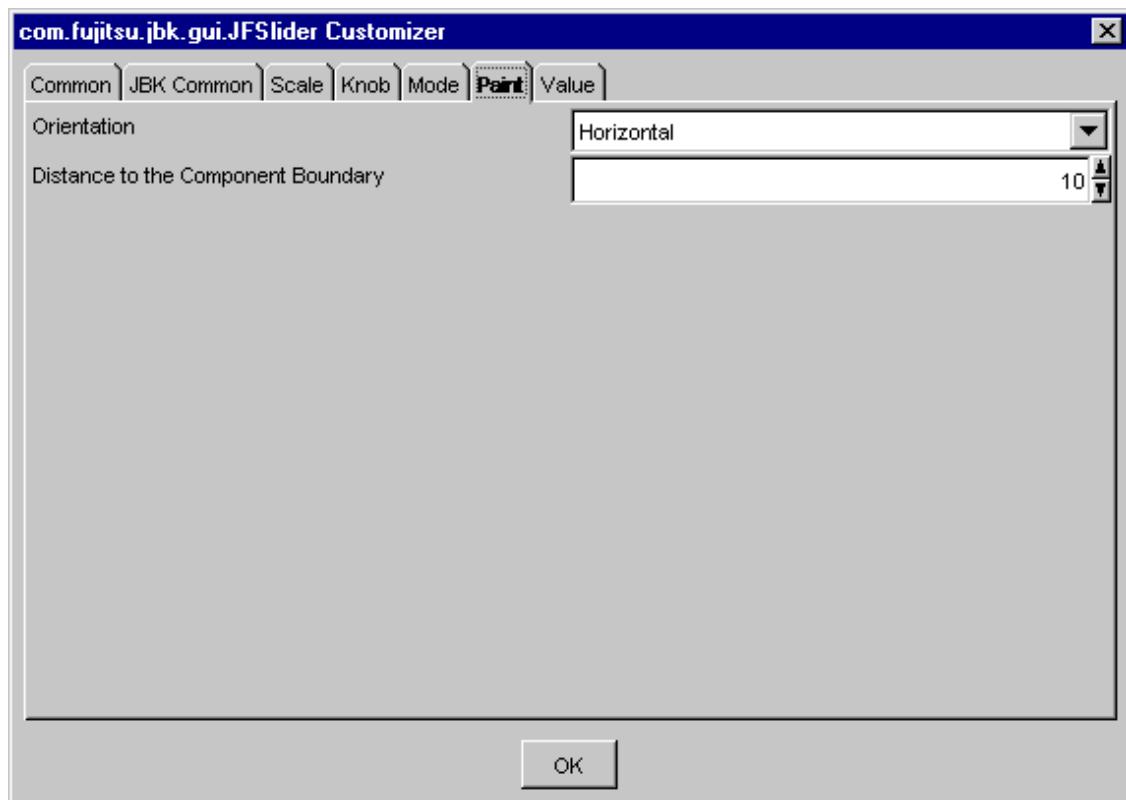
Set whether to enable range selection. If this item is checked, the range can be selected.

Move by Mouse Wheel

Set whether to enable the knob's move with mouse wheel. If checked, the knob's moving is enabled with mouse wheel operation.

- Paint

Set the slider draw information.



Orientation

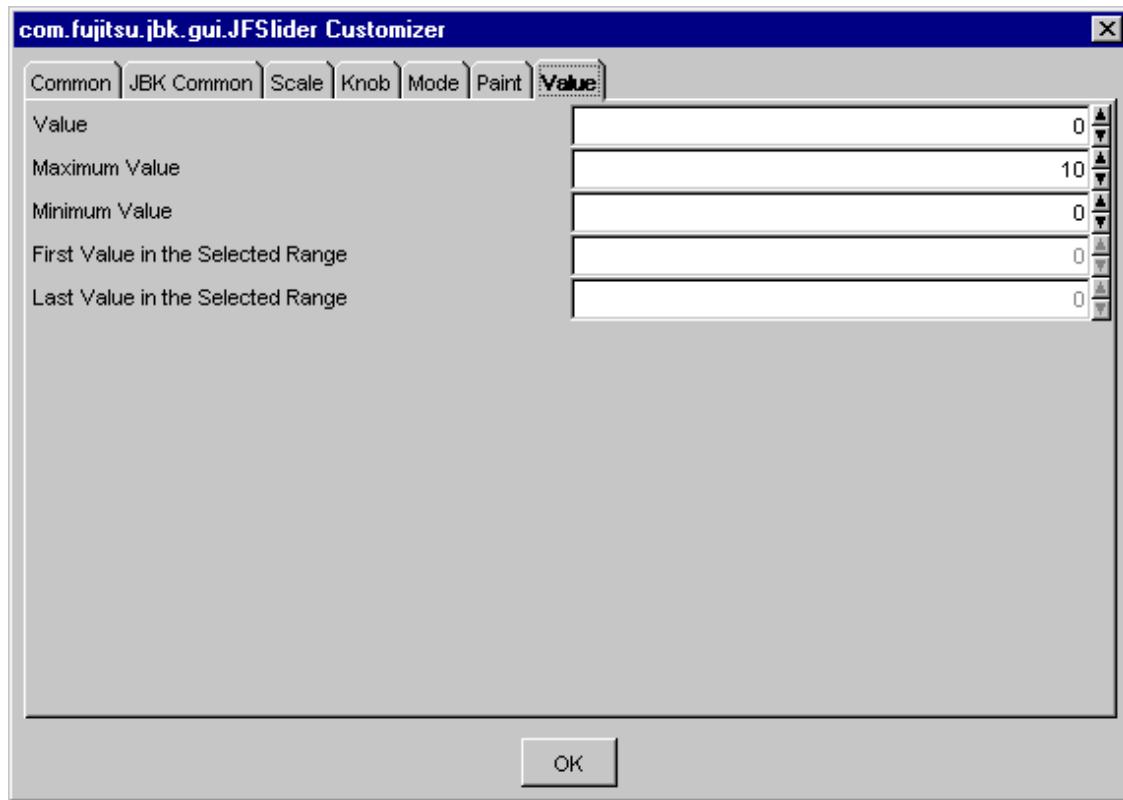
Select the slider orientation from Vertical/Horizontal.

Distance to the Component Boundary

Set the distance between the component boundary and the slider with a pixel value. In case of Horizontal specify from 0 to (component width minus 10)/2 , in case of Vertical specify from 0 to (component height minus 10)/2 as the distance between the component boundary and the slider.

- Value

Set the slider value information.



Value

Set the current value of the slider. Specify from -2147483648 to 2147483647 as the value.

Maximum Value

Set the maximum value of the slider. Specify from -2147483648 to 2147483647 as the maximum value.

Minimum Value

Set the minimum value of the slider. Specify from -2147483648 to 2147483647 as the minimum value.



Note

A system sometimes becomes unstable when very big value is established in 'Value' of the slider, 'Maximum Value' and 'Minimum Value' of range of value.

First Value in the Selected Range

When the range can be selected (when the 'Range Selection' of the 'mode' property is checked), set the first value in the selected range. Specify from the minimum value to the maximum value as the first value in the selected range.

Last Value in the Selected Range

When the range can be selected (when the 'Range Selection' of the 'mode' property is checked), set the last value in the selected range. Specify from the minimum value to the maximum value as the last value in the selected range.

3.26 Spin button Bean

The spin button Bean has the following information and [Customizer](#) functions.

- Property information

- Event information
- Method information



"Package Guide"- JFSpinBox

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderWidth	int	Y	Y	Border line width
buddy	java.awt.Component	Y	Y	Related component
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
join	boolean	Y	Y	Whether to attach to the right side of the related component at FlowLayout
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
orientation	int	Y	Y	Orientation
remoteFont	boolean	Y		Whether the registered font is a remote font
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the JFSpinner button is pressed by the mouse or key.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

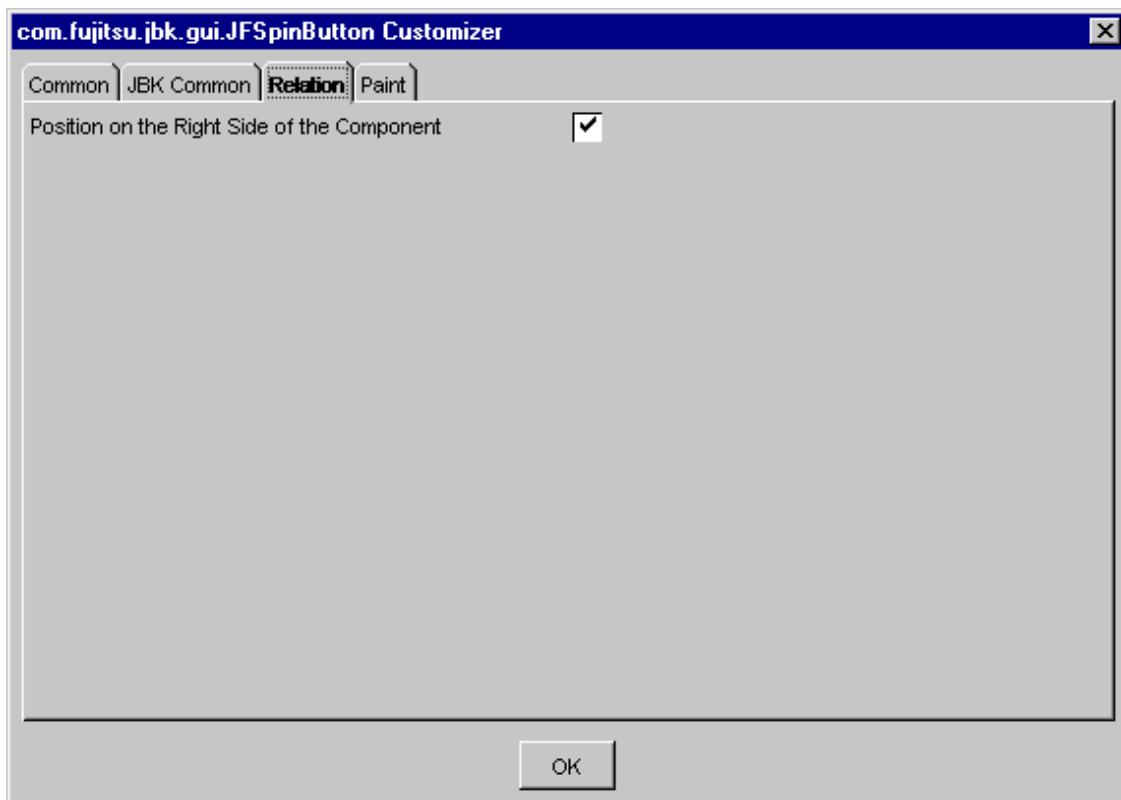
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
requestFocus		Requests an input focus.

Name	Parameters	Explanation
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)
- Relation

Specify the spin button position.

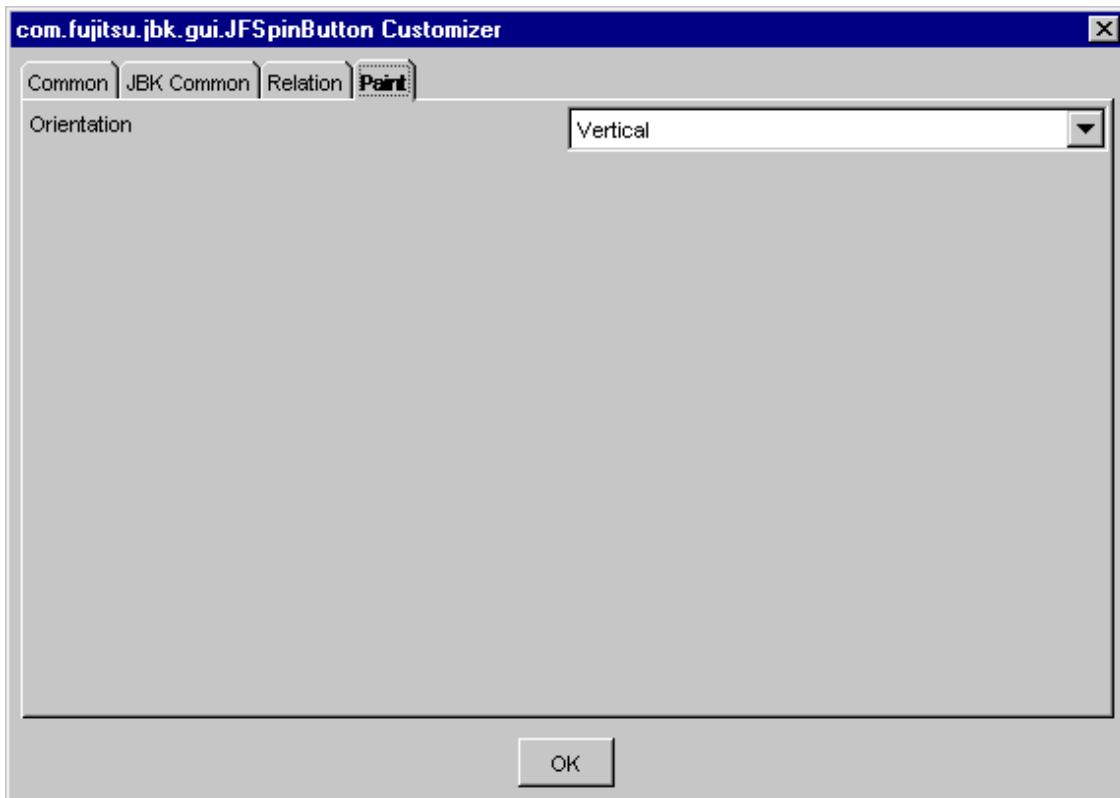


Position on the Right Side of the Component

Set whether to place on the right side of the related component. If this item is checked, the spin button is placed on the right side of the related component. If this item is unchecked, the spin button is placed in the position specified by the application.

- Paint

Set the orientation of the spin button.



Orientation

Select the orientation of the spin button from Vertical/Horizontal.

3.27 Status bar Bean

The status bar Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



See

["Package Guide"- JFStatusbar](#)

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt Color	Y	Y	Background color
componentOrientation	java.awt ComponentOrientation	Y	Y	The orientation of the string. It depends on the language

Name	Type	Reference	Setting	Explanation
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
height	int	Y	Y	Pane height
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
image	(Array) java.awt.Image	(Arr ay) Y	(Arr ay) Y	Pane image
indexOfProgressbar	int	Y		Pane to display the progress bar
insets	java.awt.Insets	Y	Y	Inset
inside	boolean	Y		Pane is/is not in the screen
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
paneAlignmentHorizontal	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Display position of pane horizontal characters
paneAlignmentVertical	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Display position of pane vertical characters
paneBackground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Background color of pane
paneBorderType	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Pane border type
paneBorderWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Pane border width
paneBounds	(Array) java.awt.Rectangle	(Arr ay) Y		Pane draw position
paneFont	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Pane font
paneForeground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Foreground color of pane
paneMode	int	Y	Y	Pane position mode

Name	Type	Reference	Setting	Explanation
paneVisible	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Pane display/no display
paneWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Pane width
parts	int	Y	Y	Number of panes
remoteFont	boolean	Y		Whether the registered font is a remote font
spacing	int	Y	Y	Gap between panes
text	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Pane character string
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the pane is clicked.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	

Name	Listener	Addition/removal	Method	Explanation
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

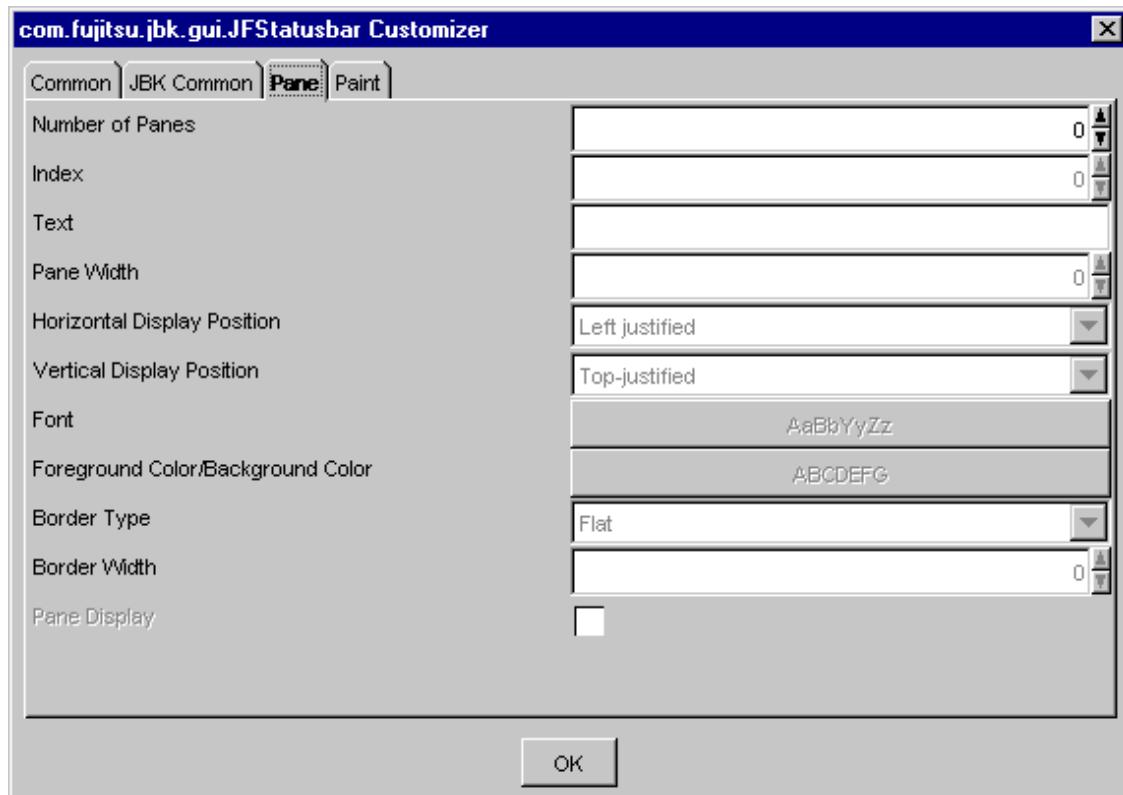
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
requestFocus		Requests an input focus.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Pane

Set the status bar pane (text display area) attributes.



In the initial status, pane attributes cannot be set because the status bar is not defined. First, set the number of panes in the 'pane' property, then set the attributes of each pane. To edit the pane attribute, specify the pane index.

Number of Panes

Set the number of panes. Specify 0 to 2147483647 as the number of panes.

Index

Specify the pane index. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of panes minus 1.

Text

Set the text of the pane specified by 'Index'.

Pane Width

Set the width of the pane specified by 'Index' with a pixel value. Specify 0 to 2147483647 as the width of the pane.

Horizontal Display Position

Select the horizontal display position of the strings in the pane set by 'Index' from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings in the pane set by index from among Top-justified, Centered or Bottom-justified.

Font

Set the font of the pane specified by 'Index'. When the button is pressed, [\[Font\] setting dialog](#) is displayed.

Foreground Color/Background Color

Set the foreground color and background color of the pane specified by 'Index'. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Border Type

Select the border type of the pane specified by 'Index' from among Flag, Convex, or Concave.

Border Width

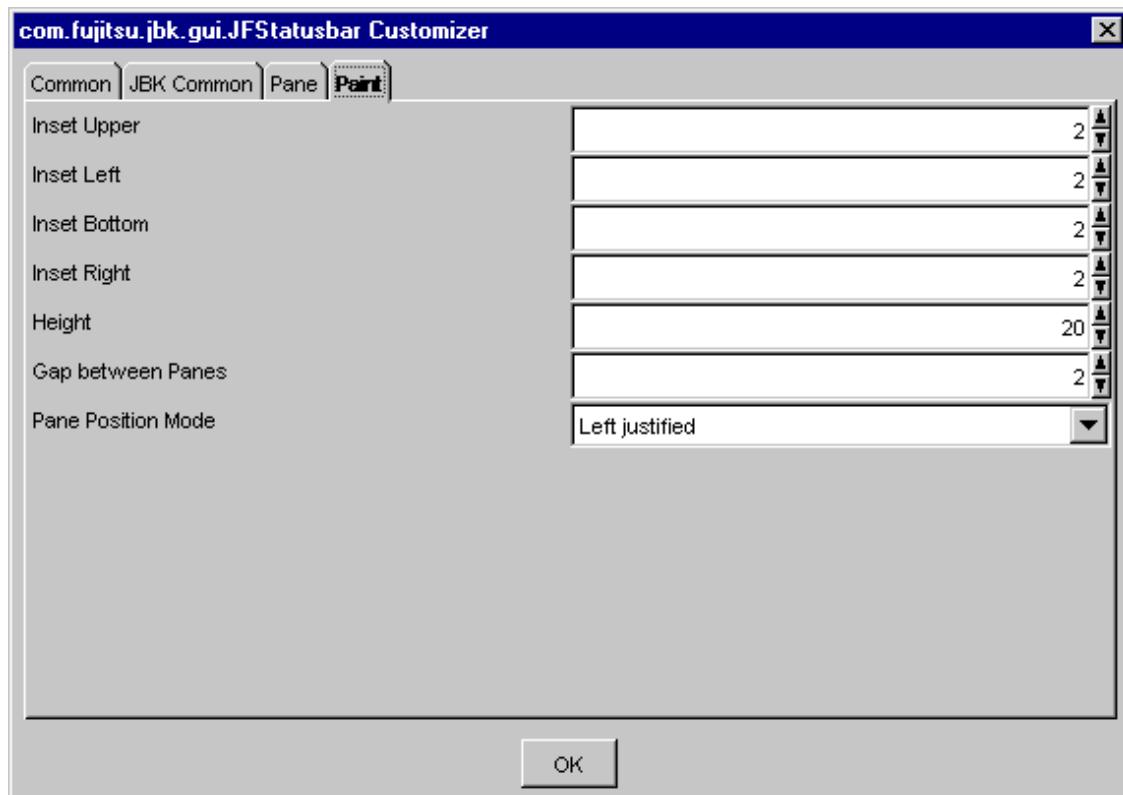
Set the border width of the pane specified by 'Index' with a pixel value. Specify 0 to 5 as the border width.

Pane Display

Set display/no display for the pane specified by 'Index'. If this item is checked, the pane is displayed.

- Paint

Sets the status bar display attributes.



Inset Upper

Set the upper inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset upper.

Inset Left

Set the left inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset left.

Inset Bottom

Set the bottom inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset bottom.

Inset Right

Set the right inset with a pixel value. Specify from -2147483648 to 2147483647 as the inset right.

Height

Set the height with a pixel value. Specify 0 to 2147483647 as the height.

Gap between Panes

Set the gap between panes with a pixel value. Specify 0 to 2147483647 as the gap between panes.

Pane Position Mode

Select the pane position mode from Left justified/Right justified.

When left-justified is selected, the right pane is adjusted (shrunk) according to the status bar size. When right-justified is selected, the left pane is adjusted (shrunk) according to the status bar size.

3.28 Table format Bean

The table format Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- [JTable View](#)

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
cellAlignmentHorizontal	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Horizontal character display position of cells
cellAlignmentVertical	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Vertical character display position of cells
cellBackground	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Background color of cells
cellBorderColor	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Border color of cells
cellBorderType	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Border type of cells
cellBorderWidth	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Border width of cells
cellEditable	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Cell editable/not editable
cellFont	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Cell font
cellForeground	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Foreground color of cells
cellObject	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Object of a cell
cellString	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Character string in a cell

Name	Type	Reference	Setting	Explanation
cellVisible	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Display/non-display of cells
columnAlignmentHorizontal	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Horizontal character display position of a cell in a specified column
columnAlignmentVertical	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Vertical character display position of a cell in a specified column
columnBackground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Background color of cells in a specified column
columnBorderColor	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Color of border of cells in a specified column
columnBorderType	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Type of border of cells in a specified column
columnBorderWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of border of cells in a specified column
columnCharWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of the character in specified column
columnCount	int	Y	Y	Number of columns
columnEditable	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether or not cells in a specified column can be edited
columnFont	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Font of cells in a specified column
columnForeground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Foreground color of cells in a specified column
columnVisible	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether or not cells in a specified column are visible
columnWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of the specified column
columns	int	Y	Y	Number of columns that indicates the display size
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
controlEnabled	boolean	Y	Y	Whether to operation of the possible/impossibility of the added component
defaultCell	com.fujitsu.jbk.gui.JFCell	Y	Y	Default cell for data
defaultCellHeight	int	Y	Y	Default cell height
defaultCellWidth	int	Y	Y	Default cell width
defaultHeaderCell	com.fujitsu.jbk.gui.JFCell	Y	Y	Default cell for header
dragMode	boolean	Y	Y	Table border line dragging enabled/disabled

Name	Type	Reference	Setting	Explanation
editable	boolean	Y	Y	Entire cell editing enabled/disabled
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
format	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Format of the specified column
headerCellAlignmentHorizontal	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Horizontal character display position of a header cell
headerCellAlignmentVertical	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Vertical character display position of a header cell
headerCellBackground	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Background color of a header cell
headerCellBorderColor	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Color of border of a header cell
headerCellBorderType	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Type of border of a header cell
headerCellBorderWidth	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Width of border of a header cell
headerCellFont	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Font of a header cell
headerCellForeground	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Foreground color of a header cell
headerCellObject	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Object of a header cell
headerCellString	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Character string in a header cell
headerCellVisible	com.fujitsu.jbk.gui.JFCellObjectProperty		Y	Whether to display a header cell
headerColumnCharWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of the character in specified header column
headerColumnWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of the specified header column
headerColumns	int	Y	Y	Number of header columns
headerRowHeight	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Height of the specified header line

Name	Type	Reference	Setting	Explanation
headerRows	int	Y	Y	Number of header lines
headerTableBorderColor	java.awt.Color	Y	Y	Header table border line color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
jumpMode	boolean	Y	Y	Automatic scroll mode
locale	java.util.Locale	Y	Y	Locale information
multipleMode	boolean	Y	Y	Multiple selection mode/single selection mode
name	java.lang.String	Y	Y	Name
position	com.fujitsu.jbk.gui.JFPosition	Y		Cursor position
remoteFont	boolean	Y		Whether the registered font is a remote font
rowAlignmentHorizontal	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Horizontal character display position of a cell in a specified row
rowAlignmentVertical	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Vertical character display position of a cell in a specified row
rowBackground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Background color of cells in a specified row
rowBorderColor	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Color of border of cells in a specified row
rowBorderType	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Type of border of cells in a specified row
rowBorderWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of border of cells in a specified row
rowCount	int	Y	Y	Number of lines
rowEditable	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether or not cells in a specified row can be edited
rowFont	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Font of cells in a specified row
rowForeground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Foreground color of cells in a specified row
rowHeight	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Height of the specified line
rowVisible	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether or not cells in a specified row are visible
rows	int	Y	Y	Number of lines that indicate the display size
scrollbarMode	boolean	Y	Y	Display mode of scroll bar

Name	Type	Reference	Setting	Explanation
selectedObjects	java.lang.Object[]	Y		Selected cell position list
selectedPosition	com.fujitsu.jbk.gui.JFPosition	Y		Selected cell position
strictly	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether disable the character string which isn't suitable for the format of the specified column
tableBorderColor	java.awt.Color	Y	Y	Table border line color
tableBorderHeight	int	Y	Y	Table border line height
tableBorderWidth	int	Y	Y	Table border line width
tableColumns	int	Y		Number of columns including the header
tableRows	int	Y		Number of lines including the header
toolTipText	java.lang.String	Y	Y	Tool tip text
viewMode	boolean	Y	Y	Whether the mode is view mode
visible	boolean	Y	Y	Whether visible
wheelScrollingEnabled	boolean	Y	Y	Whether to enable scrollbar operation with mouse wheel

Event information

Name	Listener	Addition/removal	Method	Explanation
adjustment	java.awt.event.AdjustmentListener	addAdjustmentListener removeAdjustmentListener	adjustmentValueChanged	Is issued when the value of the adjustable object changes from this scroll bar.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	

Name	Listener	Addition/removal	Method	Explanation
item	java.awt.event.ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when the cell is selected by mouse or key operation.
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event.MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
tableViewAction	com.fujitsu.jbk.gui.JFTableViewActionListener	addTableViewActionListener removeTableViewActionListener	inputAreaOpen	Is issued when the JFTableView specific operation is performed.
			inputAreaClose	
			cursorMoved	
			allSelected	
			allDeselected	
			rowSelected	
			rowDeselected	
			columnSelected	
			columnDeselected	
text	java.awt.event.TextListener	addTextListener removeTextListener	textValueChanged	Is issued when the cell character string changes.

Method information

Name	Parameters	Explanation
addColumn		Adds a column at the end.
addRow		Adds a line at the end.
allCellDeselect		Deselects all cells.
allCellSelect		Selects all cells.

Name	Parameters	Explanation
calculateView		Calculates the screen size and scroll bar position and redraws.
copy		Copies the selected cell data(=character string) onto the clipboard.
copyColumn	int	Copies the column onto the specified position.
	int	
copyRow	int	Copies the line onto the specified position.
	int	
deselectCell	int	Deselects the cell.
	int	
exchangeColumn	int	Replaces the specified column.
	int	
exchangeRow	int	Replaces the specified line.
	int	
fullRepaint		Redraws all cells.
hideToolTip		Erases the tool tip.
inputAreaClose	boolean	Does not display the input field.
inputAreaOpen		Displays the input field of the cell at the cursor position.
insertColumn	int	Adds the column to the specified position.
insertRow	int	Adds the line to the specified position.
jump	int	Scrolls so that the cell at the specified position fits the screen.
	int	
moveColumn	int	Moves the specified column.
	int	
moveRow	int	Moves the specified line.
	int	
paste		Pastes from the clipboard.
removeColumn	int	Deletes the specified column.
removeRow	int	Deletes the specified line.
replaceColumn	int	Overwrites the specified column.
	int	
replaceRow	int	Overwrites the specified line.
	int	
requestFocus		Requests an input focus.
selectCell	int	Selects the cell.
	int	
setCellAlignmentHorizontal	int	Set the character display position in the side direction of all cells.
setCellAlignmentVertical	int	Set the character display position in the vertical direction of all cells.

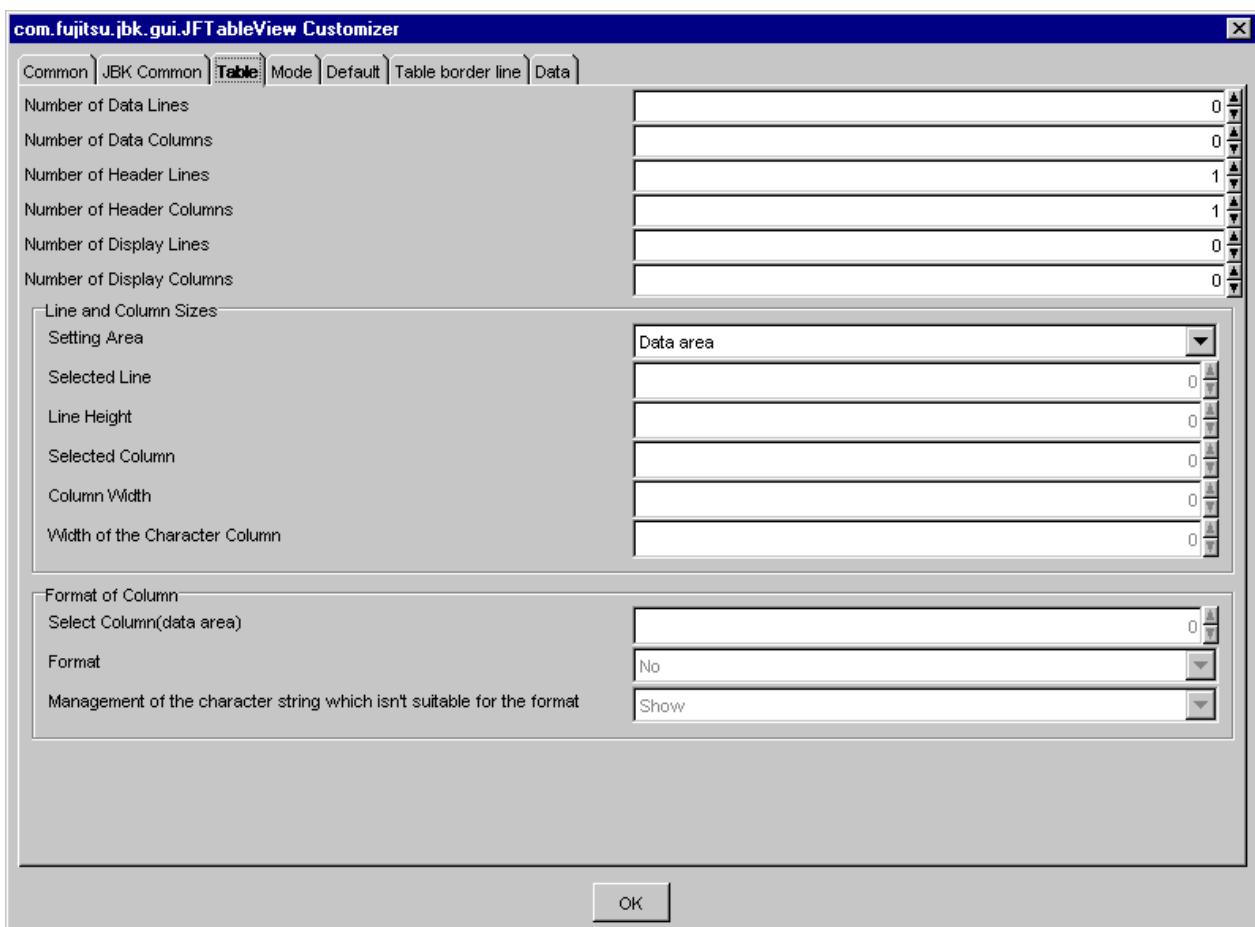
Name	Parameters	Explanation
setCellBackground	java.awt Color	Set the background color of all cells.
setCellBorderColor	java.awt Color	Set the border color of all cells.
setCellBorderType	int	Set the border type of all cells.
setCellBorderWidth	int	Set the border width of all cells.
setCellEditable	boolean	Set edit enabled/disabled of all cells.
setCellFont	java.awt Font	Set the font of all cells.
setCellForeground	java.awt Color	Set the foreground color of all cells.
setCellVisible	boolean	Set display/no display of all cells.
setColumnChars	int	Set the width of the character of all columns.
setRowColumnCount	int	Set the number of data line column.
	int	
setTableBorder	int	Set the border height and width at the same time.
	int	
setTextField	com.fujitsu.jbk. gui JFFieldString	Set the JFFieldString class to use as an input field.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Table

Set the entire table information.



Number of Data Lines

Set the number of data lines. Specify from 0 to 2147483644 as the number of data lines.

Number of Data Columns

Set the number of data columns. Specify from 0 to 2147483644 as the number of data columns.

Number of Header Lines

Set the number of header lines. Specify from 0 to 3 as the number of header lines.

Number of Header Columns

Set the number of header columns. Specify from 0 to 3 as the number of header columns.

Number of Display Lines

Set the number of display lines. Specify from 0 to 2147483647 as the number of display lines.

Number of Display Columns

Set the number of display columns. Specify from 0 to 2147483647 as the number of display columns.

Setting Area

Select the setting area for setting the line and column sizes from Data area/Header area.

Selected Line

Select the index of the line for which the line and column sizes are set. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of data lines minus 1.

Line Height

Select the height of the line for which the line and column sizes are set with a pixel value. Specify 0 to 2147483647 as the line height.



A system sometimes becomes unstable when very big value is established in the line height.

Selected Column

Select the index of the column for which the line and column sizes are set. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of data columns minus 1.

Column Width

Select the width of the column for which the line and column sizes are set with a pixel value. Specify from 0 to 2147483647 as the width of the column.



A system sometimes becomes unstable when very big value is established in the width of the column.

Width of the Character Column

Set the width of column by the number of the digit of the character.

In case of theses methods may be called before time this table is displayed, it is error.

If you used the screen designer of the integrated development environment, theses methods specified by 'Width of the Character Column' may be called before time this table is displayed.

Because such a situation leads to an error, use the source editor of the integrated development environment to change the order of calling methods.

Select Column(data area)

Select the index of data area column to do a setup of format. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of data columns minus 1.

Format

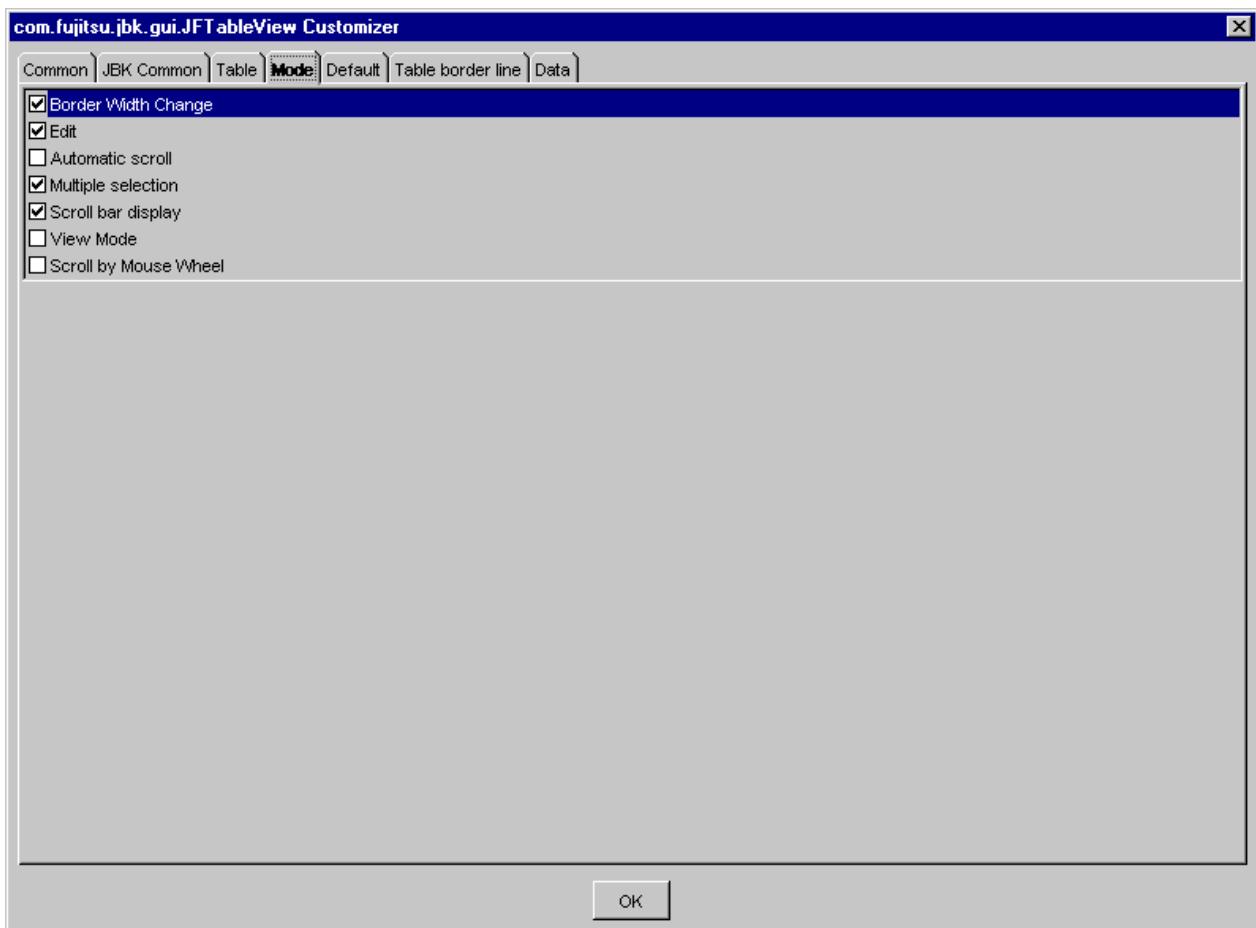
Select the format of a column to define format from among No, yyyy/M/d, d-MMMM-yy, H:mm:ss, #0, #0.00, #,##0, \$#,##, or #0%. "No" is select when a format isn't established in the column.

Management of the character string which isn't suitable for the format

Select the management of the character string which isn't suitable for the format from Invalid/Show as it is.

- Mode

Set the table mode.



Border Width Change

Set whether to enable the border width change. If this item is checked, the border width can be changed.

When the mouse pointer is positioned on the border boundary while changing is enabled, the mouse pointer changes its shape. Dragging in that status can change the border width.

Edit

Set whether editing is enabled. If this item is checked, editing is enabled.

Automatic scroll

Set whether to perform automatic scroll. If this item is checked, automatic scroll is performed at the addition/insertion of lines and columns so that the target line fits on the screen.

Multiple Selection

Set whether to enable multiple selection. If this item is checked, multiple selection is enabled.

Scroll bar display

Set display/no display for the scroll bar. If this item is checked, the scroll bar is displayed so that it matches the table size. If this item is unchecked, the scroll bar is displayed so that it matches the entire component size.

View Mode

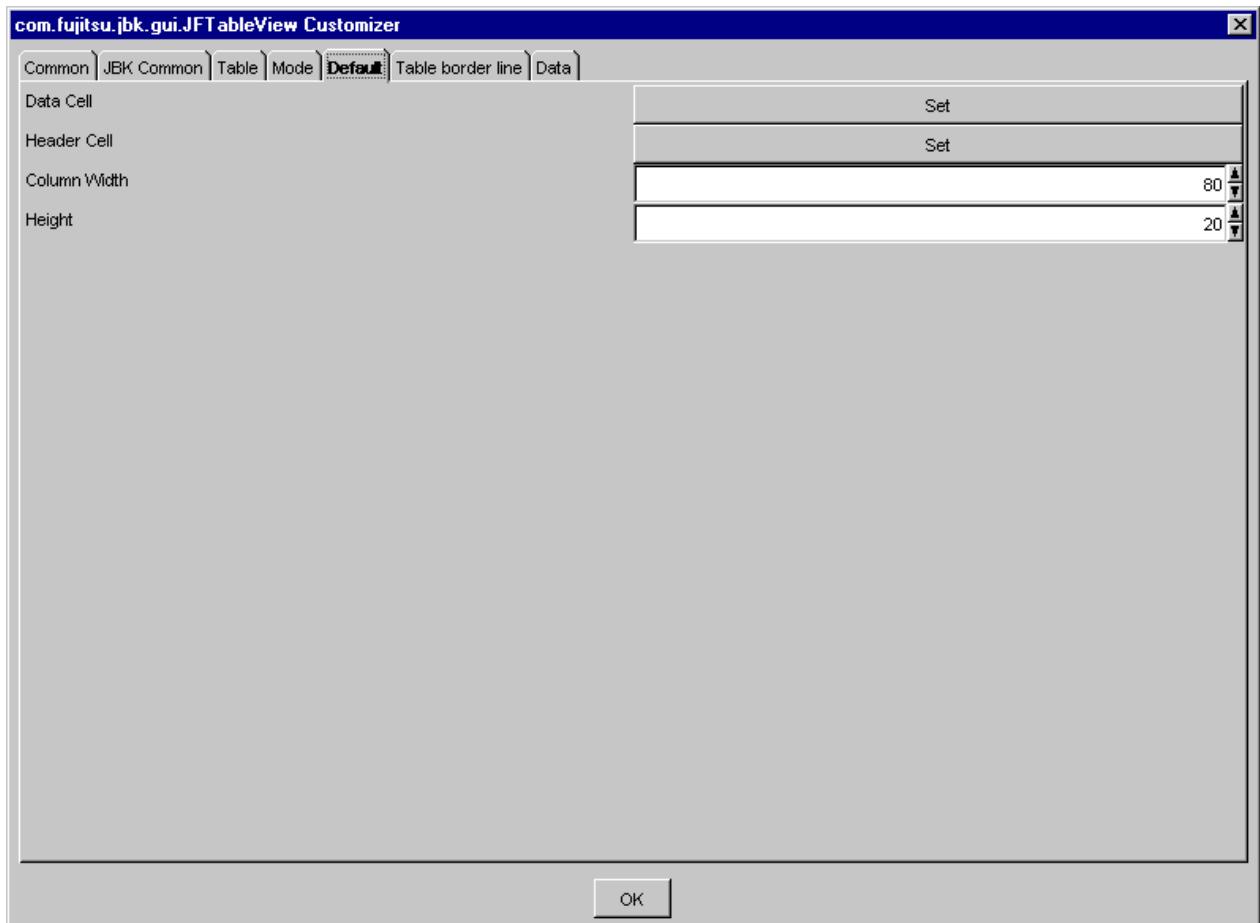
Set whether to set the view mode. If this item is checked, the mode becomes the view mode and editing in the table is disabled.

Scroll by Mouse Wheel

Set whether to enable scrolling with mouse wheel. If checked, scrolling with mouse wheel operation is enabled.

- Default

Set the default cell attributes.



Data Cell

Set the default data cell.

When the button is pressed, [\[Cell\] setting dialog](#) is displayed.

The properties of the data cell can be set up.

Header Cell

Set the default header cell.

When the button is pressed, [\[Cell\] setting dialog](#) is displayed.

The properties of the header cell can be set up.

Column Width

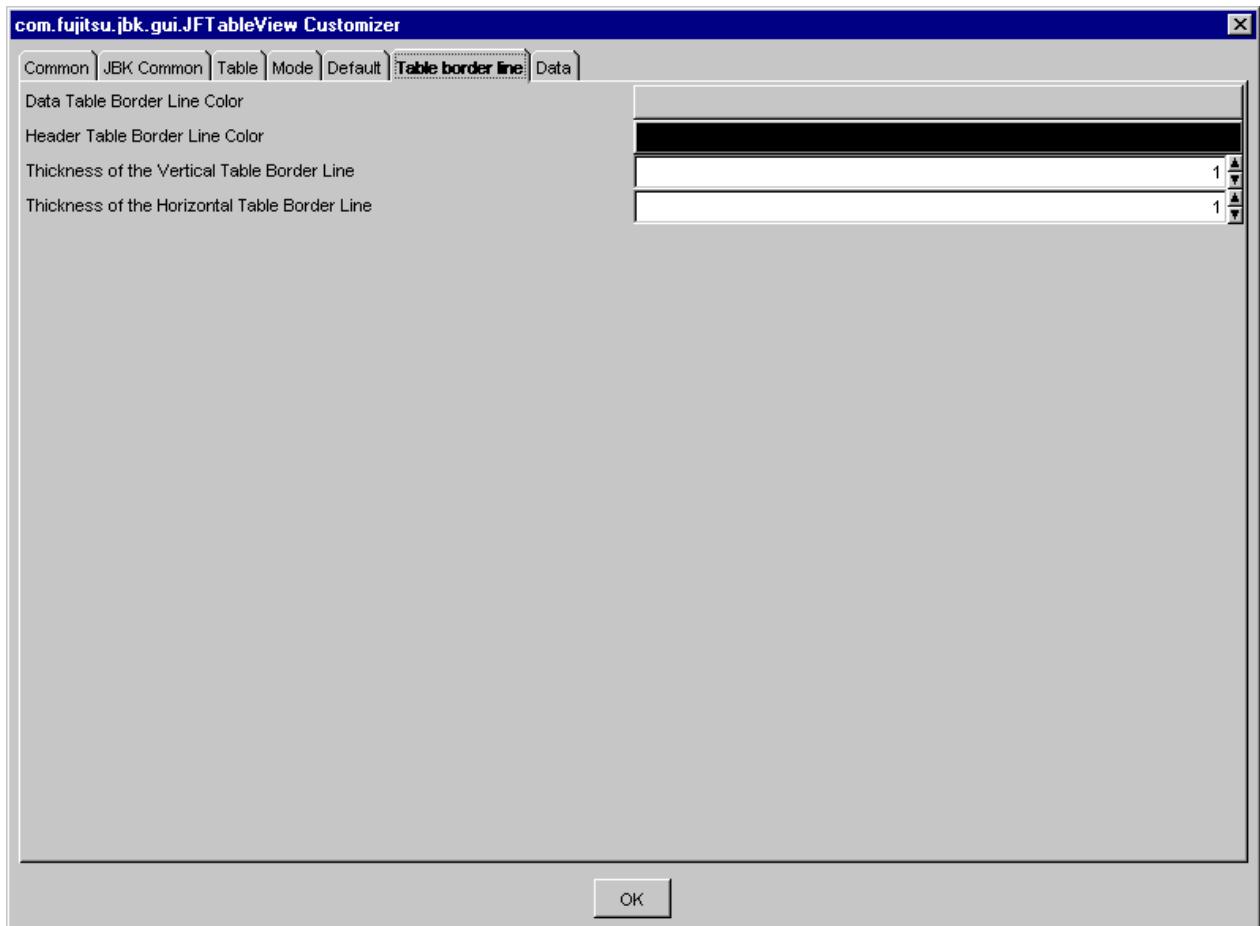
Set the default column width with a pixel value. This is used as the initial value of added/inserted column. Specify from 0 to 2147483647 as the column width.

Height

Set the default line height with a pixel value. This is used as the initial value of added/inserted line. Specify 0 to 2147483647 as the height.

- Table border line

Set attributes such as the table border line color.



Data Table Border Line Color

Set the table border line color of the data area. When the button is pressed, [Color setting dialog](#) is displayed.

Header Table Border Line Color

Set the table border line color of the header area. When the button is pressed, [Color setting dialog](#) is displayed.

Thickness of the Vertical Table Border Line

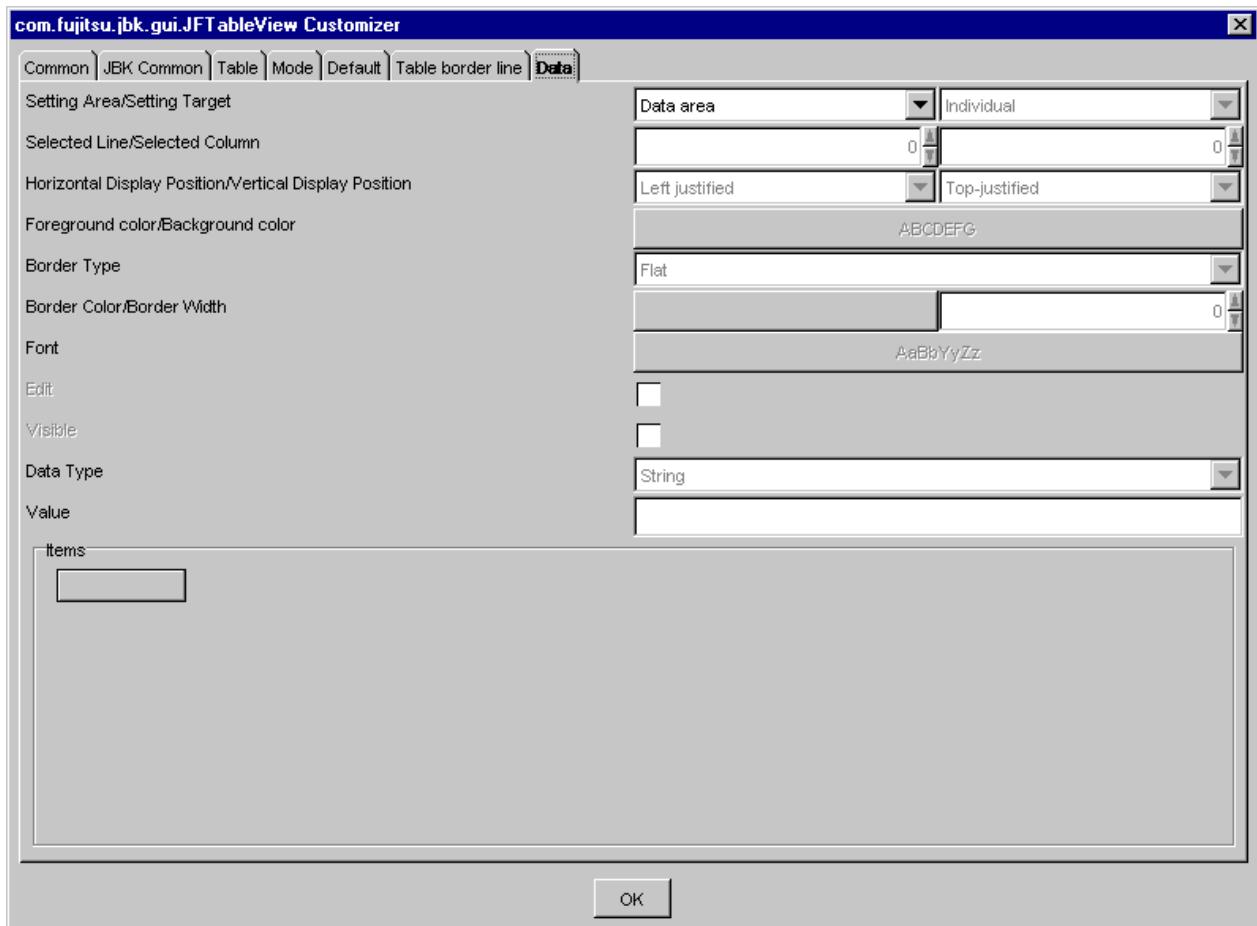
Set the thickness of the vertical table border line with a pixel value. Specify from 0 to 5 as the border width.

Thickness of the Horizontal Table Border Line

Set the thickness of the horizontal table border line with a pixel value. Specify from 0 to 5 as the border width.

- Data

Set the cell value.



In the initial status, data cannot be set because the table sizes (number of lines and number of columns) are not defined. First, set the number of lines and number of columns in the 'table' property, then set the value in each cell. To edit the value, specify the index of the edit cell.

Setting Area

Select the value setting area from Data area/Header area.

Setting Target

Select the value setting target (unit) from among Individual, One line, or One column.

Selected Line

Set the index of the value setting line. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of data lines minus 1.

Selected Column

Set the index of the value setting column. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of data columns minus 1.

Horizontal Display Position

Select the horizontal display position of the strings from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Foreground Color/Background Color

Set the foreground color and background color. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Border Type

Set the border type from among Flat, Convex, or Concave.

Border Color

Set the border color. When the button is pressed, [Color setting dialog](#) is displayed.

Border Width

Set the border width with a pixel value. Specify 0 to 5 as the border width.

Font

Set the font. When the button is pressed, [\[Font\] setting dialog](#) is displayed.

Edit

Set whether editing is enabled. If this item is checked, editing is enabled.

Visible

Set display/no display for the value. If this item is checked, the value is displayed.

Data Type

Select the data type from among String, Numeric or Boolean. The input field of 'Value' depends on 'Data Type'.

Value

Set the value of the selected node column. The set value is set as the following object class.

- String type: java.lang.String
- Numeric type: java.lang.Long
- Boolean type: java.lang.Boolean

Items

Displays the data specified for the items.

3.29 Tab panel Bean

The tab panel Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFTabPanel

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color

Name	Type	Reference	Setting	Explanation
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
component	(Array) java.awt.Component	(Array) Y		Specified position page
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
controlEnabled	boolean	Y	Y	Whether to operation of the possible/impossibility of the added component
controlEnabled	boolean	Y	Y	Whether to operation of the possible/impossibility of the added component
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
enabledToFront	boolean	Y	Y	Whether to display the specified page isn't enabled.
equalizeWidth	boolean	Y	Y	Whether to display the width of the page switch button at regular intervals
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available.
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
image	(Array) java.awt.Image	(Array) Y	(Array) Y	Image displayed on the page switch button on the page at the specified position
indexEnabled	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Whether the specified page is enabled.
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
remoteFont	boolean	Y		Whether the registered font is a remote font

Name	Type	Reference	Setting	Explanation
tabLabelColor	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Color of the label of specified page.
tabPosition	int	Y	Y	Display position of tab
tabname	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Name of the page at the specified position
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event.ContainerListener	addContainerListener removeContainerListener	componentAdded	Is issued when the pasted status changes.
			componentRemoved	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener removeInputMethodListener	caretPositionChanged	Is issued when the input method status changes.
			inputMethodTextChanged	
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.eventMouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener	propertyChange	Is issued when the property changes.

Name	Listener	Addition/removal	Method	Explanation
		removePropertyChangeListener		

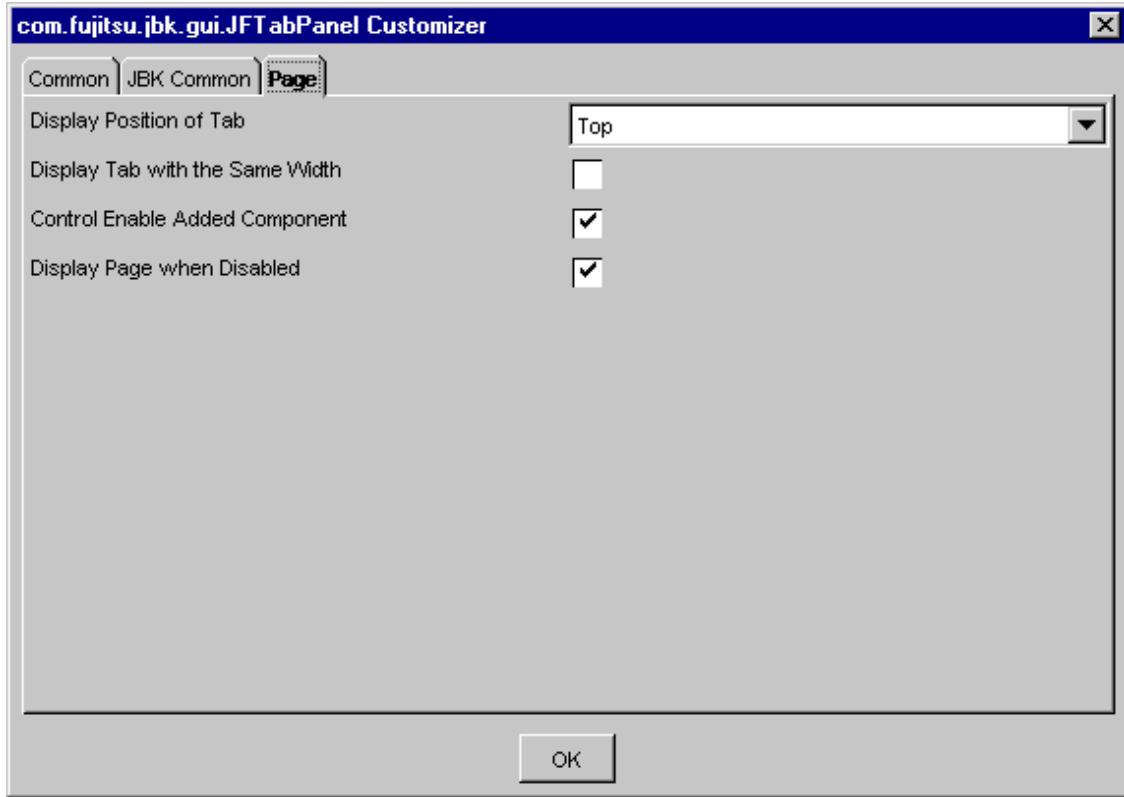
Method information

Name	Parameters	Explanation
add	java.awt Component	Adds the component.
add	java.awt Component	Adds the component.
	int	
add	java.awt Component	Adds the component.
	java.lang Object	
add	java.awt Component	Adds the component.
	java.lang Object	
	int	
hideToolTip		Erases the tool tip.
remove	java.awt Component	Deletes the specified component.
remove	int	Deletes the component at the specified position.
remove	java.lang String	Deletes the component that corresponds to the page with the specified name.
removeAll		Deletes all components.
requestFocus		Requests an input focus.
show	java.awt Component	Displays the specified page.
show	int	Displays the page at the specified position.
show	java.lang String	Displays the page that has the specified name.
showFirst		Displays the first page.
showLast		Displays the last page.
showNext		Displays the next page.
showPrevious		Displays the previous page.
showToolTip	java.lang String	Displays the tool tip.
	java.awt Point	
	java.awt Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)
- Page

Set the page attribute.



In the initial status, no page property can be set.

Using the screen designer (screen edit function) of the integrated development environment, paste components on a tab panel and add a page, then set the properties of the page. To edit a page, specify the index of the page to be edited.

Display Position of Tab

Select the display position of the tab from Top/Bottom.

Display Tab with the Same Width

Set whether to display the tab display width. If this item is checked, the tabs of each page have the same width. If this item is unchecked, the tab width is adjusted to match the number of characters in the tab name.

Control Enable Added Component

Set whether to control enable added component. If this item is checked, set to enabled component is operated in accordance with this component and tab.

Display Page when Disabled

Set whether to display the disabled page. If this item is checked, set to display the page when disabled.

3.30 Text area Bean

The text area Bean has the following information and [Customizer](#) functions.

- [Property information](#)

- Event information
- Method information



"Package Guide"- JTextArea

Property information

Name	Type	Reference	Setting	Explanation
autoEscape	boolean	Y	Y	Automatic exit function valid/invalid
autoIME	boolean	Y	Y	Automatic change of input mode
background	java.awt.Color	Y	Y	Background color
blink	boolean	Y	Y	Whether to blink the character string
blinkInterval	long	Y	Y	Blink interval of character string
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
byteLength	int	Y		Byte length of character string
caretBlink	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Input caret blink
caretPosition	int	Y	Y	Caret position
caretStyle	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Caret style for the input field
caretVisible	boolean	Y	Y	Display/non-display of the input caret
characterCodeMapped	boolean	Y	Y	Whether to convert incompatible character code
clickedHyperLinkColor	java.lang.Color	Y	Y	Color of visited hyperlinks
columnBaseChar	char	Y	Y	The base character to be used on calculating the width of field
columns	int	Y	Y	Number of display characters
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
compoundEventMode	boolean	Y	Y	Whether to fire the start/finish event of edit field and scrollbar
editable	boolean	Y	Y	Editing enabled/disabled
enableChars	char[]	Y	Y	Input-enabled character array
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enableType	int	Y	Y	Input-enabled character set
enabled	boolean	Y	Y	Whether enabled

Name	Type	Reference	Setting	Explanation
errorBeep	int	Y	Y	Error types for which a warning is sounded
focusTraversalKeyIsEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
hyperLinkViewMode	boolean	Y	Y	Whether to display hyperlinks
hyperLinkColor	java.lang.Color	Y	Y	Color of hyperlinks
ignoreRepaint	boolean	Y	Y	Whether the focus traversal key is available
inactiveBackground	java.awt.Color	Y	Y	Background color when inactive
inactiveForeground	java.awt.Color	Y	Y	Foreground color when inactive
inputAssist	int	Y	Y	Input assist method
inputLimitation	com.fujitsu.jbk.gui.JFInputLimitation	Y	Y	Input restriction
inputMode	int	Y	Y	Character set and character size
inputStyle	int	Y	Y	Character string conversion window type
insertMode	int	Y	Y	Input mode
length	int	Y		Character string length
lineHeight	int	Y	Y	Height of line
locale	java.util.Locale	Y	Y	Locale information
maxByteLength	int	Y	Y	Maximum number of input-enabled bytes
maxLength	int	Y	Y	Maximum number of input-enabled characters
name	java.lang.String	Y	Y	Name
remoteFont	boolean	Y		Whether the registered font is a remote font
reverse	boolean	Y	Y	Whether to display in reverse video or not
rows	int	Y	Y	Number of the character display lines
scrollbarVisibility	int	Y	Y	How to display scroll bar
selectedInFocus	boolean	Y	Y	Whether to select all the character string when focused or not

Name	Type	Reference	Setting	Explanation
selectedText	java.lang.String	Y		Selected character string
selectionEnd	int	Y	Y	Selection end position
selectionStart	int	Y	Y	Select start position
text	java.lang.String	Y	Y	Character string
textEditKey	com.fujitsu.jbk.gui.JFMultiLineTextEditKey	Y	Y	Function key manager
toolTipText	java.lang.String	Y	Y	Tool tip text
underlineColor	java.awt.Color	Y	Y	Underline color
underlineType	int	Y	Y	Underline type
visible	boolean	Y	Y	Whether visible
wheelScrollingEnabled	boolean	Y	Y	Whether to enable scrollbar operation with mouse wheel
wordWrap	boolean	Y	Y	Word wrap/no word wrap
wordWrapIterator	java.text.BreakIterator	Y	Y	Whether specify the pause of word to wrap around.

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when automatically exited. And it can be issued when the Enter key is pressed with the customization function of the function key, too.
autoEscape	com.fujitsu.jbk.gui.JFAutoEscapeListener	addAutoEscapeListener removeAutoEscapeListener	autoEscape	Is issued immediately prior to automatic exit.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized componentMoved componentShown componentHidden	Is issued when the component status changes.
compound	com.fujitsu.jbk.gui.JFCompoundEventListener	addCompoundEventListener removeCompoundEventListener	startProcessEvent endProcessEvent	Is issued when the event of edit field and scrollbar is fired.
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.

Name	Listener	Addition/removal	Method	Explanation
			focusLost	
hyperLink	com.fujitsu.jbk.g ui JFHyperLinkList ener	addHyperLinkList ener removeHyperLink Listener	mouseEntered	Is issued when a hyperlink is used
			mouseExited	
			mouseClicked	
inputError	com.fujitsu.jbk.g ui JFInputErrorList ener	addInputErrorList ener removeInputError Listener	inputError	Is issued when a character string input error occurs.
inputMeth od	java.awt.event InputMethodList ener	addInputMethodL istener removeInputMeth odListener	caretPositionCha nged	Is issued when the input method status changes.
			inputMethodText Changed	
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMo tion	java.awt.event MouseMotionList ener	addMouseMotion Listener removeMouseMot ionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWh eel	java.awt.event MouseWheelList ener	addMouseWheelL istener removeMouseWh eelListener	mouseWheelMo ved	Is issued by mouse wheel operation.
propertyC hange	java.beans PropertyChange Listener	addPropertyChan geListener removePropertyC hangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListen er	textValueChang ed	Is issued when a character is input.

Method information

Name	Parameters	Explanation
addEnableChar	char	Adds an input enabled character.
append	java.lang String	Adds a specified character string at the end of the current text.
canCopy		Returns whether copy is possible.
canCut		Returns whether cut is possible.
canPaste		Returns whether paste is possible.

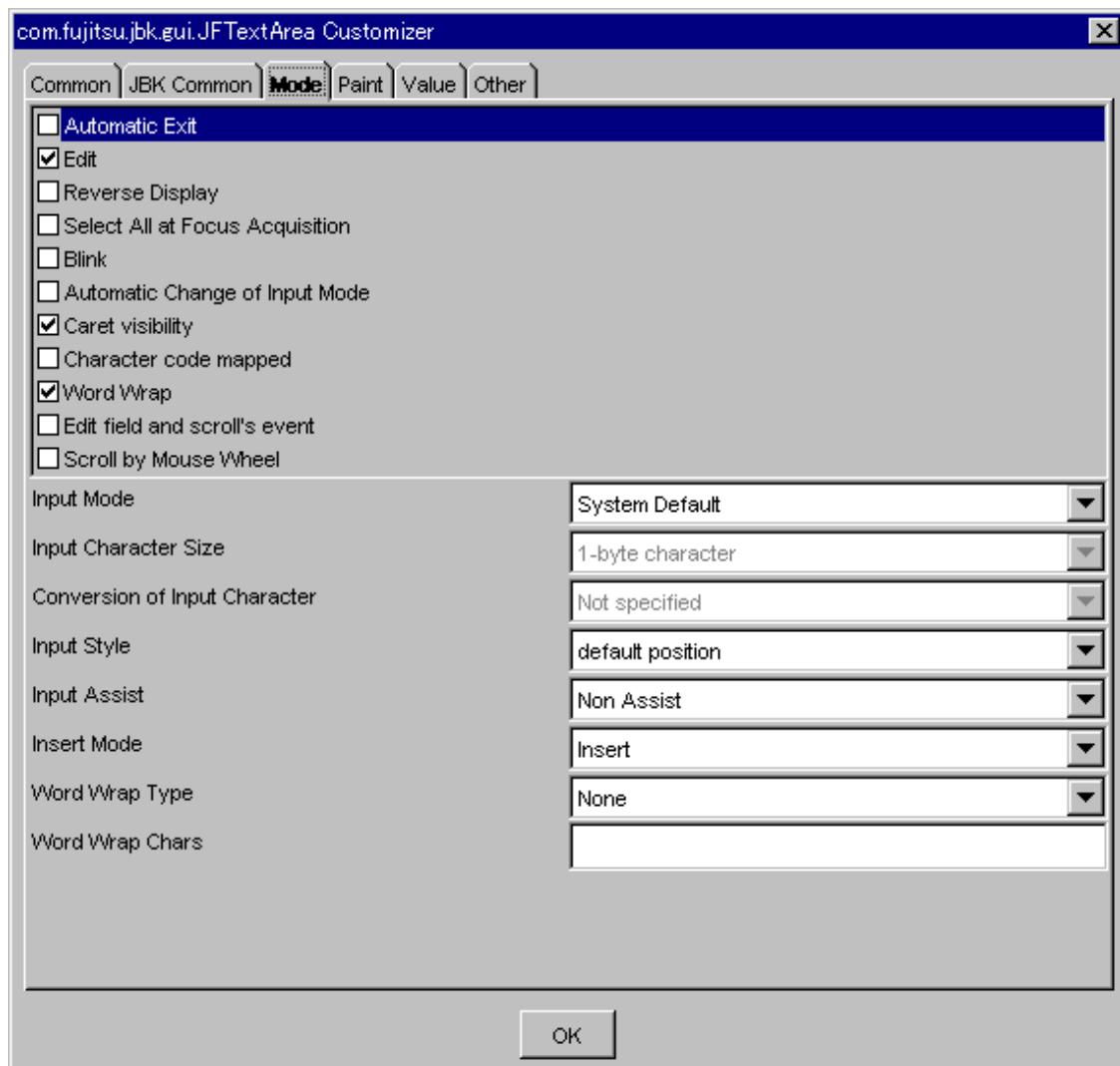
Name	Parameters	Explanation
copy		Copies the selected character string onto the clipboard.
cut		Cuts the selected character string onto the clipboard.
getLineCount		Returns the line.
getMinimumSize	int	Returns the minimum size of this component which has the specified number of the lines, and the number of the column.
	int	
getPreferredSize	int	Returns the optimum size of this component which has the specified number of the lines, and the number of the column.
	int	
getStringForRange	int	Returns the partial character string.
	int	
hideToolTip		Erases the tool tip.
insert	java.lang.String	Inserts the character string into the selected area.
	int	
insertText	java.lang.String	Inserts the character string into the selected area.
paste		Pastes from the clipboard.
replaceRange	java.lang.String	Replaces the specified range of character string by the substitute character string.
	int	
	int	
requestFocus		Requests an input focus.
select	int	Partially selects the character string.
	int	
selectAll		Selects the entire character string.
selectCancel		Cancels the selection of the character string.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- Mode

Set the operation mode in the text area.



Automatic Exit

Set automatic exit or no automatic exit. If this item is checked, automatic exit is performed.

Edit

Set whether to enable editing. If this item is checked, editing is enabled.

Reverse Display

Set the reverse video mode or not. If this is checked, the display is in reverse mode.

Select All at Focus Acquisition

Set to select all the character string or not when acquiring input focus. If this item is checked, all are selected.

Blink

Set to blink character string or not. If checked, the character string blinks. The interval time can be set in the 'Blink Interval' of the 'Paint' property.

Automatic Change of Input Mode

Set whether to change the input mode automatically when the focus moves. If this item is checked, the input mode is changed.

Caret visibility

Set the display status of the input caret. If checked, the input caret is displayed.

Character code mapped

Set whether to convert YEN SIGN. If checked, character code conversion is performed.

For the character codes to be converted, see the following table:

SJIS	Unicode	Microsoft
0x815F	0x005C[REVERSE SOLIDUS]	[Unicode]U+00A5[YEN SIGN]

Word Wrap

Set whether word wrap. If this item is checked, words are wrapped.

Edit field and scroll's event

Set whether to fire the start/finish event of edit field and scrollbar. If checked, the event is fired.

Scroll by Mouse Wheel

Set whether to enable scrolling with mouse wheel. If checked, scrolling with mouse wheel operation is enabled.

Input Mode

Select the input mode from among Alphanumeric, Hiragana, Katakana, Direct input, or System Default. This is available only when 'Automatic Change of Input Mode' is checked.

Input Character Size

Select the input character size of the field from 1-byte character or 2-byte character. This is available only when 'Automatic Change of Input Mode' is checked.

Conversion of Input Character

Select the conversion mode for the input character string from among Conversion, None or Not specified. This is available only when 'Automatic Change of Input Mode' is checked.

Input Style

Select the display position of the character string conversion window from the default position and component. To use this function, 'Automatic Change of Input Mode' must be checked.

Input Assist

Set whether to assist input of characters using a Japanese input system. By setting the conversion method, determination operations during input can be omitted.

Insert Mode

Select the input mode from Insert/Overwrite.

Word Wrap Type

Select the word wrap type from among None, Character, Line, Sentence, Word, or Set Word Wrap Chars.

The finding the location of boundaries in text. of Character, Line, Sentence, Word, and Set Word Wrap Chars is following:

- Character

The boundary analysis is created by used BreakIterator.getCharacterInstance().

See also [Appendix D About boundary analysis of word wrap function for the details](#).

- Line

The boundary analysis is created by used BreakIterator.getLineInstance().

See also [Appendix D About boundary analysis of word wrap function for the details](#).

- Sentence

The boundary analysis is created by used BreakIterator.getSentenceInstance().

See also [Appendix D About boundary analysis of word wrap function for the details.](#)

- Word

The boundary analysis is created by used BreakIterator.getWordInstance().

See also [Appendix D About boundary analysis of word wrap function for the details.](#)

- Set Word Wrap Chars

The boundary analysis is the word specified by 'Word Wrap Chars'.



Information

JTextArea does a word wrap when a string between the boundary specified by 'Word Wrap Type', and the boundary isn't set at the end of the line.

It becomes the following movement with JTextArea when "Character/Line/Sentence/Word" is specified for 'Word Wrap Type'.

Example sentences:

"This sample explains the word wrap type of JTextArea. Please see the attached document #1."

Result:

- Character

This sample explains the word wrap type of JTextArea. Please see the attached document #1.

- Line

This sample explains the word wrap type of JTextArea. Please see the attached document #1.

- Sentence

This sample explains the word wrap type of JTextArea.
Please see the attached document #1.

- Word

This sample explains the word wrap type of JTextArea. Please see the attached document #1.

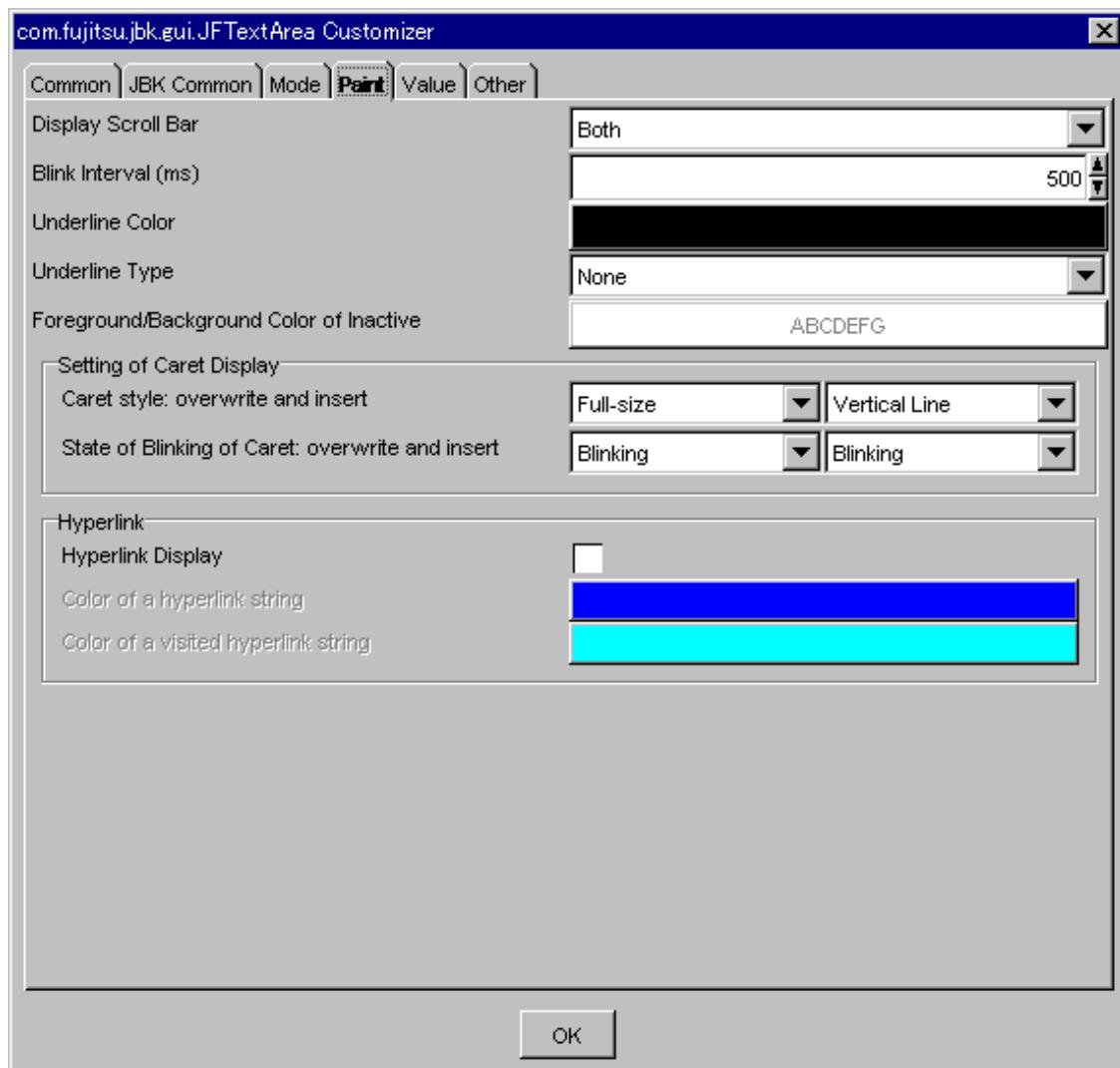
Word Wrap Chars

Set the word wrap chars.

The word wrap character specified here is effective only at the time 'Set Word Wrap Chars' is specified by 'Word Wrap Type'. When a tab character is specified, set \t.

- Paint

Set information concerning the text area display.



Display Scroll Bar

Select the scroll bar type from among Both, Only Horizontal, Only Vertical(Loopback display), or NO(Loopback display).

Blink Interval (ms)

Set the blink interval of the display character string in milliseconds (ms). Specify from 1 to 2147483647 as the blink interval.

Underline Color

Select the underline color. When the button is pressed, [Color setting dialog](#) is displayed.

Underline Type

Select the underline type from among None, Convex, Concave, or Flat.

Foreground/Background Color of Inactive

Select the foreground/background color of inactive. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Caret style: overwrite and insert

Select the caret style from among Vertical Line, Full-size, Half-size, Quarter-size, or Underline. A different status can be set for each input mode: overwrite and insert.

State of Blinking of Caret: overwrite and insert

Set whether or not the caret blinks. A different status can be set for each input mode: overwrite and insert.

Hyperlink Display

Specify whether to display hyperlinks.

Color of a hyperlink string

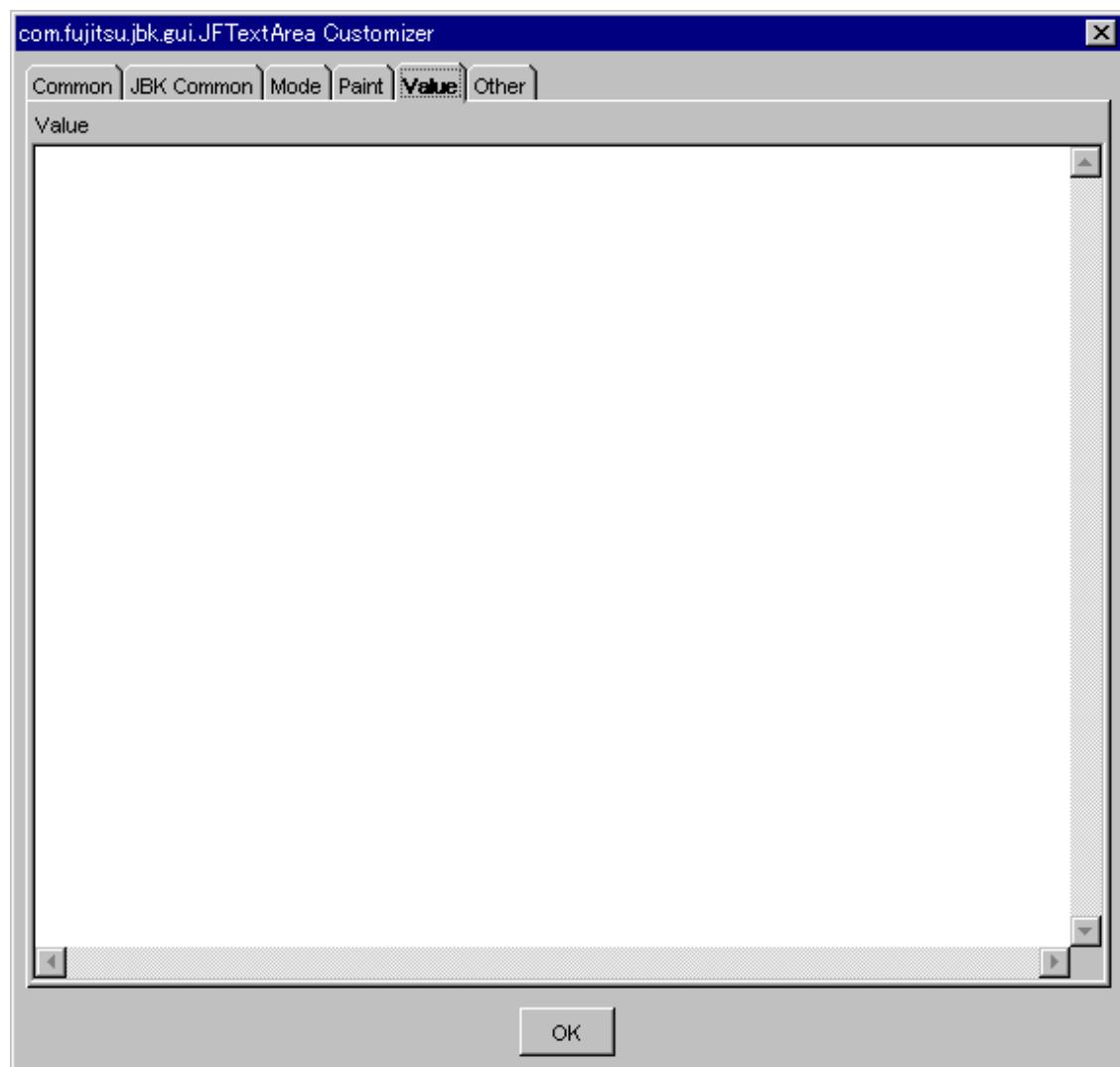
Sets the color in which a hyperlink is displayed.

Color of a visited hyperlink string

Sets the color in which the string of a visited hyperlink is displayed.

- Value

Set the text area value.

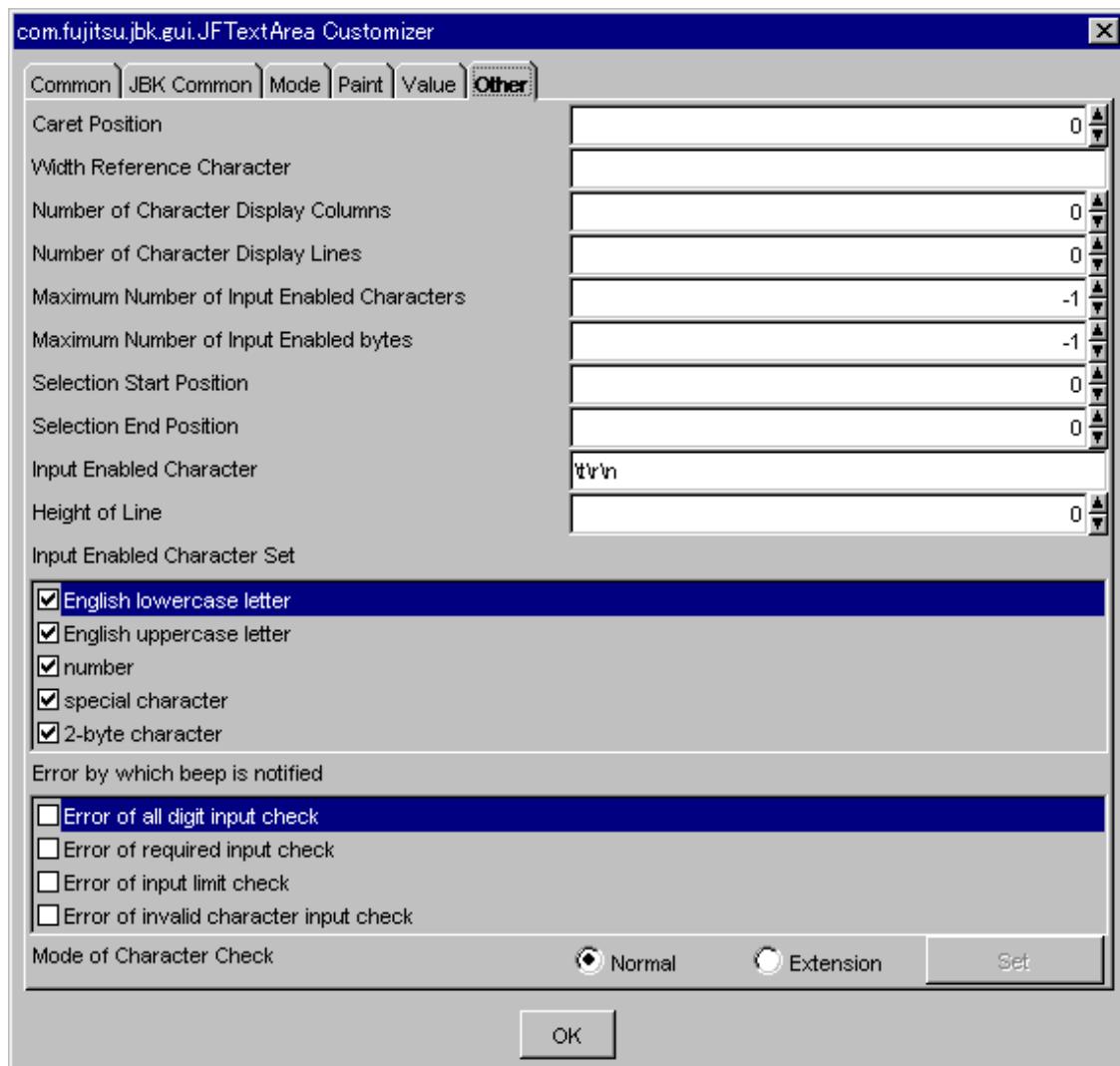


Value

Set the value to be displayed in the text area.

- Other

Set other information.



Caret Position

Set the caret position. Specify from 0 to the number of value's characters as the caret position.

Width Reference Character

Set the character which is used to decide the size of the component.

Number of Character Display Columns

Set the number of the columns that a character is displayed. Specify from 0 to 2147483647 as the number of character columns.

Number of Character Display Lines

Set the number of the lines that a character is displayed. Specify from 0 to 2147483647 as the number of character display lines.

Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input input-enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Selection Start Position

Set the selection start position. Specify from 0 to the caret position as the selection start position.

Selection End Position

Set the selection end position. Specify from the selection start position to the caret position as the selection end position.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

When a tab character or line feed is specified, set \t, \r, and \n.

Height of Line

Set the height of line. Specify the positive integer for height of the line.

Input Enabled Character Set

Select the available character set for the input: English lowercase letter, English uppercase letter, number, special character and 2-byte character. The unchecked character set cannot be used for the input.

Error by which beep is notified

Select the error types for which the warning is sounded from among Error of all digit input check, Error of required input check, Error of input limit check, or Error of invalid character input check.

Mode of Character Check

Select the input restriction from Normal and Extension.

In case of Normal, specifies input restriction with 'Maximum Number of Input Enabled Characters', 'Maximum Number of Input Enabled bytes', 'Input Enabled Character', and 'Input Enabled Character Set'.

In case of Extension, specifies input restriction with the <Set> button is pressed, [Input Limitation] setting dialog is displayed.

When Extension is specified, each input restriction becomes invalid when it is set in Normal . And, when Normal is specified, each input restriction becomes invalid when it is set in Extension.

3.31 Timer Bean

The timer Bean has the following information.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFTimer

Property information

Name	Type	Reference	Setting	Explanation
alive	boolean	Y		Whether the timer is active
count	int	Y		Event generation count
interval	long	Y	Y	Event generation interval
numberOfTimes	int	Y	Y	Event generation count

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the specified time elapses.

Method information

Name	Parameters	Explanation
reset		Restores the event generation count to 0.
start		Starts the timer.
stop		Starts the timer.

3.32 Toggle button Bean

The Toggle Button Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- [JFToggleButton](#)

Property information

Name	Type	Ref erence	Set ting	Explanation
autoTurn	boolean	Y	Y	Automatic loopback/no automatic loopback
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
buttonAlignment	int	Y	Y	Display position of check box
buttonBackground	java.awt.Color	Y	Y	Background color of check box
buttonForeground	java.awt.Color	Y	Y	Foreground color of check box
buttonGroup	com.fujitsu.jbk.gui.JButtonGroup	Y	Y	Button group
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
enableMenu	boolean	Y	Y	Whether to display the popup menu

Name	Type	Reference	Setting	Explanation
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
label	java.lang.String	Y	Y	Label character string
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
preferredColorDisplay	boolean	Y	Y	Whether display the preferred color
remoteFont	boolean	Y		Whether the registered font is a remote font
sendItemEventBySetState	boolean	Y	Y	whether to issue ItemEvent when the state of the toggle button is changed
state	boolean	Y	Y	State of button
toolTipText	java.lang.String	Y	Y	Tool tip text
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener	caretPositionChanged	Is issued when the input method status changes.

Name	Listener	Addition/removal	Method	Explanation
		removeInputMethodListener	inputMethodTextChanged	
item	java.awt.event.ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when the button state changes.
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event.MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.

Method information

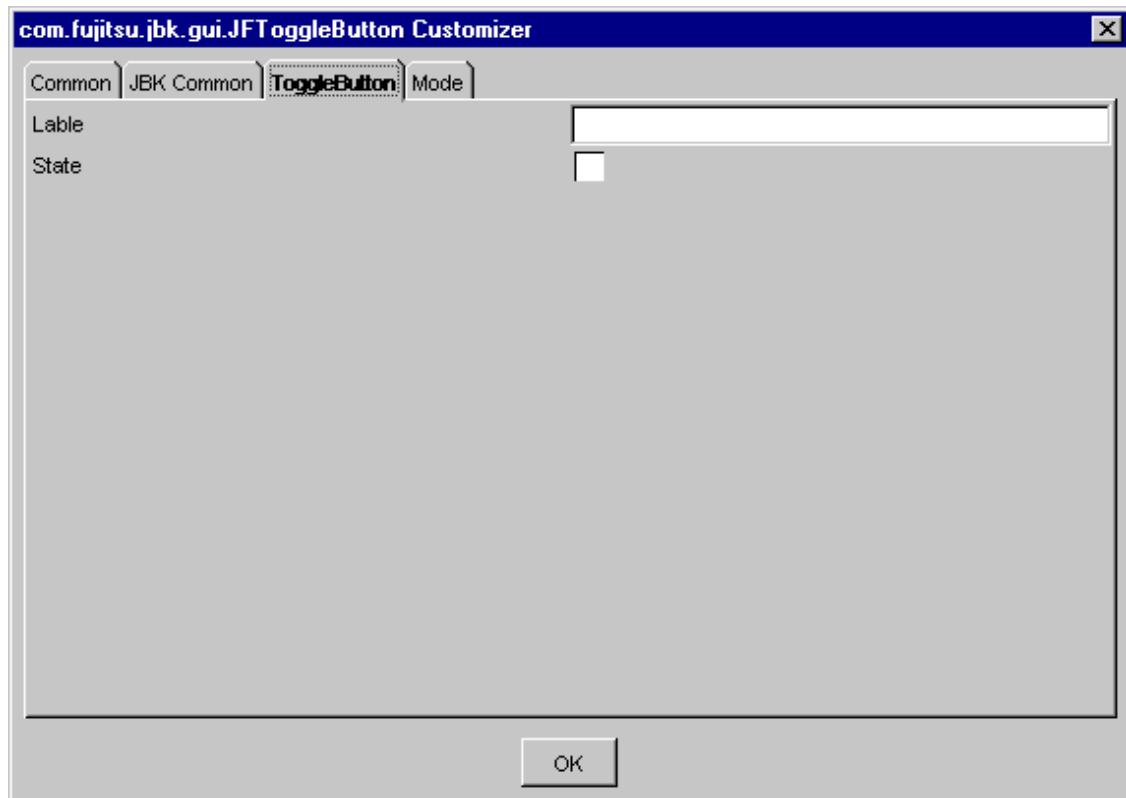
Name	Parameters	Explanation
hideToolTip		Erases the tool tip.
requestFocus		Requests an input focus.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)

- ToggleButton

Set the toggle button.



Label

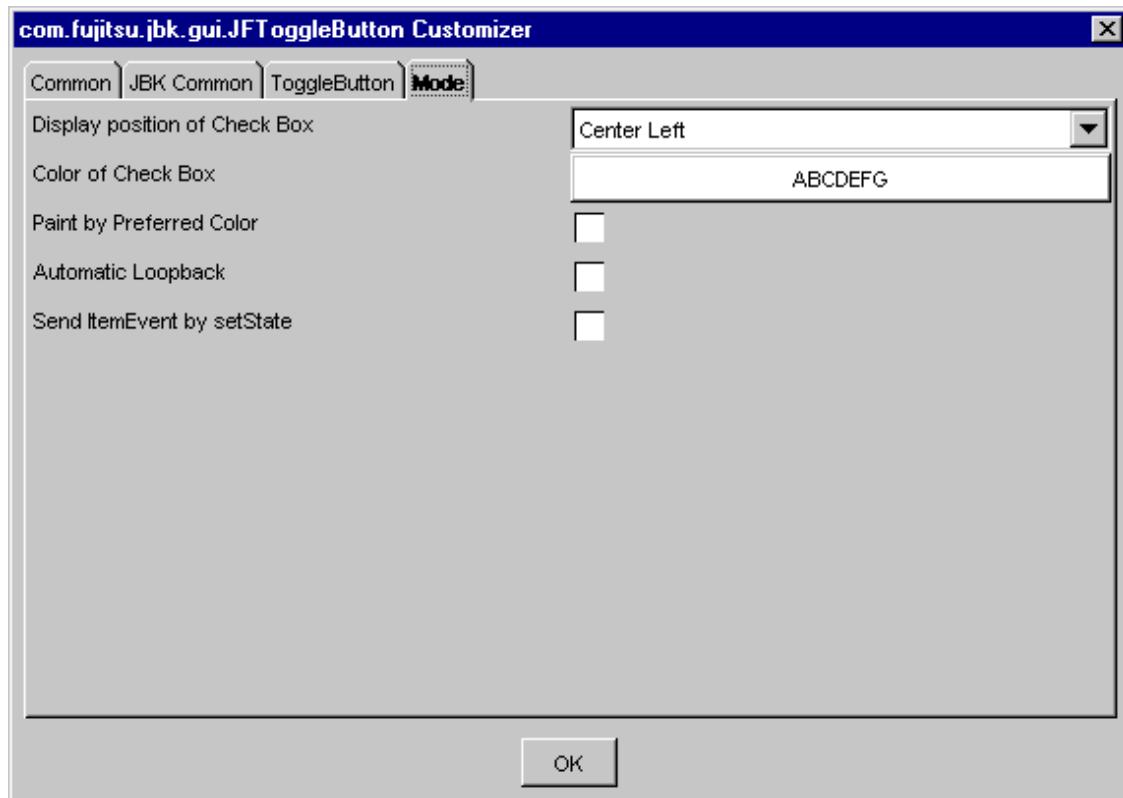
Set the label to be displayed for the toggle button.

State

Set the state either "on" or "off". The "on" state is the toggle button is currently selected.

- Mode

Set the toggle button mode.



Display position of Check Box

Select the display position of check box from among Top Left, Center Left, or Bottom Left.

Color of Check Box

Set the foreground color and background color of the check box. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Paint by Preferred Color

Set to paint by preferred color or usual color. If this item is checked, paint by preferred color (when to be not use, paint by impossibility color).

Automatic Loopback

Set whether to fold the label string automatically or not. If checked, the label is automatically folded.

Send ItemEvent by setState

Sets whether to issue ItemEvent when the state of the toggle button is changed.

If this item is checked, ItemEvent isn't issued when the state of the toggle button is changed.

3.33 Tool bar Bean

The tool bar Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JToolbar

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
controlEnabled	boolean	Y	Y	Whether to operation of the possible/impossibility of the added component
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
hgap	int	Y	Y	Left and right gaps for the default layout
ignoreRepaint	boolean	Y	Y	Whether the paint message of the operating system should be ignored
layout	java.awt.LayoutManager	Y	Y	Layout manager
locale	java.util.Locale	Y	Y	Locale information
name	java.lang.String	Y	Y	Name
orientation	int	Y	Y	Orientation
remoteFont	boolean	Y		Whether the registered font is a remote font
separatorLine	boolean	Y	Y	Line display/no display for separator (delimiter space)
separatorSize	int	Y	Y	Separator (delimiter space) size

Name	Type	Reference	Setting	Explanation
toolTip	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Tool tip
toolTipText	java.lang.String	Y	Y	Tool tip text
toolTipsBackground	java.awt.Color	Y	Y	Tool tip Background color
toolTipsColor	java.awt.Color	Y	Y	Tool tip character color
toolTipsDisplay	boolean	Y	Y	Tool tip display/no display
vgap	int	Y	Y	Top and bottom gaps for the default layout
visible	boolean	Y	Y	Whether visible

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the registered component issues ActionEvent.
adjustment	java.awt.event AdjustmentListener	addAdjustmentListene r removeAdjustmentListener	adjustmentValueCh anged	Is issued when the registered component issues AdjustmentEvent.
component	java.awt.event ComponentListener	addComponentListene r removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
container	java.awt.event ContainerListener	addContainerListener removeContainerListene r	componentAdded componentRemoved	Is issued when the pasted status changes.
focus	java.awt.event FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event InputMethodListene r	addInputMethodListen er removeInputMethodLi stener	caretPositionChan ged	Is issued when the input method status changes.
			inputMethodText Ch aged	
item	java.awt.event ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when the registered component issues ItemEvent.
key	java.awt.event KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	

Name	Listener	Addition/removal	Method	Explanation
mouse	java.awt.event MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
text	java.awt.event TextListener	addTextListener removeTextListener	textValueChanged	Is issued when the registered component issues TextEvent.

Method information

Name	Parameters	Explanation
add	java.awt Component	Adds the component to the end.
add	java.awt Component	Inserts the component into the specified index.
	int	
add	java.awt Component	Adds the component to the end.
	java.lang Object	
add	java.awt Component	Inserts the component into the specified index.
	java.lang Object	
	int	
addSeparator		Adds a separator (delimiter space) to the end.
hideToolTip		Erases the tool tip.
insertSeparator	int	Inserts the separator (delimiter space) into the specified index.
moveComponent	int	Moves the component and separator (delimiter space).
	int	
remove	int	Deletes the component of the specified index.
remove	java.awt Component	Deletes the specified component.

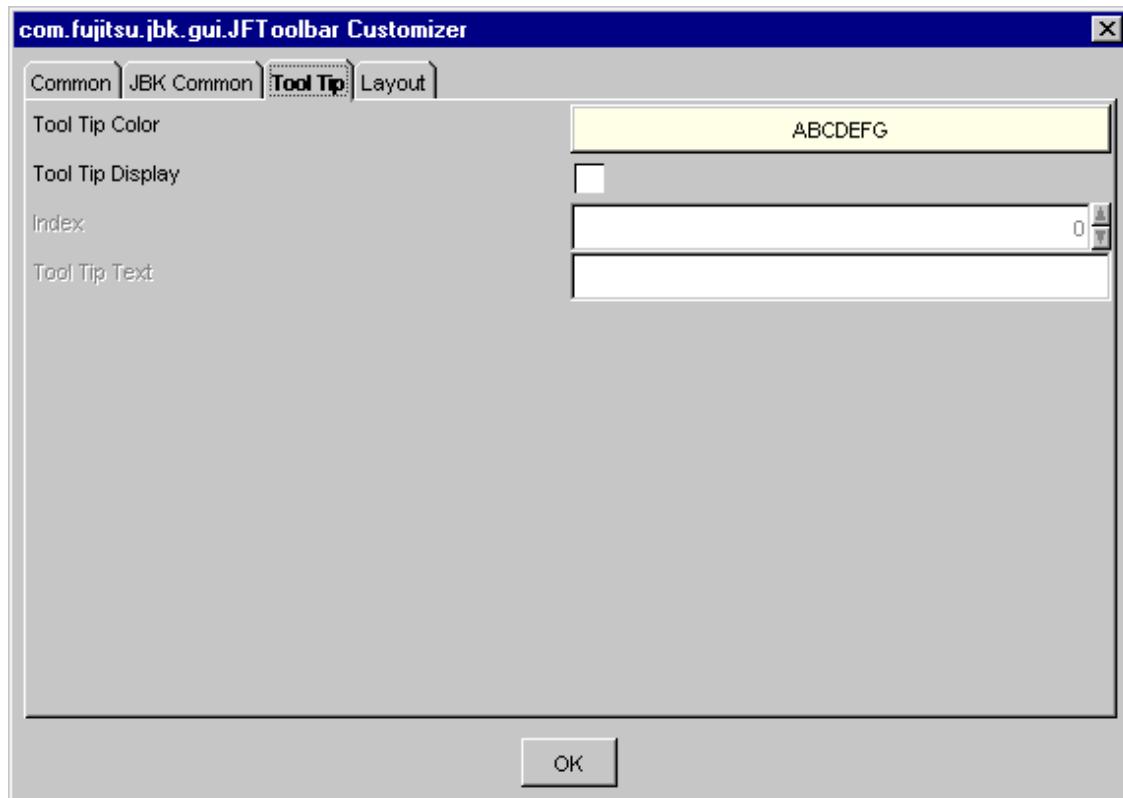
Name	Parameters	Explanation
removeAll		Deletes all components.
requestFocus		Requests an input focus.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
transferFocus		Moves the focus to the next component.

Customizer

- [Component common property](#)
- [JBK GUI common property](#)
- Tool Tip

Set the tool tip attribute.

In the initial status, no 'Index' or 'Tool Tip Text' can be set. Using the screen designer (screen edit function) of the integrated development environment, paste components on a tool bar, then make the settings.



Tool Tip Color

Set the foreground color and background color of the tool tip. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Tool Tip Display

Set display/no display for the tool tip. When this item is checked, and the mouse cursor is positioned on the tool bar button, the tool tip is displayed.

Index

Specify the index of the component to set the tool tip text. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of components minus 1.

Tool Tip Text

Set the tool tip text in the component specified by 'Index'.



Note

If you used the screen designer of the integrated development environment, this method may be called before a method that pastes components on a tool bar.

Because such a situation leads to an error, use the source editor of the integrated development environment to change the order of calling methods as follows:

Example: Pasting an image button on the tool bar and setting "Change" in the tool tip text

```
JFImageButton button = new JFImageButton("Change");
JFToolbar toolbar = new JFToolbar();

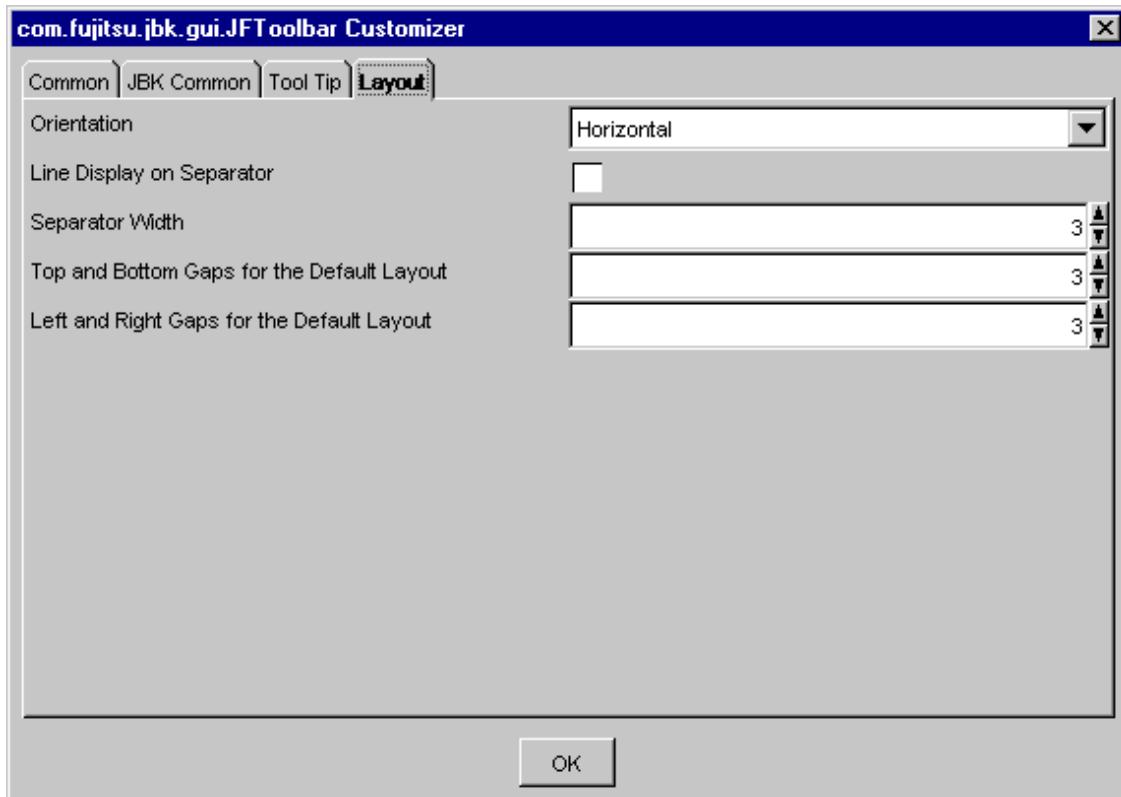
tabpanel.add(button);           // Paste an image button on the tool bar.
toolbar.setToolTipText(0,"Change"); // Set tool tip text.
```

- Layout

Set the tool bar layout.

The 'Line Display on Separator' and 'Separator Width' are effective only at the time specified separator.

The Separator isn't able to add, insert, remove by Customizer. When the Separator is operated, use the source editor of the integrated development environment.



Orientation

Select the tool bar orientation from Vertical/Horizontal.

Line Display on Separator

Sets whether to display the line to the separator. If this item is checked, to display the line to the separator

Separator Width

Set the separator width with a pixel value. Specify from 1 to 2147483647 as the separator width.

Top and Bottom Gaps for the Default Layout

When the 'Default' is set for the 'Layout,' set the spacing from the top and bottom edges of the tool bar to the component by a pixel value. Specify from 0 to 2147483647 as the spacing from the top and bottom edges in default layout.

Left and Right Gaps for the Default Layout

When the 'Default' is set for the 'Layout,' set the spacing from the left and right edges of the tool bar to the component by a pixel value. Specify from 0 to 2147483647 as the spacing from the left and right edges in default layout.

3.34 Tree format Bean

The tree format Bean has the following information and [Customizer](#) functions.

- [Property information](#)
- [Event information](#)
- [Method information](#)



"Package Guide"- JFTree

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
borderColor	java.awt.Color	Y	Y	Border line color
borderType	int	Y	Y	Border line type
borderWidth	int	Y	Y	Border line width
closedImage	java.awt.Image	Y		Closed icon image
columnCount	int	Y	Y	Number of data columns
columnWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Width of the specified column
columns	int	Y	Y	Number of display columns
componentOrientation	java.awt.ComponentOrientation	Y	Y	The orientation of the string. It depends on the language
controlDraw	boolean	Y	Y	Whether to control drawing
doubleClickOpen	boolean	Y	Y	Whether to open and close by double-clicking
editable	boolean	Y	Y	Editing enabled/disabled
enableChangeWidth	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Changing of the display width of the specified column enabled/disabled
enableMenu	boolean	Y	Y	Whether to display the popup menu
enableSort	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Sorting with the specified column data as key enabled/disabled
enableToolTip	boolean	Y	Y	Whether to display the tool tip
enabled	boolean	Y	Y	Whether enabled
focusTraversalKeysEnabled	boolean	Y	Y	Whether the focus traversal key is available
focusable	boolean	Y	Y	Whether the focus can be set
font	java.awt.Font	Y	Y	Font
foreground	java.awt.Color	Y	Y	Foreground color
headerAlignment	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Display position of the header column character string

Name	Type	Reference	Setting	Explanation
headerBackground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Background color of the specified column header
headerForeground	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Foreground color of the specified column header
headerHeight	int		Y	Height of the header
headerObject	com.fujitsu.jbk.gui.JFIndexObjectProperty		Y	Object of the column specified by the header
headerObjectToString	(Array) com.fujitsu.jbk.gui.JFObjectToString	(A rr ay) Y	(A rr ay) Y	Object for setting the character string set in the column header
ignoreRepaint	boolean		Y	Whether the paint message of the operating system should be ignored
inactiveBackground	java.awt.Color		Y	Background color when inactive
inactiveForeground	java.awt.Color		Y	Foreground color when inactive
indent	int		Y	Indent value
justBeforeClosed	com.fujitsu.jbk.gui.JFTreeNode		Y	Node closed immediately prior
justBeforeOpened	com.fujitsu.jbk.gui.JFTreeNode		Y	Node opened immediately prior
lineColor	java.awt.Color		Y	Layer line color
locale	java.util.Locale		Y	Locale information
multipleMode	boolean		Y	Multiple selection mode/single selection mode
name	java.lang.String		Y	Name
openable	boolean		Y	Whether node open and close are enabled/disabled
openedImage	java.awt.Image		Y	Opened icon image
preferredColumnWidth	(Array) int	(A rr ay) Y		Optimum column width of the specified column
remoteFont	boolean		Y	Whether the registered font is a remote font
rowHeight	int		Y	Node display height

Name	Type	Reference	Setting	Explanation
rowSelectMode	boolean	Y	Y	First-column only selection mode/single line selection mode
rows	int	Y	Y	Number of displayed lines
selectedObjects	java.lang.Object[]	Y		Node array in the selected status
toolTipText	java.lang.String	Y	Y	Tool tip text
viewMode	boolean	Y	Y	Whether the mode is view mode
visible	boolean	Y	Y	Whether visible
visibleButton	boolean	Y	Y	Display/no display of the open and close button
visibleHeader	boolean	Y	Y	Display/no display of the header
visibleLine	boolean	Y	Y	Display/no display of the layer line
visibleNodeCount	int	Y		Number of visible nodes
visibleRoot	boolean	Y	Y	Display/no display of the route
visibleTopIndex	com.fujitsu.jbk.gui.JFPosition	Y	Y	The position of the visible node displayed in the top left in the sphere of data
wheelScrollingEnabled	boolean	Y	Y	Whether to enable scrollbar operation with mouse wheel

Event information

Name	Listener	Addition/removal	Method	Explanation
action	java.awt.event.ActionListener	addActionListener removeActionListener	actionPerformed	Is issued when the mouse is double-clicked or when the Enter key is pressed.
adjustment	java.awt.event.AdjustmentListener	addAdjustmentListener removeAdjustmentListener	adjustmentValueChanged	Is issued when the value of the adjustable object changes from this scroll bar.
component	java.awt.event.ComponentListener	addComponentListener removeComponentListener	componentResized	Is issued when the component status changes.
			componentMoved	
			componentShown	
			componentHidden	
focus	java.awt.event.FocusListener	addFocusListener removeFocusListener	focusGained	Is issued when the focus moves.
			focusLost	
inputMethod	java.awt.event.InputMethodListener	addInputMethodListener	caretPositionChanged	Is issued when the input method status changes.

Name	Listener	Addition/removal	Method	Explanation
		removeInputMethodListener	inputMethodTextChanged	
item	java.awt.event.ItemListener	addItemListener removeItemListener	itemStateChanged	Is issued when the line is selected/deselected.
key	java.awt.event.KeyListener	addKeyListener removeKeyListener	keyTyped	Is issued by key operation.
			keyPressed	
			keyReleased	
mouse	java.awt.event.MouseListener	addMouseListener removeMouseListener	mouseClicked	Is issued by mouse operation.
			mousePressed	
			mouseReleased	
			mouseEntered	
			mouseExited	
mouseMotion	java.awt.event.MouseMotionListener	addMouseMotionListener removeMouseMotionListener	mouseDragged	Is issued when the mouse moves.
			mouseMoved	
mouseWheel	java.awt.event.MouseWheelListener	addMouseWheelListener removeMouseWheelListener	mouseWheelMoved	Is issued by mouse wheel operation.
propertyChange	java.beans.PropertyChangeListener	addPropertyChangeListener removePropertyChangeListener	propertyChange	Is issued when the property changes.
tree	com.fujitsu.jbk.gui.JFTreeListener	addTreeListener removeTreeListener	nodeOpened	Is issued when the node opens and closes.
			nodeClosed	

Method information

Name	Parameters	Explanation
close	com.fujitsu.jbk.gui.JFTreeNode	Closes the specified node.
closeAll		Closes all nodes.
deselect	com.fujitsu.jbk.gui.JFTreeNode	Deselects the specified node.
getContainsNode	int	Returns the node of the specified coordinates.
	int	
hideToolTip		Erases the tool tip.
open	com.fujitsu.jbk.gui.JFTreeNode	Opens the specified node.
openAll		Opens all nodes.
refresh	com.fujitsu.jbk.gui.JFTreeNode	Specifies the node whose data has been changed and reflects the change in the view.
requestFocus		Requests an input focus.

Name	Parameters	Explanation
select	com.fujitsu.jbk.gui.JFTreeNode	Selects the specified node.
showToolTip	java.lang.String	Displays the tool tip.
	java.awt.Point	
	java.awt.Dimension	
	long	
sort	int	Uses the information of the specified column to sort lines.
	boolean	
transferFocus		Moves the focus to the next component.

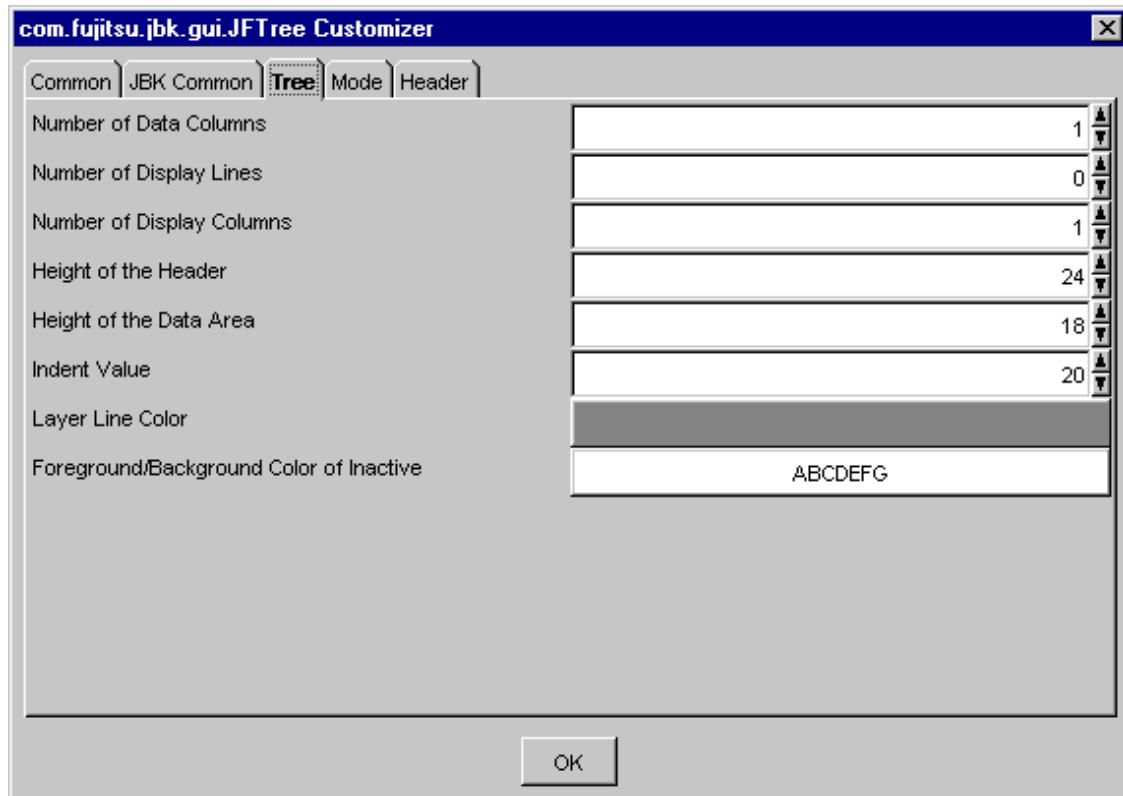
Customizer

- Component common property

- JBK GUI common property

- Tree

Sets the number of tree columns and data.



Number of Data Columns

Sets the number of columns. Specify from 1 to 2147483647 as the number of data columns.

Number of Display Lines

Set the number of display lines. Specify from 0 to 2147483647 as the number of display lines.

Number of Display Columns

Set the number of display columns. Specify from 0 to 2147483647 as the number of display columns.

Height of the Header

Set the height of the header with a pixel value. Specify from 0 to 2147483647 as the height of the header.



A system sometimes becomes unstable when very big value is established in the height of the header.

Height of the Data Area

Set the height of the data-area line with a pixel value. Specify from 0 to 2147483647 as the height of the data area.



A system sometimes becomes unstable when very big value is established in the height of the data area.

Indent Value

A node of a different level is indented and displayed. Set the indent value with a pixel value. Specify from 5 to 2147483647 as the indent value.

Layer Line Color

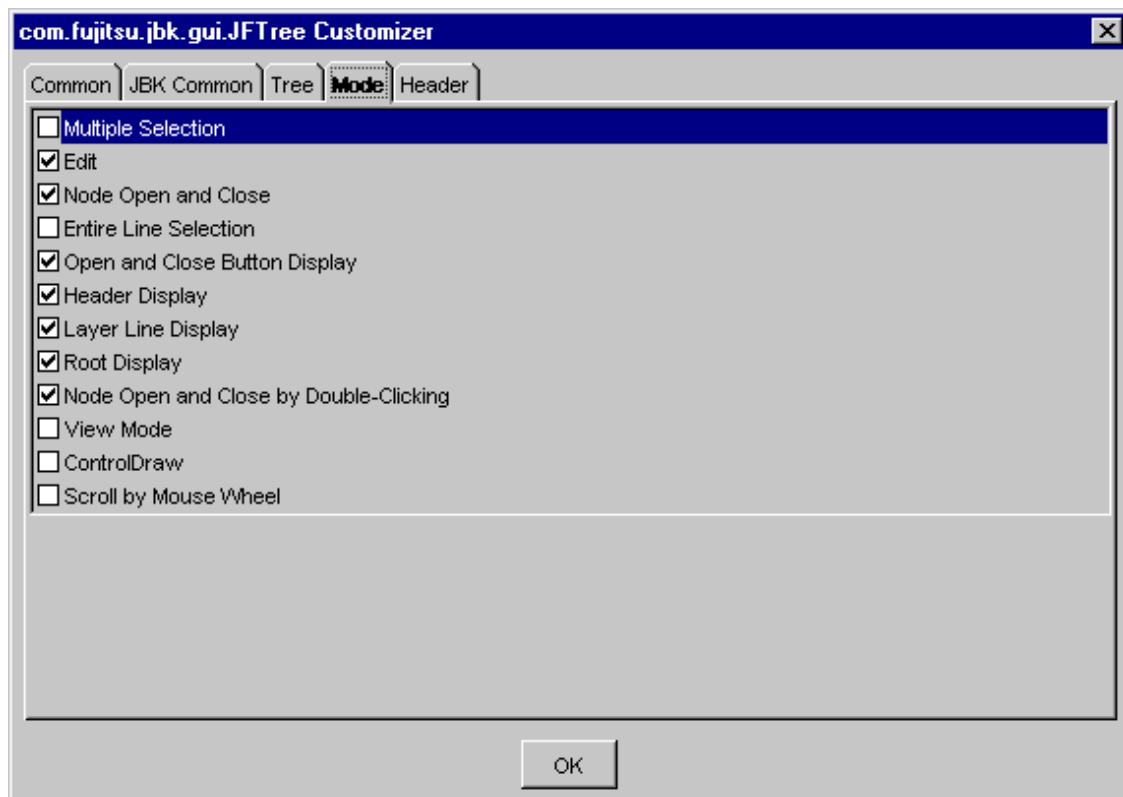
Set the color of the layer line. When the button is pressed, [Color setting dialog](#) is displayed.

Foreground/Background Color of Inactive

Set the foreground/background color of inactive. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

- Mode

Set various tree modes such as multiple selection and editing.



Multiple Selection

Set whether to enable multiple selection. If this item is checked, multiple selection is enabled. If this item is not checked, single selection is enabled.

Edit

Set whether editing is enabled. If this item is checked, editing is enabled.

If editing is enabled, data can be edited by clicking the data of the first column with the node selected.

Node Open and Close

Set whether to enable the node to be opened and closed. If this item is checked, the node can be opened and closed.

Entire Line Selection

Set whether to select the entire line. If this item is checked, the entire line can be selected.

Open and Close Button Display

Set display/no display for the open and close button. If this item is checked, the open and close button is displayed.

Header Display

Set display/no display for the header. If this item is checked, the header is displayed.

Layer Line Display

Set display/no display for the layer line. If this item is checked, the layer line is displayed.

Root Display

Set display/no display for the root node. If this item is checked, the root node is displayed.

Node Open and Close by Double-Clicking

Set whether to open and close the node by double-clicking. If this item is checked, the node can be opened and closed by double-clicking.

View Mode

Set whether to enable the view mode. If this item is checked, the mode becomes view mode and tree editing is disabled.

ControlDraw

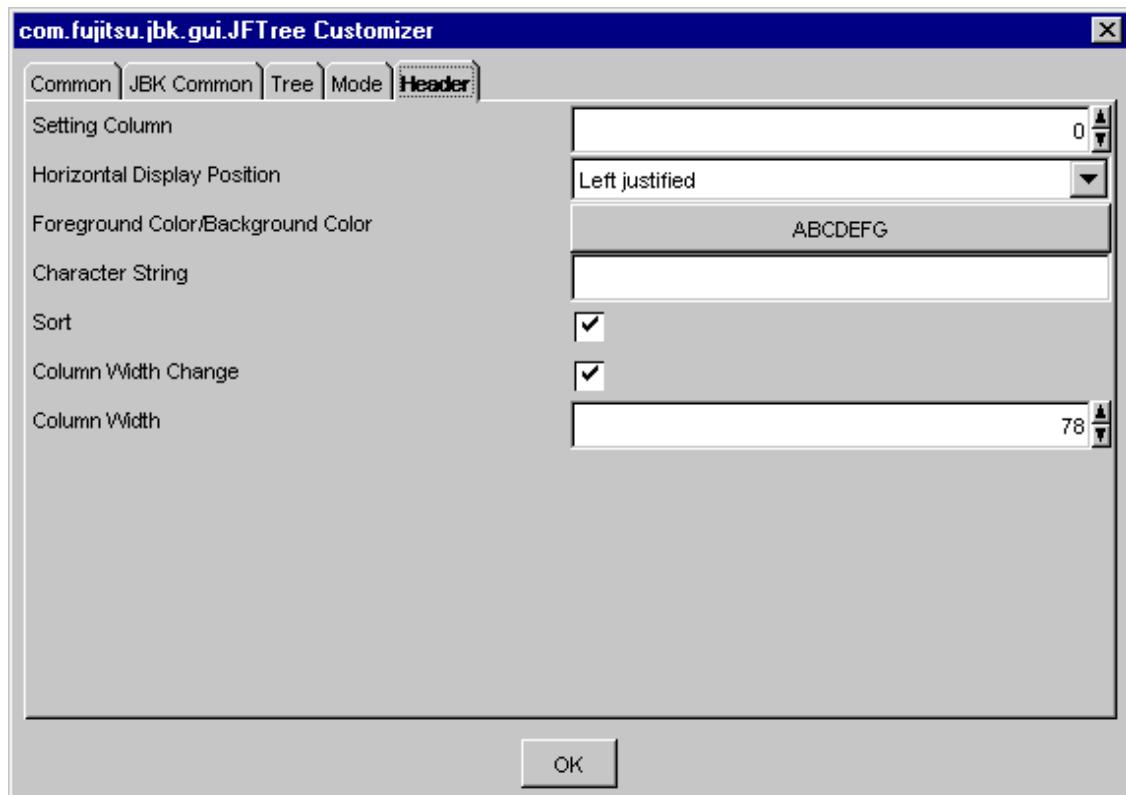
Set whether to control drawing or not. If this item is checked, Tree is not drawn until this mode is not set.

Scroll by Mouse Wheel

Set whether to enable scrolling with mouse wheel. If checked, scrolling with mouse wheel operation is enabled.

- Header

Sets the tree header information.



Setting Column

Specify the column index of the header to be set. For the index, set a series of positive integers starting at 0. The maximum value of the index is the number of data columns minus 1.

For a column thus specified, set a 'Horizontal Display Position', 'Foreground Color/Background Color', 'Character String', 'Sort', 'Column Width Change' and 'Column Width' shown below.

Horizontal Display Position

Select the horizontal display position of the strings from among Left justified, Centered or Right justified.

Foreground Color/Background Color

Set the foreground color and background color of the header. When the button is pressed, [Foreground Color/Background Color] setting dialog is displayed.

Character String

Set the header character string.

Sort

Set whether to enable sorting. If this item is checked, sorting is enabled.

Column Width Change

Set whether to enable the changing of the column width. If this item is checked, the column width can be changed.

When the mouse pointer is positioned on the column boundary while changing is enabled, the mouse pointer changes its form. Dragging in that status can change the column width.

Column Width

Set the column width with a pixel value. Specify from 0 to 2147483647 as the column width.

3.35 Customizer (common section)

The Bean customizer of the basic GUI library has the following common properties and common property setting dialogs.

- [Component common property](#)
- [JBK GUI common property](#)
- [\[Foreground Color/Background Color\] setting dialog](#)
- [\[Border Color\] setting dialog](#)
- [Color setting dialog](#)
- [\[Font\] setting dialog](#)
- [\[Input Limitation\] setting dialog](#)
- [\[Cell\] setting dialog](#)



Note

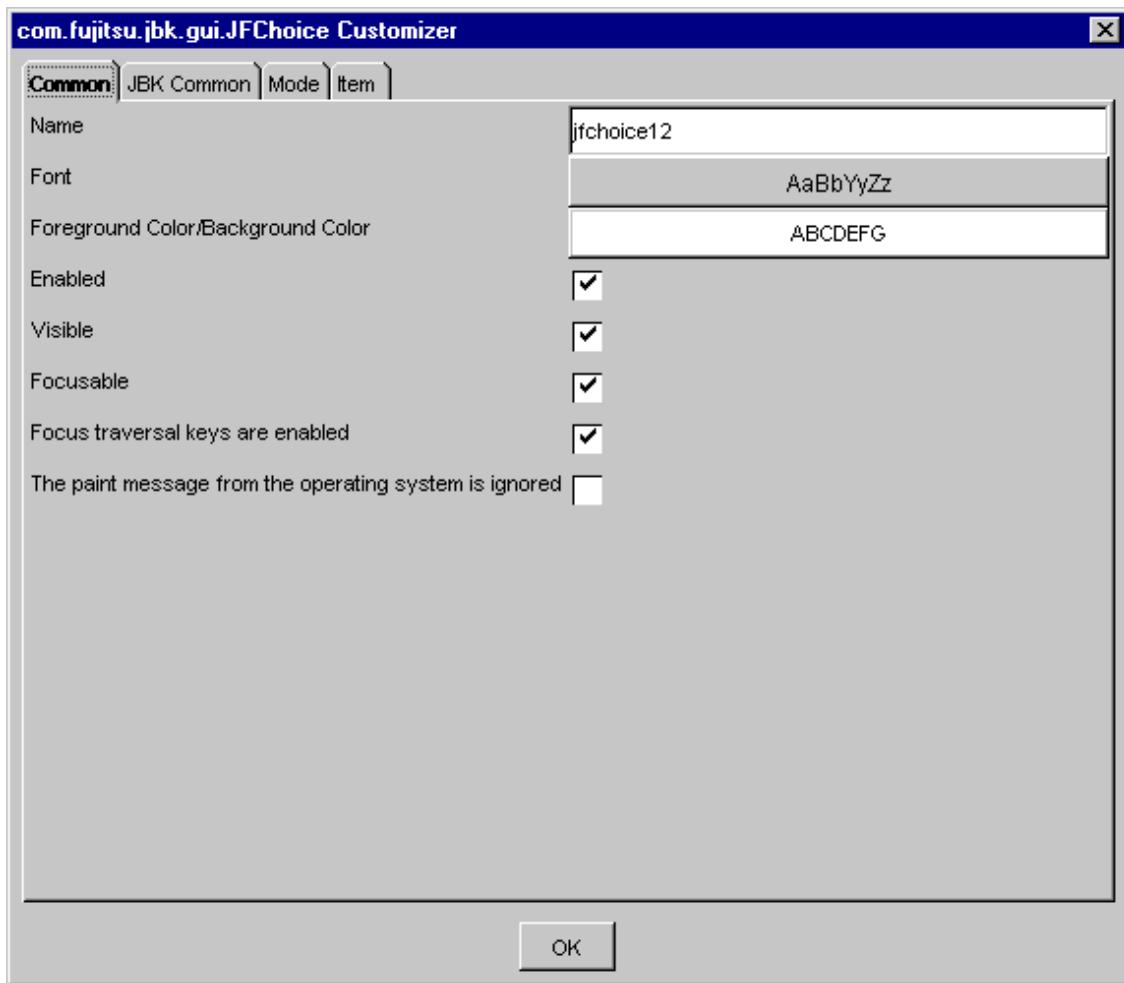
Note the following when you manipulate the Bean customizer of the basic GUI library.

A memory shortage may occur, depending on the environment, if a large numeric value or character string is set in the customizer screen.

It is recommended to restart the system if a memory shortage message appears on the screen.

Component common property

Set the component common information.



Name

Set the component name.

This function, unlike the screen designer (screen edit function) of the integrated development environment that sets the name of an instance itself, sets a name as a property value in the instance. Use this property value to set the same name for different instances.

The initial value is the GUIBeans library name plus the number of instances created in the current development environment. The ordinal number in the initial value "GUIBeans library name + ordinal number" increments but has no other regularity because the number of instances created differs from that on the screen designer depending on the development environment and operation procedure.

Font

Set the font. When the button is pressed, [\[Font\] setting dialog](#) is displayed.

Foreground Color/Background Color

Set the foreground color and background color. When the button is pressed, [\[Foreground Color/Background Color\]](#) setting dialog is displayed.

Enabled

Set whether the component operation is enabled. If this item is checked, the component operation is enabled.

Visible

Set whether to display the component on the screen. If this item is checked, the component is displayed.

Enabling focus setting

Set whether to enable setting of the focus for the component. If this item is checked, the focus can be set.

Using focus traversal key

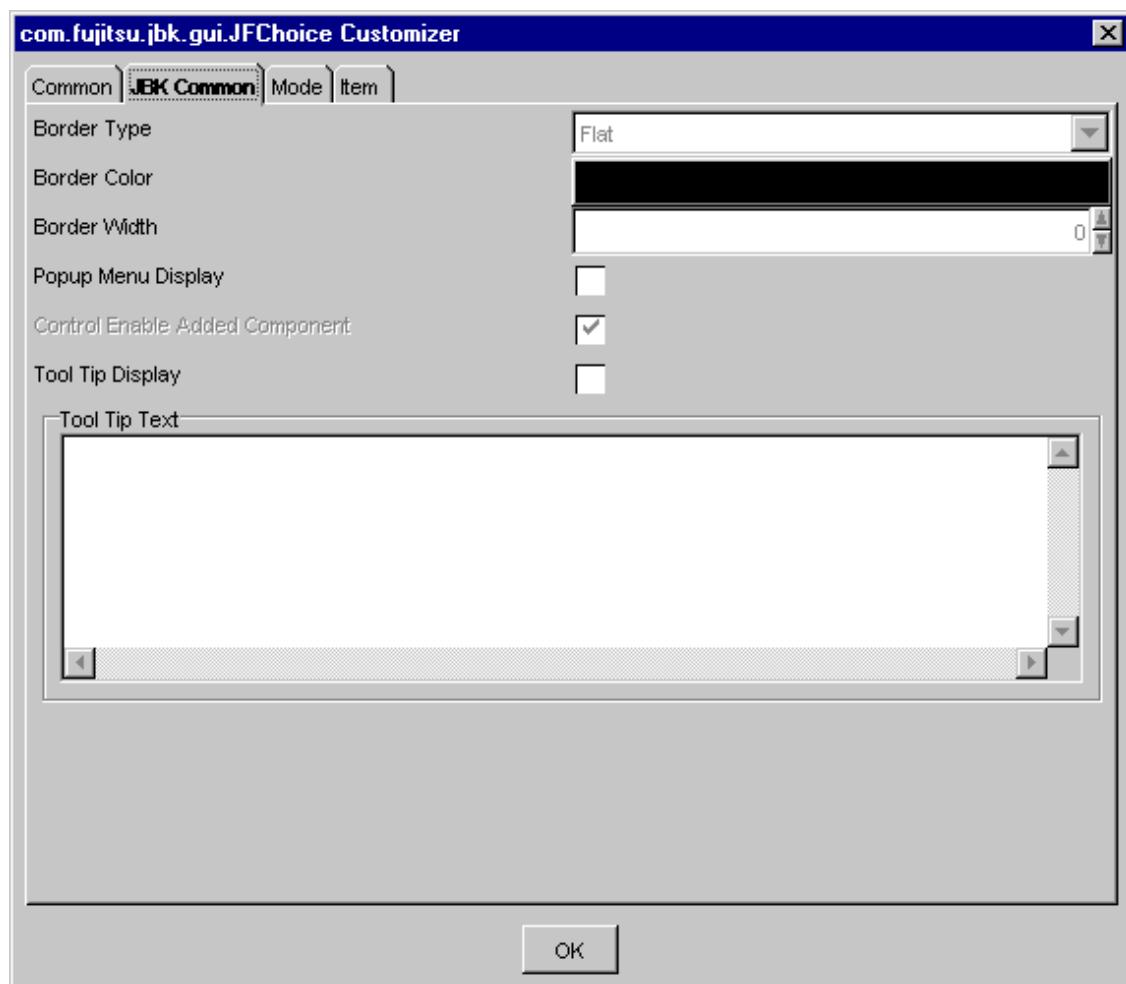
Set whether to use the focus traversal key. If this item is checked, focus can be used.

Ignoring paint messages from OS

Set whether to ignore paint messages from the OS. If this item is checked, paint messages from the OS are ignored.

JBK GUI common property

Set the component common information.



Border Type

Select the component border from among None, Flat, Convex, or Concave.

This is invalid in each class (Bean) of choice, slider, status bar, and tool bar.

Border Color

Set the border color.

Press the button to display [\[Border Color\] setting dialog](#).

You can set a border color if the border type is Flat, Convex, and Concave.

This entry is disabled for the slider, status bar, and tool bar classes (Beans).

Border Width

Set the border width with a pixel value. Specify from 0 to 2147483647 as the border width.

This entry is disabled for the choice, slider, status bar, and tool bar classes (Beans).

Note

A system sometimes becomes unstable when very big value is established in the border width.

Popup Menu Display

Set display/no display for the popup menu. If this item is checked, the popup menu can be displayed with applications.

Control Enable Added Component

Set whether to control enable added component in accordance with this component.

If this item is checked, set to control component.

This entry is enabled for the group box, light weight panel, table, tab panel, and tool bar classes (Beans). And this entry is disabled for other classes (Beans).

Tool Tip Display

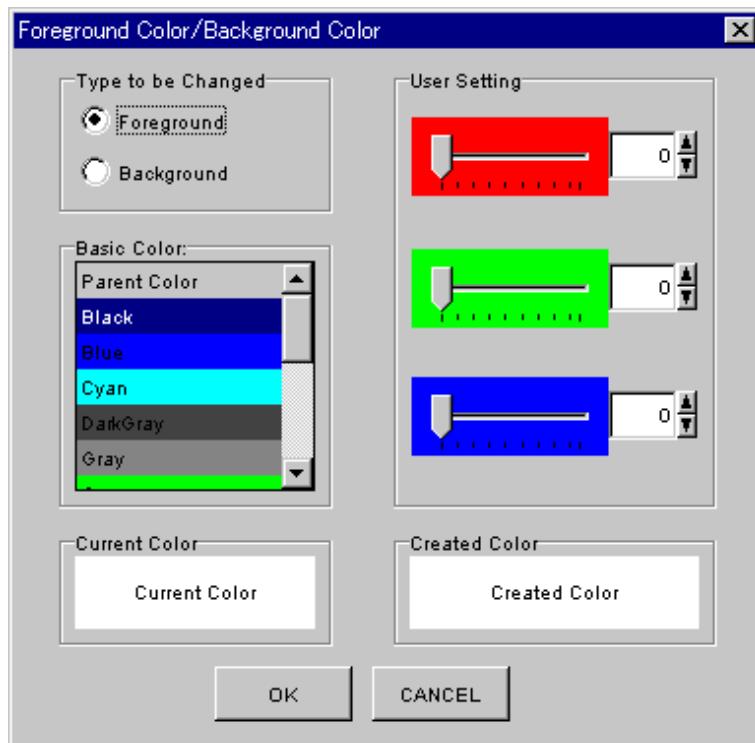
Set display/no display for the tool tip. If this item is checked, the tool tip is displayed.

Tool Tip Text

Set the character string displayed as the tool tip.

[Foreground Color/Background Color] setting dialog

Set the foreground color and background color.



Type to be Changed

Select the target of change (Foreground Color/Background Color).

Basic Color

Select one of the colors provided in a list beforehand from among Default Color, Black, Blue, Cyan, DarkGray, Gray, Green, LightGray, Magenta, Orange, Pink, Red, White, Yellow.

Current Color

Displays the current foreground color and background color.

User Setting

Displays the RGB value of the current color with a slider or numeric value (0-255). You can set a precise color that cannot be displayed by the basic color.

Created Color

Displays the foreground color and background color of the created color.

OK

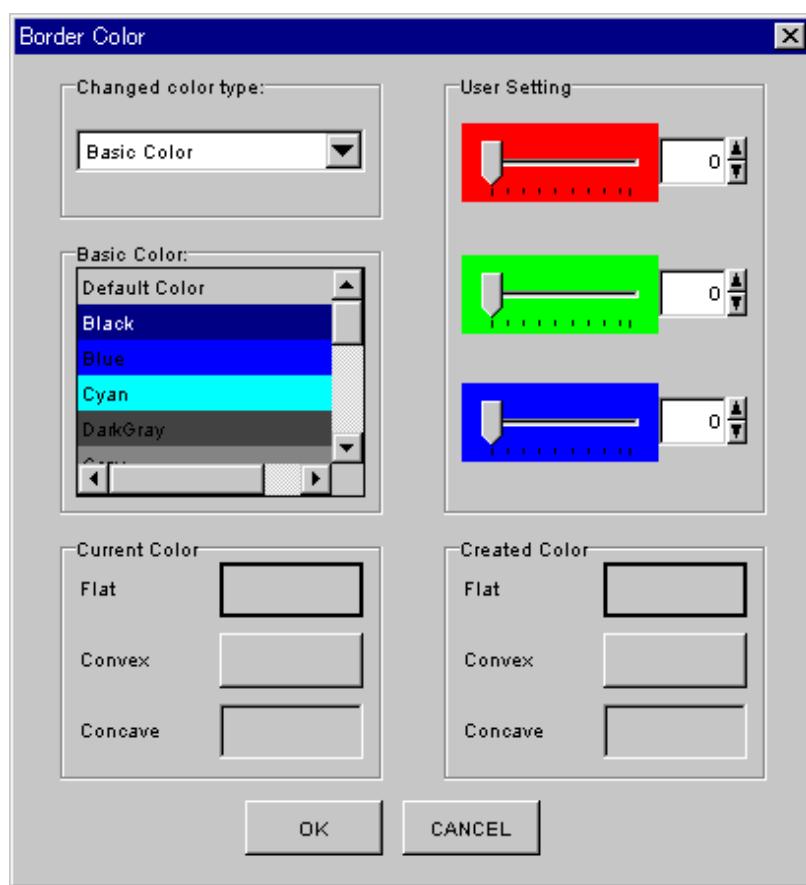
Specified value is made effective, and dialog is closed.

CANCEL

Specified value is invalidated, and dialog is closed.

[Border Color] setting dialog

Set the border color.



Changed color type:

Select the color type to change from among Basic Color, lightHighlight, highlight, DarkShadow, or Shadow.

Basic Color

Select one of the colors provided in a list beforehand from among Default Color, Black, Blue, Cyan, DarkGray, Gray, Green, LightGray, Magenta, Orange, Pink, Red, White, Yellow.

Current Color

Display the current border colors.

User Setting

Displays the RGB value of the current color with a slider or numeric value (0-255). You can set a precise color that cannot be displayed by the basic color.

Created Color

Display created border colors.

OK

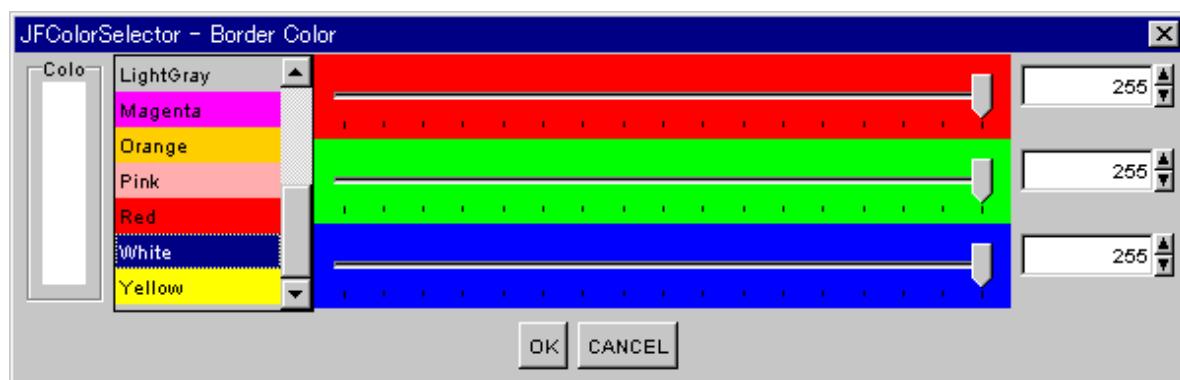
Specified value is made effective, and dialog is closed.

CANCEL

Specified value is invalidated, and dialog is closed.

Color setting dialog

Set the color.



Color

Displays the current color. When the color is set with the basic color or slider, the color to be set is displayed.

Basic color list

Select one of the colors provided in a list beforehand from among Default Color, Black, Blue, Cyan, DarkGray, Gray, Green, LightGray, Magenta, Orange, Pink, Red, White, Yellow.

RGB setting

Displays the RGB value of the current color with a slider or numeric value (0-255). You can set a precise color that cannot be displayed by the basic color.

OK

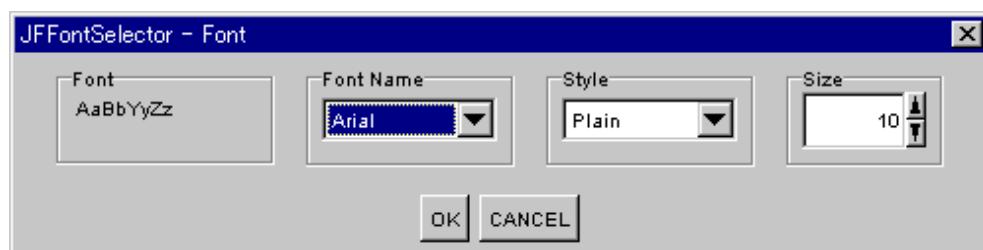
Specified value is made effective, and dialog is closed.

CANCEL

Specified value is invalidated, and dialog is closed.

[Font] setting dialog

Set the component font.



Font

Displays the font to be used by the component.

Font Name

Select the font.

Style

Select the font style from among plain, bold, italic, or bold italic.

Size

Set the font size. Specify from 0 to 2147483647 as the font size.

OK

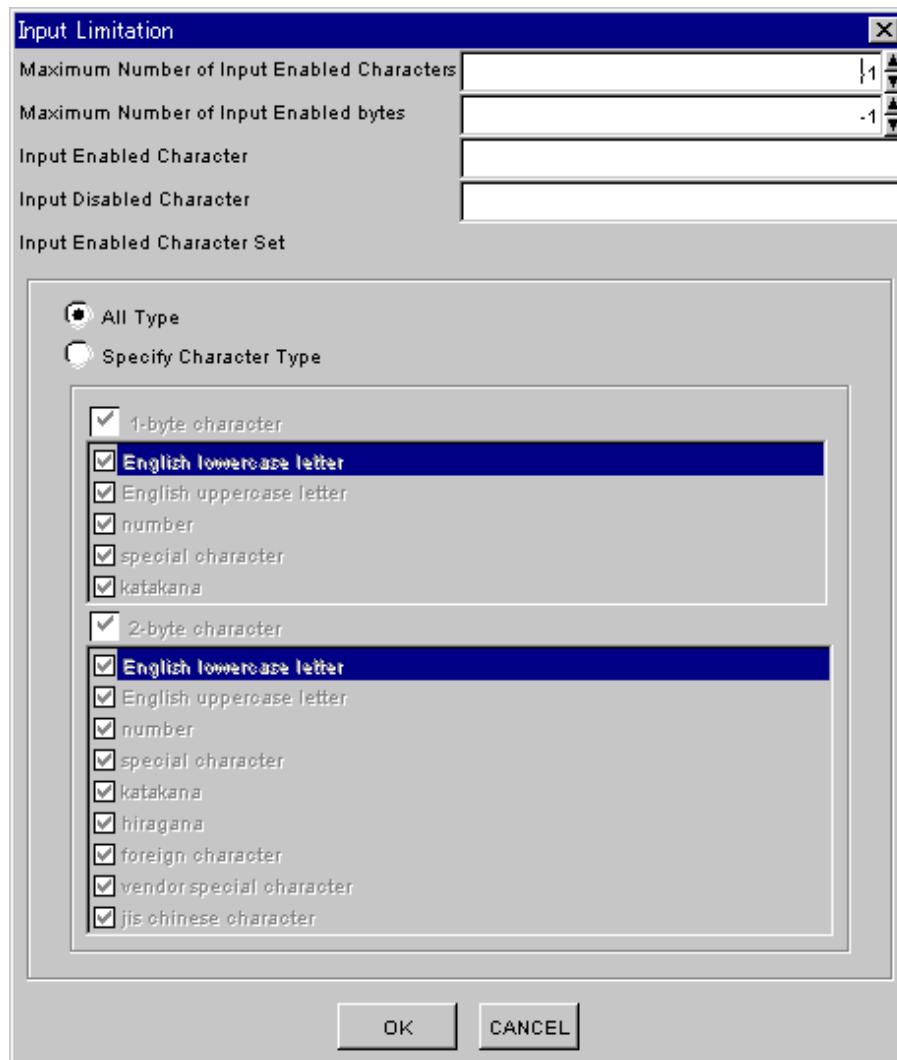
Specified value is made effective, and dialog is closed.

CANCEL

Specified value is invalidated, and dialog is closed.

[Input Limitation] setting dialog

Set the input restriction of character string.



Maximum Number of Input Enabled Characters

Set the maximum number of input enabled characters. When -1 is set, the maximum number of input characters is not checked. Specify from -1 to 2147483647 as the maximum number of input enabled characters.

Maximum Number of Input Enabled bytes

Set the maximum number of input-enabled bytes. When -1 is set, the maximum number of input input-enabled bytes is not checked. The specified value is invalid if maximum number of input enabled characters is bigger than -1. Specify from -1 to 2147483647 as the maximum number of input-enabled bytes.

Input Enabled Character

Set the characters that to be allowed for input. Set as a character string the characters that you want to allow for input.

Input Disabled Character

Set the characters that to be not allowed for input. Set as a character string the characters that you do not want to allow for input.

Input Enabled Character Set

Set the input enabled character set from All Type and Specify Character Type.

In case of Specify Character Type, if the type isn't checked, it is not enabled. If the part of the character kind which can't be inputted be made to input, it is specified by 'Input Enabled Character'.

OK

Specified value is made effective, and dialog is closed.

CANCEL

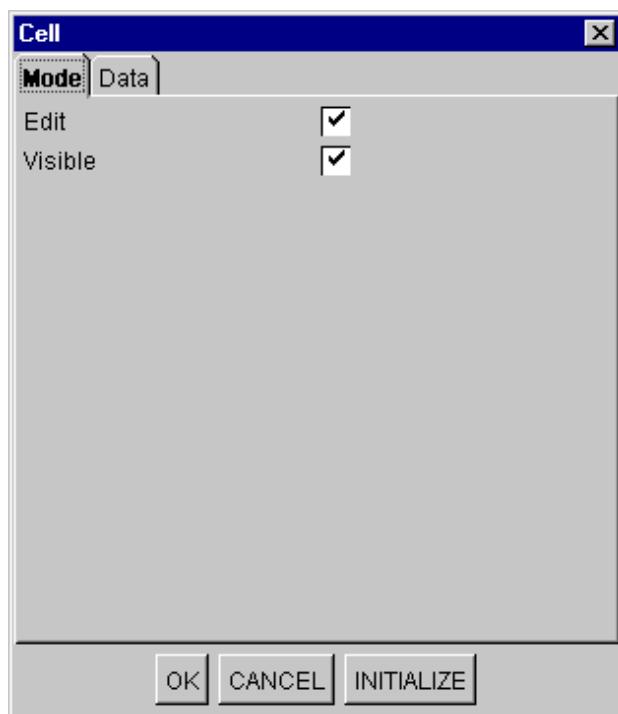
Specified value is invalidated, and dialog is closed.

[Cell] setting dialog

Set the cell property.

- Mode

Set the mode of cells.



Edit

Set whether editing is enabled. If this item is checked, editing is enabled.

Visible

Set display/no display for the value. If this item is checked, the value is displayed.

OK

Specified value is made effective, and dialog is closed.

CANCEL

Specified value is invalidated, and dialog is closed.

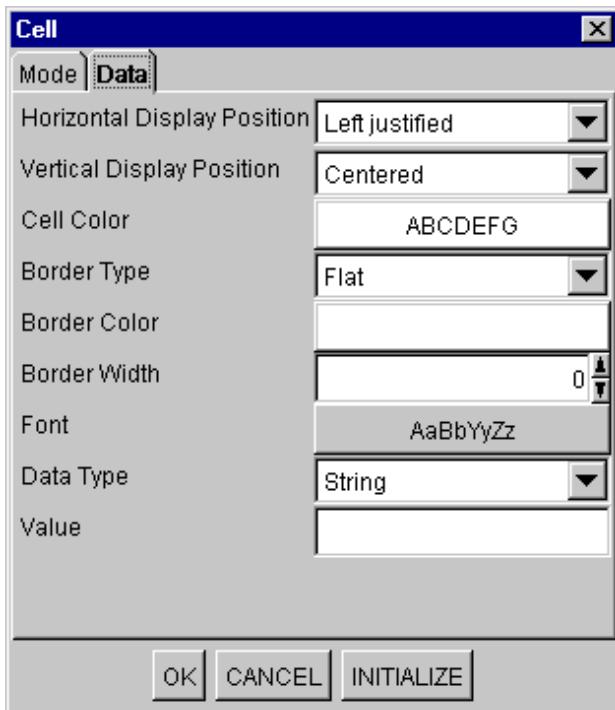
INITIALIZE

Set the initial value of the cell.

The initial value is construct new cell's one.

- **Data**

Set the cell data.



Horizontal Display Position

Select the horizontal display position of the strings from among Left justified, Centered or Right justified.

Vertical Display Position

Select the vertical display position of the strings from among Top-justified, Centered or Bottom-justified.

Cell Color

Set the foreground color and background color of the cell. When the button is pressed, [\[Foreground Color/Background Color\] setting dialog](#) is displayed.

Border Type

Set the border type from among Flat, Convex, or Concave.

Border Color

Set the border color. When the button is pressed, [Color setting dialog](#) is displayed.

Border Width

Set the border width with a pixel value. Specify from 0 to 5 as the border width.

Font

Set the font. When the button is pressed, [\[Font\] setting dialog](#) is displayed.

Data Type

Select the data type from among String, Numeric or Boolean. The input field of 'Value' depends on 'Data Type'.

Value

Set the value of the selected node column. The set value is set as the following object class.

- String type: java.lang.String
- Numeric type: java.lang.Long
- Boolean type: java.lang.Boolean

OK

Specified value is made effective, and dialog is closed.

CANCEL

Specified value is invalidated, and dialog is closed.

INITIALIZE

Set the initial value of the cell.

The initial value is construct new cell's one.

Chapter 4 UI Screen Control Library

The UI Screen Control Library consists the following facilities.

- UI Screen Control Facility
- Window Control Facility
- Object Control Facility

4.1 UI Screen Control Facility

The UI Screen Control Facility has features for supporting applications of applets requiring transitions of user interface screens. Features for management and control of large numbers of UI Screens, including loading, displaying, and removal of screens are supported. The UI Screen Control Facility has the following benefits for managing applications or applets using large number of UI Screens.

- Facilitates management of UI Screens.

In the case of applets, it becomes possible to display multiple UI Screens in a single applet, instead of having to define different applets for each screen. Using only a single applet alleviates the extra HTML analysis that would be required when using multiple applets in separate pages, and is advantageous in increasing screen transition speed.

- Allows individual specification of UI Screen creation timing.

For frequently used screens, the screens can be specified to be instantiated during initialization, or instantiated asynchronously in the background. For screens used infrequently, the screens can be specified to be instantiated when the screen is to be displayed. By specifying the screen instantiation timing, the applet instantiation performance can be tuned.

- Allows individual specification of UI Screen release timing.

This allows tuning of memory resources of constructed applications or applets.

- Input field components implementing a common interface can be managed together in screen (or multiple page) units.

This allows the programmer to able to access the input field components using name labels or numbers. The resultant source code is clean and easily maintained, and the programmer can be freed from having to code different methods for accessing each input component type.

Also UI Screens with multiple pages can be coded without the overhead of managing different pages.

UI Screens are here as following subclasses implemented by JFCEntryLogicInterface.

- JFCEntryPanel
- JFLEntryPanel
- JFLEntryScrollablePanel
- JFCEntryInterfacePanel
- JFLEntryInterfacePanel
- JFLEntryInterfaceScrollablePanel
- JFCMultiPagePanel
- JFLMultiPagePanel
- JFLMultiPageScrollablePanel

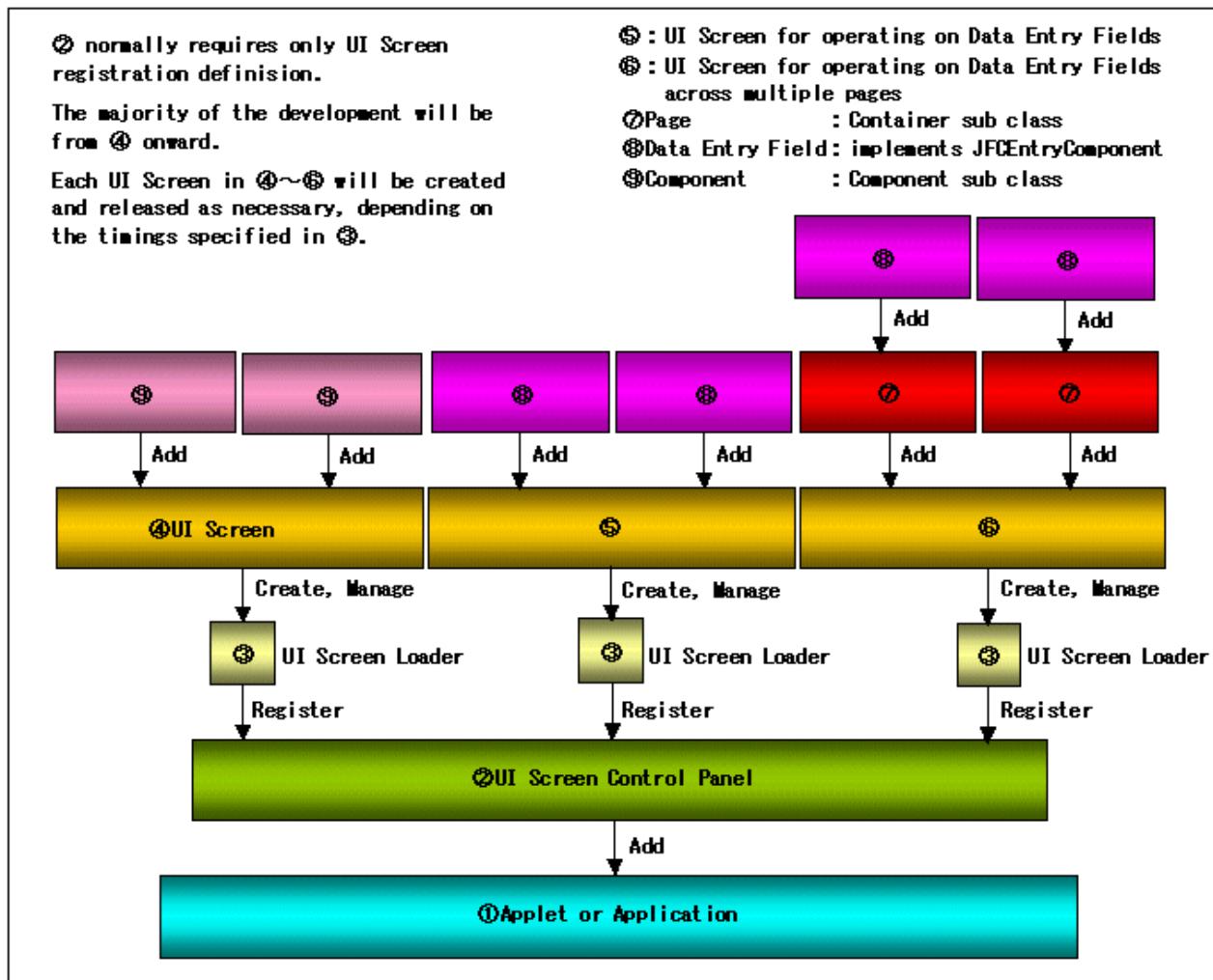
Classes provided in UI Screen Control Facility

UI Screen Control Facility provides the following classes (Refer to [Figure 4.1 Relationship of classes provided in the UI Screen Control Facility](#)).

Table 4.1 Class Functionality Listing

Class Name	Overview of functionality
JFCCardInterface (UI Screen Control Panel Interface)	This is the UI Screen Control Panel Interface, defines UI Screen Control Panel.
JFCCardPanel JFLCardPanel JFCTabbedPanel (UI Screen Control Panel)	These are the UI Screen Control Panel class that manages collections of UI Screens, and is the central component for the UI Screen Control Facility. These are extended from class Container, and can be added to subclasses of the Container class (Panel, Applet, etc).
JFCPanelLoader (Abstract class of UI Screen Loader)	This is the UI Screen Loader, which creates and manages one UI Screen. The creation and release timing of the screen object are set as attributes. JFCPanelLoader is an abstract class, and the creation and release methods for the screen object must be defined in the subclass.
JFCEntryPanelLoader (UI Screen Loader)	This is the subclass of JFCPanelLoader, that defines a method to create UI Screen using a specified name. The created UI Screen is a class implements JFCEntryLogicInterface.
JFCEntryLogicInterface (UI Screen Interface)	This is the UI Screen Interface, defines UI Screen managed by JFCEntryPanelLoader. UI Screen, that managed by UI Screen Control Panel and JFCEntryPanelLoader, must be implemented this interface.
JFCScrollablePanel JFLScrollablePanel (Scroll Panel)	This is the Scroll Panel features both scrollbars and methods to enable horizontal and vertical scrolling within the component. Provides 4 different Scrollbar Display Policies.
JFCEntryPanel JFLEntryPanel JFLEntryScrollablePanel (UI Screen)	These are the UI Screens feature to manage screen names and interfaces to UI Screen Control Panel and JFCEntryPanelLoader. JFCEntryPanel and JFLEntryScrollablePanel also has scrolling functions.
JFCEntryInterfacePanel JFLEntryInterfacePanel JFLEntryInterfaceScrollablePanel (UI Screen for operating on Data Entry Fields)	These are the UI Screens for operating on Data Entry Field, feature a common interface to access Data Entry Field sub-components that have implemented the JFCEntryComponent interface. In addition to the features, these classes allows simple and clear coding regardless of the actual component type of the Data Entry Field sub-components.
JFCMultiPagePanel JFLMultiPagePanel JFLMultiPageScrollablePanel (UI Screen for operating on Data Entry Fields across multiple pages)	These are the UI Screen for operating on Data Entry Field across multiple pages, manages Data Entry Fields over multiple pages, by adding pages(extended from Container class) to this class. Each page has Data Entry Field sub-components that have implemented the JFCEntryComponent interface. In addition to the features, these classes allows simple and clear coding regardless of the actual page location of the Data Entry Field.
JFCEntryComponent (Data Entry Field Interface)	This is the Data Entry Field interface. Components implemented this interface, can be managed by a Container implements JFCEntryInterface.
JFCEntryInterface (UI Screen Management Interface)	This is the UI Screen Management interface, and UI Screen for operating on Data Entry Fields must be implemented this interface.

Figure 4.1 Relationship of classes provided in the UI Screen Control Facility



Note

The UI Screen Control Facility utilizes functions that do not operate correctly under the JavaVM from Microsoft Corporation. To run applets using the UI Screen Control Facility in Internet Explorer, use Java Plug-in or JBK Plug-in to change the JavaVM accessed.

4.1.1 Development Flow

The development flow using the UI Screen Control Facility is as follows.

1. Create each UI Screen from subclass of the following classes.

- JFCEntryPanel
- JFLEntryPanel
- JFLEntryScrollPane
- JFCEntryInterfacePanel
- JFLEntryInterfacePanel
- JFLEntryInterfaceScrollPane
- JFCMultiPagePanel
- JFLMultiPagePanel

- JFLMultiPageScrollablePanel

These screens can be developed efficiently using a Java development environment supporting a GUI builder.

2. Create a UI Screen Control Panel from subclass of the following classes.

- JFCCardPanel
- JFLCardPanel
- JFCTabbedPanel

3. Register UI Screens (created in step 1) to the UI Screen Control Panel (created in step 2).

Register each UI Screen by redefining createPanels method. Registration is done by calling the UI Screen Registration method addPanel. The UI Screen names specified for each UI Screen using the addPanel method must be unique among the UI Screen names.

For example, to register a subclass of JFCEntryPanel created in step 1 called Panel1, the following code may be used.

```
protected void createPanels() {
    this.addPanel(.....);
    this.addPanel(.....);
    this.addPanel("BusinessScreen1", "Panel1", JFCPanelLoader.DELAYED_CREATION,
JFCPanelLoader.TEMPORARY_INSTANCE);
    //addPanel arguments are described below.
    //1st argument specifies UI Screen name (unique name used to specify transition
target during UI Screen transition).
    //2nd argument specifies the created panel class name.
    //3rd argument specifies the UI Screen object creation timing.
    // For the above example, the UI Screen is created when the UI screen is
displayed.
    // Refer to Creation Timing List below for other creation timings.
    //4th argument specified the UI Screen release timing.
    // For the above example, the UI Screen is released when this UI Screen is
released after a screen transition.
    // Refer to Release Timing List below for other release timings.
    this.addPanel(.....);
    ....
}
```

Table 4.2 Creation Timing List

Timing	Class Variable to specify	Description
at Initialization	JFCObjectLoader.INIT_CREATION	Creates the UI screen object immediately when UI Screen is registered. Normally, addPanel is called from within createPanels method, and createPanels method is called during initialization of the application or applet, so in this case the UI screen object will be created during application or applet startup.
when Displayed	JFCObjectLoader.DELAYED_CREATION	Creates the UI Screen when it is displayed. This is the creation timing recommended for applications or applets with a large number of UI Screens.
Asynchronously at Initialization	JFCObjectLoader.BACKGROUND_CREATION	Creates the UI screen object when addPanel method is called, using a separate thread from the application or applet. This creation timing is specified to increase screen transition speed for large UI Screens that are frequently used, when application or applet startup performance is also important.

Table 4.3 Release Timing List

Timing	Class Variable to specify	Description
when Hidden	JFCObjectLoader.TEMPORARY_INSTANCE	The UI Screen is held in memory only while it is displayed, and the UI Screen is released from memory when it is hidden after a screen transition. This timing is used for applications or applets designed to save on memory resource usage.
Buffered	JFCObjectLoader.BUFFERED_INSTANCE	The UI Screen is held in a memory buffer when it is hidden after a screen transition. When the number of UI Screen held in the memory buffer exceeds the limit of buffered screens set in UI Screen Control Panel, the oldest UI Screen is released from memory. The maximum number of UI Screens held in buffered memory can be set by calling setReleaseBufferSize method in UI Screen Control Panel. The default value is 10.
at Application/ Applet termination	JFCObjectLoader.PERMANENT_INSTANCE	The UI Screen is held in memory until the UI Screen Control Panel managing the UI screen is released from memory. Normally, this is synonymous to termination time of the application or applet.

4. Add the JFCCardPanel subclass created in step 2 to an application or applet.

Here, an extension to the UI Screen registration process in step 2, is proposed. The createPanels method in the UI Screen Control Panel subclass may be implemented to register UI Screens specified in an external data file. This way, the UI Screen registration can be done by modifying only the external data file, so the only coding required will be in implementing the UI Screen classes in step 1.

JFCScrollPane uses an off screen image to draw the ViewPanel.

The minimum memory (in bytes) required for the off screen image can be calculated as below:

minimum memory required = 3 X width of ViewPanel X height of ViewPanel

When using many UI Screens with ViewPanels much larger than the displayable area, it is necessary to specify the UI Screen release timings in order to adjust the memory usage.

4.1.2 UI Screen Transitions

Here, how to develop UI Screens and to transits UI Screen is described.

1. Each UI Screen is created by extending from following class.
 - JFCEntryPanel
 - JFLEEntryPanel

- JFLEntryScrollPane
- JFCEntryInterfacePanel
- JFLEntryInterfacePanel
- JFLEntryInterfaceScrollPane
- JFCMultiPagePanel
- JFLMultiPagePanel
- JFLMultiPageScrollPane

2. To transit UI Screen, the following method is used.

- setPanel(int) or setPanel(String)

These methods are also defined in JFCCardPanel, JFLCardPanel and JFCTabbedPanel.

3. In order to execute some code immediately before screen transition, redefine exposingPanel method for the UI Screen to be displayed.
 - exposingPanel(String)
4. In order to execute some code immediately after screen transition, redefine exposedPanel method for the UI screen to be displayed.
 - exposedPanel(String)

4.1.3 Transferring data between UI Screens

In a system using applets for UI Screens, when the UI Screen is switched to a different page, the UI Screen for the previous page may be removed from memory.

- JFCObjectLoader.TEMPORARY_INSTANCE
- JFCObjectLoader.BUFFERED_INSTANCE

In this case the current UI Screen cannot access the UI Screen data for the previous page anymore.

In order to avoid this situation, the UI Screen Control Facility provides a storage for UI Screen data in a separate object from the UI Screen (The UI screen data is stored in JFCPanelLoader).

To store UI Screen data in the separate storage, the UI Screen must call setData method in UI Screen. Other UI Screens can call getData method in UI Screen and specify the target UI Screen, in order to retrieve the UI Screen data for the target UI Screen.

UI Screen data is defined here as data displayed by the UI Screen. Any object can be stored, since the setData method takes an Object class for the argument. Many UI Screen data consist of multiple data items, and the use of the Vector or Hashtable class is recommended for transferring data.

4.1.4 Data Entry Fields

Data Entry Field is defined as an input component implementing JFCEntryComponent interface.

For different subclasses of the Component class, the methods for the following operations differ between the subclasses. This necessitates having to call different methods for the different subclasses respectively.

Table 4.4 Component Method

Operation	Method name		
	JFImageButton	JFChoice	JFToggleButton
setting and getting value	getLabel setLabel	getText setText	getLabel setLabel
Setting and getting multiple values	(no applicable method)	add	(no applicable method)

Operation	Method name		
	JFImageButton	JFChoice	JFToggleButton
Adding event listeners	addActionListener addTextListener addItemListener		addItemListener

By implementing the JFCEntryComponent interface, the above operations can be defined using a common interface. This allows the common access of UI components regardless of the actual component type.

A sample implementation of the JFCEntryComponent interface is shown below.

Table 4.5 Sample implementation of JFCEntryComponent

Method name	Operation for Button	Operation for List
getValue	get label in Button.	get String in 1st element.
setValue	set label in Button.	set String in 1st element.
getVectorValues	(do nothing)	get Strings for all elements.
setVectorValues	(do nothing)	add multiple Strings.
clear	clear label in Button.	clear String in 1st element.
setErrorStatus	set color of label in Button to red/black.	set color of border to red/black.

4.1.5 Accessing Data Input Fields from UI Screens

When creating UI Screens with Data Entry Fields, by using a subclass of JFCEntryInterfacePanel class for the UI Screen, the following functions can be called for the Data Entry Fields using a unique name or number to identify the fields.

- Setting and getting single values
- Setting and getting multiple values
- Switching to and from error display modes
- Enabling and disabling fields
- Setting focuses

The following describes the development flow for using UI Screen for operating on Data Entry Fields class to access Data Entry Fields.

1. Adding Data Entry Fields to UI Screen for operating on Data Entry Panel.

For example, assuming EntryComponent is a Data Entry Field class, the following code adds three Data Entry Fields to the UI Screen.

```
public void init(JFCPanelLoader panelloader) {
    EntryComponent eYear = new EntryComponent();
    EntryComponent eMonth = new EntryComponent();
    EntryComponent eDay = new EntryComponent();

    eYear.setName("year"); //set name of Data Entry Field eYear to "year"
    eMonth.setName("month"); //set name of Data Entry Field eMonth to "month"
    eDay.setName("day"); //set name of Data Entry Field eDay to "day"

    this.add(eYear, 0); //Add Data Entry Field eYear to UI Screen(Data Entry
Field number is 0).
    this.add(eMonth, 1); //Add Data Entry Field eMonth to UI Screen(Data Entry
Field number is 1).
    this.add(eDay, 2); //Add Data Entry Field eDay to UI Screen(Data Entry
Field number is 2).

    ...
}
```

2. Accessing Data Entry Field on UI Screen.

Table 4.6 Example 1. Switching to error display mode when the "year" value is incorrect.

```
private doSomething() {  
    ...  
    String strYear = this.getValue("year");      //get value in Data Entry Field eYear  
    int     iYear   = Integer.parseInt(strYear); //convert to integer value  
    if(iYear < 0)    //If year is less than 0, set error display mode for Data Entry  
    Field eYear to true.  
    this.setErrorStatus("year", true);  
    ...  
}
```

Table 4.7 Example 2. Getting all the Data Entry Field data, and storing the data in the UI Screen data storage.

```
private doSomethingElse() {  
    ...  
    Vector values = this.getVectorValues(); //retrieving all the Data Entry Field  
values  
    this.setData(values);                //Store the Data Entry Field data in  
the UI Screen data storage.  
    ...  
}
```



Note

Components that do not implement JFCEntryComponent interface will not be managed by UI Screen for operating on Data Entry Fields class.

4.1.6 Using Data Entry Fields across Multiple Pages

To sequentially enumerate Data Entry Fields added to multiple pages (Container subclasses) and manage the entry fields together, the user must define a subclass of the UI Screen for operating Data Entry Fields across multiple pages (JFCMultiPagePanel, JFLMultiPagePanel and JFLMultiPageScrollablePanel).

Only subclasses of Container may be added to the UI Screen for operating Data Entry Fields across multiple pages class using add(Component) or addPage() methods. Internally the UI Screen for operating Data Entry Fields across multiple pages uses CardLayout layout manager to manage the containers, and the added page can be switched and displayed by calling setCurrentPageNumber(int) method.

The development flow using the UI Screen for operating Data Entry Fields across multiple pages class is as below.

1. Create each page and add Data Entry Fields.

Define each page to extend a subclass of Container, then add Data Entry Fields.

2. Add each page to the UI Screen for operating Data Entry Fields across multiple pages.

Add each page to the UI Screen for operating Data Entry Fields across multiple pages using the following methods.

- add(Component)
- addPage()

3. Accessing Data Entry Fields on the UI Screen for operating Data Entry Fields across multiple pages.

The Data Entry Fields can be accessed similarly to accessing Data Entry Fields on the UI Screen for operating Data Entry Fields (e.g. JFCEntryInterfacePanel).

Also, for the UI Screen for operating Data Entry Fields across multiple pages, the following methods can be used to move the focus to the Data Entry Fields when accessing the field.

If the focus is set on a Data Entry Field in a different page, then the page is switched and displayed automatically.

- setErrorStatus(int, boolean, boolean)

- setErrorStatus(String, boolean, boolean)
- setValue(int, String, boolean)
- setValue(String, String, boolean)



Note

The UI Screen for operating Data Entry Fields across multiple pages uses the CardLayout layout manager to make page transitions. Therefore, the setLayout method cannot be used to change to a different layout manager.

4.1.7 Scrolling UI Screens

The following UI Screen extending JFCScrollablePanel or JFLScrollablePanel class can utilize the scrolling features.

- JFCEEntryPanel
- JFLEntryScrollPane
- JFCEEntryInterfacePanel
- JFLEntryInterfaceScrollPane
- JFCMultiPagePanel
- JFLMultiPageScrollPane

The UI Screen can define a virtual screen region larger than the actual visible region, and the displayed region of the virtual screen region can be changed by moving the scrollbars or calling methods.

1. Scroll Policies

4 different scroll policies can be used.

The scroll policy is set by specifying the scroll policy as an argument in the class constructor method. The scroll policy can also be modified immediately after the UI screen object is instantiated by calling setScrollbarDisplayPolicy(int) method. To retrieve the current scroll policy, getScrollbarDisplayPolicy() method is used.

Table 4.8 4 Scroll Policy types

PREVENT_SCROLL	The scrolling feature is disabled. This is the default scroll policy if the scroll policy is not specified.
SCROLLBARS_ALWAYS	The scrolling feature is enabled, and the scrollbars are always displayed.
SCROLLBARS_AS_NEEDED	The scrolling feature is enabled, and the scrollbars automatically appear when the visible region is smaller than the virtual screen region.
SCROLLBARS_NEVER	The scrolling feature is enabled, but the scrollbars are not displayed. Method calls are used to change the displayed region.

2. Size of Virtual Screen Region

To set the size of the virtual screen region, setViewSize(Dimension) method is used.

The virtual screen region may be smaller than the visible region, but the virtual screen region must be large enough to encompass all of the child components. If the virtual screen region assigned is not large enough, then the child components located beyond the virtual screen region will not be drawn correctly.

When the scroll policy is set to SCROLLBARS_ALWAYS, SCROLLBARS_AS_NEEDED, or SCROLLBARS_NEVER, then the size of the virtual screen region must be set. For PREVENT_SCROLL, the size of the virtual screen region is automatically fixed to fit in the visual region. In this case, the actual size of the virtual screen region will be the size of the visible region with the borders removed. When the scroll policy is PREVENT_SCROLL, the virtual screen region should not be altered by calling setViewSize method.

3. Scrolling Functions by method calls

Moving the displayed region of the virtual screen region (scrolling) can be done by operating the scrollbars and by method calls. In order to scroll the virtual screen region, the scroll policy must be SCROLLBARS_ALWAYS, SCROLLBARS_AS_NEEDED, or SCROLLBARS_NEVER. The virtual screen region must be larger than the visible region in order to scroll.

The following methods are provided for scrolling.

- moveViewPort(int, int)
- scrollViewPort(Component, int)
- showUpComponent(Component, int)
- setScrollPosition(int, int)
- setScrollPosition(Point)

4.2 Window Control Facility

The Window Control Facility has features for supporting applications or applets requiring transitions of windows. Features for management and control of large number of windows, including loading, displaying, and removal of windows are supported. The managed windows can be located either on the server or client hardware.

The Window Control Facility has the following benefits for managing applications or applets using large number of windows.

- Facilitates management of windows on the server.

In the case of applets, it becomes possible to display multiple windows in a single applet, instead of having to define different applets for each window. Using only a single applet alleviates the extra HTML analysis that would be required when using multiple applets in separate pages, and is advantageous in increasing window transition speed.

- Allows individual specification of window object instantiation timing.

The windows which are frequently used can be specified to be instantiated during initialization, or instantiated asynchronously in the background. And the windows which are infrequently used can be specified to be instantiated when the window is to be displayed. By specifying the window instantiation timing, the application or applet instantiation performance can be tuned.

- Allows individual specification of window object release timing.

This allows tuning of memory resources of constructed applications or applets.

Windows are defined here as subclasses of JFCFrame or JFCDialog. Window objects are instance objects of the above classes.

Servers are defined here as Web servers storing applets.

Classes provided in Window Control Facility

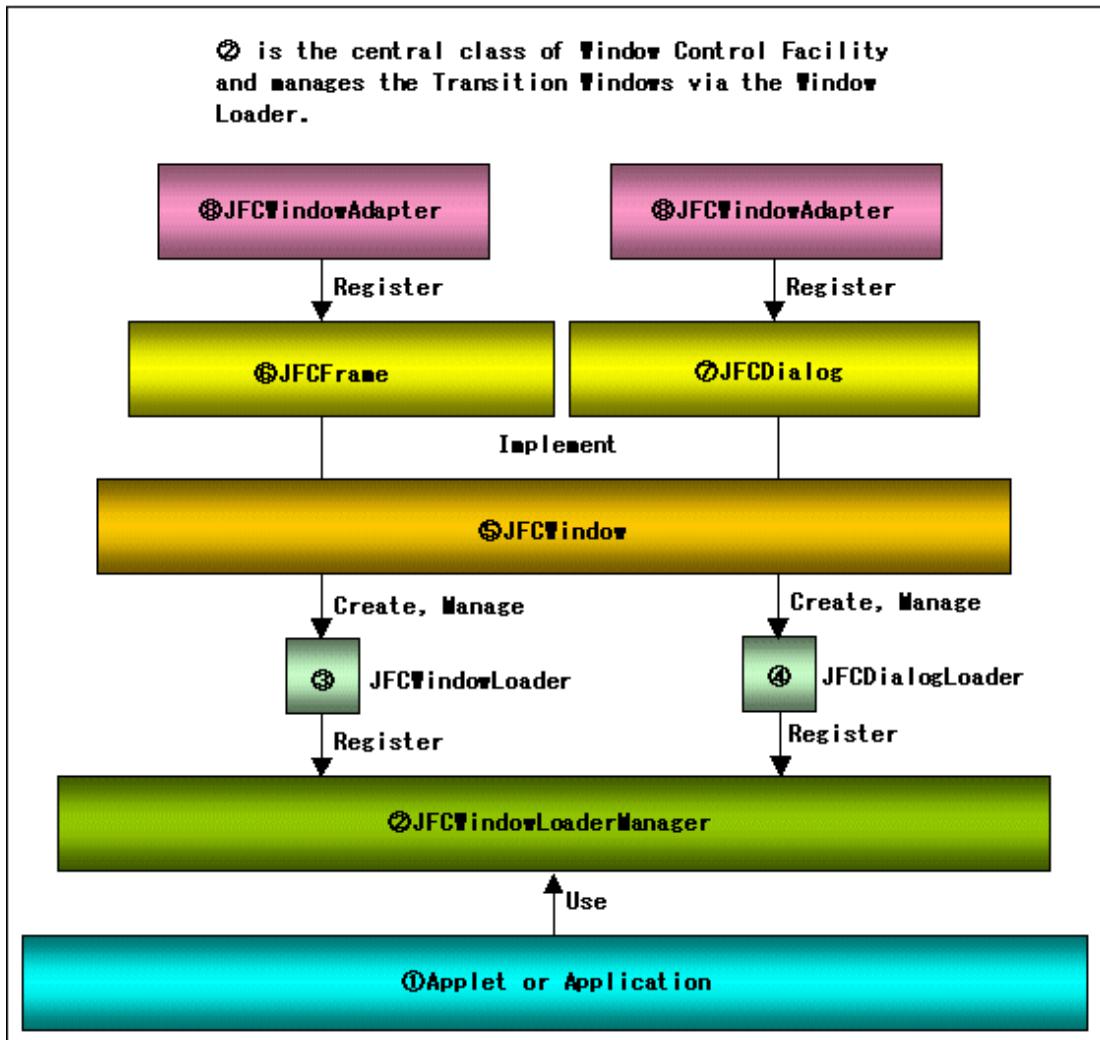
The Window Control Facility provides the following classes (Refer to [Figure 4.2 Relationship of classes provided in the Window Control Facility](#)).

Table 4.9 Class Functionality Listing

Class Name	Functionality Outline
JFCWindowLoaderManager	<p>This is the Window Control class that manages collections of windows, and is the central component of the Window Control Facility.</p> <p>Windows defined here as subclasses of JFCFrame or JFCDialog.</p> <p>The individual windows are managed via objects defined by subclasses of JFCWindowLoader or JFCDialogLoader, described below.</p> <p>Accordingly, JFCWindowLoaderManager manages the objects defined by subclasses of JFCWindowLoader or JFCDialogLoader via a Window Load Control list.</p>
JFCWindowLoader	<p>This is the Window Load Control class, which creates and manages one window object defined by subclass of JFCFrame.</p> <p>The creation and release timing of the window object are set as attributes.</p>

Class Name	Functionality Outline
JFCDialogLoader	<p>This is the subclass of JFCWindowLoader, which creates and manages one dialog object defined by subclass of JFCDialog.</p> <p>The creation and release timing for the dialog object is DELAYED_CREATION and TEMPORARY_INSTANCE respectively. Specifying other values of the creation and release timing of the dialog is not allowed.</p> <p>The creation and release timing of the dialog object are set as attributes.</p>
JFCFrame	<p>This is the Transition Frame class extended from AWT Frame class.</p> <p>This is the base class for all sub-frame class(the counterpart in UI Screen Control Library is JFCEEntryPanel). The addFrame method of JFCWindowLoaderManager(the counterpart in UI Screen Control Library is JFCCardPanel) add the frame window defined by the subclass of JFCFrame to the JFCWindowLoaderManager object, and the creation and release timing can be specified as parameters to addFrame method. Different values of the creation and release timings are defined as static variables in the JFCObjectLoader class. Once the window is added to the JFCWindowLoaderManager object, it can be made visible on the screen by calling the showWindow method of JFCWindowLoaderManager.</p>
JFCDialog	<p>This is the Transition Dialog class extended from AWT Dialog class.</p> <p>This is the base class for all sub-dialog class. The addDialog method of JFCWindowLoaderManager add the dialog object define by the subclass of JFCDialog to the JFCWindowLoaderManager object, and the dialog modality can be specified as the parameter to the addDialog method.</p>
JFCWindowAdapter	<p>This is the Transition Window Adapter class which implements the WindowListener interface. The object created from the JFCWindowAdapter class is registered with a subclass of JFCWindow or JFCDialog using the addWindowListener method of JFCFrame of JFCDialog, and unregistered using removeWindowListener method of JFCFrame or JFCDialog. When the window's status changes by virtue of being opened, closed, activated or deactivated, iconified or deiconified, the relevant method in the JFCWindowAdapter object is invoked, and the WindowEvent is passed to it.</p> <p>When the subclass of JFCWindowAdapter is defined, the methods of the parent class should always be called.</p>
JFCWindow	<p>This is the Transition Window Interface.</p> <p>The JFCWindow interface defines all necessary methods of JFCFrame/JFCDialog class, including init, display, transition and attribute get/set methods, etc. All classes that implement the JFCWindow interface should implement all the methods contained by it.</p>

Figure 4.2 Relationship of classes provided in the Window Control Facility



Note

The Window Control Facility utilizes functions that do not operate correctly under the JavaVM from Microsoft Corporation. To run applets using the Window Control Facility in Internet Explorer, use Java Plug-in or JBK Plug-in to change the JavaVM accessed.

4.2.1 Development Flow

The development flow using the Window Control Facility is as follows.

1. Create each window object from subclasses of **JFCFrame** or **JFCDialog**

This is done similarly to creating standard windows. These windows can be developed efficiently using a Java development environment supporting a GUI builder.

2. Define a subclass of **JFCWindowLoaderManager**, and register window objects

Register each window object by redefining **createWindows** method. By calling **addFrame** method, register the frame objects. By calling **addDialog** method, register the dialog objects. The window names specified for each window using the **addFrame** or **addDialog** method must be unique among the window names. For example, to register a subclass of **JFCFrame** and a subclass of **JFCDialog** created in Step 1 called **Frame1** and **Dialg1** respectively, the following code may be used.

```

protected void createWindows() {
    this.addFrame("BusinessFrame1", "Frame1", JFCObjectLoader.DELAYED_CREATION,
    JFCObjectLoader.TEMPORARY_INSTANCE);
  
```

```

this.addDialog("BusinessDialog1", "Dialog1", true);
//addFrame arguments are described below.
//1st argument specifies the frame name(unique name used to specify transition
target during window transition).
//2nd argument specifies the created frame class name.
//3rd argument specifies the frame object creation timing.
// For the above example, the frame object is created when the frame is
displayed.
// Refer to "Creation Timing List" below for other creation timings.
//4th argument specifies the frame object release timing.
// For the above example, the frmae object is released when the frame is not
showing after the window transition.
// Refer to "Release Timing List" below for other release timings.
//addDialog argument is decribed below.
//1st argument specifies the dialog name(unique name used to specify transition
target during window transition).
//2nd argument specifies the created dialog class name.
//3rd argument specifies the dialog modality.
// For the above example, the dialog will be constructed as a modal dialog.

this.addFrame(.....);
this.addDialog(.....);
....
}

```

Table 4.10 Creation Timing List

Timing	Class Variable to specify	Description
at Initialization	JFCObjectLoader.INIT_CREATION	Create the window object immediately when addFrame method is called. Normally, addFrame is called from within createWindows method, and createWindows method is called during initialization of the application or applet, so in this case the window objects will be created during the application or applet startup.
when Displayed	JFCObjectLoader.DELAYED_CREATION	Create the frame/dialog object when the frame/dialog is to be displayed. This is the creation timing recommended for applications or applets with a large number of windows.
Asynchronously at Initialization	JFCObjectLoader.BACKGROUND_CREATION	Create the window object when the addFrame method is called, using a separate thread from the application or applet. This creation timing is specified to increase window transition speed for windows that are frequently used, when application or applet startup performance is also important.

Table 4.11 Release Timing List

Timing	Class Variable to specify	Description
when Not Showing	JFCObjectLoader.TEMPORARY_INSTANCE	The frame/dialog object is held in memory only while the frame/dialog is showing, and the frame/dialog object is released from memory when the frame or dialog is not showing after window transition. This timing is used for applications or applets designed to save on memory resource usage.
Buffered	JFCObjectLoader.BUFFERED_INSTANCE	The window object is held in a memory buffer when the window is not showing after a window transition. When the number of window objects held in the memory buffer exceeds the limit of buffered windows set in JFCObjectLoaderManager, the oldest window object is released from memory. The maximum number of window objects held in buffered memory can be set by calling setReleaseBufferSize method of JFCObjectLoaderManager. The default value is 10.
at Application/ Applet termination	JFCObjectLoader.PERMANENT_INSTANCE	The window object is held in memory until the JFCWindowLoaderManager (or subclass of JFCWindowLoaderManager) managing the window object is released from memory. Normally, this is synonymous to termination time of the application or applet.

- After adding all frame/dialog class created in step 2, call showWindow method of JFCWindowLoaderManager to make the window show on screen.



Note

The applications or applets using Window Control Facility may use the setURLs or addURL method of JFCObjectLoader to specify the location of the sub-window class of JFCFrame or JFCDialog, so that the window class can be loaded via the network at the time of window object creation as if the window class is loaded locally. Note that in the case of applet, due to the security restriction, only the host from which the applet has been downloaded is trusted. The same restriction is applied when using setURLs or addURL in a applet. For the case of application, you can use setURLs and addURL as you wish.

4.2.2 Window Transitions

Each Transition Window is created by extending from JFCFrame or JFCDialog class. To change to other windows, showWindow method in JFCFrame/JFCDialog is used.

The destination window become active if it is showing. If it is not showing, show it and make it active. Since more than one window can be showing at the same time, the source window may also be showing after the window transition. Whether or not the window is showing when deactivate after the window transition is determined by the attribute value of the transition window, which can be obtained by calling isHiddenWhenDeactive method, and set by calling setHiddenWhenDeactive method in JFCFrame/JFCDialog.

In order to execute some code immediately before window transition, redefine exposingWindow method for the window to be changed to. And in order to execute some code immediately after window transition, redefine exposedWindow method for the window to be changed to.

4.2.3 Transferring data between Transition Windows

In order to get data of other Transition Window object, the Transition Window class provides the setData and getData methods. To store window data, setData method is used, and to get the window data, getData method is used.

Transition Window data is defined here as data contained by the Transition Window. Any object can be stored, since the setData method takes an Object class for the argument. Many window data consist of multiple data items, and the use of the Vector or Hashtable class is recommended for transferring data.

4.3 Object Control Facility

The Object Control Facility is described below.

The Object Control Facility has features for supporting applications or applets requiring management and control of large number of objects, including loading and removal of objects. The managed objects can be located either on the server or client hardware.

The Object Control Facility has the following benefits for managing applications or applets using large number of objects.

- Allows individual specification of object instantiation timing.

The objects which are frequently used can be specified to be instantiated during initialization, or instantiated asynchronously in the background. And the objects which are infrequently used can be specified to be instantiated when the object is to be used. By specifying the object instantiation timing, the application or applet instantiation performance can be tuned.

- Allows individual specification of object release timing.

This allows tuning of memory resources of constructed applications or applets.

Objects are defined here as subclasses of Java Object class.

Servers are defined here as Web servers storing applets.

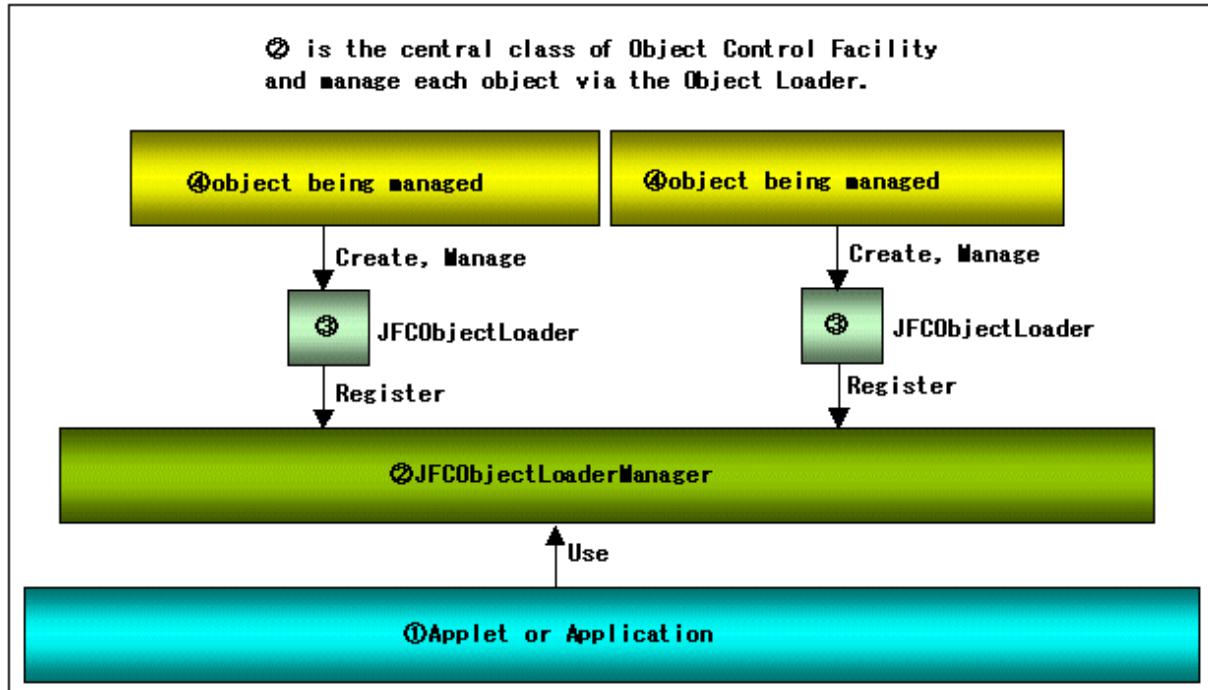
Classes provided in Object Control Facility

The Object Control Facility provides the following classes (Refer to [Figure 4.3 Relationship of classes provided in the Object Control Facility](#)).

Table 4.12 Class Functionality Listing

Class Name	Functionality Outline
JFCObjectLoaderManager	<p>This is the Object Control class that manages collections of objects, and is the central component of the Object Control Facility.</p> <p>The individual objects are managed via objects defined by the subclass of JFCObjectLoader, described below.</p> <p>Accordingly, JFCObjectLoaderManager manages the objects defined by the subclass of JFCObjectLoader via a Object Load Control list.</p>
JFCObjectLoader	<p>This is the Object Load Control class, which creates and manages one object.</p> <p>The creation and release timing of the object are set as attributes.</p>

Figure 4.3 Relationship of classes provided in the Object Control Facility



Note

The Object Control Facility utilizes functions that do not operate correctly under the JavaVM from Microsoft Corporation. To run applets using the Object Control Facility in Internet Explorer, use Java Plug-in or JBK Plug-in to change the JavaVM accessed.

4.3.1 Development Flow

The development flow using the Object Control Facility is as follows.

1. Create each object from subclasses of Java Object.
2. Define a subclass of JFCObjectLoaderManager, and register the objects.

By calling the add method in JFCObjectLoaderManager, register each object. The object names specified for each object using the add method must be unique among the object names.

3. After adding all objects created in step 2, manage and control the objects.

First, by calling the getObject method, get a reference to the object. If the object creation timing is specified as DELAYED_CREATION, realizeObject method should be called beforehand.

4. Second, appropriate operation can be performed on the object.
5. And last, to remove the object from the memory, the releaseObject method is called. Whether the memory of the object is freed or not depends on the release timing of the object.

For example, the ObjectManager class is defined as subclass of JFCObjectLoaderManager class, and the SubButton class is defined as subclass of java.awt.Button class. The following code shows the usage of the object.

```

//The subclass of JFCObjectLoaderManager
public class SubObjectManager extends JFCObjectLoaderManager
{
    public SubObjectManager() {
        this.add("Button1", "SubButton", JFCObjectLoader.DELAYED_CREATION,
JFCObjectLoader.TEMPORARY_INSTANCE);
        //add arguments are described below
        //1st argument specifies the object name.
    }
}

```

```

//2nd argument specifies the created object class name.
//3rd argument specifies the object creation timing.
// For the above example, the object is created when the realizeObject
method is called.
// Refer to "Creation Timing List" below for other creation timings.
//4th argument specifies the object release timing.
// For the above example, the object is released when the releaseObject
method is called.
// Refer to "Release Timing List" below for other release timings.
//Other objects can be registered in the same way as above.
this.add(.....);
.....
}
}

```

Table 4.13 Creation Timing List

Timing	Class Variable to specify	Description
at Initialization	JFCObjectLoader.INIT_CREATION	Create the object immediately when add method is called.
when realizeObject is called	JFCObjectLoader.DELAYED_CREATION	Create the object when the realizeObject method is called. This is the creation timing recommended for applications or applets with a large number of objects.
Asynchronously at Initialization	JFCObjectLoader.BACKGROUND_CREATION	Create the object when the add method is called, using a separate thread from the application or applet. This creation timing is specified to increase the speed of getting reference to objects that are frequently used, when application or applet startup performance is also important.

Table 4.14 Release Timing List

Timing	Class Variable to specify	Description
when releaseObject is called	JFCObjectLoader.TEMPO RARY_INSTANCE	The object is released from memory when the releaseObject method is called. This timing is used for applications or applets designed to save on memory resource usage.
Buffered when releaseObject is called	JFCObjectLoader.BUFFE RED_INSTANCE	The object is held in a memory buffer when the releaseObject method is called. When the number of objects held in the memory buffer exceeds the limit of buffered objects set in JFCObjectLoaderManager, the oldest object is released from memory. The maximum number of objects held in the buffered memory can be set by calling the setReleaseBufferSize method of JFCObjectLoaderManager. The default value is 10.
at Application/ Applet termination	JFCObjectLoader.PERMA NENT_INSTANCE	The object is held in memory until the JFCObjectLoaderManager (or subclass of JFCObjectLoaderManager) managing the object is released from memory. Normally, this is synonymous to termination time of the application or applet.



The applications or applets using Object Control Facility may use the setURLs or addURL method of JFCObjectLoader to specify the location of the object class, so that the object class can be loaded via the network at the time of object creation as if the object class is loaded locally. Note that in the case of applet, due to the security restriction, only the host from which the applet has been downloaded is trusted. The same restriction is applied when using setURLs or addURL in a applet. For the case of application, you can use setURLs and addURL as you wish.

4.3.2 Transferring data between objects

In order to get the data of other object, the Object Load Control class JFCObjectLoader provides setData and getData methods. To store object data, setData method is used, and to get the object data, getData method is used.

The Object data is defined here as data contained by the object. Any object can be stored, since the setData method takes an Object class for the argument. Many object data consist of multiple data items, and the use of the Vector or Hashtable class is recommended for transferring data.

Chapter 5 Line Drawing Functions

The line drawing functions are used to draw graphics, e.g., lines, circles, and squares in applications or applets.

5.1 Explanation of functions

The line drawing functions enable the user to draw the following graphics:

- Rectangle
- RoundRectangle
- Circle
- Lozenge
- PosSlopeLine
- NegSlopeLine
- HorizontalLine
- VerticalLine

The FillStyle property is used to define a FillStyle in graphics, e.g., Circle and Rectangle.

The LineStyle property is used to define a LineStyle, e.g., Dot and, PointChain.

If either of the following pairs of properties is changed, the other property is also changed to the same value as that of the changed property.

- LineColor and foreground
- FillColor and background

5.2 Line Drawing Bean

A line drawing contains the following information and [Customizer](#) functions.

- [Property information](#)



See

"Package Guide"- [JFLines](#)

Property information

Name	Type	Reference	Setting	Explanation
background	java.awt.Color	Y	Y	Background color
fillColor	java.awt.Color	Y	Y	Fill color
fillStyle	int	Y	Y	Fill style
foreground	java.awt.Color	Y	Y	Foreground color
lineColor	java.awt.Color	Y	Y	Line color
lineStyle	int	Y	Y	Line style
lineType	int	Y	Y	Line drawing type

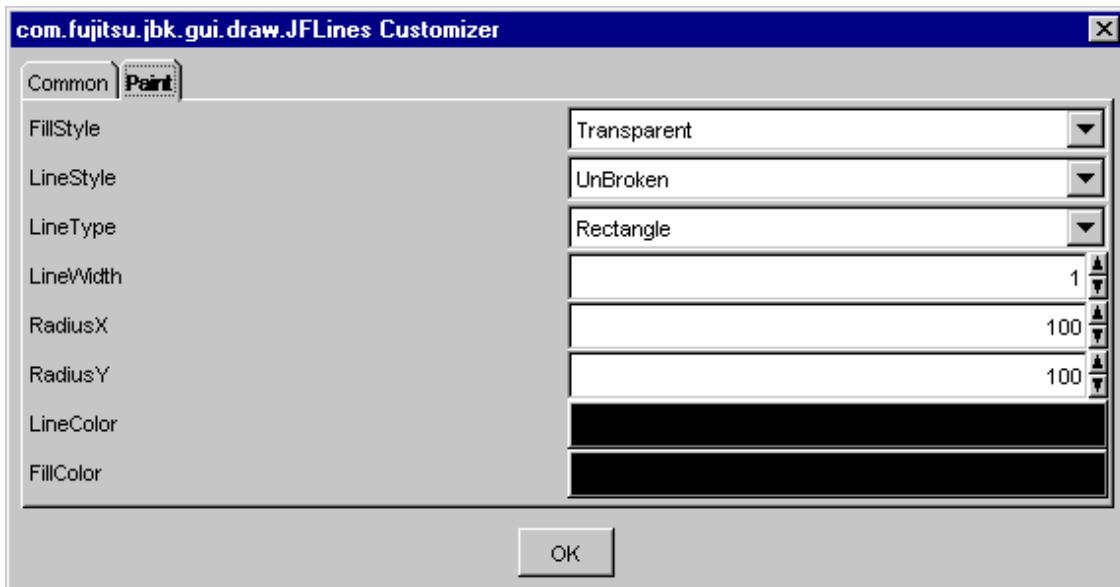
Name	Type	Reference	Setting	Explanation
lineWidth	int	Y	Y	Line width
radiusX	int	Y	Y	Rounded horizontal radius
radiusY	int	Y	Y	Rounded vertical radius

Customizer

- [Component common property](#)

- Drawing

Defines a line drawing display.



FillStyle

Select a FillStyle of the line drawing from the following: Transparent/Opaque/HorizontalHatch/VerticalHatch/CrossHatch/RightDiagonalHatch/LeftDiagonalHatch/DiagonalCrossHatch/DeepNetPattern/LightNetPattern. This specification is valid if a graphic such as a Rectangle/RoundRectangle/Circle/Lozenge is specified for the LineType.

LineStyle

Select a LineStyle of the line drawing from the following: UnBroken/Broken/Dot/PointChain/TwoPointChain/Float/Hollow/Shadw.

Specifications Float, Hollow, and Shadw are valid if a graphic such as a Rectangle/RoundRectangle/Circle/Lozenge is specified for the LineType.

LineType

Select a LineType from the following: Rectangle/RoundRectangle/Circle/Lozenge/PosSlopeLine/NegSlopeLine/HorizontalLine/VerticalLine.

LineWidth

Select a LineWidth of the line drawing.

RadiusX

Sets a RadiusX of the line drawing. This specification is valid if RoundRectangle is specified for the LineType.

RadiusY

Sets a RadiusY of the line drawing. This specification is valid if RoundRectangle is specified for the LineType.

LineColor

Sets a LineColor of the line drawing.

If the LineColor is changed, the foreground is also changed to the same value as the LineColor. If the foreground is changed, the LineColor is also changed to the same value as the foreground.

FillColor

Sets a FillColor of the line drawing. This specification is valid if a value other than transparent is specified for the FillStyle.

If the FillColor is changed, the background is also changed to the same value as the FillColor. If the background is changed, the FillColor is also changed to the same value as the background.

Appendix A About the GUI Library switchover from former JBK for Windows

The process of the application developed by JBK for Windows of the former version to move to current Basic GUI Libraries is explained with the following here.

- About the port of JavaBeans

A.1 About the port of JavaBeans

The properties name of basic GUIBeans to provide with this function copes with it to become a properties name along the design pattern of Beans.

Therefore, JavaBeans which derives from basic GUIBeans in former JBK and is made might not be able to be read by this function. Explains about the process to port JavaBeans developed with a former product to basic GUIBeans of this function, with the following contents here.

- Applicable basic GUIBeans properties
- How to port with workbench

A.1.1 Applicable basic GUIBeans properties

The properties which porting is necessary for are as the following.

Ports from JBK V1 for Windows and V2 to JBK V3

Basic GUIBeans	Former properties name	Setting method	Reference method
JFCheckList	item	-	getItems(),getItem(int)
JFPanel	autofocus	setAutoFocus(boolean)	isAutoFocus()
JFPanel	firstfocuscomponent	setFirstFocusComponent(Component)	getFirstFocusComponent()
JFTableView	wrapColumnLayoutType	-	getWrapColumnLayout()
JFTabPanel	name	setName(int,String)	getName(int)

Ports from JBK V3.0 L20 for Windows to JBK V3.0 L30

Basic GUIBeans	Former properties name	Setting method	Reference method
JFToggleButton	group	setButtonGroup(JFButtonGroup)	getButtonGroup()

A.1.2 How to port with workbench

Explains about the way of porting which workbench was used for here.

1. Confirms the properties which port management is necessary for with [A.1.1 Applicable basic GUIBeans properties](#).
2. Open JavaBeans which port management is necessary for with Java form definition tool.
3. On [Package Explorer] of workbench, right-click on the JavaBeans that need to be ported.
Select [Open With]-[Java Editor] on the popup menu to start Java Editor.
4. Select [Edit]-[Define BeanInfo]-[BeanInfo Definition] to display the [BeanInfo Definition] dialog box.
Select the method checked in step 1 in the list box of the dialog box and click [Disable].

5. Select again the item selected in step 3 and click [Enable].
6. Store JavaBeans under this condition.

Appendix B How to port UI Screen Control Library

In this appendix, the porting method, with a new function added to the UI Screen Control Library, is explained below.

- How to port from the UI Screen Control Library in JBK V3.0 or earlier
- Lightweight version of UI Screen Control Facility

B.1 How to port from the UI Screen Control Library in JBK V3.0 or earlier

A new function has been added to the UI Screen Control Library in JBK V3.1 and later.

With the addition, the following porting for a product that uses the UI Screen Control Library in JBK V3.0 or earlier must be performed.

- Deleting the exposingPanel(String) call processing in the UI Screen Control Library

In the UI Screen Control Library, a function that calls exposingPanel() of JFCEEntryPanel immediately before the screen is switched in a screen transition when setPanel() of JFCCardPanel, JFCTabbedPanel, or JFCEEntryPanel is executed has been added.

Therefore, for a product that implements processing that calls exposingPanel(), the processing must be deleted to prevent a double call.

Even though a screen is registered by createPanels() of JFCCardPanel or JFCTabbedPanel without executing setPanel(), the constructor of JFCCardPanel or JFCTabbedPanel executes setPanel(). Since exposingPanel() is called at this time, be careful about switching.

For a product that does not implement the processing that calls exposingPanel(String), switching is not required.

- Porting operation required for switching to lightweight version

When switching to a lightweight version of the UI Screen Control Library, additional porting is required.

For more information about the porting method, see "[B.2 Lightweight version of UI Screen Control Facility](#)".

B.2 Lightweight version of UI Screen Control Facility

The UI Screen Control Facility provides the lightweight version that decreases the memory use compared to JBK V3.1.

Explains how to port to lightweight version from heavyweight version of UI Screen Control Facility with the following contents.

- Class list of lightweight version of UI Screen Control Facility
- Change of the API specification in the port to lightweight version
- How to port to lightweight version
- Incompatibility in the por

B.2.1 Class list of lightweight version of UI Screen Control Facility

In the porting to lightweight version from heavyweight version of the UI Screen Control Facility, the list of the new class and interface is shown below.

Table B.1 New class and interface list

Class and Interface Name	Overview of functionality
JFCCardInterface	The interface that defines the UI Screen Control Panel (JFCCardPanel, JFLCardPanel and JFCTabbedPanel).
JFLCardPanel	The lightweight version of UI Screen Control Panel with the same function as JFCCardPanel.
JFLScrollablePanel	The lightweight version of Scroll Panel with the same function as JFCscrollablePanel.

Class and Interface Name	Overview of functionality
JFCEntryLogicInterface	The interface that defines the UI Screen (JFCEntryPanel, JFLEntryPanel and JFLEntryScrollablePanel).
JFLEntryPanel	The lightweight UI Screen that removed the scroll feature from JFCEntryPanel.
JFLEntryScrollablePanel	The lightweight UI Screen with the same function as JFCEntryPanel.
JFLEntryInterfacePanel	The lightweight UI Screen for operating on Data Entry Fields that removed the scroll feature from JFCEntryInterfacePanel.
JFLEntryInterfaceScrollablePanel	The lightweight UI Screen for operating on Data Entry Fields with the same function as JFCEntryInterfacePanel.
JFLMultiPagePanel	The lightweight UI Screen for operating on Data Entry Fields across multiple pages that removed the scroll feature from JFCMultiPagePanel.
JFLMultiPageScrollablePanel	The lightweight UI Screen for operating on Data Entry Fields across multiple pages with the same function as JFCMultiPagePanel.

The list of the class and interface of heavyweight and lightweight is shown below.

Table B.2 Class and interface list

Class and Interface Name	Heavyweight version	Lightweight version
UI Screen Control Panel Interface	(none)	JFCCardInterface
UI Screen Interface	(none)	JFCEntryLogicInterface
UI Screen Management Interface	JFCEntryInterface	JFCEntryInterface
Data Entry Field Interface	JFCEntryComponent	JFCEntryComponent
UI Screen Control Panel	JFCCardPanel	JFLCardPanel
Abstract class of UI Screen Loader	JFCPanelLoader	JFCPanelLoader
UI Screen Loader	JFCEntryPanelLoader	JFCEntryPanelLoader
UI Screen	(none)	JFLEntryPanel
UI Screen with scroll feature	JFCEntryPanel	JFLEntryScrollablePanel
UI Screen for operating on Data Entry Fields	(none)	JFLEntryInterfacePanel
UI Screen for operating on Data Entry Fields with scroll feature	JFCEntryPanel	JFLEntryInterfaceScrollablePanel
UI Screen for operating on Data Entry Fields across multiple pages	(none)	JFLMultiPagePanel
UI Screen for operating on Data Entry Fields across multiple pages with scroll feature	JFCMultiPagePanel	JFLMultiPageScrollablePanel

B.2.2 Change of the API specification in the porting to lightweight version

In the porting to lightweight version from heavyweight version of UI Screen Control Library, change of the API specification and the difference in operation are explained below.

- [Change of the API specification of JFCPanelLoader](#)
- [Change of the API specification of JFCEntryPanelLoader](#)

- Difference between JFCScrollPane and JFLScrollPane
- Difference of the view port of JFCScrollPane and JFLScrollPane
- Change of the API specification of JFCMultiPagePanel and JFLMultiPageScrollPane

Change of the API specification of JFCPanelLoader

Change of the API specification accompanying change of JFCPanelLoader is shown below.

Table B.3 Change of the API specification of JFCPanelLoader

Old JFCPanelLoader	New JFCPanelLoader	Overview
JFCPanelLoader (JFCCardPanel)	JFCPanelLoader (JFCCardInterface)	In order to treat JFCCardPanel, JFLCardPanel, and JFCTabbedPanel similarly, an argument is changed into JFCCardInterface from JFCCardPanel.
(none)	Container getCardInterface()	The method which can be acquired without asking the kind of The UI Screen Control Panel (JFCCardPanel, JFLCardPanel, and JFCTabbedPanel) is added.
(none)	void exposingPanel()	The call-back method (void exposedPanel()) called immediately after screen transition -- in addition, the call-back method called just before screen transition is added

Change of the API specification of JFCEntryPanelLoader

Change of the API specification accompanying change of JFCEntryPanelLoader is shown below.

Table B.4 Change of the API specification of JFCEntryPanelLoader

Old JFCEntryPanelLoader	New JFCEntryPanelLoader	Overview
JFCEntryPanelLoader (JFCCardPanel, String, String)	JFCEntryPanelLoader (JFCCardInterface, String, String)	In order to treat JFCCardPanel, JFLCardPanel, and JFCTabbedPanel similarly, an argument is changed into JFCCardInterface from JFCCardPanel.
JFCEntryPanelLoader (JFCCardPanel, String, String, int, int)	JFCEntryPanelLoader (JFCCardInterface, String, String, int, int)	In order to treat JFCCardPanel, JFLCardPanel, and JFCTabbedPanel similarly, an argument is changed into JFCCardInterface from JFCCardPanel.
(none)	JFCEntryPanelLoader (JFCCardInterface, String, String, int, int, URL[])	The constructor, which can specify URL list of the UI Screen is added.
(none)	void exposingPanel()	The call-back method (void exposedPanel()) called immediately after screen transition -- in addition, the call-back method called just before screen transition is added

Difference between JFCScrollPane and JFLScrollPane

JFLScrollPane is the lightweight version with the same function as JFCScrollPane. The difference of the specification of JFCScrollPane and JFLScrollPane is shown below.

Table B.5 Difference between JFCScrollPane and JFLScrollPane

JFCScrollPane	JFLScrollPane	Overview
There is the convex type border of thickness 2 by the default.	There is no border by the default.	The setup of the border is possible using the method.
ScrollPane getViewPort()	Container getViewPort()	The return value changes into JFLScrollPane from ScrollPane.
JFPanel getViewPanel()	Container getViewPanel()	The return value changes into Container from JFPanel.

Difference of the view port of JFCScrollPane and JFLScrollPane

Although the return value of getViewPort() of JFCScrollPane is java.awt.ScrollPane, getViewPort() of JFLScrollPane returns itself. The difference of API specification of the view port acquired by getViewPort() is shown below.

Table B.6 Difference of the view port of JFCScrollPane and JFLScrollPane

Viewport of JFCScrollPane	JFLScrollPane	Overview
A component is added to ScrollPane by add().	A component is added to view panel by add().	Since add() of the view port of JFCScrollPane cannot be used in principle, the influence by port is nothing.
getComponent(int) can acquire only a view panel.	getComponent(int) calls getComponent(int) of a view panel.	getViewPanel() of JFCScrollPane can be substituted for getComponent(0) of the view port of JFCScrollPane.
getComponents() can acquire only a view panel.	getComponents() calls getComponents() of a view panel.	getViewPanel() of JFCScrollPane can be substituted for getComponents() of the view port of JFCScrollPane.
getComponentCount() always returns 1.	getComponentCount() calls getComponentCount() of a view panel.	In order that getComponentCount() of the view port of JFCScrollPane always return 1, the necessity of calling this method is nothing.
setLayout() always throws the exception.	setLayout() calls setLayout() of view panel.	Since setLayout() of the view port of JFCScrollPane cannot be used, the influence by port is nothing.

Normally the view port is acquired by calling getViewPort() of JFCScrollPane, and the above methods are not used, and in this case there is no influence to porting.

Change of the API specification of JFCMultiPagePanel and JFLMultiPageScrollablePanel

JFLMultiPageScrollablePanel is the lightweight version with the same function as JFCMultiPagePanel. The difference of the API specification between JFCMultiPagePanel and JFLMultiPageScrollablePanel is shown below.

Table B.7 Change of the API specification of JFCMultiPagePanel and JFLMultiPageScrollablePanel

JFCMultiPagePanel	JFLMultiPageScrollablePanel	Overview
void addPanel(Panel)	void addPanel(Container)	The influence is nothing, because the change of the argument is in the porting to lightweight version.
Panel getCurrentPage()	Container currentPage()	It is change of the return value in the porting to lightweight version. It is necessary to cast of the return value at the time of porting.

JFCMultiPagePanel	JFLMultiPageScrollablePanel	Overview
Panel getPage(int)	Container getPage(int)	It is change of the return value in the port to lightweight version. It is necessary to cast of the return value at the time of porting.
int getPageNumber(Panel)	int getPageNumber(Container)	The influence is nothing, because the change of the argument is in the port to lightweight version.

An argument is changed in order that JFLMultiPageScrollablePanel treat the lightweight pages inherited from java.awt.Container. However, by port pages into lightweight version, it does not have the influence.

B.2.3 How to port to lightweight version

The porting work accompanying the porting to lightweight version from heavyweight of UI Screen Control Facility performs in the following procedures.

1. Change the class name

Change the class name as the following.

- JFCCardPanel -> JFLCardPanel
- JFCEntryPanel -> JFLEntryScrollPane
- JFCEntryInterfacePanel -> JFLEntryInterfaceScrollPane
- JFCMultiPagePanel -> JFLMultiPageScrollPane

2. Change the method of JFCPanelLoader and JFCEntryPanelLoader

Change the method as the following.

- JFCPanelLoader and JFCEntryPanelLoader's getCardPanel() -> getCardInterface()

3. Change the attribute of Scroll Panel

JFLScrollPane has no border by default. Add the processing which sets up the border, when adopting the same way of being visible as JFCScrollPane.



```
JFLScrollPane panel = new JFLScrollPane();
panel.setBorderWidth(2);
panel.setBorderType(JFLLineType.CONCAVE);
```

4. Change the return value of getViewPort() of Scroll Panel

The return value of getViewPort() of the following classes is changed into Container from ScrollPane.

- JFLScrollPane
- JFLEntryScrollPane
- JFLEntryInterfaceScrollPane
- JFLMultiPageScrollPane

In connection with this, if needed, correct and cast the return value.

 **Example**

Before : ScrollPane port = getViewPort();

After : JFLScrollablePanel port = (JFLScrollablePanel) getViewPort();

5. Change the return value of getViewPanel() of Scroll Panel

The return value of getViewPanel() of the following classes is changed into Container from JPanel.

- JFLScrollablePanel
- JFLEntryScrollablePanel
- JFLEntryInterfaceScrollablePanel
- JFLMultiPageScrollablePanel

In connection with this, if needed, correct and cast the return value.

 **Example**

Before : JPanel panel = getViewPanel();

After : JFLightPanel panel = (JFLightPanel) getViewPanel()

6. Change the return value of getCurrentPage() of UI Screen for operating on Data Entry Fields across multiple pages

The return value of getCurrentPage() of JFLMultiPagePanel and JFLMultiPageScrollablePanel is changed into Container from Panel. If needed, correct and cast the return value.

 **Example**

Before : Panel panel = getCurrentPage();

After : Container panel = getCurrentPage();

7. Change the return value of getPage(int) of UI Screen for operating on Data Entry Fields across multiple pages

The return value of getPage(int) of JFLMultiPagePanel and JFLMultiPageScrollablePanel is changed into Container from Panel. If needed, correct and cast the return value.

 **Example**

Before : Panel panel = getPage(1);

After : Container panel = getPage(1);

8. Port to lightweight version of pages added to UI Screen for operating on Data Entry Fields across multiple pages

Port to lightweight version pages added to JFLMultiPagePanel and JFLMultiPageScrollablePanel using by addPage(Container).

If the parent class of pages is JPanel, change into JFLightPanel.

9. Change the method of UI Screen

Change into getCardInterface() from getCardPanel() of the following classes.

- JFLEntryPanel
- JFLEntryScrollablePanel
- JFLEntryInterfacePanel
- JFLEntryInterfaceScrollablePanel

- JFLMultiPagePanel
- JFLMultiPageScrollablePanel

B.2.4 Incompatibility in the port

- The components, which can be added to the lightweight version of panels, are only lightweight components. Operation adding heavyweight components is not guaranteed.
- The pages, which can be added to JFLMultiPagePanel and JFLMultiPageScrollablePanel, are only lightweight panels. Operation adding heavyweight panels is not guaranteed.

Appendix C About the supplementary characters

The JBK V5.1L10 and later GUI Library is different from JBK V5.0L10 in terms of setting the input of supplementary characters. The difference is as follows.

- Supplementary characters cannot be input in the JBK V5.0L10 GUI Library.
- Supplementary characters can be input in the JBK V5.1L10 and later GUI Library.

C.1 Setting supplementary characters to not be inputable

For the JBK V5.1L10 and later GUI Library, follow the procedure below to set supplementary characters to not be inputable (like in JBKV5.0L10).

1. Create JFInputLimitation.
2. Use JFInputLimitation#setEnableUnicodeType(Character.UnicodeBlock... enableUnicodeType) to set all the characters except supplementary characters to be inputable.
3. Set the characters that are not included in the inputable characters to not be inputable.
4. Set the control character to not be inputable.
5. Set the character input component to JFInputLimitation.



Example

Implementation example

```
JFFieldString field = new JFFieldString();

JFInputLimitation limit = new JFInputLimitation();

//Set all the characters except supplementary characters to be inputable
//List all the character types except surrogate code and supplementary characters

limit.setEnableUnicodeType(
    UnicodeBlock.ALPHABETIC_PRESENTATION_FORMS,
    UnicodeBlock.ARABIC,
    UnicodeBlock.ARABIC_PRESENTATION_FORMS_A,
    UnicodeBlock.ARABIC_PRESENTATION_FORMS_B,
    UnicodeBlock.ARmenian,
    UnicodeBlock.ARROWS,
    UnicodeBlock.BASIC_LATIN,
    UnicodeBlock.BENGALI,
    UnicodeBlock.BLOCK_ELEMENTS,
    UnicodeBlock.BOPOMOFO,
    UnicodeBlock.BOPOMOFO_EXTENDED,
    UnicodeBlock.BOX_DRAWING,
    UnicodeBlock.BRAILLE_PATTERNS,
    UnicodeBlock.BUHID,
    UnicodeBlock.CHEROKEE,
    UnicodeBlock.CJK_COMPATIBILITY,
    UnicodeBlock.CJK_COMPATIBILITY_FORMS,
    UnicodeBlock.CJK_COMPATIBILITY_IDEOGRAPHS,
    UnicodeBlock.CJK_RADICALS_SUPPLEMENT,
    UnicodeBlock.CJK_SYMBOLS_AND_PUNCTUATION,
    UnicodeBlock.CJK_UNIFIED_IDEOGRAPHS,
    UnicodeBlock.CJK_UNIFIED_IDEOGRAPHS_EXTENSION_A,
    UnicodeBlock.COMBINING_DIACRITICAL_MARKS,
    UnicodeBlock.COMBINING_HALF_MARKS,
```

```
UnicodeBlock.COMBINING_MARKS_FOR_SYMBOLS,
UnicodeBlock.CONTROL_PICTURES,
UnicodeBlock.CURRENCY_SYMBOLS,
UnicodeBlock.CYRILLIC,
UnicodeBlock.CYRILLIC_SUPPLEMENTARY,
UnicodeBlock.DEVANAGARI,
UnicodeBlock.DINGBATS,
UnicodeBlock.ENCLOSED_ALPHANUMERICS,
UnicodeBlock.ENCLOSED_CJK LETTERS_AND_MONTHS,
UnicodeBlock.ETHIOPIC,
UnicodeBlock.GENERAL_PUNCTUATION,
UnicodeBlock.GEOMETRIC_SHAPES,
UnicodeBlock.GEORGIAN,
UnicodeBlock.GREEK,
UnicodeBlock.GREEK_EXTENDED,
UnicodeBlock.GUJARATI,
UnicodeBlock.GURMUKHI,
UnicodeBlock.HALFWIDTH_AND_FULLWIDTH_FORMS,
UnicodeBlock.HANGUL_COMPATIBILITY_JAMO,
UnicodeBlock.HANGUL_JAMO,
UnicodeBlock.HANGUL_SYLLABLES,
UnicodeBlock.HANUNOO,
UnicodeBlock.HEBREW,
UnicodeBlock.HIRAGANA,
UnicodeBlock.IDEOGRAPHIC_DESCRIPTION_CHARACTERS,
UnicodeBlock.IPA_EXTENSIONS,
UnicodeBlock.KANBUN,
UnicodeBlock.KANGXI_RADICALS,
UnicodeBlock.KANNADA,
UnicodeBlock.KATAKANA,
UnicodeBlock.KATAKANA_PHONETIC_EXTENSIONS,
UnicodeBlock.KHMER,
UnicodeBlock.KHMER_SYMBOLS,
UnicodeBlock.LAO,
UnicodeBlock.LATIN_1_SUPPLEMENT,
UnicodeBlock.LATIN_EXTENDED_A,
UnicodeBlock.LATIN_EXTENDED_ADDITIONAL,
UnicodeBlock.LATIN_EXTENDED_B,
UnicodeBlock.LETTERLIKE_SYMBOLS,
UnicodeBlock.LIMBU,
UnicodeBlock.MALAYALAM,
UnicodeBlock.MATHEMATICAL_OPERATORS,
UnicodeBlock.MISCELLANEOUS_MATHEMATICAL_SYMBOLS_A,
UnicodeBlock.MISCELLANEOUS_MATHEMATICAL_SYMBOLS_B,
UnicodeBlock.MISCELLANEOUS_SYMBOLS,
UnicodeBlock.MISCELLANEOUS_SYMBOLS_AND_ARROWS,
UnicodeBlock.MISCELLANEOUS_TECHNICAL,
UnicodeBlock.MONGOLIAN,
UnicodeBlock.MYANMAR,
UnicodeBlock.NUMBER_FORMS,
UnicodeBlock.OGHAM,
UnicodeBlock.OPTICAL_CHARACTER_RECOGNITION,
UnicodeBlock.ORIYA,
UnicodeBlock.PHONETIC_EXTENSIONS,
UnicodeBlock.PRIVATE_USE_AREA,
UnicodeBlock.RUNIC,
UnicodeBlock.SINHALA,
UnicodeBlock.SMALL_FORM_VARIANTS,
UnicodeBlock.SPACING_MODIFIER_LETTERS,
UnicodeBlock.SPECIALS,
UnicodeBlock.SUPERSCRIPTS_AND_SUBSCRIPTS,
UnicodeBlock.SUPPLEMENTAL_ARROWS_A,
UnicodeBlock.SUPPLEMENTAL_ARROWS_B,
```

```

        UnicodeBlock.SUPPLEMENTAL_MATHEMATICAL_OPERATORS,
        UnicodeBlock.SYRIAC,
        UnicodeBlock.TAGALOG,
        UnicodeBlock.TAGBANWA,
        UnicodeBlock.TAI_LE,
        UnicodeBlock.TAMIL,
        UnicodeBlock.TELUGU,
        UnicodeBlock.THAANA,
        UnicodeBlock.THAI,
        UnicodeBlock.TIBETAN,
        UnicodeBlock.UNIFIED_CANADIAN_ABORIGINAL_SYLLABICS,
        UnicodeBlock.VARIATION_SELECTORS,
        UnicodeBlock.YI_RADICALS,
        UnicodeBlock.YI_SYLLABLES,
        UnicodeBlock.YIJING_HEXAGRAM_SYMBOLS
    );

    //UnicodeBlock.HIGH_PRIVATE_USE_SURROGATES,
    //UnicodeBlock.HIGH_SURROGATES,
    //UnicodeBlock.LOW_SURROGATES,

    //UnicodeBlock.AEGEAN_NUMBERS,
    //UnicodeBlock.BYZANTINE_MUSICAL_SYMBOLS,
    //UnicodeBlock.CJK_COMPATIBILITY_IDEOGRAPHS_SUPPLEMENT,
    //UnicodeBlock.CJK_UNIFIED_IDEOGRAPHS_EXTENSION_B,
    //UnicodeBlock.CYPRIOT_SYLLABARY,
    //UnicodeBlock.DESERET,
    //UnicodeBlock.GOTHIC,
    //UnicodeBlock.LINEAR_B_IDEOGRAMS,
    //UnicodeBlock.LINEAR_B_SYLLABARY,
    //UnicodeBlock.MATHEMATICAL_ALPHANUMERIC_SYMBOLS,
    //UnicodeBlock.MUSICAL_SYMBOLS,
    //UnicodeBlock.OLD_ITALIC,
    //UnicodeBlock.OSMANYA,
    //UnicodeBlock.SHAVIAN,
    //UnicodeBlock.SUPPLEMENTARY_PRIVATE_USE_AREA_A,
    //UnicodeBlock.SUPPLEMENTARY_PRIVATE_USE_AREA_B,
    //UnicodeBlock.TAGS,
    //UnicodeBlock.TAI_XUAN_JING_SYMBOLS,
    //UnicodeBlock.UGARITIC,
    //UnicodeBlock.VARIATION_SELECTORS_SUPPLEMENT,

    //Set the characters that are not included in the inputable characters to not be inputable.
    //(The following character types included in the Unicode code value from 0x0 to 0xff)
    //java.lang.Character.OTHER_SYMBOL
    //java.lang.Character.FORMAT
    //java.lang.Character.DIRECTIONALITY_SEGMENT_SEPARATOR
    char[] disableChars = {'\u00a6','\u00a7','\u00a9','\u00ad','\u00ae',
                          '\u00b0','\u00b2','\u00b3','\u00b6','\u00b9',
                          '\u00bc','\u00bd','\u00be'};

    limit.setDisableChars(disableChars);

    //Set the control character to not be inputable
    for(char i=0x0000; i<=0x001f; i++){
        limit.addDisableChar(i);
    }
    for(char i=0x007F; i<=0x009F; i++){
        limit.addDisableChar(i);
    }
}

```

```
//Set JFInputLimitation  
field.setInputLimitation(limit);
```

.....

Appendix D About boundary analysis of word wrap function for the details

JTextArea specify the finding the location of boundaries in text, by setWordWrapIterator(BreakIterator) method.

In case of the following, explains about the value.

- [BreakIterator.getWordInstance\(\)](#)
- [BreakIterator.getSentenceInstance\(\)](#)
- [BreakIterator.getLineInstance\(\)](#)
- [BreakIterator.getCharacterInstance\(\)](#)

BreakIterator.getWordInstance()

When BreakIterator.getWordInstance() is specify to JTextArea#setWordWrapIterator(BreakIterator), use the following boundary value.

0x0020	0x0021	0x0022	0x0023	0x0024	0x0025	0x0026	0x0027	0x0028	0x0029
0x002a	0x002b	0x002c	0x002d	0x002e	0x002f	0x003a	0x003b	0x003c	0x003d
0x003e	0x003f	0x0040	0x005b	0x005c	0x005d	0x005e	0x00f7	0x005f	0x0060
0x007b	0x007c	0x007d	0x007e	0x00a8	0x00b1	0x00b4	0x00d7	0x00f7	0x0391
0x0392	0x0393	0x0394	0x0395	0x0396	0x0397	0x0398	0x0399	0x039a	0x039b
0x039c	0x039d	0x039e	0x039f	0x03a0	0x03a1	0x03a3	0x03a4	0x03a5	0x03a6
0x03a7	0x03a8	0x03a9	0x03b1	0x03b2	0x03b3	0x03b4	0x03b5	0x03b6	0x03b7
0x03b8	0x03b9	0x03ba	0x03bb	0x03bc	0x03bd	0x03be	0x03bf	0x03c0	0x03c1
0x03c3	0x03c4	0x03c5	0x03c6	0x03c7	0x03c8	0x03c9	0x0401	0x0410	0x0411
0x0412	0x0413	0x0414	0x0415	0x0416	0x0417	0x0418	0x0419	0x041a	0x041b
0x041c	0x041d	0x041e	0x041f	0x0420	0x0421	0x0422	0x0423	0x0424	0x0425
0x0426	0x0427	0x0428	0x0429	0x042a	0x042b	0x042a	0x042b	0x042c	0x042d
0x042e	0x042f	0x0430	0x0431	0x0432	0x0433	0x0434	0x0435	0x0436	0x0437
0x0438	0x0439	0x043a	0x043b	0x043c	0x043d	0x043e	0x043f	0x0440	0x0441
0x0442	0x0443	0x0444	0x0445	0x0446	0x0447	0x0448	0x0449	0x044a	0x044b
0x044c	0x044d	0x044e	0x044f	0x0451	0x044f	0x2010	0x2015	0x2018	0x2019
0x201c	0x201d	0x2020	0x2021	0x2025	0x2026	0x2030	0x2032	0x2033	0x203b
0x2103	0x2116	0x2121	0x212b	0x2160	0x2161	0x2162	0x2163	0x2164	0x2165
0x2166	0x2167	0x2168	0x2169	0x2170	0x2171	0x2172	0x2173	0x2174	0x2175
0x2176	0x2177	0x2178	0x2179	0x2177	0x2178	0x2179	0x2190	0x2191	0x2192
0x2193	0x21d2	0x21d4	0x2200	0x2202	0x2203	0x2207	0x2208	0x220b	0x2211
0x221a	0x221d	0x221e	0x221f	0x2220	0x2225	0x2227	0x2228	0x2229	0x222a
0x222b	0x222c	0x222e	0x2234	0x2235	0x223d	0x2252	0x2260	0x2261	0x2266
0x2267	0x226a	0x226b	0x2282	0x2283	0x2286	0x2287	0x22a5	0x22bf	0x2312
0x2460	0x2461	0x2462	0x2463	0x2464	0x2465	0x2466	0x2467	0x2468	0x2469
0x246a	0x246b	0x246c	0x246d	0x246e	0x246f	0x2470	0x2471	0x2472	0x2473
0x2500	0x2501	0x2502	0x2503	0x250c	0x250f	0x2510	0x2513	0x2514	0x2518
0x251b	0x251c	0x251d	0x2520	0x2523	0x2524	0x2525	0x2528	0x252b	0x2517

0x252c	0x252f	0x2530	0x2533	0x2534	0x2537	0x2538	0x253b	0x253c	0x253f
0x2542	0x254b	0x25a0	0x25a1	0x25b2	0x25b3	0x25bc	0x25bd	0x25c6	0x25c7
0x25cb	0x25ce	0x25cf	0x25ef	0x2605	0x2606	0x2640	0x2642	0x266a	0x266d
0x266f	0x3000	0x3001	0x3002	0x3003	0x3005	0x3006	0x3008	0x3009	0x300a
0x300b	0x300c	0x300d	0x300e	0x300f	0x3010	0x3011	0x3012	0x3013	0x3014
0x3015	0x301d	0x301f	0x3041	0x3042	0x3043	0x3044	0x3045	0x3046	0x3047
0x3048	0x3049	0x304a	0x304b	0x304c	0x304d	0x304e	0x304f	0x3050	0x3051
0x3052	0x3053	0x3054	0x3055	0x3056	0x3057	0x3058	0x3059	0x305a	0x305b
0x305c	0x305d	0x305e	0x305f	0x3060	0x3061	0x3062	0x3063	0x3064	0x3065
0x3066	0x3067	0x3068	0x3069	0x306a	0x306b	0x306c	0x306d	0x306e	0x306f
0x3070	0x3071	0x3072	0x3073	0x3074	0x3075	0x3076	0x3077	0x3078	0x3079
0x307a	0x307b	0x307c	0x307d	0x307e	0x307f	0x3080	0x3081	0x3082	0x3083
0x3084	0x3085	0x3086	0x3087	0x3088	0x3089	0x308a	0x308b	0x308c	0x308d
0x308e	0x308f	0x3090	0x3091	0x3092	0x3093	0x309b	0x309c	0x309d	0x309e
0x30a1	0x30a2	0x30a3	0x30a4	0x30a5	0x30a6	0x30a7	0x30a8	0x30a9	0x30aa
0x30ab	0x30ac	0x30ad	0x30ae	0x30af	0x30b0	0x30b1	0x30b2	0x30b3	0x30b4
0x30b5	0x30b6	0x30b7	0x30b8	0x30b9	0x30ba	0x30bb	0x30bc	0x30bd	0x30be
0x30bf	0x30c0	0x30c1	0x30c2	0x30c3	0x30c4	0x30c5	0x30c6	0x30c7	0x30c8
0x30c9	0x30ca	0x30cb	0x30cc	0x30cd	0x30ce	0x30cf	0x30d0	0x30d1	0x30d2
0x30d3	0x30d4	0x30d5	0x30d6	0x30d7	0x30d8	0x30d9	0x30da	0x30db	0x30dc
0x30dd	0x30de	0x30df	0x30e0	0x30e1	0x30e2	0x30e3	0x30e4	0x30e5	0x30e6
0x30e7	0x30e8	0x30e9	0x30ea	0x30eb	0x30ec	0x30ed	0x30ee	0x30ef	0x30f0
0x30f1	0x30f2	0x30f3	0x30f4	0x30f5	0x30f6	0x30fb	0x30fc	0x30fd	0x30fe
0x3231	0x3232	0x3239	0x32a4	0x32a5	0x32a6	0x32a7	0x32a8	0x3303	0x330d
0x3314	0x3318	0x3322	0x3323	0x3326	0x3327	0x332b	0x3336	0x333b	0x3349
0x334A	0x334D	0x3351	0x3357	0x337b	0x337c	0x337d	0x337e	0x338e	0x338f
0x339c	0x339d	0x339e	0x33a1	0x33c4	0x33cd	0x4e00	0x4e01	0x4e03	0x4e07
0x4e08	0x4e09	0x4e0a	0x4e0b	0x4e0d	0x4e0e	0x4e10	0x4e11	0x4e14	0x4e15
0x4e16	0x4e17	0x4e18	0x4e19	0x4e1e	0x4e21	0x4e26	0x4e28	0x4e2a	0x4e2d
0x4e31	0x4e32	0x4e36	0x4e38	0x4e39	0x4e3b	0x4e3c	0x4e3f	0x4e42	0x4e43
0x4e45	0x4e4b	0x4e4d	0x4e4e	0x4e4f	0x4e55	0x4e56	0x4e57	0x4e58	0x4e59
0x4e5d	0x4e5e	0x4e5f	0x4e62	0x4e71	0x4e73	0x4e7e	0x4e80	0x4e82	0x4e85
0x4e86	0x4e88	0x4e89	0x4e8a	0x4e8b	0x4e8c	0x4e8e	0x4e91	0x4e92	0x4e94
0x4e95	0x4e98	0x4e99	0x4e9b	0x4e9c	0x4e9e	0x4e9f	0x4ea0	0x4ea1	0x4ea2
0x4ea4	0x4ea5	0x4ea6	0x4ea8	0x4eab	0x4eac	0x4ead	0x4eae	0x4eb0	0x4eb3
0x4eb6	0x4eba	0x4ec0	0x4ec1	0x4ec2	0x4ec4	0x4ec6	0x4ec7	0x4eca	0x4ecb
0x4ecd	0x4ece	0x4cf	0x4ed4	0x4ed5	0x4ed6	0x4ed7	0x4ed8	0x4ed9	0x4ef2
0x4ef6	0x4edd	0x4ede	0x4edf	0x4ee1	0x4ee3	0x4ee4	0x4ee5	0x4eed	0x4eee
0x4ef0	0x4ef7	0x4efb	0x4fc	0x4f00	0x4f01	0x4f03	0x4f09	0x4f0a	0x4f0d
0x4f0e	0x4f0f	0x4f10	0x4f11	0x4f1a	0x4f1c	0x4f1d	0x4f2f	0x4f30	0x4f34

0x4f36	0x4f38	0x4f39	0x4f39	0x4f3c	0x4f3d	0x4f43	0x4f46	0x4f47	0x4f4d
0x4f4e	0x4f4f	0x4f50	0x4f51	0x4f53	0x4f55	0x4f56	0x4f57	0x4f59	0x4f5a
0x4f5b	0x4f5c	0x4f5d	0x4f5e	0x4f69	0x4f6f	0x65b7	0x65b9	0x65bc	0x65bd
0x65c1	0x65c3	0x65c4	0x65c5	0x65c6	0x65cb	0x65cc	0x65cf	0x65d2	0x65d7
0x65d9	0x65db	0x65e0	0x65e1	0x65e2	0x65e5	0x65e6	0x65e7	0x65e8	0x65e9
0x65ec	0x65ed	0x65f1	0x65fa	0x65fb	0x6600	0x6600	0x6602	0x6603	0x6606
0x6607	0x6609	0x6609	0x660a	0x660c	0x660e	0x660f	0x6613	0x6614	0x6615
0x6615	0x661c	0x661e	0x661e	0x661f	0x6620	0x6624	0x6624	0x6625	0x6627
0x6628	0x662d	0x662e	0x662e	0x662f	0x6631	0x6631	0x6634	0x6635	0x6636
0x663b	0x663b	0x663c	0x663f	0x6641	0x6642	0x6643	0x6644	0x6649	0x664b
0x664f	0x6652	0x6657	0x6657	0x6659	0x6659	0x665d	0x665e	0x665f	0x6662
0x6664	0x6665	0x6665	0x6666	0x6667	0x6668	0x6669	0x666e	0x666f	0x6670
0x6673	0x6673	0x6674	0x6676	0x667a	0x6681	0x6683	0x6684	0x6687	0x6688
0x6689	0x668e	0x6691	0x6696	0x6697	0x6698	0x6699	0x6699	0x669d	0x66a0
0x66a0	0x66a2	0x66a6	0x66ab	0x66ae	0x66b2	0x66b2	0x66b4	0x66b8	0x66b9
0x66bc	0x66be	0x66bf	0x66bf	0x66c1	0x66c4	0x66c7	0x66c9	0x66d6	0x66d9
0x66da	0x66dc	0x66dd	0x66e0	0x66e6	0x66e9	0x66f0	0x66f2	0x66f3	0x66f4
0x66f5	0x66f7	0x66f8	0x66f9	0x66fa	0x66fa	0x66fb	0x66fb	0x66fc	0x66fd
0x66fe	0x66ff	0x6700	0x6703	0x6708	0x6709	0x670b	0x670d	0x670e	0x670e
0x670f	0x6714	0x6715	0x6716	0x6717	0x671b	0x671d	0x671e	0x671f	0x6726
0x6727	0x6728	0x672a	0x672b	0x672c	0x672d	0x672e	0x6731	0x6734	0x6736
0x6737	0x6738	0x673a	0x673d	0x673f	0x6741	0x6746	0x6749	0x674e	0x674f
0x6750	0x6751	0x6753	0x6756	0x6759	0x675c	0x675e	0x675f	0x6760	0x6761
0x6762	0x6763	0x6764	0x6765	0x6766	0x6766	0x676a	0x676d	0x676f	0x6770
0x6771	0x6772	0x6773	0x6775	0x6777	0x677c	0x677e	0x677f	0x6785	0x6787
0x6789	0x678b	0x678c	0x6790	0x6795	0x6797	0x679a	0x679c	0x679d	0x67a0
0x67a1	0x67a2	0x67a6	0x67a9	0x67af	0x67b3	0x67b4	0x67b6	0x67b7	0x67b8
0x67b9	0x67bb	0x67bb	0x67c0	0x67c0	0x67c1	0x67c4	0x67c6	0x67ca	0x67ce
0x67cf	0x67d0	0x67d1	0x67d3	0x67d4	0x67d8	0x67da	0x67dd	0x67de	0x67e2
0x67e4	0x67e7	0x67e9	0x67ec	0x67ee	0x67ef	0x67f1	0x67f3	0x67f4	0x67f5
0x67fb	0x67fe	0x67ff	0x6801	0x6801	0x6802	0x6803	0x6804	0x6813	0x6816
0x6817	0x681e	0x6821	0x6822	0x6829	0x682a	0x682b	0x6832	0x6834	0x6838
0x6839	0x683c	0x683d	0x6840	0x6841	0x6842	0x6843	0x6844	0x6844	0x6846
0x6848	0x684d	0x684e	0x6850	0x6851	0x6852	0x6852	0x6853	0x6854	0x6859
0x685c	0x685d	0x685f	0x6863	0x6867	0x6874	0x6876	0x6877	0x687e	0x687f
0x6881	0x6883	0x6885	0x688d	0x688f	0x6893	0x6894	0x6897	0x689b	0x689d
0x689f	0x68a0	0x68a2	0x68a6	0x68a7	0x68a8	0x68ad	0x68af	0x68b0	0x68b1
0x68b3	0x68b5	0x68b6	0x68b9	0x68ba	0x68bc	0x68c4	0x68c6	0x68c8	0x68c8
0x68c9	0x68ca	0x68cb	0x68cd	0x68cf	0x68cf	0x68d2	0x68d4	0x68d5	0x68d7
0x68d8	0x68da	0x68df	0x68e0	0x68e1	0x68e3	0x68e7	0x68ee	0x68ef	0x68f2

0x68f9	0x68fa	0x6900	0x6901	0x6904	0x6905	0x6908	0x690b	0x690c	0x690d
0x690e	0x690f	0x6912	0x6919	0x691a	0x691b	0x691c	0x6921	0x6922	0x6923
0x6925	0x6926	0x6928	0x692a	0x6930	0x6934	0x6936	0x6939	0x693d	0x693f
0x694a	0x6953	0x6954	0x6955	0x6959	0x695a	0x695c	0x695d	0x695e	0x6960
0x6961	0x6962	0x6968	0x6968	0x696a	0x696b	0x696d	0x696e	0x696f	0x6973
0x6974	0x6975	0x6977	0x6978	0x6979	0x697c	0x697d	0x697e	0x6981	0x6982
0x698a	0x698e	0x6991	0x6994	0x6995	0x6998	0x6998	0x699b	0x699c	0x69a0
0x69a7	0x69ae	0x69b1	0x69b2	0x69b4	0x69bb	0x69be	0x69bf	0x69c1	0x69c3
0x69c7	0x69ca	0x69cb	0x69cc	0x69cd	0x69ce	0x69d0	0x69d3	0x69d8	0x69d9
0x69dd	0x69de	0x69e2	0x69e2	0x69e7	0x69e8	0x69eb	0x69ed	0x69f2	0x69f9
0x69fb	0x69fd	0x69ff	0x6a02	0x6a05	0x6a0a	0x6a0b	0x6a0c	0x6a12	0x6a13
0x6a14	0x6a17	0x6a19	0x6a1b	0x6a1e	0x6a1f	0x6a21	0x6a22	0x6a23	0x6a29
0x6a2a	0x6a2b	0x6a2e	0x6a30	0x6a30	0x6a35	0x6a36	0x6a38	0x6a39	0x6a3a
0x6a3d	0x6a44	0x6a46	0x6a46	0x6a47	0x6a48	0x6a4b	0x6a58	0x6a59	0x6a5f
0x6a61	0x6a62	0x6a66	0x6a6b	0x6a6b	0x6a72	0x6a73	0x6a73	0x6a78	0x6a7e
0x6a7e	0x6a7f	0x6a80	0x6a84	0x6a8d	0x6a8e	0x6a90	0x6a97	0x6a9c	0x6aa0
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0x6ac3	0x6ad1	0x6ad3	0x6ada	0x6adb	0x6ade	0x6adf	0x6ae2	0x6ae2	0x6ae4
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0x6b1d	0x6b1f	0x6b20	0x6b21	0x6b23	0x6b27	0x6b32	0x6b37	0x6b38	0x6b39
0x6b3a	0x6b3d	0x6b3e	0x6b43	0x6b47	0x6b49	0x6b4c	0x6b4e	0x6b50	0x6b53
0x6b54	0x6b59	0x6b5b	0x6b5f	0x6b61	0x6b62	0x6b63	0x6b64	0x6b66	0x6b69
0x6b6a	0x6b6f	0x6b73	0x6b74	0x6b78	0x6b79	0x6b7b	0x6b7f	0x6b80	0x6b83
0x6b84	0x6b86	0x6b89	0x6b8a	0x6b8b	0x6b8d	0x6b95	0x6b96	0x6b98	0x6b9e
0x6ba4	0x6baa	0x6bab	0x6baf	0x6bb1	0x6bb2	0x6bb3	0x6bb4	0x6bb5	0x6bb7
0x6bba	0x6bbb	0x6bbc	0x6bbf	0x6bc0	0x6bc5	0x6bc6	0x6bcd	0x6bce	
0x6bd2	0x6bd3	0x6bd4	0x6bd6	0x6bd6	0x6bd8	0x6bdb	0x6bdf	0x6beb	0x6bec
0x6bef	0x6bf3	0x6c08	0x6c0f	0x6c11	0x6c13	0x6c14	0x6c17	0x6c1b	0x6c23
0x6c24	0x6c34	0x6c37	0x6c38	0x6c3e	0x6c3f	0x6c3f	0x6c40	0x6c41	0x6c42
0x6c4e	0x6c50	0x6c55	0x6c57	0x6c5a	0x6c5c	0x6c5c	0x6c5d	0x6c5e	0x6c5f
0x6c60	0x6c62	0x6c68	0x6c6a	0x6c6f	0x6c6f	0x6c70	0x6c72	0x6c73	0x6c7a
0x6c7d	0x6c7e	0x6c81	0x6c82	0x6c83	0x6c86	0x6c86	0x6c88	0x6c8c	0x6c8d
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0x6d33	0x6d35	0x6d36	0x6d38	0x6d3b	0x6d3d	0x6d3e	0x6d41	0x6d44	0x6d45
0x6d59	0x6d5a	0x6d5c	0x6d63	0x6d64	0x6d66	0x6d69	0x6d6a	0x6d6c	0x6d6e

0x6d6f	0x6d6f	0x6d74	0x6d77	0x6d78	0x6d79	0x6d85	0x6d87	0x6d87	0x6d88
0x6d8c	0x6d8e	0x6d93	0x6d95	0x6d96	0x6d96	0x6d99	0x6d9b	0x6d9c	0x6dac
0x6dac	0x6daf	0x6db2	0x6db5	0x6db8	0x6dbc	0x6dc0	0x6dc5	0x6dc6	0x6dc7
0x6dc9	0x6dc9	0x6dcf	0x6dcf	0x6dd1	0x6dd2	0x6dd5	0x6dd8	0x6dd9	0x6dde
0x6de1	0x6de4	0x6de6	0x6de8	0x6dea	0x6deb	0x6dec	0x6dee	0x6df1	0x6df2
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0x6e1a	0x6e1b	0x6e1d	0x6e1f	0x6e20	0x6e21	0x6e23	0x6e24	0x6e25	0x6e26
0x6e27	0x6e27	0x6e29	0x6e2b	0x6e2c	0x6e2d	0x6e2e	0x6e2f	0x6e38	0x6e39
0x6e39	0x6e3a	0x6e3c	0x6e3c	0x6e3e	0x6e43	0x6e4a	0x6e4d	0x6e4e	0x6e56
0x6e58	0x6e5b	0x6e5c	0x6e5c	0x6e5f	0x6e67	0x6e6b	0x6e6e	0x6e6f	0x6e72
0x6e76	0x6e7e	0x6e7f	0x6e80	0x6e82	0x6e8c	0x6e8f	0x6e90	0x6e96	0x6e98
0x6e9c	0x6e9d	0x6e9f	0x6ea2	0x6ea5	0x6eaa	0x6eaf	0x6eb2	0x6eb6	0x6eb7
0x6eba	0x6ebd	0x6ebf	0x6ebf	0x6ec2	0x6ec4	0x6ec5	0x6ec9	0x6ecb	0x6ecc
0x6ed1	0x6ed3	0x6ed4	0x6ed5	0x6edd	0x6ede	0x6eec	0x6eff	0x6ef2	0x6ef4
0x6ef7	0x6ef8	0x6efe	0x6eff	0x6f01	0x6f02	0x6f06	0x6f09	0x6f0f	0x6f11
0x6f13	0x6f14	0x6f15	0x6f20	0x6f22	0x6f23	0x6f2b	0x6f2c	0x6f31	0x6f32
0x6f38	0x6f3e	0x6f3f	0x6f41	0x6f45	0x6f54	0x6f58	0x6f5b	0x6f5c	0x6f5f
0x6f64	0x6f66	0x6f6d	0x6f6e	0x6f6f	0x6f70	0x6f74	0x6f78	0x6f7a	0x6f7c
0x6f80	0x6f81	0x6f82	0x6f84	0x6f86	0x6f88	0x6f88	0x6f8e	0x6f91	0x6f97
0x6fa1	0x6fa3	0x6fa4	0x6faa	0x6fb1	0x6fb3	0x6fb5	0x6fb5	0x6fb9	0x6fc0
0x6fc1	0x6fc2	0x6fc3	0x6fc6	0x6fd4	0x6fd5	0x6fd8	0x6fdb	0x6fdf	0x6fe0
0x6fe1	0x6fe4	0x6feb	0x6fec	0x6fee	0x6fef	0x6ff1	0x6ff3	0x6ff5	0x6ff5
0x6ff6	0x6ffa	0x6ffe	0x7001	0x7005	0x7005	0x7007	0x7007	0x7009	0x700b
0x700f	0x7011	0x7015	0x7018	0x701a	0x701b	0x701d	0x701e	0x701f	0x7026
0x7027	0x7028	0x7028	0x702c	0x7030	0x7032	0x703e	0x704c	0x7051	0x7058
0x7063	0x706b	0x706f	0x7070	0x7078	0x707c	0x707d	0x7085	0x7085	0x7089
0x708a	0x708e	0x7092	0x7099	0x70ab	0x70ab	0x70ac	0x70ad	0x70ae	0x70af
0x70b3	0x70b8	0x70b9	0x70ba	0x70bb	0x70bb	0x70c8	0x70cb	0x70cf	0x70d9
0x70dd	0x70df	0x70f1	0x70f9	0x70fd	0x7104	0x7104	0x7109	0x710f	0x710f
0x7114	0x7119	0x711a	0x711c	0x7121	0x7126	0x7136	0x713c	0x7146	0x7146
0x7147	0x7147	0x7149	0x714c	0x714e	0x7155	0x7156	0x7159	0x715c	0x715c
0x7162	0x7164	0x7165	0x7166	0x7167	0x7169	0x716c	0x716e	0x717d	0x7184
0x7188	0x718a	0x718f	0x7194	0x7195	0x7199	0x719f	0x71a8	0x71ac	0x71b1
0x71b9	0x71be	0x71c1	0x71c1	0x71c3	0x71c8	0x71c9	0x71ce	0x71d0	0x71d2
0x71d4	0x71d5	0x71d7	0x71df	0x71e0	0x71e5	0x71e6	0x71e7	0x71ec	0x71ed
0x71ee	0x71f5	0x71f9	0x71fb	0x71fc	0x71fe	0x71fe	0x71ff	0x7206	0x720d
0x7210	0x721b	0x7228	0x722a	0x722c	0x722d	0x7230	0x7232	0x7235	0x7236
0x723a	0x723b	0x723c	0x723d	0x723e	0x723f	0x7240	0x7246	0x7247	0x7248
0x724b	0x724c	0x7252	0x7258	0x7259	0x725b	0x725d	0x725f	0x7261	0x7262

0x7267	0x7269	0x7272	0x7274	0x7279	0x727d	0x727e	0x7280	0x7281	0x7282
0x7287	0x7292	0x7296	0x72a0	0x72a2	0x72a7	0x72ac	0x72af	0x72b1	0x72b1
0x72b2	0x72b6	0x72b9	0x72be	0x72be	0x72c2	0x72c3	0x72c4	0x72c6	0x72ce
0x72d0	0x72d2	0x72d7	0x72d9	0x72db	0x72e0	0x72e1	0x72e2	0x72e9	0x72ec
0x72ed	0x72f7	0x72f8	0x72f9	0x72fc	0x72fd	0x730a	0x7316	0x7317	0x731b
0x731c	0x731d	0x731f	0x7324	0x7324	0x7325	0x7329	0x732a	0x732b	0x732e
0x732f	0x7334	0x7336	0x7337	0x733e	0x733f	0x7344	0x7345	0x734e	0x734f
0x7357	0x7363	0x7368	0x736a	0x7370	0x7372	0x7375	0x7377	0x7377	0x7378
0x737a	0x737b	0x7384	0x7387	0x7389	0x738b	0x7396	0x73a9	0x73b2	0x73b3
0x73bb	0x73bd	0x73bd	0x73c0	0x73c2	0x73c8	0x73c9	0x73ca	0x73cd	
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0x73ea	0x73ed	0x73ee	0x73f1	0x73f5	0x73f5	0x73f8	0x73fe	0x7403	0x7405
0x7406	0x7407	0x7407	0x7409	0x7422	0x7425	0x7426	0x7426	0x7429	0x7429
0x742a	0x742a	0x742e	0x742e	0x7432	0x7433	0x7434	0x7435	0x7436	0x743a
0x743f	0x7441	0x7455	0x7459	0x745a	0x745b	0x745c	0x745e	0x745f	0x7460
0x7462	0x7462	0x7463	0x7464	0x7469	0x746a	0x746f	0x7470	0x7473	0x7476
0x747e	0x7483	0x7489	0x7489	0x748b	0x749e	0x749f	0x749f	0x74a2	0x74a7
0x74b0	0x74bd	0x74ca	0x74cf	0x74d4	0x74dc	0x74e0	0x74e2	0x74e3	0x74e6
0x74e7	0x74e9	0x74ee	0x74f0	0x74f1	0x74f2	0x74f6	0x74f7	0x74f8	0x7501
0x7501	0x7503	0x7504	0x7505	0x750c	0x750d	0x750e	0x7511	0x7513	0x7515
0x7518	0x751a	0x751c	0x751e	0x751f	0x7523	0x7525	0x7526	0x7528	0x752b
0x752c	0x752f	0x752f	0x7530	0x7531	0x7532	0x7533	0x7537	0x7538	0x753a
0x753b	0x753c	0x7544	0x7546	0x7549	0x754a	0x754b	0x754c	0x754d	0x754f
0x7551	0x7554	0x7559	0x755a	0x755b	0x755c	0x755d	0x7560	0x7562	0x7564
0x7565	0x7566	0x7567	0x7569	0x756a	0x756b	0x756d	0x756f	0x756f	0x7570
0x7573	0x7574	0x7576	0x7577	0x7578	0x757f	0x7582	0x7586	0x7587	0x7589
0x758a	0x758b	0x758e	0x758f	0x7591	0x7594	0x759a	0x759d	0x75a3	0x75a5
0x75ab	0x75b1	0x75b2	0x75b3	0x75b5	0x75b8	0x75b9	0x75bc	0x75bd	0x75be
0x75c2	0x75c3	0x75c5	0x75c7	0x75ca	0x75cd	0x75d2	0x75d4	0x75d5	0x75d8
0x75d9	0x75db	0x75de	0x75e2	0x75e3	0x75e9	0x75f0	0x75f2	0x75f3	0x75f4
0x75fa	0x75fc	0x75fe	0x75ff	0x7601	0x7609	0x760b	0x760d	0x761f	0x7620
0x7621	0x7622	0x7624	0x7627	0x7630	0x7634	0x763b	0x7642	0x7646	0x7647
0x7648	0x764c	0x7652	0x7656	0x7658	0x765c	0x7661	0x7662	0x7667	0x7668
0x7669	0x766a	0x766c	0x7670	0x7672	0x7676	0x7678	0x767a	0x767b	0x767c
0x767d	0x767e	0x7680	0x7682	0x7682	0x7683	0x7684	0x7686	0x7687	0x7688
0x768b	0x768e	0x7690	0x7693	0x7696	0x7699	0x769a	0x769b	0x769b	0x769c
0x769c	0x769e	0x769e	0x76a6	0x76a6	0x76ae	0x76b0	0x76b4	0x76b7	0x76b8
0x76b9	0x76ba	0x76bf	0x76c2	0x76c3	0x76c6	0x76c8	0x76ca	0x76cd	0x76d2
0x76d6	0x76d7	0x76db	0x76dc	0x76de	0x76df	0x76e1	0x76e3	0x76e4	0x76e5
0x76e7	0x76ea	0x76ee	0x76f2	0x76f4	0x76f8	0x76fb	0x76fe	0x7701	0x7704

0x7707	0x7708	0x7709	0x770b	0x770c	0x771b	0x771e	0x771f	0x7720	0x7724
0x7725	0x7726	0x7729	0x7737	0x7738	0x773a	0x773c	0x7740	0x7746	0x7746
0x7747	0x775a	0x775b	0x7761	0x7763	0x7765	0x7766	0x7768	0x776b	0x7779
0x777e	0x777f	0x778b	0x778e	0x7791	0x779e	0x77a0	0x77a5	0x77ac	0x77ad
0x77b0	0x77b3	0x77b6	0x77b9	0x77bb	0x77bc	0x77bd	0x77bf	0x77c7	0x77cd
0x77d7	0x77da	0x77db	0x77dc	0x77e2	0x77e3	0x77e5	0x77e7	0x77e9	0x77ed
0x77ee	0x77ef	0x77f3	0x77fc	0x7802	0x780c	0x7812	0x7814	0x7815	0x7820
0x7821	0x7821	0x7825	0x7826	0x7827	0x7832	0x7834	0x783a	0x783f	0x7845
0x784e	0x784e	0x785d	0x7864	0x7864	0x786b	0x786c	0x786f	0x7872	0x7874
0x787a	0x787a	0x787c	0x7881	0x7886	0x7887	0x788c	0x788d	0x788e	0x7891
0x7893	0x7895	0x7897	0x789a	0x78a3	0x78a7	0x78a9	0x78aa	0x78af	0x78b5
0x78ba	0x78bc	0x78be	0x78c1	0x78c5	0x78c6	0x78ca	0x78cb	0x78d0	0x78d1
0x78d4	0x78da	0x78e7	0x78e8	0x78ec	0x78ef	0x78f4	0x78fd	0x7901	0x7907
0x790e	0x7911	0x7912	0x7919	0x7926	0x792a	0x792b	0x792c	0x7930	0x7930
0x793a	0x793c	0x793e	0x7940	0x7941	0x7947	0x7948	0x7949	0x7950	0x7953
0x7955	0x7956	0x7957	0x795a	0x795d	0x795e	0x795f	0x7960	0x7962	0x7965
0x7968	0x796d	0x7977	0x797a	0x797f	0x7980	0x7981	0x7984	0x7985	0x798a
0x798d	0x798e	0x798f	0x7994	0x7994	0x799b	0x799b	0x799d	0x79a6	0x79a7
0x79aa	0x79ae	0x79b0	0x79b3	0x79b9	0x79ba	0x79bd	0x79be	0x79bf	0x79c0
0x79c1	0x79c9	0x79cb	0x79d1	0x79d2	0x79d5	0x79d8	0x79df	0x79e1	0x79e3
0x79e4	0x79e6	0x79e7	0x79e9	0x79ec	0x79f0	0x79fb	0x7a00	0x7a08	0x7a0b
0x7a0d	0x7a0e	0x7a14	0x7a17	0x7a18	0x7a19	0x7a1a	0x7a1c	0x7a1f	0x7a20
0x7a2e	0x7a31	0x7a32	0x7a37	0x7a3b	0x7a3c	0x7a3d	0x7a3e	0x7a3f	0x7a40
0x7a42	0x7a43	0x7a46	0x7a49	0x7a4d	0x7a4e	0x7a4f	0x7a50	0x7a57	0x7a61
0x7a62	0x7a63	0x7a69	0x7a6b	0x7a70	0x7a74	0x7a76	0x7a79	0x7a7a	0x7a7d
0x7a7f	0x7a81	0x7a83	0x7a84	0x7a88	0x7a92	0x7a93	0x7a95	0x7a96	0x7a97
0x7a98	0x7a9f	0x7aa9	0x7aaa	0x7aae	0x7aaf	0x7ab0	0x7ab6	0x7aba	0x7abf
0x7ac3	0x7ac4	0x7ac5	0x7ac7	0x7ac8	0x7aca	0x7acb	0x7acd	0x7acf	0x7ad1
0x7ad1	0x7ad2	0x7ad3	0x7ad5	0x7ad9	0x7ada	0x7adc	0x7add	0x7adf	0x7ae0
0x7ae1	0x7ae2	0x7ae3	0x7ae5	0x7ae6	0x7ae7	0x7ae7	0x7aea	0x7aeb	0x7aeb
0x7aed	0x7aef	0x7af0	0x7af6	0x7af8	0x7af9	0x7afa	0x7aff	0x7b02	0x7b04
0x7b06	0x7b08	0x7b0a	0x7b0b	0x7b0f	0x7b11	0x7b18	0x7b19	0x7b1b	0x7b1e
0x7b20	0x7b25	0x7b26	0x7b28	0x7b2c	0x7b33	0x7b35	0x7b36	0x7b39	0x7b45
0x7b46	0x7b48	0x7b49	0x7b4b	0x7b4c	0x7b4d	0x7b4f	0x7b50	0x7b51	0x7b52
0x7b54	0x7b56	0x7b5d	0x7b65	0x7b67	0x7b6c	0x7b6e	0x7b70	0x7b71	0x7b74
0x7b75	0x7b7a	0x7b86	0x7b87	0x7b8b	0x7b8d	0x7b8f	0x7b92	0x7b94	0x7b95
0x7b97	0x7b98	0x7b99	0x7b9a	0x7b9c	0x7b9d	0x7b9e	0x7b9e	0x7b9f	0x7ba1
0x7baa	0x7bad	0x7bb1	0x7bb4	0x7bb8	0x7bc0	0x7bc1	0x7bc4	0x7bc6	0x7bc7
0x7bc9	0x7bcb	0x7bcc	0x7bcf	0x7bdd	0x7be0	0x7be4	0x7be5	0x7be6	0x7be9
0x7bed	0x7bf3	0x7bf6	0x7bf7	0x7c00	0x7c07	0x7c0d	0x7c11	0x7c12	0x7c13

0x7c14	0x7c17	0x7c1f	0x7c21	0x7c23	0x7c27	0x7c2a	0x7c2b	0x7c37	0x7c38
0x7c3d	0x7c3e	0x7c3f	0x7c40	0x7c43	0x7c4c	0x7c4d	0x7c4f	0x7c50	0x7c54
0x7c56	0x7c58	0x7c5f	0x7c60	0x7c64	0x7c65	0x7c6c	0x7c73	0x7c75	0x7c7e
0x7c81	0x7c82	0x7c83	0x7c89	0x7c8b	0x7c8d	0x7c90	0x7c92	0x7c95	0x7c97
0x7c98	0x7c9b	0x7c9f	0x7ca1	0x7ca2	0x7ca4	0x7ca5	0x7ca7	0x7ca8	0x7cab
0x7cad	0x7cae	0x7cb1	0x7cb2	0x7cb3	0x7cb9	0x7cbd	0x7cbe	0x7cc0	0x7cc2
0x7cc5	0x7cca	0x7cce	0x7cd2	0x7cd6	0x7cd8	0x7cdc	0x7cde	0x7cdf	0x7ce0
0x7ce2	0x7ce7	0x7cef	0x7cf2	0x7cf4	0x7cf6	0x7cf8	0x7cfa	0x7cfb	0x7cfe
0x7d00	0x7d02	0x7d04	0x7d05	0x7d06	0x7d0a	0x7d0b	0x7d0d	0x7d10	0x7d14
0x7d15	0x7d17	0x7d18	0x7d19	0x7d1a	0x7d1b	0x7d1c	0x7d20	0x7d21	0x7d22
0x7d2b	0x7d2c	0x7d2e	0x7d2f	0x7d30	0x7d32	0x7d33	0x7d35	0x7d39	0x7d3a
0x7d3f	0x7d42	0x7d43	0x7d44	0x7d45	0x7d46	0x7d48	0x7d48	0x7d4b	0x7d4c
0x7d4e	0x7d4f	0x7d50	0x7d56	0x7d5b	0x7d5c	0x7d5c	0x7d5e	0x7d61	0x7d62
0x7d63	0x7d66	0x7d68	0x7d6e	0x7d71	0x7d72	0x7d73	0x7d75	0x7d76	0x7d79
0x7d7d	0x7d89	0x7d8f	0x7d93	0x7d99	0x7d9a	0x7d9b	0x7d9c	0x7d9f	0x7da0
0x7da0	0x7da2	0x7da3	0x7dab	0x7dac	0x7dad	0x7dae	0x7daf	0x7db0	0x7db1
0x7db2	0x7db4	0x7db5	0x7db7	0x7db7	0x7db8	0x7dba	0x7dbb	0x7dbd	0x7dbe
0x7dbf	0x7dc7	0x7dca	0x7dcb	0x7dcf	0x7dd1	0x7dd2	0x7dd5	0x7dd6	0x7dd6
0x7dd8	0x7dda	0x7ddc	0x7ddd	0x7dde	0x7de0	0x7de1	0x7de4	0x7de8	0x7de9
0x7dec	0x7def	0x7df2	0x7df4	0x7fb	0x7e01	0x7e04	0x7e05	0x7e09	0x7ea
0x7e0b	0x7e12	0x7e1b	0x7e1e	0x7e1f	0x7e21	0x7e22	0x7e23	0x7e26	0x7e2b
0x7e2e	0x7e31	0x7e32	0x7e35	0x7e37	0x7e39	0x7e3a	0x7e3b	0x7e3d	0x7e3e
0x7e41	0x7e43	0x7e46	0x7e4a	0x7e4b	0x7e4d	0x7e52	0x7e52	0x7e54	0x7e55
0x7e56	0x7e59	0x7e5a	0x7e5d	0x7e5e	0x7e66	0x7e67	0x7e69	0x7e6a	0x7e6d
0x7e70	0x7e79	0x7e7b	0x7e7c	0x7e7d	0x7e7f	0x7e82	0x7e83	0x7e88	0x7e89
0x7e8a	0x7e8a	0x7e8c	0x7e8e	0x7e8f	0x7e90	0x7e92	0x7e93	0x7e94	0x7e96
0x7e9b	0x7e9c	0x7f36	0x7f38	0x7f3a	0x7f45	0x7f47	0x7f47	0x7f4c	0x7f4d
0x7f4e	0x7f50	0x7f51	0x7f54	0x7f55	0x7f58	0x7f5f	0x7f60	0x7f67	0x7f68
0x7f69	0x7f6a	0x7f6b	0x7f6e	0x7f70	0x7f72	0x7f75	0x7f77	0x7f78	0x7f79
0x7f82	0x7f83	0x7f85	0x7f86	0x7f87	0x7f88	0x7f8a	0x7f8c	0x7f8e	0x7f94
0x7f9a	0x7f9d	0x7f9e	0x7fa1	0x7fa1	0x7fa3	0x7fa4	0x7fa8	0x7fa9	0x7fae
0x7faf	0x7fb2	0x7fb6	0x7fb8	0x7fb9	0x7fdb	0x7fc1	0x7fc5	0x7fc6	0x7fca
0x7fcc	0x7fd2	0x7fd4	0x7fd5	0x7fe0	0x7fe1	0x7fe6	0x7fe9	0x7feb	0x7ff0
0x7ff3	0x7ff9	0x7ffb	0x7ffc	0x8000	0x8001	0x8003	0x8004	0x8005	0x8006
0x800b	0x800c	0x8010	0x8012	0x8015	0x8017	0x8018	0x8019	0x801c	0x8021
0x8028	0x8033	0x8036	0x803b	0x803d	0x803f	0x8046	0x804a	0x8052	0x8056
0x8058	0x805a	0x805e	0x805f	0x8061	0x8062	0x8068	0x806f	0x8070	0x8072
0x8073	0x8074	0x8076	0x8077	0x8079	0x807d	0x807e	0x807f	0x8084	0x8085
0x8086	0x8087	0x8089	0x808b	0x808c	0x8093	0x8096	0x8098	0x809a	0x809b
0x809d	0x80a1	0x80a2	0x80a5	0x80a9	0x80aa	0x80ac	0x80ad	0x80af	0x80b1

0x80b2	0x80b4	0x80ba	0x80c3	0x80c4	0x80c6	0x80cc	0x80ce	0x80d6	0x80d9
0x80da	0x80db	0x80dd	0x80de	0x80e1	0x80e4	0x80e5	0x80ef	0x80f1	0x80f4
0x80f8	0x80fc	0x80fd	0x8102	0x8105	0x8106	0x8107	0x8108	0x8109	0x810a
0x811a	0x811b	0x8123	0x8129	0x812f	0x8131	0x8133	0x8139	0x813e	0x8146
0x814b	0x814e	0x8150	0x8151	0x8153	0x8154	0x8155	0x815f	0x8165	0x8166
0x816b	0x816e	0x8170	0x8171	0x8174	0x8178	0x8179	0x817a	0x817f	0x8180
0x8182	0x8183	0x8188	0x818a	0x818f	0x8193	0x8195	0x819a	0x819c	0x819d
0x81a0	0x81a3	0x81a4	0x81a8	0x81a9	0x81b0	0x81b3	0x81b5	0x81b8	0x81ba
0x81bd	0x81be	0x81bf	0x81c0	0x81c2	0x81c6	0x81c8	0x81c9	0x81cd	0x81d1
0x81d3	0x81d8	0x81d9	0x81da	0x81df	0x81e0	0x81e3	0x81e5	0x81e7	0x81e8
0x81ea	0x81ed	0x81f3	0x81f4	0x81fa	0x81fb	0x81fc	0x81fe	0x8201	0x8202
0x8205	0x8207	0x8208	0x8209	0x820a	0x820c	0x820d	0x820e	0x8210	0x8212
0x8216	0x8217	0x8218	0x821b	0x821c	0x821e	0x821f	0x8229	0x822a	0x822b
0x822c	0x822e	0x8233	0x8235	0x8236	0x8237	0x8238	0x8239	0x8240	0x8247
0x8258	0x8259	0x825a	0x825d	0x825f	0x8262	0x8264	0x8266	0x8268	0x826a
0x826b	0x826e	0x826f	0x8271	0x8272	0x8276	0x8277	0x8278	0x827e	0x828b
0x828d	0x8292	0x8299	0x829d	0x829f	0x82a5	0x82a6	0x82ab	0x82ac	0x82ad
0x82af	0x82b1	0x82b3	0x82b8	0x82b9	0x82bb	0x82bd	0x82c5	0x82d1	0x82d2
0x82d3	0x82d4	0x82d7	0x82d9	0x82db	0x82dc	0x82de	0x82df	0x82e1	0x82e3
0x82e5	0x82e6	0x82e7	0x82eb	0x82f1	0x82f3	0x82f4	0x82f9	0x82fa	0x82fb
0x8301	0x8301	0x8302	0x8303	0x8304	0x8305	0x8306	0x8309	0x830e	0x8316
0x8317	0x8318	0x831c	0x8323	0x8328	0x832b	0x832f	0x8331	0x8332	0x8334
0x8335	0x8336	0x8338	0x8339	0x8340	0x8345	0x8349	0x834a	0x834f	0x8350
0x8352	0x8358	0x8362	0x8362	0x8373	0x8375	0x8377	0x837b	0x837c	0x837f
0x837f	0x8385	0x8387	0x8389	0x838a	0x838e	0x8393	0x8396	0x839a	0x839e
0x839f	0x83a0	0x83a2	0x83a8	0x83aa	0x83ab	0x83b1	0x83b5	0x83bd	0x83c1
0x83c5	0x83c7	0x83c7	0x83ca	0x83cc	0x83ce	0x83d3	0x83d6	0x83d8	0x83dc
0x83df	0x83e0	0x83e9	0x83eb	0x83ef	0x83f0	0x83f1	0x83f2	0x83f4	0x83f6
0x83f6	0x83f7	0x83fb	0x83fd	0x8403	0x8404	0x8407	0x840b	0x840c	0x840d
0x840e	0x8413	0x8420	0x8422	0x8429	0x842a	0x842c	0x8431	0x8435	0x8438
0x843c	0x843d	0x8446	0x8448	0x8448	0x8449	0x844e	0x8457	0x845b	0x8461
0x8462	0x8463	0x8466	0x8469	0x846b	0x846c	0x846d	0x846e	0x846f	0x8471
0x8475	0x8477	0x8479	0x847a	0x8482	0x8484	0x848b	0x8490	0x8494	0x8499
0x849c	0x849f	0x84a1	0x84ad	0x84b2	0x84b4	0x84b4	0x84b8	0x84b9	0x84bb
0x84bc	0x84bf	0x84c1	0x84c4	0x84c6	0x84c9	0x84ca	0x84cb	0x84cd	0x84d0
0x84d1	0x84d6	0x84d9	0x84da	0x84dc	0x84dc	0x84ec	0x84ee	0x84f4	0x84fc
0x84ff	0x8500	0x8506	0x8511	0x8513	0x8514	0x8515	0x8517	0x8518	0x851a
0x851f	0x8521	0x8526	0x852c	0x852d	0x8535	0x853d	0x8540	0x8541	0x8543
0x8548	0x8549	0x854a	0x854b	0x854e	0x8553	0x8553	0x8555	0x8557	0x8558
0x8559	0x8559	0x855a	0x8563	0x8568	0x8569	0x856a	0x856b	0x856b	0x856d

0x8577	0x857e	0x8580	0x8584	0x8587	0x8588	0x858a	0x8590	0x8591	0x8594
0x8597	0x8599	0x859b	0x859c	0x85a4	0x85a6	0x85a8	0x85a9	0x85aa	0x85ab
0x85ac	0x85ae	0x85af	0x85b0	0x85b0	0x85b9	0x85ba	0x85c1	0x85c9	0x85cd
0x85cf	0x85d0	0x85d5	0x85dc	0x85dd	0x85e4	0x85e5	0x85e9	0x85ea	0x85f7
0x85f9	0x85fa	0x85fb	0x85fe	0x8602	0x8606	0x8607	0x860a	0x860b	0x8613
0x8616	0x8617	0x861a	0x8622	0x862d	0x862f	0x8630	0x863f	0x864d	0x864e
0x8650	0x8654	0x8655	0x865a	0x865c	0x865e	0x865f	0x8667	0x866b	0x8671
0x8679	0x867b	0x868a	0x868b	0x868c	0x8693	0x8695	0x86a3	0x86a4	0x86a9
0x86aa	0x86ab	0x86af	0x86b0	0x86b6	0x86c4	0x86c6	0x86c7	0x86c9	0x86cb
0x86cd	0x86ce	0x86d4	0x86d9	0x86db	0x86de	0x86df	0x86e4	0x86e9	0x86ec
0x86ed	0x86ee	0x86ef	0x86f8	0x86f9	0x86fb	0x86fe	0x8700	0x8702	0x8703
0x8706	0x8708	0x8709	0x870a	0x870d	0x8711	0x8712	0x8718	0x871a	0x871c
0x8725	0x8729	0x8734	0x8737	0x873b	0x873f	0x8749	0x874b	0x874c	0x874e
0x8753	0x8755	0x8757	0x8759	0x875f	0x8760	0x8763	0x8766	0x8768	0x876a
0x876e	0x8774	0x8776	0x8778	0x877f	0x8782	0x878d	0x879f	0x87a2	0x87ab
0x87af	0x87b3	0x87ba	0x87bb	0x87bd	0x87c0	0x87c4	0x87c6	0x87c7	0x87cb
0x87d0	0x87d2	0x87e0	0x87ef	0x87f2	0x87f6	0x87f7	0x87f9	0x87fb	0x87fe
0x8805	0x8807	0x8807	0x880d	0x880e	0x880f	0x8811	0x8815	0x8816	0x8821
0x8822	0x8823	0x8827	0x8831	0x8836	0x8839	0x883b	0x8840	0x8842	0x8844
0x8846	0x884c	0x884d	0x8852	0x8853	0x8857	0x8859	0x885b	0x885d	0x885e
0x8861	0x8862	0x8863	0x8868	0x886b	0x8870	0x8872	0x8875	0x8877	0x887d
0x887e	0x887f	0x8881	0x8882	0x8888	0x888b	0x888d	0x8892	0x8896	0x8897
0x8899	0x889e	0x88a2	0x88a4	0x88ab	0x88ae	0x88b0	0x88b1	0x88b4	0x88b5
0x88b7	0x88bf	0x88c1	0x88c2	0x88c3	0x88c4	0x88c5	0x88cf	0x88d4	0x88d5
0x88d8	0x88d9	0x88dc	0x88dd	0x88df	0x88e1	0x88e8	0x88f2	0x88f3	0x88f4
0x88f5	0x88f5	0x88f8	0x88f9	0x88fc	0x88fd	0x88fe	0x8902	0x8904	0x8907
0x890a	0x890c	0x8910	0x8912	0x8913	0x891c	0x891c	0x891d	0x891e	0x8925
0x892a	0x892b	0x8936	0x8938	0x893b	0x8941	0x8943	0x8944	0x894c	0x894d
0x8956	0x895e	0x895f	0x8960	0x8964	0x8966	0x896a	0x896d	0x896f	0x8972
0x8974	0x8977	0x897e	0x897f	0x8981	0x8983	0x8986	0x8987	0x8988	0x898a
0x898b	0x898f	0x8993	0x8996	0x8997	0x8998	0x899a	0x89a1	0x89a6	0x89a7
0x89a9	0x89aa	0x89ac	0x89af	0x89b2	0x89b3	0x89ba	0x89bd	0x89bf	0x89c0
0x89d2	0x89da	0x89dc	0x89dd	0x89e3	0x89e6	0x89e7	0x89f4	0x89f8	0x8a00
0x8a02	0x8a03	0x8a08	0x8a0a	0x8a0c	0x8a0e	0x8a10	0x8a12	0x8a12	0x8a13
0x8a16	0x8a17	0x8a18	0x8a1b	0x8a1d	0x8a1f	0x8a23	0x8a25	0x8a2a	0x8a2d
0x8a31	0x8a33	0x8a34	0x8a36	0x8a37	0x8a37	0x8a3a	0x8a3b	0x8a3c	0x8a41
0x8a46	0x8a48	0x8a50	0x8a51	0x8a52	0x8a54	0x8a55	0x8a5b	0x8a5e	0x8a60
0x8a62	0x8a63	0x8a66	0x8a69	0x8a6b	0x8a6c	0x8a6d	0x8a6e	0x8a70	0x8a71
0x8a72	0x8a73	0x8a79	0x8a79	0x8a7c	0x8a82	0x8a84	0x8a85	0x8a87	0x8a89
0x8a8c	0x8a8d	0x8a91	0x8a93	0x8a95	0x8a98	0x8a9a	0x8a9e	0x8aa0	0x8aa1

0x8aa3	0x8aa4	0x8aa5	0x8aa6	0x8aa7	0x8aa7	0x8aa8	0x8aac	0x8aad	0x8ab0
0x8ab2	0x8ab9	0x8abc	0x8abe	0x8abe	0x8abf	0x8ac2	0x8ac4	0x8ac7	0x8acb
0x8acc	0x8acd	0x8acf	0x8ad2	0x8ad6	0x8ada	0x8adb	0x8adc	0x8ade	0x8adf
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0x8b04	0x8b07	0x8b0c	0x8b0e	0x8b10	0x8b14	0x8b16	0x8b17	0x8b19	0x8b1a
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0x8b3e	0x8b41	0x8b49	0x8b4c	0x8b4e	0x8b4f	0x8b53	0x8b53	0x8b56	0x8b58
0x8b5a	0x8b5b	0x8b5c	0x8b5f	0x8b66	0x8b6b	0x8b6c	0x8b6f	0x8b70	0x8b71
0x8b72	0x8b74	0x8b77	0x8b7d	0x8b7f	0x8b7f	0x8b80	0x8b83	0x8b8a	0x8b8c
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0x8c62	0x8c6a	0x8c6b	0x8c6c	0x8c78	0x8c79	0x8c7a	0x8c7c	0x8c82	0x8c85
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0x8e44	0x8e47	0x8e48	0x8e49	0x8e4a	0x8e4c	0x8e50	0x8e55	0x8e59	0x8e5f
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0x8e87	0x8e8a	0x8e8b	0x8e8d	0x8e91	0x8e93	0x8e94	0x8e99	0x8ea1	0x8eaa
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0x8ecb	0x8ecc	0x8ecd	0x8ecf	0x8ecf	0x8ed2	0x8edb	0x8edf	0x8ee2	0x8ee3
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0x8fb2	0x8fbc	0x8fbf	0x8fc2	0x8fc4	0x8fc5	0x8fce	0x8fd1	0x8fd4	0x8fda
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0x8ff7	0x8ff8	0x8ff9	0x8ffa	0x8ffd	0x9000	0x9001	0x9003	0x9005	0x9006

0x900b	0x900d	0x900e	0x900f	0x9010	0x9011	0x9013	0x9014	0x9015	0x9016
0x9017	0x9019	0x901a	0x901d	0x901e	0x901f	0x9020	0x9021	0x9022	0x9023
0x9027	0x902e	0x9031	0x9032	0x9035	0x9036	0x9038	0x9039	0x903c	0x903e
0x9041	0x9042	0x9045	0x9047	0x9049	0x904a	0x904b	0x904d	0x904e	0x904f
0x9050	0x9051	0x9052	0x9053	0x9054	0x9055	0x9056	0x9058	0x9059	0x905c
0x905e	0x9060	0x9061	0x9063	0x9065	0x9067	0x9067	0x9068	0x9069	0x906d
0x906e	0x906f	0x9072	0x9075	0x9076	0x9077	0x9078	0x907a	0x907c	0x907d
0x907f	0x9080	0x9081	0x9082	0x9083	0x9084	0x9087	0x9089	0x908a	0x908f
0x9091	0x90a3	0x90a6	0x90a8	0x90aa	0x90af	0x90b1	0x90b5	0x90b8	0x90c1
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0x90f5	0x90f7	0x90fd	0x9102	0x9112	0x9115	0x9115	0x9119	0x9127	0x9127
0x912d	0x9130	0x9132	0x9149	0x914a	0x914b	0x914c	0x914d	0x914e	0x9152
0x9154	0x9156	0x9158	0x9162	0x9163	0x9165	0x9169	0x916a	0x916c	0x9172
0x9173	0x9175	0x9177	0x9178	0x9182	0x9187	0x9189	0x918b	0x918d	0x9190
0x9192	0x9197	0x919c	0x91a2	0x91a4	0x91aa	0x91ab	0x91af	0x91b4	0x91b5
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0x91da	0x91db	0x91dc	0x91dd	0x91de	0x91de	0x91df	0x91e1	0x91e3	0x91e4
0x91e4	0x91e5	0x91e5	0x91e6	0x91e7	0x91ed	0x91ed	0x91ee	0x91ee	0x91f5
0x91f6	0x91fc	0x91ff	0x9206	0x9206	0x920a	0x920a	0x920d	0x920e	0x9210
0x9210	0x9211	0x9214	0x9215	0x921e	0x9229	0x922c	0x9234	0x9237	0x9239
0x9239	0x923a	0x923a	0x923c	0x923c	0x923f	0x9240	0x9240	0x9244	0x9245
0x9248	0x9249	0x924b	0x924e	0x924e	0x9250	0x9251	0x9251	0x9257	0x9259
0x9259	0x925a	0x925b	0x925e	0x9262	0x9264	0x9266	0x9267	0x9267	0x9271
0x9277	0x9277	0x9278	0x9278	0x927e	0x9280	0x9283	0x9285	0x9288	0x9288
0x9291	0x9293	0x9295	0x9296	0x9298	0x929a	0x929b	0x929c	0x92a7	0x92a7
0x92ad	0x92b7	0x92b9	0x92cf	0x92d0	0x92d0	0x92d2	0x92d3	0x92d3	0x92d5
0x92d5	0x92d7	0x92d7	0x92d9	0x92d9	0x92e0	0x92e0	0x92e4	0x92e7	0x92e7
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0x9319	0x931a	0x931d	0x931d	0x931e	0x931e	0x9320	0x9321	0x9321	0x9322
0x9323	0x9325	0x9325	0x9326	0x9328	0x932b	0x932c	0x932e	0x932f	0x9332
0x9335	0x933a	0x933b	0x9344	0x9348	0x9348	0x934b	0x934d	0x9354	0x9356
0x9357	0x9357	0x935b	0x935c	0x9360	0x936c	0x936e	0x9370	0x9370	0x9375
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0x93ac	0x93ad	0x93ae	0x93b0	0x93b9	0x93c3	0x93c6	0x93c6	0x93c8	0x93d0
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0x9444	0x9445	0x9445	0x9448	0x9448	0x9451	0x9452	0x9453	0x945a	0x945b

0x945e	0x9460	0x9462	0x946a	0x9470	0x9475	0x9477	0x947c	0x947d	0x947e
0x947f	0x9481	0x9577	0x9580	0x9582	0x9583	0x9587	0x9589	0x958a	0x958b
0x958f	0x9591	0x9592	0x9592	0x9593	0x9594	0x9596	0x9598	0x9599	0x95a0
0x95a2	0x95a3	0x95a4	0x95a5	0x95a7	0x95a8	0x95ad	0x95b2	0x95b9	0x95bb
0x95bc	0x95be	0x95c3	0x95c7	0x95ca	0x95cc	0x95cd	0x95d4	0x95d5	0x95d6
0x95d8	0x95dc	0x95e1	0x95e2	0x95e5	0x961c	0x9621	0x9628	0x962a	0x962e
0x962f	0x9632	0x963b	0x963f	0x9640	0x9642	0x9644	0x964b	0x964c	0x964d
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0x9665	0x9666	0x966a	0x966c	0x9670	0x9672	0x9673	0x9675	0x9676	0x9677
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0x9724	0x9727	0x972a	0x9730	0x9732	0x9733	0x9733	0x9738	0x9739	0x973b
0x973b	0x973d	0x973e	0x9742	0x9743	0x9743	0x9744	0x9746	0x9748	0x9749
0x974d	0x974d	0x974f	0x974f	0x9751	0x9751	0x9752	0x9755	0x9755	0x9756
0x9759	0x975c	0x975e	0x9760	0x9761	0x9762	0x9764	0x9766	0x9768	0x9769
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0x97a8	0x97ab	0x97ad	0x97b3	0x97b4	0x97c3	0x97c6	0x97c8	0x97cb	0x97d3
0x97dc	0x97ed	0x97ee	0x97f2	0x97f3	0x97f5	0x97f6	0x97fb	0x97ff	0x9801
0x9802	0x9803	0x9805	0x9806	0x9808	0x980c	0x980f	0x9810	0x9811	0x9812
0x9813	0x9817	0x9818	0x981a	0x9821	0x9824	0x982c	0x982d	0x9834	0x9837
0x9838	0x983b	0x983c	0x983d	0x9846	0x984b	0x984c	0x984d	0x984e	0x984f
0x9854	0x9855	0x9857	0x9857	0x9858	0x985b	0x985e	0x9865	0x9865	0x9867
0x986b	0x986f	0x9870	0x9871	0x9873	0x9874	0x98a8	0x98aa	0x98af	0x98b1
0x98b6	0x98c3	0x98c4	0x98c6	0x98db	0x98dc	0x98df	0x98e2	0x98e9	0x98eb
0x98ed	0x98ee	0x98ef	0x98f2	0x98f4	0x98fc	0x98fd	0x98fe	0x9903	0x9905
0x9909	0x990a	0x990c	0x9910	0x9912	0x9913	0x9914	0x9918	0x991d	0x991e
0x9920	0x9921	0x9924	0x9927	0x9927	0x9928	0x992c	0x992e	0x993d	0x993e
0x9942	0x9945	0x9949	0x994b	0x994c	0x9950	0x9951	0x9952	0x9955	0x9957
0x9996	0x9997	0x9998	0x9999	0x999e	0x999e	0x99a5	0x99a8	0x99ac	0x99ad
0x99ae	0x99b3	0x99b4	0x99bc	0x99c1	0x99c4	0x99c5	0x99c6	0x99c8	0x99d0
0x99d1	0x99d2	0x99d5	0x99d8	0x99db	0x99dd	0x99df	0x99e2	0x99ed	0x99ee
0x99f1	0x99f2	0x99f8	0x99fb	0x99ff	0x9a01	0x9a05	0x9a0e	0x9a0f	0x9a12
0x9a13	0x9a19	0x9a28	0x9a2b	0x9a30	0x9a37	0x9a3e	0x9a40	0x9a42	0x9a43

0x9a45	0x9a4d	0x9a4e	0x9a4e	0x9a55	0x9a57	0x9a5a	0x9a5b	0x9a5f	0x9a62
0x9a64	0x9a65	0x9a69	0x9a6a	0x9a6b	0x9aa8	0x9aad	0x9ab0	0x9ab8	0x9abc
0x9ac0	0x9ac4	0x9acf	0x9ad1	0x9ad3	0x9ad4	0x9ad8	0x9ad9	0x9ad9	0x9adc
0x9adc	0x9ade	0x9adf	0x9ae2	0x9ae3	0x9ae6	0x9aea	0x9ae8	0x9aed	0x9aee
0x9aef	0x9af1	0x9af4	0x9af7	0x9afb	0x9b06	0x9b18	0x9b1a	0x9b1f	0x9b22
0x9b23	0x9b25	0x9b27	0x9b28	0x9b29	0x9b2a	0x9b2e	0x9b2f	0x9b31	0x9b32
0x9b3b	0x9b3c	0x9b41	0x9b42	0x9b43	0x9b44	0x9b45	0x9b4d	0x9b4e	0x9b4f
0x9b51	0x9b54	0x9b58	0x9b5a	0x9b6f	0x9b72	0x9b72	0x9b74	0x9b75	0x9b75
0x9b83	0x9b8e	0x9b8f	0x9b8f	0x9b91	0x9b92	0x9b93	0x9b96	0x9b97	0x9b9f
0x9ba0	0x9ba8	0x9baa	0x9bab	0x9bad	0x9bae	0x9bb1	0x9bb1	0x9bb4	0x9bb9
0x9bbb	0x9bbb	0x9bc0	0x9bc6	0x9bc9	0x9bca	0x9bcf	0x9bd1	0x9bd2	0x9bd4
0x9bd6	0x9bdb	0x9be1	0x9be2	0x9be3	0x9be4	0x9be8	0x9bf0	0x9bf1	0x9bf2
0x9bf5	0x9c00	0x9c00	0x9c04	0x9c06	0x9c08	0x9c09	0x9c0a	0x9c0c	0x9c0d
0x9c10	0x9c12	0x9c13	0x9c14	0x9c15	0x9c1b	0x9c21	0x9c24	0x9c25	0x9c2d
0x9c2e	0x9c2f	0x9c30	0x9c32	0x9c39	0x9c3a	0x9c3b	0x9c3e	0x9c46	0x9c47
0x9c48	0x9c52	0x9c57	0x9c5a	0x9c60	0x9c67	0x9c76	0x9c78	0x9ce5	0x9ce7
0x9ce9	0x9ceb	0x9cec	0x9cf0	0x9cf3	0x9cf4	0x9cf6	0x9d03	0x9d06	0x9d07
0x9d08	0x9d09	0x9d0e	0x9d12	0x9d15	0x9d1b	0x9d1f	0x9d23	0x9d26	0x9d28
0x9d2a	0x9d2b	0x9d2c	0x9d3b	0x9d3e	0x9d3f	0x9d41	0x9d44	0x9d46	0x9d48
0x9d50	0x9d51	0x9d59	0x9d5c	0x9d5d	0x9d5e	0x9d60	0x9d61	0x9d64	0x9d6b
0x9d6b	0x9d6c	0x9d6f	0x9d70	0x9d70	0x9d72	0x9d7a	0x9d87	0x9d89	0x9d8f
0x9d9a	0x9da4	0x9da9	0x9dab	0x9daf	0x9db2	0x9db4	0x9db8	0x9dba	0x9dbb
0x9dc1	0x9dc2	0x9dc4	0x9dc6	0x9dcf	0x9dd3	0x9dd9	0x9de6	0x9ded	0x9def
0x9df2	0x9df8	0x9df9	0x9dfa	0x9dfd	0x9e19	0x9e19	0x9e1a	0x9e1b	0x9e1e
0x9e75	0x9e78	0x9e79	0x9e7d	0x9e7f	0x9e81	0x9e88	0x9e8b	0x9e8c	0x9e91
0x9e92	0x9e93	0x9e95	0x9e97	0x9e9d	0x9e9f	0x9ea5	0x9ea6	0x9ea9	0x9eaa
0x9ead	0x9eb8	0x9eb9	0x9eba	0x9ebb	0x9ebc	0x9ebe	0x9ebf	0x9ec4	0x9ecc
0x9ecd	0x9ece	0x9ecf	0x9ed0	0x9ed1	0x9ed1	0x9ed2	0x9ed4	0x9ed8	0x9ed9
0x9edb	0x9edc	0x9edd	0x9ede	0x9ee0	0x9ee5	0x9ee8	0x9eef	0x9ef4	0x9ef6
0x9ef7	0x9ef9	0x9efb	0x9efc	0x9efd	0x9f07	0x9f08	0x9f0e	0x9f13	0x9f15
0x9f20	0x9f21	0x9f2c	0x9f3b	0x9f3e	0x9f4a	0x9f4b	0x9f4e	0x9f4f	0x9f52
0x9f54	0x9f5f	0x9f60	0x9f61	0x9f62	0x9f63	0x9f66	0x9f67	0x9f6a	0x9f6c
0x9f72	0x9f76	0x9f77	0x9f8d	0x9f95	0x9f9c	0x9f9d	0x9fa0	0xf929	0xf929
0xf9dc	0xf9dc	0xfa0e	0xfa0e	0xfa0f	0xfa0f	0xfa10	0xfa10	0xfa11	0xfa11
0xfa12	0xfa12	0xfa13	0xfa13	0xfa14	0xfa14	0xfa15	0xfa15	0xfa16	0xfa16
0xfa17	0xfa17	0xfa18	0xfa18	0xfa19	0xfa19	0xfa1a	0xfa1a	0xfa1b	0xfa1b
0xfa1c	0xfa1c	0xfa1d	0xfa1d	0xfa1e	0xfa1e	0xfa1f	0xfa1f	0xfa20	0xfa20
0xfa21	0xfa21	0xfa22	0xfa22	0xfa23	0xfa23	0xfa24	0xfa24	0xfa25	0xfa25
0xfa26	0xfa26	0xfa27	0xfa27	0xfa28	0xfa28	0xfa29	0xfa29	0xfa2a	0xfa2a
0xfa2b	0xfa2b	0xfa2c	0xfa2c	0xfa2d	0xfa2d	0xff01	0xff02	0xff02	0xff03

0xff04	0xff05	0xff06	0xff07	0xff07	0xff08	0xff09	0xff0a	0xff0b	0xff0c
0xff0d	0xff0e	0xff0f	0xff10	0xff11	0xff12	0xff13	0xff14	0xff15	0xff16
0xff17	0xff18	0xff19	0xff1a	0xff1b	0xff1c	0xff1d	0xff1e	0xff1f	0xff20
0xff21	0xff22	0xff23	0xff24	0xff25	0xff26	0xff27	0xff28	0xff29	0xff2a
0xff2b	0xff2c	0xff2d	0xff2e	0xff2f	0xff30	0xff31	0xff32	0xff33	0xff34
0xff35	0xff36	0xff37	0xff38	0xff39	0xff3a	0xff3f	0xff30	0xff3b	0xff3c
0xff3d	0xff3e	0xff3f	0xff40	0xff41	0xff42	0xff43	0xff44	0xff45	0xff46
0xff47	0xff48	0xff49	0xff4a	0xff4b	0xff4c	0xff4d	0xff4e	0xff4f	0xff50
0xff51	0xff52	0xff53	0xff54	0xff55	0xff56	0xff57	0xff58	0xff59	0xff5a
0xff5b	0xff5c	0xff5d	0xff5e	0xff61	0xff62	0xff63	0xff64	0xff65	0xff66
0xff67	0xff68	0xff69	0xff6a	0xff6b	0xff6c	0xff6d	0xff6e	0xff6f	0xff70
0xff71	0xff72	0xff73	0xff74	0xff75	0xff76	0xff77	0xff78	0xff79	0xff7a
0xff7b	0xff7c	0xff7d	0xff7e	0xff7f	0xff80	0xff81	0xff82	0xff83	0xff84
0xff85	0xff86	0xff87	0xff88	0xff89	0xff8a	0xff8b	0xff8c	0xff8d	0xff8e
0xff8f	0xff90	0xff91	0xff92	0xff93	0xff94	0xff95	0xff96	0xff97	0xff98
0xff99	0xff9a	0xff9b	0xff9c	0xff9d	0xff9e	0xff9f	0xffe0	0xffe1	0xffe2
0xffe3	0xffe4	0xffe5	0xffe1	0xffe2	0xffe3	0xffe4	0xffe5		

Information

The following code, it can be used as a boundary value when it is specified as input enable chars.

0x0001	0x0002	0x0003	0x0004	0x0005	0x0006	0x0007	0x0008	0x0009	0x000a
0x000b	0x000c	0x000d	0x000e	0x000f	0x0010	0x0011	0x0012	0x0013	0x0014
0x0015	0x0016	0x0017	0x0018	0x0019	0x001a	0x001b	0x001c	0x001d	0x001e
0x001f	0x007f	0x00a7	0x00b0	0x00b6					

BreakIterator.getSentenceInstance()

When BreakIterator.getSentenceInstance() is specify to JFTTextArea#setWordWrapIterator(BreakIterator), use the following boundary value.

0x0021	0x003f	0x0391	0x0392	0x0393	0x0394	0x0395	0x0396	0x0397	0x0398
0x0399	0x039a	0x039b	0x039c	0x039d	0x039e	0x039f	0x03a0	0x03a1	0x03a3
0x03a4	0x03a5	0x03a6	0x03a7	0x03a8	0x03a9	0x03b1	0x03b2	0x03b3	0x03b4
0x03b5	0x03b6	0x03b7	0x03b8	0x03b9	0x03ba	0x03bb	0x03bc	0x03bd	0x03be
0x03bf	0x03c0	0x03c1	0x03c3	0x03c4	0x03c5	0x03c6	0x03c7	0x03c8	0x03c9
0x0401	0x0410	0x0411	0x0412	0x0413	0x0414	0x0415	0x0416	0x0417	0x0418
0x0419	0x041a	0x041b	0x041c	0x041d	0x041e	0x041f	0x0420	0x0421	0x0422
0x0423	0x0424	0x0425	0x0426	0x0427	0x0428	0x0429	0x042a	0x042b	0x042a
0x042b	0x042c	0x042d	0x042e	0x042f	0x0430	0x0431	0x0432	0x0433	0x0434
0x0435	0x0436	0x0437	0x0438	0x0439	0x043a	0x043b	0x043c	0x043d	0x043e
0x043f	0x0440	0x0441	0x0442	0x0443	0x0444	0x0445	0x0446	0x0447	0x0448

0x0449	0x044a	0x044b	0x044c	0x044d	0x044e	0x044f	0x0451	0x044f	0x2010
0x2015	0x2018	0x2019	0x201c	0x201d	0x2020	0x2021	0x2025	0x2026	0x2030
0x2032	0x2033	0x203b	0x2103	0x2116	0x2121	0x212b	0x2160	0x2161	0x2162
0x2163	0x2164	0x2165	0x2166	0x2167	0x2168	0x2169	0x2170	0x2171	0x2172
0x2173	0x2174	0x2175	0x2176	0x2177	0x2178	0x2179	0x2177	0x2178	0x2179
0x2190	0x2191	0x2192	0x2193	0x21d2	0x21d4	0x2200	0x2202	0x2203	0x2207
0x2208	0x220b	0x2211	0x221a	0x221d	0x221e	0x221f	0x2220	0x2225	0x2227
0x2228	0x2229	0x222a	0x222b	0x222c	0x222e	0x2234	0x2235	0x223d	0x2252
0x2260	0x2261	0x2266	0x2267	0x226a	0x226b	0x2282	0x2283	0x2286	0x2287
0x22a5	0x22bf	0x2312	0x2460	0x2461	0x2462	0x2463	0x2464	0x2465	0x2466
0x2467	0x2468	0x2469	0x246a	0x246b	0x246c	0x246d	0x246e	0x246f	0x2470
0x2471	0x2472	0x2473	0x2500	0x2501	0x2502	0x2503	0x250c	0x250f	0x2510
0x2513	0x2514	0x2518	0x251b	0x251c	0x251d	0x2520	0x2523	0x2524	0x2525
0x2528	0x252b	0x2517	0x252c	0x252f	0x2530	0x2533	0x2534	0x2537	0x2538
0x253b	0x253c	0x253f	0x2542	0x254b	0x25a0	0x25a1	0x25b2	0x25b3	0x25bc
0x25bd	0x25c6	0x25c7	0x25cb	0x25ce	0x25cf	0x25ef	0x2605	0x2606	0x2640
0x2642	0x266a	0x266d	0x266f	0x3000	0x3001	0x3002	0x3003	0x3005	0x3006
0x3008	0x3009	0x300a	0x300b	0x300c	0x300d	0x300e	0x300f	0x3010	0x3011
0x3012	0x3013	0x3014	0x3015	0x301d	0x301f	0x3041	0x3042	0x3043	0x3044
0x3045	0x3046	0x3047	0x3048	0x3049	0x304a	0x304b	0x304c	0x304d	0x304e
0x304f	0x3050	0x3051	0x3052	0x3053	0x3054	0x3055	0x3056	0x3057	0x3058
0x3059	0x305a	0x305b	0x305c	0x305d	0x305e	0x305f	0x3060	0x3061	0x3062
0x3063	0x3064	0x3065	0x3066	0x3067	0x3068	0x3069	0x306a	0x306b	0x306c
0x306d	0x306e	0x306f	0x3070	0x3071	0x3072	0x3073	0x3074	0x3075	0x3076
0x3077	0x3078	0x3079	0x307a	0x307b	0x307c	0x307d	0x307e	0x307f	0x3080
0x3081	0x3082	0x3083	0x3084	0x3085	0x3086	0x3087	0x3088	0x3089	0x308a
0x308b	0x308c	0x308d	0x308e	0x308f	0x3090	0x3091	0x3092	0x3093	0x309b
0x309c	0x309d	0x309e	0x30a1	0x30a2	0x30a3	0x30a4	0x30a5	0x30a6	0x30a7
0x30a8	0x30a9	0x30aa	0x30ab	0x30ac	0x30ad	0x30ae	0x30af	0x30b0	0x30b1
0x30b2	0x30b3	0x30b4	0x30b5	0x30b6	0x30b7	0x30b8	0x30b9	0x30ba	0x30bb
0x30bc	0x30bd	0x30be	0x30bf	0x30c0	0x30c1	0x30c2	0x30c3	0x30c4	0x30c5
0x30c6	0x30c7	0x30c8	0x30c9	0x30ca	0x30cb	0x30cc	0x30cd	0x30ce	0x30cf
0x30d0	0x30d1	0x30d2	0x30d3	0x30d4	0x30d5	0x30d6	0x30d7	0x30d8	0x30d9
0x30da	0x30db	0x30dc	0x30dd	0x30de	0x30df	0x30e0	0x30e1	0x30e2	0x30e3
0x30e4	0x30e5	0x30e6	0x30e7	0x30e8	0x30e9	0x30ea	0x30eb	0x30ec	0x30ed
0x30ee	0x30ef	0x30f0	0x30f1	0x30f2	0x30f3	0x30f4	0x30f5	0x30f6	0x30fb
0x30fc	0x30fd	0x30fe	0x3231	0x3232	0x3239	0x32a4	0x32a5	0x32a6	0x32a7
0x32a8	0x3303	0x330d	0x3314	0x3318	0x3322	0x3323	0x3326	0x3327	0x332b
0x3336	0x333b	0x3349	0x334A	0x334D	0x3351	0x3357	0x337b	0x337c	0x337d
0x337e	0x338e	0x338f	0x339c	0x339d	0x339e	0x33a1	0x33c4	0x33cd	0x4e00

0x4e01	0x4e03	0x4e07	0x4e08	0x4e09	0x4e0a	0x4e0b	0x4e0d	0x4e0e	0x4e10
0x4e11	0x4e14	0x4e15	0x4e16	0x4e17	0x4e18	0x4e19	0x4e1e	0x4e21	0x4e26
0x4e28	0x4e2a	0x4e2d	0x4e31	0x4e32	0x4e36	0x4e38	0x4e39	0x4e3b	0x4e3c
0x4e3f	0x4e42	0x4e43	0x4e45	0x4e4b	0x4e4d	0x4e4e	0x4e4f	0x4e55	0x4e56
0x4e57	0x4e58	0x4e59	0x4e5d	0x4e5e	0x4e5f	0x4e62	0x4e71	0x4e73	0x4e7e
0x4e80	0x4e82	0x4e85	0x4e86	0x4e88	0x4e89	0x4e8a	0x4e8b	0x4e8c	0x4e8e
0x4e91	0x4e92	0x4e94	0x4e95	0x4e98	0x4e99	0x4e9b	0x4e9c	0x4e9e	0x4e9f
0x4ea0	0x4ea1	0x4ea2	0x4ea4	0x4ea5	0x4ea6	0x4ea8	0x4eb	0x4ec	0x4ead
0x4eae	0x4eb0	0x4eb3	0x4eb6	0x4eba	0x4ec0	0x4ec1	0x4ec2	0x4ec4	0x4ec6
0x4ec7	0x4eca	0x4ecb	0x4ecd	0x4ece	0x4ecf	0x4ed4	0x4ed5	0x4ed6	0x4ed7
0x4ed8	0x4ed9	0x4ef2	0x4ef6	0x4edd	0x4ede	0x4edf	0x4ee1	0x4ee3	0x4ee4
0x4ee5	0x4eed	0x4eee	0x4ef0	0x4ef7	0x4efb	0x4fc	0x4f00	0x4f01	0x4f03
0x4f09	0x4f0a	0x4f0d	0x4f0e	0x4f0f	0x4f10	0x4f11	0x4f1a	0x4f1c	0x4f1d
0x4f2f	0x4f30	0x4f34	0x4f36	0x4f38	0x4f39	0x4f39	0x4f3c	0x4f3d	0x4f43
0x4f46	0x4f47	0x4f4d	0x4f4e	0x4f4f	0x4f50	0x4f51	0x4f53	0x4f55	0x4f56
0x4f57	0x4f59	0x4f5a	0x4f5b	0x4f5c	0x4f5d	0x4f5e	0x4f69	0x4f6f	0x65b7
0x65b9	0x65bc	0x65bd	0x65c1	0x65c3	0x65c4	0x65c5	0x65c6	0x65cb	0x65cc
0x65cf	0x65d2	0x65d7	0x65d9	0x65db	0x65e0	0x65e1	0x65e2	0x65e5	0x65e6
0x65e7	0x65e8	0x65e9	0x65ec	0x65ed	0x65f1	0x65fa	0x65fb	0x6600	0x6600
0x6602	0x6603	0x6606	0x6607	0x6609	0x6609	0x660a	0x660c	0x660e	0x660f
0x6613	0x6614	0x6615	0x6615	0x661c	0x661e	0x661e	0x661f	0x6620	0x6624
0x6624	0x6625	0x6627	0x6628	0x662d	0x662e	0x662e	0x662f	0x6631	0x6631
0x6634	0x6635	0x6636	0x663b	0x663b	0x663c	0x663f	0x6641	0x6642	0x6643
0x6644	0x6649	0x664b	0x664f	0x6652	0x6657	0x6657	0x6659	0x6659	0x665d
0x665e	0x665f	0x6662	0x6664	0x6665	0x6665	0x6666	0x6667	0x6668	0x6669
0x666e	0x666f	0x6670	0x6673	0x6673	0x6674	0x6676	0x667a	0x6681	0x6683
0x6684	0x6687	0x6688	0x6689	0x668e	0x6691	0x6696	0x6697	0x6698	0x6699
0x6699	0x669d	0x66a0	0x66a0	0x66a2	0x66a6	0x66ab	0x66ae	0x66b2	0x66b2
0x66b4	0x66b8	0x66b9	0x66bc	0x66be	0x66bf	0x66bf	0x66c1	0x66c4	0x66c7
0x66c9	0x66d6	0x66d9	0x66da	0x66dc	0x66dd	0x66e0	0x66e6	0x66e9	0x66f0
0x66f2	0x66f3	0x66f4	0x66f5	0x66f7	0x66f8	0x66f9	0x66fa	0x66fa	0x66fb
0x66fb	0x66fc	0x66fd	0x66fe	0x66ff	0x6700	0x6703	0x6708	0x6709	0x670b
0x670d	0x670e	0x670e	0x670f	0x6714	0x6715	0x6716	0x6717	0x671b	0x671d
0x671e	0x671f	0x6726	0x6727	0x6728	0x672a	0x672b	0x672c	0x672d	0x672e
0x6731	0x6734	0x6736	0x6737	0x6738	0x673a	0x673d	0x673f	0x6741	0x6746
0x6749	0x674e	0x674f	0x6750	0x6751	0x6753	0x6756	0x6759	0x675c	0x675e
0x675f	0x6760	0x6761	0x6762	0x6763	0x6764	0x6765	0x6766	0x6766	0x676a
0x676d	0x676f	0x6770	0x6771	0x6772	0x6773	0x6775	0x6777	0x677c	0x677e
0x677f	0x6785	0x6787	0x6789	0x678b	0x678c	0x6790	0x6795	0x6797	0x679a
0x679c	0x679d	0x67a0	0x67a1	0x67a2	0x67a6	0x67a9	0x67af	0x67b3	0x67b4

0x67b6	0x67b7	0x67b8	0x67b9	0x67bb	0x67bb	0x67c0	0x67c0	0x67c1	0x67c4
0x67c6	0x67ca	0x67ce	0x67cf	0x67d0	0x67d1	0x67d3	0x67d4	0x67d8	0x67da
0x67dd	0x67de	0x67e2	0x67e4	0x67e7	0x67e9	0x67ec	0x67ee	0x67ef	0x67f1
0x67f3	0x67f4	0x67f5	0x67fb	0x67fe	0x67ff	0x6801	0x6801	0x6802	0x6803
0x6804	0x6813	0x6816	0x6817	0x681e	0x6821	0x6822	0x6829	0x682a	0x682b
0x6832	0x6834	0x6838	0x6839	0x683c	0x683d	0x6840	0x6841	0x6842	0x6843
0x6844	0x6844	0x6846	0x6848	0x684d	0x684e	0x6850	0x6851	0x6852	0x6852
0x6853	0x6854	0x6859	0x685c	0x685d	0x685f	0x6863	0x6867	0x6874	0x6876
0x6877	0x687e	0x687f	0x6881	0x6883	0x6885	0x688d	0x688f	0x6893	0x6894
0x6897	0x689b	0x689d	0x689f	0x68a0	0x68a2	0x68a6	0x68a7	0x68a8	0x68ad
0x68af	0x68b0	0x68b1	0x68b3	0x68b5	0x68b6	0x68b9	0x68ba	0x68bc	0x68c4
0x68c6	0x68c8	0x68c8	0x68c9	0x68ca	0x68cb	0x68cd	0x68cf	0x68cf	0x68d2
0x68d4	0x68d5	0x68d7	0x68d8	0x68da	0x68df	0x68e0	0x68e1	0x68e3	0x68e7
0x68ee	0x68ef	0x68f2	0x68f9	0x68fa	0x6900	0x6901	0x6904	0x6905	0x6908
0x690b	0x690c	0x690d	0x690e	0x690f	0x6912	0x6919	0x691a	0x691b	0x691c
0x6921	0x6922	0x6923	0x6925	0x6926	0x6928	0x692a	0x6930	0x6934	0x6936
0x6939	0x693d	0x693f	0x694a	0x6953	0x6954	0x6955	0x6959	0x695a	0x695c
0x695d	0x695e	0x6960	0x6961	0x6962	0x6968	0x6968	0x696a	0x696b	0x696d
0x696e	0x696f	0x6973	0x6974	0x6975	0x6977	0x6978	0x6979	0x697c	0x697d
0x697e	0x6981	0x6982	0x698a	0x698e	0x6991	0x6994	0x6995	0x6998	0x6998
0x699b	0x699c	0x69a0	0x69a7	0x69ae	0x69b1	0x69b2	0x69b4	0x69bb	0x69be
0x69bf	0x69c1	0x69c3	0x69c7	0x69ca	0x69cb	0x69cc	0x69cd	0x69ce	0x69d0
0x69d3	0x69d8	0x69d9	0x69dd	0x69de	0x69e2	0x69e2	0x69e7	0x69e8	0x69eb
0x69ed	0x69f2	0x69f9	0x69fb	0x69fd	0x69ff	0x6a02	0x6a05	0x6a0a	0x6a0b
0x6a0c	0x6a12	0x6a13	0x6a14	0x6a17	0x6a19	0x6a1b	0x6a1e	0x6a1f	0x6a21
0x6a22	0x6a23	0x6a29	0x6a2a	0x6a2b	0x6a2e	0x6a30	0x6a30	0x6a35	0x6a36
0x6a38	0x6a39	0x6a3a	0x6a3d	0x6a44	0x6a46	0x6a46	0x6a47	0x6a48	0x6a4b
0x6a58	0x6a59	0x6a5f	0x6a61	0x6a62	0x6a66	0x6a6b	0x6a6b	0x6a72	0x6a73
0x6a73	0x6a78	0x6a7e	0x6a7e	0x6a7f	0x6a80	0x6a84	0x6a8d	0x6a8e	0x6a90
0x6a97	0x6a9c	0x6aa0	0x6aa2	0x6aa3	0x6aaa	0x6aac	0x6aae	0x6ab3	0x6ab8
0x6abb	0x6ac1	0x6ac2	0x6ac3	0x6ad1	0x6ad3	0x6ada	0x6adb	0x6ade	0x6adf
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0x6b0a	0x6b12	0x6b16	0x6b1d	0x6b1f	0x6b20	0x6b21	0x6b23	0x6b27	0x6b32
0x6b37	0x6b38	0x6b39	0x6b3a	0x6b3d	0x6b3e	0x6b43	0x6b47	0x6b49	0x6b4c
0x6b4e	0x6b50	0x6b53	0x6b54	0x6b59	0x6b5b	0x6b5f	0x6b61	0x6b62	0x6b63
0x6b64	0x6b66	0x6b69	0x6b6a	0x6b6f	0x6b73	0x6b74	0x6b78	0x6b79	0x6b7b
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0x6b96	0x6b98	0x6b9e	0x6ba4	0x6baa	0x6bab	0x6baf	0x6bb1	0x6bb2	0x6bb3
0x6bb4	0x6bb5	0x6bb7	0x6bba	0x6bbb	0x6bbc	0x6bbf	0x6bc0	0x6bc5	0x6bc6
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0x6bdf	0x6beb	0x6bec	0x6bef	0x6bf3	0x6c08	0x6c0f	0x6c11	0x6c13	0x6c14
0x6c17	0x6c1b	0x6c23	0x6c24	0x6c34	0x6c37	0x6c38	0x6c3e	0x6c3f	0x6c3f
0x6c40	0x6c41	0x6c42	0x6c4e	0x6c50	0x6c55	0x6c57	0x6c5a	0x6c5c	0x6c5c
0x6c5d	0x6c5e	0x6c5f	0x6c60	0x6c62	0x6c68	0x6c6a	0x6c6f	0x6c6f	0x6c70
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0x6c88	0x6c8c	0x6c8d	0x6c90	0x6c92	0x6c93	0x6c96	0x6c99	0x6c9a	0x6c9b
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0x6d6a	0x6d6c	0x6d6e	0x6d6f	0x6d6f	0x6d74	0x6d77	0x6d78	0x6d79	0x6d85
0x6d87	0x6d87	0x6d88	0x6d8c	0x6d8e	0x6d93	0x6d95	0x6d96	0x6d96	0x6d99
0x6d9b	0x6d9c	0x6dac	0x6dac	0x6daf	0x6db2	0x6db5	0x6db8	0x6dbc	0x6dc0
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0x6dee	0x6df1	0x6df2	0x6df2	0x6df3	0x6df5	0x6df7	0x6df8	0x6df8	0x6df9
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0x6e13	0x6e15	0x6e19	0x6e1a	0x6e1b	0x6e1d	0x6e1f	0x6e20	0x6e21	0x6e23
0x6e24	0x6e25	0x6e26	0x6e27	0x6e27	0x6e29	0x6e2b	0x6e2c	0x6e2d	0x6e2e
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0x6e4d	0x6e4e	0x6e56	0x6e58	0x6e5b	0x6e5c	0x6e5c	0x6e5f	0x6e67	0x6e6b
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0x6e90	0x6e96	0x6e98	0x6e9c	0x6e9d	0x6e9f	0x6ea2	0x6ea5	0x6eaa	0x6eaf
0x6eb2	0x6eb6	0x6eb7	0x6eba	0x6ebd	0x6ebf	0x6ebf	0x6ec2	0x6ec4	0x6ec5
0x6ec9	0x6ecb	0x6ecc	0x6ed1	0x6ed3	0x6ed4	0x6ed5	0x6edd	0x6ede	0x6eec
0x6eff	0x6ef2	0x6ef4	0x6ef7	0x6ef8	0x6efe	0x6eff	0x6f01	0x6f02	0x6f06
0x6f09	0x6f0f	0x6f11	0x6f13	0x6f14	0x6f15	0x6f20	0x6f22	0x6f23	0x6f2b
0x6f2c	0x6f31	0x6f32	0x6f38	0x6f3e	0x6f3f	0x6f41	0x6f45	0x6f54	0x6f58
0x6f5b	0x6f5c	0x6f5f	0x6f64	0x6f66	0x6f6d	0x6f6e	0x6f6f	0x6f70	0x6f74
0x6f78	0x6f7a	0x6f7c	0x6f80	0x6f81	0x6f82	0x6f84	0x6f86	0x6f88	0x6f88
0x6f8e	0x6f91	0x6f97	0x6fa1	0x6fa3	0x6fa4	0x6faa	0x6fb1	0x6fb3	0x6fb5
0x6fb5	0x6fb9	0x6fc0	0x6fc1	0x6fc2	0x6fc3	0x6fc6	0x6fd4	0x6fd5	0x6fd8
0x6fdb	0x6fdf	0x6fe0	0x6fe1	0x6fe4	0x6feb	0x6fec	0x6fee	0x6fef	0x6ff1
0x6ff3	0x6ff5	0x6ff5	0x6ff6	0x6ffa	0x6ffe	0x7001	0x7005	0x7005	0x7007
0x7007	0x7009	0x700b	0x700f	0x7011	0x7015	0x7018	0x701a	0x701b	0x701d
0x701e	0x701f	0x7026	0x7027	0x7028	0x7028	0x702c	0x7030	0x7032	0x703e
0x704c	0x7051	0x7058	0x7063	0x706b	0x706f	0x7070	0x7078	0x707c	0x707d

0x7085	0x7085	0x7089	0x708a	0x708e	0x7092	0x7099	0x70ab	0x70ab	0x70ac
0x70ad	0x70ae	0x70af	0x70b3	0x70b8	0x70b9	0x70ba	0x70bb	0x70bb	0x70c8
0x70cb	0x70cf	0x70d9	0x70dd	0x70df	0x70f1	0x70f9	0x70fd	0x7104	0x7104
0x7109	0x710f	0x710f	0x7114	0x7119	0x711a	0x711c	0x7121	0x7126	0x7136
0x713c	0x7146	0x7146	0x7147	0x7147	0x7149	0x714c	0x714e	0x7155	0x7156
0x7159	0x715c	0x715c	0x7162	0x7164	0x7165	0x7166	0x7167	0x7169	0x716c
0x716e	0x717d	0x7184	0x7188	0x718a	0x718f	0x7194	0x7195	0x7199	0x719f
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0x71ce	0x71d0	0x71d2	0x71d4	0x71d5	0x71d7	0x71df	0x71e0	0x71e5	0x71e6
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0x725f	0x7261	0x7262	0x7267	0x7269	0x7272	0x7274	0x7279	0x727d	0x727e
0x7280	0x7281	0x7282	0x7287	0x7292	0x7296	0x72a0	0x72a2	0x72a7	0x72ac
0x72af	0x72b1	0x72b1	0x72b2	0x72b6	0x72b9	0x72be	0x72be	0x72c2	0x72c3
0x72c4	0x72c6	0x72ce	0x72d0	0x72d2	0x72d7	0x72d9	0x72db	0x72e0	0x72e1
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0x7316	0x7317	0x731b	0x731c	0x731d	0x731f	0x7324	0x7324	0x7325	0x7329
0x732a	0x732b	0x732e	0x732f	0x7334	0x7336	0x7337	0x733e	0x733f	0x7344
0x7345	0x734e	0x734f	0x7357	0x7363	0x7368	0x736a	0x7370	0x7372	0x7375
0x7377	0x7377	0x7378	0x737a	0x737b	0x7384	0x7387	0x7389	0x738b	0x7396
0x73a9	0x73b2	0x73b3	0x73bb	0x73bd	0x73bd	0x73c0	0x73c2	0x73c8	0x73c9
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0x73e3	0x73e3	0x73e5	0x73ea	0x73ed	0x73ee	0x73f1	0x73f5	0x73f5	0x73f8
0x73fe	0x7403	0x7405	0x7406	0x7407	0x7407	0x7409	0x7422	0x7425	0x7426
0x7426	0x7429	0x7429	0x742a	0x742a	0x742e	0x742e	0x7432	0x7433	0x7434
0x7435	0x7436	0x743a	0x743f	0x7441	0x7455	0x7459	0x745a	0x745b	0x745c
0x745e	0x745f	0x7460	0x7462	0x7462	0x7463	0x7464	0x7469	0x746a	0x746f
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0x749f	0x74a2	0x74a7	0x74b0	0x74bd	0x74ca	0x74cf	0x74d4	0x74dc	0x74e0
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0x7526	0x7528	0x752b	0x752c	0x752f	0x752f	0x7530	0x7531	0x7532	0x7533
0x7537	0x7538	0x753a	0x753b	0x753c	0x7544	0x7546	0x7549	0x754a	0x754b
0x754c	0x754d	0x754f	0x7551	0x7554	0x7559	0x755a	0x755b	0x755c	0x755d
0x7560	0x7562	0x7564	0x7565	0x7566	0x7567	0x7569	0x756a	0x756b	0x756d
0x756f	0x756f	0x7570	0x7573	0x7574	0x7576	0x7577	0x7578	0x757f	0x7582
0x7586	0x7587	0x7589	0x758a	0x758b	0x758e	0x758f	0x7591	0x7594	0x759a

0x759d	0x75a3	0x75a5	0x75ab	0x75b1	0x75b2	0x75b3	0x75b5	0x75b8	0x75b9
0x75bc	0x75bd	0x75be	0x75c2	0x75c3	0x75c5	0x75c7	0x75ca	0x75cd	0x75d2
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0x760d	0x761f	0x7620	0x7621	0x7622	0x7624	0x7627	0x7630	0x7634	0x763b
0x7642	0x7646	0x7647	0x7648	0x764c	0x7652	0x7656	0x7658	0x765c	0x7661
0x7662	0x7667	0x7668	0x7669	0x766a	0x766c	0x7670	0x7672	0x7676	0x7678
0x767a	0x767b	0x767c	0x767d	0x767e	0x7680	0x7682	0x7682	0x7683	0x7684
0x7686	0x7687	0x7688	0x768b	0x768e	0x7690	0x7693	0x7696	0x7699	0x769a
0x769b	0x769b	0x769c	0x769c	0x769e	0x769e	0x76a6	0x76a6	0x76ae	0x76b0
0x76b4	0x76b7	0x76b8	0x76b9	0x76ba	0x76bf	0x76c2	0x76c3	0x76c6	0x76c8
0x76ca	0x76cd	0x76d2	0x76d6	0x76d7	0x76db	0x76dc	0x76de	0x76df	0x76e1
0x76e3	0x76e4	0x76e5	0x76e7	0x76ea	0x76ee	0x76f2	0x76f4	0x76f8	0x76fb
0x76fe	0x7701	0x7704	0x7707	0x7708	0x7709	0x770b	0x770c	0x771b	0x771e
0x771f	0x7720	0x7724	0x7725	0x7726	0x7729	0x7737	0x7738	0x773a	0x773c
0x7740	0x7746	0x7746	0x7747	0x775a	0x775b	0x7761	0x7763	0x7765	0x7766
0x7768	0x776b	0x7779	0x777e	0x777f	0x778b	0x778e	0x7791	0x779e	0x77a0
0x77a5	0x77ac	0x77ad	0x77b0	0x77b3	0x77b6	0x77b9	0x77bb	0x77bc	0x77bd
0x77bf	0x77c7	0x77cd	0x77d7	0x77da	0x77db	0x77dc	0x77e2	0x77e3	0x77e5
0x77e7	0x77e9	0x77ed	0x77ee	0x77ef	0x77f3	0x77fc	0x7802	0x780c	0x7812
0x7814	0x7815	0x7820	0x7821	0x7821	0x7825	0x7826	0x7827	0x7832	0x7834
0x783a	0x783f	0x7845	0x784e	0x784e	0x785d	0x7864	0x7864	0x786b	0x786c
0x786f	0x7872	0x7874	0x787a	0x787a	0x787c	0x7881	0x7886	0x7887	0x788c
0x788d	0x788e	0x7891	0x7893	0x7895	0x7897	0x789a	0x78a3	0x78a7	0x78a9
0x78aa	0x78af	0x78b5	0x78ba	0x78bc	0x78be	0x78c1	0x78c5	0x78c6	0x78ca
0x78cb	0x78d0	0x78d1	0x78d4	0x78da	0x78e7	0x78e8	0x78ec	0x78ef	0x78f4
0x78fd	0x7901	0x7907	0x790e	0x7911	0x7912	0x7919	0x7926	0x792a	0x792b
0x792c	0x7930	0x7930	0x793a	0x793c	0x793e	0x7940	0x7941	0x7947	0x7948
0x7949	0x7950	0x7953	0x7955	0x7956	0x7957	0x795a	0x795d	0x795e	0x795f
0x7960	0x7962	0x7965	0x7968	0x796d	0x7977	0x797a	0x797f	0x7980	0x7981
0x7984	0x7985	0x798a	0x798d	0x798e	0x798f	0x7994	0x7994	0x799b	0x799b
0x799d	0x79a6	0x79a7	0x79aa	0x79ae	0x79b0	0x79b3	0x79b9	0x79ba	0x79bd
0x79be	0x79bf	0x79c0	0x79c1	0x79c9	0x79cb	0x79d1	0x79d2	0x79d5	0x79d8
0x79df	0x79e1	0x79e3	0x79e4	0x79e6	0x79e7	0x79e9	0x79ec	0x79f0	0x79fb
0x7a00	0x7a08	0x7a0b	0x7a0d	0x7a0e	0x7a14	0x7a17	0x7a18	0x7a19	0x7a1a
0x7a1c	0x7a1f	0x7a20	0x7a2e	0x7a31	0x7a32	0x7a37	0x7a3b	0x7a3c	0x7a3d
0x7a3e	0x7a3f	0x7a40	0x7a42	0x7a43	0x7a46	0x7a49	0x7a4d	0x7a4e	0x7a4f
0x7a50	0x7a57	0x7a61	0x7a62	0x7a63	0x7a69	0x7a6b	0x7a70	0x7a74	0x7a76
0x7a79	0x7a7a	0x7a7d	0x7a7f	0x7a81	0x7a83	0x7a84	0x7a88	0x7a92	0x7a93
0x7a95	0x7a96	0x7a97	0x7a98	0x7a9f	0x7aaa	0x7aae	0x7aab	0x7ab0	

0x7ab6	0x7aba	0x7abf	0x7ac3	0x7ac4	0x7ac5	0x7ac7	0x7ac8	0x7aca	0x7acb
0x7acd	0x7acf	0x7ad1	0x7ad1	0x7ad2	0x7ad3	0x7ad5	0x7ad9	0x7ada	0x7adc
0x7add	0x7adf	0x7ae0	0x7ae1	0x7ae2	0x7ae3	0x7ae5	0x7ae6	0x7ae7	0x7ae7
0x7aea	0x7aeb	0x7aeb	0x7aed	0x7aef	0x7af0	0x7af6	0x7af8	0x7af9	0x7afa
0x7aff	0x7b02	0x7b04	0x7b06	0x7b08	0x7b0a	0x7b0b	0x7b0f	0x7b11	0x7b18
0x7b19	0x7b1b	0x7b1e	0x7b20	0x7b25	0x7b26	0x7b28	0x7b2c	0x7b33	0x7b35
0x7b36	0x7b39	0x7b45	0x7b46	0x7b48	0x7b49	0x7b4b	0x7b4c	0x7b4d	0x7b4f
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0x7b70	0x7b71	0x7b74	0x7b75	0x7b7a	0x7b86	0x7b87	0x7b8b	0x7b8d	0x7b8f
0x7b92	0x7b94	0x7b95	0x7b97	0x7b98	0x7b99	0x7b9a	0x7b9c	0x7b9d	0x7b9e
0x7b9e	0x7b9f	0x7ba1	0x7baa	0x7bad	0x7bb1	0x7bb4	0x7bb8	0x7bc0	0x7bc1
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0x7c11	0x7c12	0x7c13	0x7c14	0x7c17	0x7c1f	0x7c21	0x7c23	0x7c27	0x7c2a
0x7c2b	0x7c37	0x7c38	0x7c3d	0x7c3e	0x7c3f	0x7c40	0x7c43	0x7c4c	0x7c4d
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0x7d35	0x7d39	0x7d3a	0x7d3f	0x7d42	0x7d43	0x7d44	0x7d45	0x7d46	0x7d48
0x7d48	0x7d4b	0x7d4c	0x7d4e	0x7d4f	0x7d50	0x7d56	0x7d5b	0x7d5c	0x7d5c
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0x7e05	0x7e09	0x7e0a	0x7e0b	0x7e12	0x7e1b	0x7e1e	0x7e1f	0x7e21	0x7e22
0x7e23	0x7e26	0x7e2b	0x7e2e	0x7e31	0x7e32	0x7e35	0x7e37	0x7e39	0x7e3a
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0x7e52	0x7e54	0x7e55	0x7e56	0x7e59	0x7e5a	0x7e5d	0x7e5e	0x7e66	0x7e67
0x7e69	0x7e6a	0x7e6d	0x7e70	0x7e79	0x7e7b	0x7e7c	0x7e7d	0x7e7f	0x7e82
0x7e83	0x7e88	0x7e89	0x7e8a	0x7e8a	0x7e8c	0x7e8e	0x7e8f	0x7e90	0x7e92
0x7e93	0x7e94	0x7e96	0x7e9b	0x7e9c	0x7f36	0x7f38	0x7f3a	0x7f45	0x7f47

0x7f47	0x7f4c	0x7f4d	0x7f4e	0x7f50	0x7f51	0x7f54	0x7f55	0x7f58	0x7f5f
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0x7fe9	0x7feb	0x7ff0	0x7ff3	0x7ff9	0x7ffb	0x7ffc	0x8000	0x8001	0x8003
0x8004	0x8005	0x8006	0x800b	0x800c	0x8010	0x8012	0x8015	0x8017	0x8018
0x8019	0x801c	0x8021	0x8028	0x8033	0x8036	0x803b	0x803d	0x803f	0x8046
0x804a	0x8052	0x8056	0x8058	0x805a	0x805e	0x805f	0x8061	0x8062	0x8068
0x806f	0x8070	0x8072	0x8073	0x8074	0x8076	0x8077	0x8079	0x807d	0x807e
0x807f	0x8084	0x8085	0x8086	0x8087	0x8089	0x808b	0x808c	0x8093	0x8096
0x8098	0x809a	0x809b	0x809d	0x80a1	0x80a2	0x80a5	0x80a9	0x80aa	0x80ac
0x80ad	0x80af	0x80b1	0x80b2	0x80b4	0x80ba	0x80c3	0x80c4	0x80c6	0x80cc
0x80ce	0x80d6	0x80d9	0x80da	0x80db	0x80dd	0x80de	0x80e1	0x80e4	0x80e5
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0x8108	0x8109	0x810a	0x811a	0x811b	0x8123	0x8129	0x812f	0x8131	0x8133
0x8139	0x813e	0x8146	0x814b	0x814e	0x8150	0x8151	0x8153	0x8154	0x8155
0x815f	0x8165	0x8166	0x816b	0x816e	0x8170	0x8171	0x8174	0x8178	0x8179
0x817a	0x817f	0x8180	0x8182	0x8183	0x8188	0x818a	0x818f	0x8193	0x8195
0x819a	0x819c	0x819d	0x81a0	0x81a3	0x81a4	0x81a8	0x81a9	0x81b0	0x81b3
0x81b5	0x81b8	0x81ba	0x81bd	0x81be	0x81bf	0x81c0	0x81c2	0x81c6	0x81c8
0x81c9	0x81cd	0x81d1	0x81d3	0x81d8	0x81d9	0x81da	0x81df	0x81e0	0x81e3
0x81e5	0x81e7	0x81e8	0x81ea	0x81ed	0x81f3	0x81f4	0x81fa	0x81fb	0x81fc
0x81fe	0x8201	0x8202	0x8205	0x8207	0x8208	0x8209	0x820a	0x820c	0x820d
0x820e	0x8210	0x8212	0x8216	0x8217	0x8218	0x821b	0x821c	0x821e	0x821f
0x8229	0x822a	0x822b	0x822c	0x822e	0x8233	0x8235	0x8236	0x8237	0x8238
0x8239	0x8240	0x8247	0x8258	0x8259	0x825a	0x825d	0x825f	0x8262	0x8264
0x8266	0x8268	0x826a	0x826b	0x826e	0x826f	0x8271	0x8272	0x8276	0x8277
0x8278	0x827e	0x828b	0x828d	0x8292	0x8299	0x829d	0x829f	0x82a5	0x82a6
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0x82df	0x82e1	0x82e3	0x82e5	0x82e6	0x82e7	0x82eb	0x82f1	0x82f3	0x82f4
0x82f9	0x82fa	0x82fb	0x8301	0x8301	0x8302	0x8303	0x8304	0x8305	0x8306
0x8309	0x830e	0x8316	0x8317	0x8318	0x831c	0x8323	0x8328	0x832b	0x832f
0x8331	0x8332	0x8334	0x8335	0x8336	0x8338	0x8339	0x8340	0x8345	0x8349
0x834a	0x834f	0x8350	0x8352	0x8358	0x8362	0x8362	0x8373	0x8375	0x8377
0x837b	0x837c	0x837f	0x837f	0x8385	0x8387	0x8389	0x838a	0x838e	0x8393
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0x83f2	0x83f4	0x83f6	0x83f6	0x83f7	0x83fb	0x83fd	0x8403	0x8404	0x8407
0x840b	0x840c	0x840d	0x840e	0x8413	0x8420	0x8422	0x8429	0x842a	0x842c
0x8431	0x8435	0x8438	0x843c	0x843d	0x8446	0x8448	0x8448	0x8449	0x844e
0x8457	0x845b	0x8461	0x8462	0x8463	0x8466	0x8469	0x846b	0x846c	0x846d
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0x8490	0x8494	0x8499	0x849c	0x849f	0x84a1	0x84ad	0x84b2	0x84b4	0x84b4
0x84b8	0x84b9	0x84bb	0x84bc	0x84bf	0x84c1	0x84c4	0x84c6	0x84c9	0x84ca
0x84cb	0x84cd	0x84d0	0x84d1	0x84d6	0x84d9	0x84da	0x84dc	0x84dc	0x84ec
0x84ee	0x84f4	0x84fc	0x84ff	0x8500	0x8506	0x8511	0x8513	0x8514	0x8515
0x8517	0x8518	0x851a	0x851f	0x8521	0x8526	0x852c	0x852d	0x8535	0x853d
0x8540	0x8541	0x8543	0x8548	0x8549	0x854a	0x854b	0x854e	0x8553	0x8553
0x8555	0x8557	0x8558	0x8559	0x8559	0x855a	0x8563	0x8568	0x8569	0x856a
0x856b	0x856b	0x856d	0x8577	0x857e	0x8580	0x8584	0x8587	0x8588	0x858a
0x8590	0x8591	0x8594	0x8597	0x8599	0x859b	0x859c	0x85a4	0x85a6	0x85a8
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0x85c1	0x85c9	0x85cd	0x85cf	0x85d0	0x85d5	0x85dc	0x85dd	0x85e4	0x85e5
0x85e9	0x85ea	0x85f7	0x85f9	0x85fa	0x85fb	0x85fe	0x8602	0x8606	0x8607
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0x86a3	0x86a4	0x86a9	0x86aa	0x86ab	0x86af	0x86b0	0x86b6	0x86c4	0x86c6
0x86c7	0x86c9	0x86cb	0x86cd	0x86ce	0x86d4	0x86d9	0x86db	0x86de	0x86df
0x86e4	0x86e9	0x86ec	0x86ed	0x86ee	0x86ef	0x86f8	0x86f9	0x86fb	0x86fe
0x8700	0x8702	0x8703	0x8706	0x8708	0x8709	0x870a	0x870d	0x8711	0x8712
0x8718	0x871a	0x871c	0x8725	0x8729	0x8734	0x8737	0x873b	0x873f	0x8749
0x874b	0x874c	0x874e	0x8753	0x8755	0x8757	0x8759	0x875f	0x8760	0x8763
0x8766	0x8768	0x876a	0x876e	0x8774	0x8776	0x8778	0x877f	0x8782	0x878d
0x879f	0x87a2	0x87ab	0x87af	0x87b3	0x87ba	0x87bb	0x87bd	0x87c0	0x87c4
0x87c6	0x87c7	0x87cb	0x87d0	0x87d2	0x87e0	0x87ef	0x87f2	0x87f6	0x87f7
0x87f9	0x87fb	0x87fe	0x8805	0x8807	0x8807	0x880d	0x880e	0x880f	0x8811
0x8815	0x8816	0x8821	0x8822	0x8823	0x8827	0x8831	0x8836	0x8839	0x883b
0x8840	0x8842	0x8844	0x8846	0x884c	0x884d	0x8852	0x8853	0x8857	0x8859
0x885b	0x885d	0x885e	0x8861	0x8862	0x8863	0x8868	0x886b	0x8870	0x8872
0x8875	0x8877	0x887d	0x887e	0x887f	0x8881	0x8882	0x8888	0x888b	0x888d
0x8892	0x8896	0x8897	0x8899	0x889e	0x88a2	0x88a4	0x88ab	0x88ae	0x88b0
0x88b1	0x88b4	0x88b5	0x88b7	0x88bf	0x88c1	0x88c2	0x88c3	0x88c4	0x88c5
0x88cf	0x88d4	0x88d5	0x88d8	0x88d9	0x88dc	0x88dd	0x88df	0x88e1	0x88e8
0x88f2	0x88f3	0x88f4	0x88f5	0x88f5	0x88f8	0x88f9	0x88fc	0x88fd	0x88fe
0x8902	0x8904	0x8907	0x890a	0x890c	0x8910	0x8912	0x8913	0x891c	0x891c

0x891d	0x891e	0x8925	0x892a	0x892b	0x8936	0x8938	0x893b	0x8941	0x8943
0x8944	0x894c	0x894d	0x8956	0x895e	0x895f	0x8960	0x8964	0x8966	0x896a
0x896d	0x896f	0x8972	0x8974	0x8977	0x897e	0x897f	0x8981	0x8983	0x8986
0x8987	0x8988	0x898a	0x898b	0x898f	0x8993	0x8996	0x8997	0x8998	0x899a
0x89a1	0x89a6	0x89a7	0x89a9	0x89aa	0x89ac	0x89af	0x89b2	0x89b3	0x89ba
0x89bd	0x89bf	0x89c0	0x89d2	0x89da	0x89dc	0x89dd	0x89e3	0x89e6	0x89e7
0x89f4	0x89f8	0x8a00	0x8a02	0x8a03	0x8a08	0x8a0a	0x8a0c	0x8a0e	0x8a10
0x8a12	0x8a12	0x8a13	0x8a16	0x8a17	0x8a18	0x8a1b	0x8a1d	0x8a1f	0x8a23
0x8a25	0x8a2a	0x8a2d	0x8a31	0x8a33	0x8a34	0x8a36	0x8a37	0x8a37	0x8a3a
0x8a3b	0x8a3c	0x8a41	0x8a46	0x8a48	0x8a50	0x8a51	0x8a52	0x8a54	0x8a55
0x8a5b	0x8a5e	0x8a60	0x8a62	0x8a63	0x8a66	0x8a69	0x8a6b	0x8a6c	0x8a6d
0x8a6e	0x8a70	0x8a71	0x8a72	0x8a73	0x8a79	0x8a79	0x8a7c	0x8a82	0x8a84
0x8a85	0x8a87	0x8a89	0x8a8c	0x8a8d	0x8a91	0x8a93	0x8a95	0x8a98	0x8a9a
0x8a9e	0x8aa0	0x8aa1	0x8aa3	0x8aa4	0x8aa5	0x8aa6	0x8aa7	0x8aa7	0x8aa8
0x8aac	0x8aad	0x8ab0	0x8ab2	0x8ab9	0x8abc	0x8abe	0x8abe	0x8abf	0x8ac2
0x8ac4	0x8ac7	0x8acb	0x8acc	0x8acd	0x8acf	0x8ad2	0x8ad6	0x8ada	0x8adb
0x8adc	0x8ade	0x8adf	0x8adf	0x8ae0	0x8ae1	0x8ae2	0x8ae4	0x8ae6	0x8ae7
0x8aeb	0x8aed	0x8aee	0x8af1	0x8af3	0x8af6	0x8af7	0x8af8	0x8afa	0x8afe
0x8b00	0x8b01	0x8b02	0x8b04	0x8b07	0x8b0c	0x8b0e	0x8b10	0x8b14	0x8b16
0x8b17	0x8b19	0x8b1a	0x8b1b	0x8b1d	0x8b20	0x8b21	0x8b26	0x8b28	0x8b2b
0x8b2c	0x8b33	0x8b39	0x8b3e	0x8b41	0x8b49	0x8b4c	0x8b4e	0x8b4f	0x8b53
0x8b53	0x8b56	0x8b58	0x8b5a	0x8b5b	0x8b5c	0x8b5f	0x8b66	0x8b6b	0x8b6c
0x8b6f	0x8b70	0x8b71	0x8b72	0x8b74	0x8b77	0x8b7d	0x8b7f	0x8b7f	0x8b80
0x8b83	0x8b8a	0x8b8c	0x8b8e	0x8b90	0x8b92	0x8b93	0x8b96	0x8b99	0x8b9a
0x8c37	0x8c3a	0x8c3f	0x8c41	0x8c46	0x8c48	0x8c4a	0x8c4c	0x8c4e	0x8c50
0x8c55	0x8c5a	0x8c61	0x8c62	0x8c6a	0x8c6b	0x8c6c	0x8c78	0x8c79	0x8c7a
0x8c7c	0x8c82	0x8c85	0x8c89	0x8c8a	0x8c8c	0x8c8d	0x8c8e	0x8c94	0x8c98
0x8c9d	0x8c9e	0x8ca0	0x8ca1	0x8ca2	0x8ca7	0x8ca8	0x8ca9	0x8caa	0x8cab
0x8cac	0x8cad	0x8cae	0x8caf	0x8cb0	0x8cb2	0x8cb3	0x8cb4	0x8cb6	0x8cb7
0x8cb8	0x8ccb	0x8cbc	0x8cbd	0x8cbf	0x8cc0	0x8cc1	0x8cc2	0x8cc3	0x8cc4
0x8cc7	0x8cc8	0x8cca	0x8ccd	0x8cce	0x8cd1	0x8cd3	0x8cda	0x8cdb	0x8cdc
0x8cde	0x8ce0	0x8ce2	0x8ce3	0x8ce4	0x8ce6	0x8cea	0x8ced	0x8cf0	0x8cf0
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0x8d0a	0x8d0b	0x8d0d	0x8d0f	0x8d10	0x8d12	0x8d12	0x8d13	0x8d14	0x8d16
0x8d64	0x8d66	0x8d67	0x8d6b	0x8d6d	0x8d70	0x8d71	0x8d73	0x8d74	0x8d76
0x8d76	0x8d77	0x8d81	0x8d85	0x8d8a	0x8d99	0x8da3	0x8da8	0x8db3	0x8dba
0x8dbe	0x8dc2	0x8dc5	0x8dc6	0x8dcf	0x8dd6	0x8dda	0x8ddb	0x8ddd	0x8dff
0x8de1	0x8de3	0x8de8	0x8dea	0x8deb	0x8def	0x8df3	0x8df5	0x8dfc	0x8dff
0x8e08	0x8e09	0x8e0a	0x8e0f	0x8e10	0x8e1d	0x8e1e	0x8e1f	0x8e2a	0x8e30
0x8e34	0x8e35	0x8e42	0x8e44	0x8e47	0x8e48	0x8e49	0x8e4a	0x8e4c	0x8e50

0x8e55	0x8e59	0x8e5f	0x8e60	0x8e63	0x8e64	0x8e72	0x8e74	0x8e76	0x8e7c
0x8e81	0x8e84	0x8e85	0x8e87	0x8e8a	0x8e8b	0x8e8d	0x8e91	0x8e93	0x8e94
0x8e99	0x8ea1	0x8eaa	0x8eab	0x8eac	0x8eaf	0x8eb0	0x8eb1	0x8ebe	0x8ec5
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0x8edf	0x8ee2	0x8ee3	0x8eeb	0x8ef8	0x8efb	0x8efc	0x8efd	0x8efe	0x8f03
0x8f05	0x8f09	0x8f0a	0x8f0c	0x8f12	0x8f13	0x8f14	0x8f15	0x8f19	0x8f1b
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0x8fef	0x8ff0	0x8ff4	0x8ff7	0x8ff8	0x8ff9	0x8ffa	0x8ffd	0x9000	0x9001
0x9003	0x9005	0x9006	0x900b	0x900d	0x900e	0x900f	0x9010	0x9011	0x9013
0x9014	0x9015	0x9016	0x9017	0x9019	0x901a	0x901d	0x901e	0x901f	0x9020
0x9021	0x9022	0x9023	0x9027	0x902e	0x9031	0x9032	0x9035	0x9036	0x9038
0x9039	0x903c	0x903e	0x9041	0x9042	0x9045	0x9047	0x9049	0x904a	0x904b
0x904d	0x904e	0x904f	0x9050	0x9051	0x9052	0x9053	0x9054	0x9055	0x9056
0x9058	0x9059	0x905c	0x905e	0x9060	0x9061	0x9063	0x9065	0x9067	0x9067
0x9068	0x9069	0x906d	0x906e	0x906f	0x9072	0x9075	0x9076	0x9077	0x9078
0x907a	0x907c	0x907d	0x907f	0x9080	0x9081	0x9082	0x9083	0x9084	0x9087
0x9089	0x908a	0x908f	0x9091	0x90a3	0x90a6	0x90a8	0x90aa	0x90af	0x90b1
0x90b5	0x90b8	0x90c1	0x90ca	0x90ce	0x90db	0x90de	0x90de	0x90e1	0x90e2
0x90e4	0x90e8	0x90ed	0x90f5	0x90f7	0x90fd	0x9102	0x9112	0x9115	0x9115
0x9119	0x9127	0x9127	0x912d	0x9130	0x9132	0x9149	0x914a	0x914b	0x914c
0x914d	0x914e	0x9152	0x9154	0x9156	0x9158	0x9162	0x9163	0x9165	0x9169
0x916a	0x916c	0x9172	0x9173	0x9175	0x9177	0x9178	0x9182	0x9187	0x9189
0x918b	0x918d	0x9190	0x9192	0x9197	0x919c	0x91a2	0x91a4	0x91aa	0x91ab
0x91af	0x91b4	0x91b5	0x91b8	0x91ba	0x91c0	0x91c1	0x91c6	0x91c7	0x91c8
0x91c9	0x91cb	0x91cc	0x91cd	0x91ce	0x91cf	0x91d0	0x91d1	0x91d6	0x91d7
0x91d7	0x91d8	0x91da	0x91da	0x91db	0x91dc	0x91dd	0x91de	0x91de	0x91df
0x91e1	0x91e3	0x91e4	0x91e4	0x91e5	0x91e5	0x91e6	0x91e7	0x91ed	0x91ed
0x91ee	0x91ee	0x91f5	0x91f6	0x91fc	0x91ff	0x9206	0x9206	0x920a	0x920a
0x920d	0x920e	0x9210	0x9210	0x9211	0x9214	0x9215	0x921e	0x9229	0x922c
0x9234	0x9237	0x9239	0x9239	0x923a	0x923a	0x923c	0x923c	0x923f	0x9240
0x9240	0x9244	0x9245	0x9248	0x9249	0x924b	0x924e	0x924e	0x9250	0x9251
0x9251	0x9257	0x9259	0x9259	0x925a	0x925b	0x925e	0x9262	0x9264	0x9266
0x9267	0x9267	0x9271	0x9277	0x9277	0x9278	0x9278	0x927e	0x9280	0x9283
0x9285	0x9288	0x9288	0x9291	0x9293	0x9295	0x9296	0x9298	0x929a	0x929b
0x929c	0x92a7	0x92a7	0x92ad	0x92b7	0x92b9	0x92cf	0x92d0	0x92d0	0x92d2

0x92d3	0x92d3	0x92d5	0x92d5	0x92d7	0x92d7	0x92d9	0x92d9	0x92e0	0x92e0
0x92e4	0x92e7	0x92e7	0x92e9	0x92ea	0x92ed	0x92f2	0x92f3	0x92f8	0x92f9
0x92f9	0x92fa	0x92fb	0x92fb	0x92fc	0x92ff	0x92ff	0x9302	0x9302	0x9306
0x930f	0x9310	0x9318	0x9319	0x931a	0x931d	0x931d	0x931e	0x931e	0x9320
0x9321	0x9321	0x9322	0x9323	0x9325	0x9325	0x9326	0x9328	0x932b	0x932c
0x932e	0x932f	0x9332	0x9335	0x933a	0x933b	0x9344	0x9348	0x9348	0x934b
0x934d	0x9354	0x9356	0x9357	0x9357	0x935b	0x935c	0x9360	0x936c	0x936e
0x9370	0x9370	0x9375	0x937c	0x937e	0x938c	0x9394	0x9396	0x9397	0x939a
0x93a4	0x93a4	0x93a7	0x93ac	0x93ad	0x93ae	0x93b0	0x93b9	0x93c3	0x93c6
0x93c6	0x93c8	0x93d0	0x93d1	0x93d6	0x93d7	0x93d8	0x93dd	0x93de	0x93de
0x93e1	0x93e4	0x93e5	0x93e8	0x93f8	0x93f8	0x9403	0x9407	0x9410	0x9413
0x9414	0x9418	0x9419	0x941a	0x9421	0x942b	0x9431	0x9431	0x9435	0x9436
0x9438	0x943a	0x9441	0x9444	0x9445	0x9445	0x9448	0x9448	0x9451	0x9452
0x9453	0x945a	0x945b	0x945e	0x9460	0x9462	0x946a	0x9470	0x9475	0x9477
0x947c	0x947d	0x947e	0x947f	0x9481	0x9577	0x9580	0x9582	0x9583	0x9587
0x9589	0x958a	0x958b	0x958f	0x9591	0x9592	0x9592	0x9593	0x9594	0x9596
0x9598	0x9599	0x95a0	0x95a2	0x95a3	0x95a4	0x95a5	0x95a7	0x95a8	0x95ad
0x95b2	0x95b9	0x95bb	0x95bc	0x95be	0x95c3	0x95c7	0x95ca	0x95cc	0x95cd
0x95d4	0x95d5	0x95d6	0x95d8	0x95dc	0x95e1	0x95e2	0x95e5	0x961c	0x9621
0x9628	0x962a	0x962e	0x962f	0x9632	0x963b	0x963f	0x9640	0x9642	0x9644
0x964b	0x964c	0x964d	0x964f	0x9650	0x965b	0x965c	0x965d	0x965e	0x965f
0x9662	0x9663	0x9664	0x9665	0x9666	0x966a	0x966c	0x9670	0x9672	0x9673
0x9675	0x9676	0x9677	0x9678	0x967a	0x967d	0x9685	0x9686	0x9688	0x968a
0x968b	0x968d	0x968e	0x968f	0x9694	0x9695	0x9697	0x9698	0x9699	0x969b
0x969c	0x969d	0x969d	0x96a0	0x96a3	0x96a7	0x96a8	0x96aa	0x96af	0x96af
0x96b0	0x96b1	0x96b2	0x96b4	0x96b6	0x96b7	0x96b8	0x96b9	0x96bb	0x96bc
0x96c0	0x96c1	0x96c4	0x96c5	0x96c6	0x96c7	0x96c9	0x96cb	0x96cc	0x96cd
0x96ce	0x96d1	0x96d5	0x96d6	0x96d9	0x96db	0x96dc	0x96e2	0x96e3	0x96e8
0x96ea	0x96eb	0x96f0	0x96f2	0x96f6	0x96f7	0x96f9	0x96fb	0x9700	0x9704
0x9706	0x9707	0x9708	0x970a	0x970d	0x970e	0x970f	0x9711	0x9713	0x9716
0x9719	0x971c	0x971e	0x9724	0x9727	0x972a	0x9730	0x9732	0x9733	0x9733
0x9738	0x9739	0x973b	0x973b	0x973d	0x973e	0x9742	0x9743	0x9743	0x9744
0x9746	0x9748	0x9749	0x974d	0x974d	0x974f	0x974f	0x9751	0x9751	0x9752
0x9755	0x9755	0x9756	0x9759	0x975c	0x975e	0x9760	0x9761	0x9762	0x9764
0x9766	0x9768	0x9769	0x976b	0x976d	0x9771	0x9774	0x9779	0x977a	0x977c
0x9781	0x9784	0x9785	0x9786	0x978b	0x978d	0x978f	0x9790	0x9798	0x979c
0x97a0	0x97a3	0x97a6	0x97a8	0x97ab	0x97ad	0x97b3	0x97b4	0x97c3	0x97c6
0x97c8	0x97cb	0x97d3	0x97dc	0x97ed	0x97ee	0x97f2	0x97f3	0x97f5	0x97f6
0x97fb	0x97ff	0x9801	0x9802	0x9803	0x9805	0x9806	0x9808	0x980c	0x980f
0x9810	0x9811	0x9812	0x9813	0x9817	0x9818	0x981a	0x9821	0x9824	0x982c

0x982d	0x9834	0x9837	0x9838	0x983b	0x983c	0x983d	0x9846	0x984b	0x984c
0x984d	0x984e	0x984f	0x9854	0x9855	0x9857	0x9857	0x9858	0x985b	0x985e
0x9865	0x9865	0x9867	0x986b	0x986f	0x9870	0x9871	0x9873	0x9874	0x98a8
0x98aa	0x98af	0x98b1	0x98b6	0x98c3	0x98c4	0x98c6	0x98db	0x98dc	0x98df
0x98e2	0x98e9	0x98eb	0x98ed	0x98ee	0x98ef	0x98f2	0x98f4	0x98fc	0x98fd
0x98fe	0x9903	0x9905	0x9909	0x990a	0x990c	0x9910	0x9912	0x9913	0x9914
0x9918	0x991d	0x991e	0x9920	0x9921	0x9924	0x9927	0x9927	0x9928	0x992c
0x992e	0x993d	0x993e	0x9942	0x9945	0x9949	0x994b	0x994c	0x9950	0x9951
0x9952	0x9955	0x9957	0x9996	0x9997	0x9998	0x9999	0x999e	0x999e	0x99a5
0x99a8	0x99ac	0x99ad	0x99ae	0x99b3	0x99b4	0x99bc	0x99c1	0x99c4	0x99c5
0x99c6	0x99c8	0x99d0	0x99d1	0x99d2	0x99d5	0x99d8	0x99db	0x99dd	0x99df
0x99e2	0x99ed	0x99ee	0x99f1	0x99f2	0x99f8	0x99fb	0x99ff	0x9a01	0x9a05
0x9a0e	0x9a0f	0x9a12	0x9a13	0x9a19	0x9a28	0x9a2b	0x9a30	0x9a37	0x9a3e
0x9a40	0x9a42	0x9a43	0x9a45	0x9a4d	0x9a4e	0x9a4e	0x9a55	0x9a57	0x9a5a
0x9a5b	0x9a5f	0x9a62	0x9a64	0x9a65	0x9a69	0x9a6a	0x9a6b	0x9aa8	0x9aad
0x9ab0	0x9ab8	0x9abc	0x9ac0	0x9ac4	0x9acf	0x9ad1	0x9ad3	0x9ad4	0x9ad8
0x9ad9	0x9ad9	0x9adc	0x9adc	0x9ade	0x9adf	0x9ae2	0x9ae3	0x9ae6	0x9aea
0x9aeb	0x9aed	0x9aee	0x9aef	0x9af1	0x9af4	0x9af7	0x9afb	0x9b06	0x9b18
0x9b1a	0x9b1f	0x9b22	0x9b23	0x9b25	0x9b27	0x9b28	0x9b29	0x9b2a	0x9b2e
0x9b2f	0x9b31	0x9b32	0x9b3b	0x9b3c	0x9b41	0x9b42	0x9b43	0x9b44	0x9b45
0x9b4d	0x9b4e	0x9b4f	0x9b51	0x9b54	0x9b58	0x9b5a	0x9b6f	0x9b72	0x9b72
0x9b74	0x9b75	0x9b75	0x9b83	0x9b8e	0x9b8f	0x9b8f	0x9b91	0x9b92	0x9b93
0x9b96	0x9b97	0x9b9f	0x9ba0	0x9ba8	0x9baa	0x9bab	0x9bad	0x9bae	0x9bb1
0x9bb1	0x9bb4	0x9bb9	0x9bbb	0x9bbb	0x9bc0	0x9bc6	0x9bc9	0x9bca	0x9bcf
0x9bd1	0x9bd2	0x9bd4	0x9bd6	0x9bdb	0x9be1	0x9be2	0x9be3	0x9be4	0x9be8
0x9bf0	0x9bf1	0x9bf2	0x9bf5	0x9c00	0x9c00	0x9c04	0x9c06	0x9c08	0x9c09
0x9c0a	0x9c0c	0x9c0d	0x9c10	0x9c12	0x9c13	0x9c14	0x9c15	0x9c1b	0x9c21
0x9c24	0x9c25	0x9c2d	0x9c2e	0x9c2f	0x9c30	0x9c32	0x9c39	0x9c3a	0x9c3b
0x9c3e	0x9c46	0x9c47	0x9c48	0x9c52	0x9c57	0x9c5a	0x9c60	0x9c67	0x9c76
0x9c78	0x9ce5	0x9ce7	0x9ce9	0x9ceb	0x9cec	0x9cf0	0x9cf3	0x9cf4	0x9cf6
0x9d03	0x9d06	0x9d07	0x9d08	0x9d09	0x9d0e	0x9d12	0x9d15	0x9d1b	0x9d1f
0x9d23	0x9d26	0x9d28	0x9d2a	0x9d2b	0x9d2c	0x9d3b	0x9d3e	0x9d3f	0x9d41
0x9d44	0x9d46	0x9d48	0x9d50	0x9d51	0x9d59	0x9d5c	0x9d5d	0x9d5e	0x9d60
0x9d61	0x9d64	0x9d6b	0x9d6b	0x9d6c	0x9d6f	0x9d70	0x9d70	0x9d72	0x9d7a
0x9d87	0x9d89	0x9d8f	0x9d9a	0x9da4	0x9da9	0x9dab	0x9daf	0x9db2	0x9db4
0x9db8	0x9dba	0x9dbb	0x9dc1	0x9dc2	0x9dc4	0x9dc6	0x9dcf	0x9dd3	0x9dd9
0x9de6	0x9ded	0x9def	0x9df2	0x9df8	0x9df9	0x9dfa	0x9dfd	0x9e19	0x9e19
0x9e1a	0x9e1b	0x9e1e	0x9e75	0x9e78	0x9e79	0x9e7d	0x9e7f	0x9e81	0x9e88
0x9e8b	0x9e8c	0x9e91	0x9e92	0x9e93	0x9e95	0x9e97	0x9e9d	0x9e9f	0x9ea5
0x9ea6	0x9ea9	0x9eaa	0x9ead	0x9eb8	0x9eb9	0x9eba	0x9ebb	0x9ebc	0x9ebe

0x9ebf	0x9ec4	0x9ecc	0x9ecd	0x9ece	0x9ecf	0x9ed0	0x9ed1	0x9ed1	0x9ed2
0x9ed4	0x9ed8	0x9ed9	0x9edb	0x9edc	0x9edd	0x9ede	0x9ee0	0x9ee5	0x9ee8
0x9eff	0x9ef4	0x9ef6	0x9ef7	0x9ef9	0x9efb	0x9efc	0x9efd	0x9f07	0x9f08
0x9f0e	0x9f13	0x9f15	0x9f20	0x9f21	0x9f2c	0x9f3b	0x9f3e	0x9f4a	0x9f4b
0x9f4e	0x9f4f	0x9f52	0x9f54	0x9f5f	0x9f60	0x9f61	0x9f62	0x9f63	0x9f66
0x9f67	0x9f6a	0x9f6c	0x9f72	0x9f76	0x9f77	0x9f8d	0x9f95	0x9f9c	0x9f9d
0xfa0	0xf929	0xf929	0xf9dc	0xf9dc	0xfa0e	0xfa0e	0xfa0f	0xfa0f	0xfa10
0xfa10	0xfa11	0xfa11	0xfa12	0xfa12	0xfa13	0xfa13	0xfa14	0xfa14	0xfa15
0xfa15	0xfa16	0xfa16	0xfa17	0xfa17	0xfa18	0xfa18	0xfa19	0xfa19	0xfa1a
0xfa1a	0xfa1b	0xfa1b	0xfa1c	0xfa1c	0xfa1d	0xfa1d	0xfa1e	0xfa1e	0xfa1f
0xfa1f	0xfa20	0xfa20	0xfa21	0xfa21	0xfa22	0xfa22	0xfa23	0xfa23	0xfa24
0xfa24	0xfa25	0xfa25	0xfa26	0xfa26	0xfa27	0xfa27	0xfa28	0xfa28	0xfa29
0xfa29	0xfa2a	0xfa2a	0xfa2b	0xfa2b	0xfa2c	0xfa2c	0xfa2d	0xfa2d	0xff01
0xff02	0xff02	0xff03	0xff04	0xff05	0xff06	0xff07	0xff07	0xff08	0xff09
0xff0a	0xff0b	0xff0c	0xff0d	0xff0e	0xff0f	0xff10	0xff11	0xff12	0xff13
0xff14	0xff15	0xff16	0xff17	0xff18	0xff19	0xff1a	0xff1b	0xff1c	0xff1d
0xff1e	0xff1f	0xff20	0xff21	0xff22	0xff23	0xff24	0xff25	0xff26	0xff27
0xff28	0xff29	0xff2a	0xff2b	0xff2c	0xff2d	0xff2e	0xff2f	0xff30	0xff31
0xff32	0xff33	0xff34	0xff35	0xff36	0xff37	0xff38	0xff39	0xff3a	0xff2f
0xff30	0xff3b	0xff3c	0xff3d	0xff3e	0xff3f	0xff40	0xff41	0xff42	0xff43
0xff44	0xff45	0xff46	0xff47	0xff48	0xff49	0xff4a	0xff4b	0xff4c	0xff4d
0xff4e	0xff4f	0xff50	0xff51	0xff52	0xff53	0xff54	0xff55	0xff56	0xff57
0xff58	0xff59	0xff5a	0xff5b	0xff5c	0xff5d	0xff5e	0xff61	0xff62	0xff63
0xff64	0xff65	0xff66	0xff67	0xff68	0xff69	0xff6a	0xff6b	0xff6c	0xff6d
0xff6e	0xff6f	0xff70	0xff71	0xff72	0xff73	0xff74	0xff75	0xff76	0xff77
0xff78	0xff79	0xff7a	0xff7b	0xff7c	0xff7d	0xff7e	0xff7f	0xff80	0xff81
0xff82	0xff83	0xff84	0xff85	0xff86	0xff87	0xff88	0xff89	0xff8a	0xff8b
0xff8c	0xff8d	0xff8e	0xff8f	0xff90	0xff91	0xff92	0xff93	0xff94	0xff95
0xff96	0xff97	0xff98	0xff99	0xff9a	0xff9b	0xff9c	0xff9d	0xff9e	0xff9f
0xfe0	0xfe1	0xfe2	0xfe3	0xfe4	0xfe5	~	~	~	~

Information

The following code, it can be used as a boundary value when it is specified as input enable chars.

0x000a	0x000c
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BreakIterator.getLineInstance()

When BreakIterator.getLineInstance() is specify to JFTTextArea#setWordWrapIterator(BreakIterator), use the following boundary value.

0x0020	0x0021	0x0025	0x0029	0x002c	0x002d	0x002e			
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0x003a	0x003b	0x003f	0x005d	0x007d	0x0391	0x0392	0x0393	0x0394	0x0395
0x0396	0x0397	0x0398	0x0399	0x039a	0x039b	0x039c	0x039d	0x039e	0x039f
0x03a0	0x03a1	0x03a3	0x03a4	0x03a5	0x03a6	0x03a7	0x03a8	0x03a9	0x03b1
0x03b2	0x03b3	0x03b4	0x03b5	0x03b6	0x03b7	0x03b8	0x03b9	0x03ba	0x03bb
0x03bc	0x03bd	0x03be	0x03bf	0x03c0	0x03c1	0x03c3	0x03c4	0x03c5	0x03c6
0x03c7	0x03c8	0x03c9	0x0401	0x0410	0x0411	0x0412	0x0413	0x0414	0x0415
0x0416	0x0417	0x0418	0x0419	0x041a	0x041b	0x041c	0x041d	0x041e	0x041f
0x0420	0x0421	0x0422	0x0423	0x0424	0x0425	0x0426	0x0427	0x0428	0x0429
0x042a	0x042b	0x042a	0x042b	0x042c	0x042d	0x042e	0x042f	0x0430	0x0431
0x0432	0x0433	0x0434	0x0435	0x0436	0x0437	0x0438	0x0439	0x043a	0x043b
0x043c	0x043d	0x043e	0x043f	0x0440	0x0441	0x0442	0x0443	0x0444	0x0445
0x0446	0x0447	0x0448	0x0449	0x044a	0x044b	0x044c	0x044d	0x044e	0x044f
0x0451	0x044f	0x2010	0x2015	0x2018	0x2019	0x201c	0x201d	0x2020	0x2021
0x2025	0x2026	0x2030	0x2032	0x2033	0x203b	0x2103	0x2116	0x2121	0x212b
0x2160	0x2161	0x2162	0x2163	0x2164	0x2165	0x2166	0x2167	0x2168	0x2169
0x2170	0x2171	0x2172	0x2173	0x2174	0x2175	0x2176	0x2177	0x2178	0x2179
0x2177	0x2178	0x2179	0x2190	0x2191	0x2192	0x2193	0x21d2	0x21d4	0x2200
0x2202	0x2203	0x2207	0x2208	0x220b	0x2211	0x221a	0x221d	0x221e	0x221f
0x2220	0x2225	0x2227	0x2228	0x2229	0x222a	0x222b	0x222c	0x222e	0x2234
0x2235	0x223d	0x2252	0x2260	0x2261	0x2266	0x2267	0x226a	0x226b	0x2282
0x2283	0x2286	0x2287	0x22a5	0x22bf	0x2312	0x2460	0x2461	0x2462	0x2463
0x2464	0x2465	0x2466	0x2467	0x2468	0x2469	0x246a	0x246b	0x246c	0x246d
0x246e	0x246f	0x2470	0x2471	0x2472	0x2473	0x2500	0x2501	0x2502	0x2503
0x250c	0x250f	0x2510	0x2513	0x2514	0x2518	0x251b	0x251c	0x251d	0x2520
0x2523	0x2524	0x2525	0x2528	0x252b	0x2517	0x252c	0x252f	0x2530	0x2533
0x2534	0x2537	0x2538	0x253b	0x253c	0x253f	0x2542	0x254b	0x25a0	0x25a1
0x25b2	0x25b3	0x25bc	0x25bd	0x25c6	0x25c7	0x25cb	0x25ce	0x25cf	0x25ef
0x2605	0x2606	0x2640	0x2642	0x266a	0x266d	0x266f	0x3000	0x3001	0x3002
0x3003	0x3005	0x3006	0x3008	0x3009	0x300a	0x300b	0x300c	0x300d	0x300e
0x300f	0x3010	0x3011	0x3012	0x3013	0x3014	0x3015	0x301d	0x301f	0x3041
0x3042	0x3043	0x3044	0x3045	0x3046	0x3047	0x3048	0x3049	0x304a	0x304b
0x304c	0x304d	0x304e	0x304f	0x3050	0x3051	0x3052	0x3053	0x3054	0x3055
0x3056	0x3057	0x3058	0x3059	0x305a	0x305b	0x305c	0x305d	0x305e	0x305f
0x3060	0x3061	0x3062	0x3063	0x3064	0x3065	0x3066	0x3067	0x3068	0x3069
0x306a	0x306b	0x306c	0x306d	0x306e	0x306f	0x3070	0x3071	0x3072	0x3073
0x3074	0x3075	0x3076	0x3077	0x3078	0x3079	0x307a	0x307b	0x307c	0x307d
0x307e	0x307f	0x3080	0x3081	0x3082	0x3083	0x3084	0x3085	0x3086	0x3087
0x3088	0x3089	0x308a	0x308b	0x308c	0x308d	0x308e	0x308f	0x3090	0x3091
0x3092	0x3093	0x309b	0x309c	0x309d	0x309e	0x30a1	0x30a2	0x30a3	0x30a4
0x30a5	0x30a6	0x30a7	0x30a8	0x30a9	0x30aa	0x30ab	0x30ac	0x30ad	0x30ae

0x30af	0x30b0	0x30b1	0x30b2	0x30b3	0x30b4	0x30b5	0x30b6	0x30b7	0x30b8
0x30b9	0x30ba	0x30bb	0x30bc	0x30bd	0x30be	0x30bf	0x30c0	0x30c1	0x30c2
0x30c3	0x30c4	0x30c5	0x30c6	0x30c7	0x30c8	0x30c9	0x30ca	0x30cb	0x30cc
0x30cd	0x30ce	0x30cf	0x30d0	0x30d1	0x30d2	0x30d3	0x30d4	0x30d5	0x30d6
0x30d7	0x30d8	0x30d9	0x30da	0x30db	0x30dc	0x30dd	0x30de	0x30df	0x30e0
0x30e1	0x30e2	0x30e3	0x30e4	0x30e5	0x30e6	0x30e7	0x30e8	0x30e9	0x30ea
0x30eb	0x30ec	0x30ed	0x30ee	0x30ef	0x30f0	0x30f1	0x30f2	0x30f3	0x30f4
0x30f5	0x30f6	0x30fb	0x30fc	0x30fd	0x30fe	0x3231	0x3232	0x3239	0x32a4
0x32a5	0x32a6	0x32a7	0x32a8	0x3303	0x330d	0x3314	0x3318	0x3322	0x3323
0x3326	0x3327	0x332b	0x3336	0x333b	0x3349	0x334A	0x334D	0x3351	0x3357
0x337b	0x337c	0x337d	0x337e	0x338e	0x338f	0x339c	0x339d	0x339e	0x33a1
0x33c4	0x33cd	0x4e00	0x4e01	0x4e03	0x4e07	0x4e08	0x4e09	0x4e0a	0x4e0b
0x4e0d	0x4e0e	0x4e10	0x4e11	0x4e14	0x4e15	0x4e16	0x4e17	0x4e18	0x4e19
0x4e1e	0x4e21	0x4e26	0x4e28	0x4e2a	0x4e2d	0x4e31	0x4e32	0x4e36	0x4e38
0x4e39	0x4e3b	0x4e3c	0x4e3f	0x4e42	0x4e43	0x4e45	0x4e4b	0x4e4d	0x4e4e
0x4e4f	0x4e55	0x4e56	0x4e57	0x4e58	0x4e59	0x4e5d	0x4e5e	0x4e5f	0x4e62
0x4e71	0x4e73	0x4e7e	0x4e80	0x4e82	0x4e85	0x4e86	0x4e88	0x4e89	0x4e8a
0x4e8b	0x4e8c	0x4e8e	0x4e91	0x4e92	0x4e94	0x4e95	0x4e98	0x4e99	0x4e9b
0x4e9c	0x4e9e	0x4e9f	0x4ea0	0x4ea1	0x4ea2	0x4ea4	0x4ea5	0x4ea6	0x4ea8
0x4eab	0x4eac	0x4ead	0x4eae	0x4eb0	0x4eb3	0x4eb6	0x4eba	0x4ec0	0x4ec1
0x4ec2	0x4ec4	0x4ec6	0x4ec7	0x4eca	0x4ecb	0x4ecd	0x4ece	0x4ecf	0x4ed4
0x4ed5	0x4ed6	0x4ed7	0x4ed8	0x4ed9	0x4ef2	0x4ef6	0x4edd	0x4ede	0x4edf
0x4ee1	0x4ee3	0x4ee4	0x4ee5	0x4eed	0x4eee	0x4ef0	0x4ef7	0x4efb	0x4efc
0x4f00	0x4f01	0x4f03	0x4f09	0x4f0a	0x4f0d	0x4f0e	0x4f0f	0x4f10	0x4f11
0x4f1a	0x4f1c	0x4f1d	0x4f2f	0x4f30	0x4f34	0x4f36	0x4f38	0x4f39	0x4f39
0x4f3c	0x4f3d	0x4f43	0x4f46	0x4f47	0x4f4d	0x4f4e	0x4f4f	0x4f50	0x4f51
0x4f53	0x4f55	0x4f56	0x4f57	0x4f59	0x4f5a	0x4f5b	0x4f5c	0x4f5d	0x4f5e
0x4f69	0x4f6f	0x65b7	0x65b9	0x65bc	0x65bd	0x65c1	0x65c3	0x65c4	0x65c5
0x65c6	0x65cb	0x65cc	0x65cf	0x65d2	0x65d7	0x65d9	0x65db	0x65e0	0x65e1
0x65e2	0x65e5	0x65e6	0x65e7	0x65e8	0x65e9	0x65ec	0x65ed	0x65f1	0x65fa
0x65fb	0x6600	0x6600	0x6602	0x6603	0x6606	0x6607	0x6609	0x6609	0x660a
0x660c	0x660e	0x660f	0x6613	0x6614	0x6615	0x6615	0x661c	0x661e	0x661e
0x661f	0x6620	0x6624	0x6624	0x6625	0x6627	0x6628	0x662d	0x662e	0x662e
0x662f	0x6631	0x6631	0x6634	0x6635	0x6636	0x663b	0x663b	0x663c	0x663f
0x6641	0x6642	0x6643	0x6644	0x6649	0x664b	0x664f	0x6652	0x6657	0x6657
0x6659	0x6659	0x665d	0x665e	0x665f	0x6662	0x6664	0x6665	0x6665	0x6666
0x6667	0x6668	0x6669	0x666e	0x666f	0x6670	0x6673	0x6673	0x6674	0x6676
0x667a	0x6681	0x6683	0x6684	0x6687	0x6688	0x6689	0x668e	0x6691	0x6696
0x6697	0x6698	0x6699	0x6699	0x669d	0x66a0	0x66a0	0x66a2	0x66a6	0x66ab
0x66ae	0x66b2	0x66b2	0x66b4	0x66b8	0x66b9	0x66bc	0x66be	0x66bf	0x66bf

0x66c1	0x66c4	0x66c7	0x66c9	0x66d6	0x66d9	0x66da	0x66dc	0x66dd	0x66e0
0x66e6	0x66e9	0x66f0	0x66f2	0x66f3	0x66f4	0x66f5	0x66f7	0x66f8	0x66f9
0x66fa	0x66fa	0x66fb	0x66fb	0x66fc	0x66fd	0x66fe	0x66ff	0x6700	0x6703
0x6708	0x6709	0x670b	0x670d	0x670e	0x670e	0x670f	0x6714	0x6715	0x6716
0x6717	0x671b	0x671d	0x671e	0x671f	0x6726	0x6727	0x6728	0x672a	0x672b
0x672c	0x672d	0x672e	0x6731	0x6734	0x6736	0x6737	0x6738	0x673a	0x673d
0x673f	0x6741	0x6746	0x6749	0x674e	0x674f	0x6750	0x6751	0x6753	0x6756
0x6759	0x675c	0x675e	0x675f	0x6760	0x6761	0x6762	0x6763	0x6764	0x6765
0x6766	0x6766	0x676a	0x676d	0x676f	0x6770	0x6771	0x6772	0x6773	0x6775
0x6777	0x677c	0x677e	0x677f	0x6785	0x6787	0x6789	0x678b	0x678c	0x6790
0x6795	0x6797	0x679a	0x679c	0x679d	0x67a0	0x67a1	0x67a2	0x67a6	0x67a9
0x67af	0x67b3	0x67b4	0x67b6	0x67b7	0x67b8	0x67b9	0x67bb	0x67bb	0x67c0
0x67c0	0x67c1	0x67c4	0x67c6	0x67ca	0x67ce	0x67cf	0x67d0	0x67d1	0x67d3
0x67d4	0x67d8	0x67da	0x67dd	0x67de	0x67e2	0x67e4	0x67e7	0x67e9	0x67ec
0x67ee	0x67ef	0x67f1	0x67f3	0x67f4	0x67f5	0x67fb	0x67fe	0x67ff	0x6801
0x6801	0x6802	0x6803	0x6804	0x6813	0x6816	0x6817	0x681e	0x6821	0x6822
0x6829	0x682a	0x682b	0x6832	0x6834	0x6838	0x6839	0x683c	0x683d	0x6840
0x6841	0x6842	0x6843	0x6844	0x6844	0x6846	0x6848	0x684d	0x684e	0x6850
0x6851	0x6852	0x6852	0x6853	0x6854	0x6859	0x685c	0x685d	0x685f	0x6863
0x6867	0x6874	0x6876	0x6877	0x687e	0x687f	0x6881	0x6883	0x6885	0x688d
0x688f	0x6893	0x6894	0x6897	0x689b	0x689d	0x689f	0x68a0	0x68a2	0x68a6
0x68a7	0x68a8	0x68ad	0x68af	0x68b0	0x68b1	0x68b3	0x68b5	0x68b6	0x68b9
0x68ba	0x68bc	0x68c4	0x68c6	0x68c8	0x68c8	0x68c9	0x68ca	0x68cb	0x68cd
0x68cf	0x68cf	0x68d2	0x68d4	0x68d5	0x68d7	0x68d8	0x68da	0x68df	0x68e0
0x68e1	0x68e3	0x68e7	0x68ee	0x68ef	0x68f2	0x68f9	0x68fa	0x6900	0x6901
0x6904	0x6905	0x6908	0x690b	0x690c	0x690d	0x690e	0x690f	0x6912	0x6919
0x691a	0x691b	0x691c	0x6921	0x6922	0x6923	0x6925	0x6926	0x6928	0x692a
0x6930	0x6934	0x6936	0x6939	0x693d	0x693f	0x694a	0x6953	0x6954	0x6955
0x6959	0x695a	0x695c	0x695d	0x695e	0x6960	0x6961	0x6962	0x6968	0x6968
0x696a	0x696b	0x696d	0x696e	0x696f	0x6973	0x6974	0x6975	0x6977	0x6978
0x6979	0x697c	0x697d	0x697e	0x6981	0x6982	0x698a	0x698e	0x6991	0x6994
0x6995	0x6998	0x6998	0x699b	0x699c	0x69a0	0x69a7	0x69ae	0x69b1	0x69b2
0x69b4	0x69bb	0x69be	0x69bf	0x69c1	0x69c3	0x69c7	0x69ca	0x69cb	0x69cc
0x69cd	0x69ce	0x69d0	0x69d3	0x69d8	0x69d9	0x69dd	0x69de	0x69e2	0x69e2
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0x6a30	0x6a35	0x6a36	0x6a38	0x6a39	0x6a3a	0x6a3d	0x6a44	0x6a46	0x6a46
0x6a47	0x6a48	0x6a4b	0x6a58	0x6a59	0x6a5f	0x6a61	0x6a62	0x6a66	0x6a6b
0x6a6b	0x6a72	0x6a73	0x6a73	0x6a78	0x6a7e	0x6a7e	0x6a7f	0x6a80	0x6a84

0x6a8d	0x6a8e	0x6a90	0x6a97	0x6a9c	0x6aa0	0x6aa2	0x6aa3	0x6aaa	0x6aac
0x6aae	0x6ab3	0x6ab8	0x6abb	0x6ac1	0x6ac2	0x6ac3	0x6ad1	0x6ad3	0x6ada
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0x6afb	0x6b04	0x6b05	0x6b0a	0x6b12	0x6b16	0x6b1d	0x6b1f	0x6b20	0x6b21
0x6b23	0x6b27	0x6b32	0x6b37	0x6b38	0x6b39	0x6b3a	0x6b3d	0x6b3e	0x6b43
0x6b47	0x6b49	0x6b4c	0x6b4e	0x6b50	0x6b53	0x6b54	0x6b59	0x6b5b	0x6b5f
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0x6b78	0x6b79	0x6b7b	0x6b7f	0x6b80	0x6b83	0x6b84	0x6b86	0x6b89	0x6b8a
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0x6d78	0x6d79	0x6d85	0x6d87	0x6d87	0x6d88	0x6d8c	0x6d8e	0x6d93	0x6d95
0x6d96	0x6d96	0x6d99	0x6d9b	0x6d9c	0x6dac	0x6dac	0x6daf	0x6db2	0x6db5
0x6db8	0x6dbc	0x6dc0	0x6dc5	0x6dc6	0x6dc7	0x6dc9	0x6dcc	0x6dcf	0x6dcf
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0x6ec2	0x6ec4	0x6ec5	0x6ec9	0x6ecb	0x6ecc	0x6ed1	0x6ed3	0x6ed4	0x6ed5
0x6edd	0x6ede	0x6eec	0x6eff	0x6ef2	0x6ef4	0x6ef7	0x6ef8	0x6efe	0x6eff

0x6f01	0x6f02	0x6f06	0x6f09	0x6f0f	0x6f11	0x6f13	0x6f14	0x6f15	0x6f20
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0x6f45	0x6f54	0x6f58	0x6f5b	0x6f5c	0x6f5f	0x6f64	0x6f66	0x6f6d	0x6f6e
0x6f6f	0x6f70	0x6f74	0x6f78	0x6f7a	0x6f7c	0x6f80	0x6f81	0x6f82	0x6f84
0x6f86	0x6f88	0x6f88	0x6f8e	0x6f91	0x6f97	0x6fa1	0x6fa3	0x6fa4	0x6faa
0x6fb1	0x6fb3	0x6fb5	0x6fb5	0x6fb9	0x6fc0	0x6fc1	0x6fc2	0x6fc3	0x6fc6
0x6fd4	0x6fd5	0x6fd8	0x6fdb	0x6fdf	0x6fe0	0x6fe1	0x6fe4	0x6feb	0x6fec
0x6fee	0x6fef	0x6ff1	0x6ff3	0x6ff5	0x6ff5	0x6ff6	0x6ffa	0x6ffe	0x7001
0x7005	0x7005	0x7007	0x7007	0x7009	0x700b	0x700f	0x7011	0x7015	0x7018
0x701a	0x701b	0x701d	0x701e	0x701f	0x7026	0x7027	0x7028	0x7028	0x702c
0x7030	0x7032	0x703e	0x704c	0x7051	0x7058	0x7063	0x706b	0x706f	0x7070
0x7078	0x707c	0x707d	0x7085	0x7085	0x7089	0x708a	0x708e	0x7092	0x7099
0x70ab	0x70ab	0x70ac	0x70ad	0x70ae	0x70af	0x70b3	0x70b8	0x70b9	0x70ba
0x70bb	0x70bb	0x70c8	0x70cb	0x70cf	0x70d9	0x70dd	0x70df	0x70f1	0x70f9
0x70fd	0x7104	0x7104	0x7109	0x710f	0x710f	0x7114	0x7119	0x711a	0x711c
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0x714e	0x7155	0x7156	0x7159	0x715c	0x715c	0x7162	0x7164	0x7165	0x7166
0x7167	0x7169	0x716c	0x716e	0x717d	0x7184	0x7188	0x718a	0x718f	0x7194
0x7195	0x7199	0x719f	0x71a8	0x71ac	0x71b1	0x71b9	0x71be	0x71c1	0x71c1
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0x71e0	0x71e5	0x71e6	0x71e7	0x71ec	0x71ed	0x71ee	0x71f5	0x71f9	0x71fb
0x71fc	0x71fe	0x71fe	0x71ff	0x7206	0x720d	0x7210	0x721b	0x7228	0x722a
0x722c	0x722d	0x7230	0x7232	0x7235	0x7236	0x723a	0x723b	0x723c	0x723d
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0x7259	0x725b	0x725d	0x725f	0x7261	0x7262	0x7267	0x7269	0x7272	0x7274
0x7279	0x727d	0x727e	0x7280	0x7281	0x7282	0x7287	0x7292	0x7296	0x72a0
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0x72be	0x72c2	0x72c3	0x72c4	0x72c6	0x72ce	0x72d0	0x72d2	0x72d7	0x72d9
0x72db	0x72e0	0x72e1	0x72e2	0x72e9	0x72ec	0x72ed	0x72f7	0x72f8	0x72f9
0x72fc	0x72fd	0x730a	0x7316	0x7317	0x731b	0x731c	0x731d	0x731f	0x7324
0x7324	0x7325	0x7329	0x732a	0x732b	0x732e	0x732f	0x7334	0x7336	0x7337
0x733e	0x733f	0x7344	0x7345	0x734e	0x734f	0x7357	0x7363	0x7368	0x736a
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0x7389	0x738b	0x7396	0x73a9	0x73b2	0x73b3	0x73bb	0x73bd	0x73bd	0x73c0
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0x73d6	0x73de	0x73e0	0x73e3	0x73e3	0x73e5	0x73ea	0x73ed	0x73ee	0x73f1
0x73f5	0x73f5	0x73f8	0x73fe	0x7403	0x7405	0x7406	0x7407	0x7407	0x7409
0x7422	0x7425	0x7426	0x7426	0x7429	0x7429	0x742a	0x742a	0x742e	0x742e
0x7432	0x7433	0x7434	0x7435	0x7436	0x743a	0x743f	0x7441	0x7455	0x7459
0x745a	0x745b	0x745c	0x745e	0x745f	0x7460	0x7462	0x7462	0x7463	0x7464

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0x74d4	0x74dc	0x74e0	0x74e2	0x74e3	0x74e6	0x74e7	0x74e9	0x74ee	0x74f0
0x74f1	0x74f2	0x74f6	0x74f7	0x74f8	0x7501	0x7501	0x7503	0x7504	0x7505
0x750c	0x750d	0x750e	0x7511	0x7513	0x7515	0x7518	0x751a	0x751c	0x751e
0x751f	0x7523	0x7525	0x7526	0x7528	0x752b	0x752c	0x752f	0x752f	0x7530
0x7531	0x7532	0x7533	0x7537	0x7538	0x753a	0x753b	0x753c	0x7544	0x7546
0x7549	0x754a	0x754b	0x754c	0x754d	0x754f	0x7551	0x7554	0x7559	0x755a
0x755b	0x755c	0x755d	0x7560	0x7562	0x7564	0x7565	0x7566	0x7567	0x7569
0x756a	0x756b	0x756d	0x756f	0x756f	0x7570	0x7573	0x7574	0x7576	0x7577
0x7578	0x757f	0x7582	0x7586	0x7587	0x7589	0x758a	0x758b	0x758e	0x758f
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0x75b5	0x75b8	0x75b9	0x75bc	0x75bd	0x75be	0x75c2	0x75c3	0x75c5	0x75c7
0x75ca	0x75cd	0x75d2	0x75d4	0x75d5	0x75d8	0x75d9	0x75db	0x75de	0x75e2
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0x7630	0x7634	0x763b	0x7642	0x7646	0x7647	0x7648	0x764c	0x7652	0x7656
0x7658	0x765c	0x7661	0x7662	0x7667	0x7668	0x7669	0x766a	0x766c	0x7670
0x7672	0x7676	0x7678	0x767a	0x767b	0x767c	0x767d	0x767e	0x7680	0x7682
0x7682	0x7683	0x7684	0x7686	0x7687	0x7688	0x768b	0x768e	0x7690	0x7693
0x7696	0x7699	0x769a	0x769b	0x769b	0x769c	0x769c	0x769e	0x769e	0x76a6
0x76a6	0x76ae	0x76b0	0x76b4	0x76b7	0x76b8	0x76b9	0x76ba	0x76bf	0x76c2
0x76c3	0x76c6	0x76c8	0x76ca	0x76cd	0x76d2	0x76d6	0x76d7	0x76db	0x76dc
0x76de	0x76df	0x76e1	0x76e3	0x76e4	0x76e5	0x76e7	0x76ea	0x76ee	0x76f2
0x76f4	0x76f8	0x76fb	0x76fe	0x7701	0x7704	0x7707	0x7708	0x7709	0x770b
0x770c	0x771b	0x771e	0x771f	0x7720	0x7724	0x7725	0x7726	0x7729	0x7737
0x7738	0x773a	0x773c	0x7740	0x7746	0x7746	0x7747	0x775a	0x775b	0x7761
0x7763	0x7765	0x7766	0x7768	0x776b	0x7779	0x777e	0x777f	0x778b	0x778e
0x7791	0x779e	0x77a0	0x77a5	0x77ac	0x77ad	0x77b0	0x77b3	0x77b6	0x77b9
0x77bb	0x77bc	0x77bd	0x77bf	0x77c7	0x77cd	0x77d7	0x77da	0x77db	0x77dc
0x77e2	0x77e3	0x77e5	0x77e7	0x77e9	0x77ed	0x77ee	0x77ef	0x77f3	0x77fc
0x7802	0x780c	0x7812	0x7814	0x7815	0x7820	0x7821	0x7821	0x7825	0x7826
0x7827	0x7832	0x7834	0x783a	0x783f	0x7845	0x784e	0x784e	0x785d	0x7864
0x7864	0x786b	0x786c	0x786f	0x7872	0x7874	0x787a	0x787a	0x787c	0x7881
0x7886	0x7887	0x788c	0x788d	0x788e	0x7891	0x7893	0x7895	0x7897	0x789a
0x78a3	0x78a7	0x78a9	0x78aa	0x78af	0x78b5	0x78ba	0x78bc	0x78be	0x78c1
0x78c5	0x78c6	0x78ca	0x78cb	0x78d0	0x78d1	0x78d4	0x78da	0x78e7	0x78e8
0x78ec	0x78ef	0x78f4	0x78fd	0x7901	0x7907	0x790e	0x7911	0x7912	0x7919
0x7926	0x792a	0x792b	0x792c	0x7930	0x7930	0x793a	0x793c	0x793e	0x7940
0x7941	0x7947	0x7948	0x7949	0x7950	0x7953	0x7955	0x7956	0x7957	0x795a

0x795d	0x795e	0x795f	0x7960	0x7962	0x7965	0x7968	0x796d	0x7977	0x797a
0x797f	0x7980	0x7981	0x7984	0x7985	0x798a	0x798d	0x798e	0x798f	0x7994
0x7994	0x799b	0x799b	0x799d	0x79a6	0x79a7	0x79aa	0x79ae	0x79b0	0x79b3
0x79b9	0x79ba	0x79bd	0x79be	0x79bf	0x79c0	0x79c1	0x79c9	0x79cb	0x79d1
0x79d2	0x79d5	0x79d8	0x79df	0x79e1	0x79e3	0x79e4	0x79e6	0x79e7	0x79e9
0x79ec	0x79f0	0x79fb	0x7a00	0x7a08	0x7a0b	0x7a0d	0x7a0e	0x7a14	0x7a17
0x7a18	0x7a19	0x7a1a	0x7a1c	0x7a1f	0x7a20	0x7a2e	0x7a31	0x7a32	0x7a37
0x7a3b	0x7a3c	0x7a3d	0x7a3e	0x7a3f	0x7a40	0x7a42	0x7a43	0x7a46	0x7a49
0x7a4d	0x7a4e	0x7a4f	0x7a50	0x7a57	0x7a61	0x7a62	0x7a63	0x7a69	0x7a6b
0x7a70	0x7a74	0x7a76	0x7a79	0x7a7a	0x7a7d	0x7a7f	0x7a81	0x7a83	0x7a84
0x7a88	0x7a92	0x7a93	0x7a95	0x7a96	0x7a97	0x7a98	0x7a9f	0x7aa9	0x7aaa
0x7aae	0x7aaf	0x7ab0	0x7ab6	0x7aba	0x7abf	0x7ac3	0x7ac4	0x7ac5	0x7ac7
0x7ac8	0x7aca	0x7acb	0x7acd	0x7acf	0x7ad1	0x7ad1	0x7ad2	0x7ad3	0x7ad5
0x7ad9	0x7ada	0x7adc	0x7add	0x7adf	0x7ae0	0x7ae1	0x7ae2	0x7ae3	0x7ae5
0x7ae6	0x7ae7	0x7ae7	0x7aea	0x7aeb	0x7aeb	0x7aed	0x7aef	0x7af0	0x7af6
0x7af8	0x7af9	0x7afa	0x7aff	0x7b02	0x7b04	0x7b06	0x7b08	0x7b0a	0x7b0b
0x7b0f	0x7b11	0x7b18	0x7b19	0x7b1b	0x7b1e	0x7b20	0x7b25	0x7b26	0x7b28
0x7b2c	0x7b33	0x7b35	0x7b36	0x7b39	0x7b45	0x7b46	0x7b48	0x7b49	0x7b4b
0x7b4c	0x7b4d	0x7b4f	0x7b50	0x7b51	0x7b52	0x7b54	0x7b56	0x7b5d	0x7b65
0x7b67	0x7b6c	0x7b6e	0x7b70	0x7b71	0x7b74	0x7b75	0x7b7a	0x7b86	0x7b87
0x7b8b	0x7b8d	0x7b8f	0x7b92	0x7b94	0x7b95	0x7b97	0x7b98	0x7b99	0x7b9a
0x7b9c	0x7b9d	0x7b9e	0x7b9e	0x7b9f	0x7ba1	0x7baa	0x7bad	0x7bb1	0x7bb4
0x7bb8	0x7bc0	0x7bc1	0x7bc4	0x7bc6	0x7bc7	0x7bc9	0x7bcc	0x7bcf	
0x7bdd	0x7be0	0x7be4	0x7be5	0x7be6	0x7be9	0x7bed	0x7bf3	0x7bf6	0x7bf7
0x7c00	0x7c07	0x7c0d	0x7c11	0x7c12	0x7c13	0x7c14	0x7c17	0x7c1f	0x7c21
0x7c23	0x7c27	0x7c2a	0x7c2b	0x7c37	0x7c38	0x7c3d	0x7c3e	0x7c3f	0x7c40
0x7c43	0x7c4c	0x7c4d	0x7c4f	0x7c50	0x7c54	0x7c56	0x7c58	0x7c5f	0x7c60
0x7c64	0x7c65	0x7c6c	0x7c73	0x7c75	0x7c7e	0x7c81	0x7c82	0x7c83	0x7c89
0x7c8b	0x7c8d	0x7c90	0x7c92	0x7c95	0x7c97	0x7c98	0x7c9b	0x7c9f	0x7ca1
0x7ca2	0x7ca4	0x7ca5	0x7ca7	0x7ca8	0x7cab	0x7cad	0x7cae	0x7cb1	0x7cb2
0x7cb3	0x7cb9	0x7cbd	0x7cbe	0x7cc0	0x7cc2	0x7cc5	0x7cca	0x7cce	0x7cd2
0x7cd6	0x7cd8	0x7cdc	0x7cde	0x7cdf	0x7ce0	0x7ce2	0x7ce7	0x7cef	0x7cf2
0x7cf4	0x7cf6	0x7cf8	0x7cfa	0x7cfb	0x7cfe	0x7d00	0x7d02	0x7d04	0x7d05
0x7d06	0x7d0a	0x7d0b	0x7d0d	0x7d10	0x7d14	0x7d15	0x7d17	0x7d18	0x7d19
0x7d1a	0x7d1b	0x7d1c	0x7d20	0x7d21	0x7d22	0x7d2b	0x7d2c	0x7d2e	0x7d2f
0x7d30	0x7d32	0x7d33	0x7d35	0x7d39	0x7d3a	0x7d3f	0x7d42	0x7d43	0x7d44
0x7d45	0x7d46	0x7d48	0x7d48	0x7d4b	0x7d4c	0x7d4e	0x7d4f	0x7d50	0x7d56
0x7d5b	0x7d5c	0x7d5c	0x7d5e	0x7d61	0x7d62	0x7d63	0x7d66	0x7d68	0x7d6e
0x7d71	0x7d72	0x7d73	0x7d75	0x7d76	0x7d79	0x7d7d	0x7d89	0x7d8f	0x7d93
0x7d99	0x7d9a	0x7d9b	0x7d9c	0x7d9f	0x7da0	0x7da0	0x7da2	0x7da3	0x7dab

0x7dac	0x7dad	0x7dae	0x7daf	0x7db0	0x7db1	0x7db2	0x7db4	0x7db5	0x7db7
0x7db7	0x7db8	0x7dba	0x7dbb	0x7dbd	0x7dbe	0x7dbf	0x7dc7	0x7dca	0x7dcf
0x7dcf	0x7dd1	0x7dd2	0x7dd5	0x7dd6	0x7dd8	0x7dda	0x7ddc	0x7ddd	
0x7dde	0x7de0	0x7de1	0x7de4	0x7de8	0x7de9	0x7dec	0x7def	0x7df2	0x7df4
0x7dfb	0x7e01	0x7e04	0x7e05	0x7e09	0x7e0a	0x7e0b	0x7e12	0x7e1b	0x7e1e
0x7e1f	0x7e21	0x7e22	0x7e23	0x7e26	0x7e2b	0x7e2e	0x7e31	0x7e32	0x7e35
0x7e37	0x7e39	0x7e3a	0x7e3b	0x7e3d	0x7e3e	0x7e41	0x7e43	0x7e46	0x7e4a
0x7e4b	0x7e4d	0x7e52	0x7e52	0x7e54	0x7e55	0x7e56	0x7e59	0x7e5a	0x7e5d
0x7e5e	0x7e66	0x7e67	0x7e69	0x7e6a	0x7e6d	0x7e70	0x7e79	0x7e7b	0x7e7c
0x7e7d	0x7e7f	0x7e82	0x7e83	0x7e88	0x7e89	0x7e8a	0x7e8a	0x7e8c	0x7e8e
0x7e8f	0x7e90	0x7e92	0x7e93	0x7e94	0x7e96	0x7e9b	0x7e9c	0x7f36	0x7f38
0x7f3a	0x7f45	0x7f47	0x7f47	0x7f4c	0x7f4d	0x7f4e	0x7f50	0x7f51	0x7f54
0x7f55	0x7f58	0x7f5f	0x7f60	0x7f67	0x7f68	0x7f69	0x7f6a	0x7f6b	0x7f6e
0x7f70	0x7f72	0x7f75	0x7f77	0x7f78	0x7f79	0x7f82	0x7f83	0x7f85	0x7f86
0x7f87	0x7f88	0x7f8a	0x7f8c	0x7f8e	0x7f94	0x7f9a	0x7f9d	0x7f9e	0x7fa1
0x7fa1	0x7fa3	0x7fa4	0x7fa8	0x7fa9	0x7fae	0x7faf	0x7fb2	0x7fb6	0x7fb8
0x7fb9	0x7fdb	0x7fc1	0x7fc5	0x7fc6	0x7fc8	0x7fcc	0x7fd2	0x7fd4	0x7fd5
0x7fe0	0x7fe1	0x7fe6	0x7fe9	0x7feb	0x7ff0	0x7ff3	0x7ff9	0x7ffb	0x7ffc
0x8000	0x8001	0x8003	0x8004	0x8005	0x8006	0x800b	0x800c	0x8010	0x8012
0x8015	0x8017	0x8018	0x8019	0x801c	0x8021	0x8028	0x8033	0x8036	0x803b
0x803d	0x803f	0x8046	0x804a	0x8052	0x8056	0x8058	0x805a	0x805e	0x805f
0x8061	0x8062	0x8068	0x806f	0x8070	0x8072	0x8073	0x8074	0x8076	0x8077
0x8079	0x807d	0x807e	0x807f	0x8084	0x8085	0x8086	0x8087	0x8089	0x808b
0x808c	0x8093	0x8096	0x8098	0x809a	0x809b	0x809d	0x80a1	0x80a2	0x80a5
0x80a9	0x80aa	0x80ac	0x80ad	0x80af	0x80b1	0x80b2	0x80b4	0x80ba	0x80c3
0x80c4	0x80c6	0x80cc	0x80ce	0x80d6	0x80d9	0x80da	0x80db	0x80dd	0x80de
0x80e1	0x80e4	0x80e5	0x80ef	0x80f1	0x80f4	0x80f8	0x80fc	0x80fd	0x8102
0x8105	0x8106	0x8107	0x8108	0x8109	0x810a	0x811a	0x811b	0x8123	0x8129
0x812f	0x8131	0x8133	0x8139	0x813e	0x8146	0x814b	0x814e	0x8150	0x8151
0x8153	0x8154	0x8155	0x815f	0x8165	0x8166	0x816b	0x816e	0x8170	0x8171
0x8174	0x8178	0x8179	0x817a	0x817f	0x8180	0x8182	0x8183	0x8188	0x818a
0x818f	0x8193	0x8195	0x819a	0x819c	0x819d	0x81a0	0x81a3	0x81a4	0x81a8
0x81a9	0x81b0	0x81b3	0x81b5	0x81b8	0x81ba	0x81bd	0x81be	0x81bf	0x81c0
0x81c2	0x81c6	0x81c8	0x81c9	0x81cd	0x81d1	0x81d3	0x81d8	0x81d9	0x81da
0x81df	0x81e0	0x81e3	0x81e5	0x81e7	0x81e8	0x81ea	0x81ed	0x81f3	0x81f4
0x81fa	0x81fb	0x81fc	0x81fe	0x8201	0x8202	0x8205	0x8207	0x8208	0x8209
0x820a	0x820c	0x820d	0x820e	0x8210	0x8212	0x8216	0x8217	0x8218	0x821b
0x821c	0x821e	0x821f	0x8229	0x822a	0x822b	0x822c	0x822e	0x8233	0x8235
0x8236	0x8237	0x8238	0x8239	0x8240	0x8247	0x8258	0x8259	0x825a	0x825d
0x825f	0x8262	0x8264	0x8266	0x8268	0x826a	0x826b	0x826e	0x826f	0x8271

0x8272	0x8276	0x8277	0x8278	0x827e	0x828b	0x828d	0x8292	0x8299	0x829d
0x829f	0x82a5	0x82a6	0x82ab	0x82ac	0x82ad	0x82af	0x82b1	0x82b3	0x82b8
0x82b9	0x82bb	0x82bd	0x82c5	0x82d1	0x82d2	0x82d3	0x82d4	0x82d7	0x82d9
0x82db	0x82dc	0x82de	0x82df	0x82e1	0x82e3	0x82e5	0x82e6	0x82e7	0x82eb
0x82f1	0x82f3	0x82f4	0x82f9	0x82fa	0x82fb	0x8301	0x8301	0x8302	0x8303
0x8304	0x8305	0x8306	0x8309	0x830e	0x8316	0x8317	0x8318	0x831c	0x8323
0x8328	0x832b	0x832f	0x8331	0x8332	0x8334	0x8335	0x8336	0x8338	0x8339
0x8340	0x8345	0x8349	0x834a	0x834f	0x8350	0x8352	0x8358	0x8362	0x8362
0x8373	0x8375	0x8377	0x837b	0x837c	0x837f	0x837f	0x8385	0x8387	0x8389
0x838a	0x838e	0x8393	0x8396	0x839a	0x839e	0x839f	0x83a0	0x83a2	0x83a8
0x83aa	0x83ab	0x83b1	0x83b5	0x83bd	0x83c1	0x83c5	0x83c7	0x83c7	0x83ca
0x83cc	0x83ce	0x83d3	0x83d6	0x83d8	0x83dc	0x83df	0x83e0	0x83e9	0x83eb
0x83ef	0x83f0	0x83f1	0x83f2	0x83f4	0x83f6	0x83f6	0x83f7	0x83fb	0x83fd
0x8403	0x8404	0x8407	0x840b	0x840c	0x840d	0x840e	0x8413	0x8420	0x8422
0x8429	0x842a	0x842c	0x8431	0x8435	0x8438	0x843c	0x843d	0x8446	0x8448
0x8448	0x8449	0x844e	0x8457	0x845b	0x8461	0x8462	0x8463	0x8466	0x8469
0x846b	0x846c	0x846d	0x846e	0x846f	0x8471	0x8475	0x8477	0x8479	0x847a
0x8482	0x8484	0x848b	0x8490	0x8494	0x8499	0x849c	0x849f	0x84a1	0x84ad
0x84b2	0x84b4	0x84b4	0x84b8	0x84b9	0x84bb	0x84bc	0x84bf	0x84c1	0x84c4
0x84c6	0x84c9	0x84ca	0x84cb	0x84cd	0x84d0	0x84d1	0x84d6	0x84d9	0x84da
0x84dc	0x84dc	0x84ec	0x84ee	0x84f4	0x84fc	0x84ff	0x8500	0x8506	0x8511
0x8513	0x8514	0x8515	0x8517	0x8518	0x851a	0x851f	0x8521	0x8526	0x852c
0x852d	0x8535	0x853d	0x8540	0x8541	0x8543	0x8548	0x8549	0x854a	0x854b
0x854e	0x8553	0x8553	0x8555	0x8557	0x8558	0x8559	0x8559	0x855a	0x8563
0x8568	0x8569	0x856a	0x856b	0x856b	0x856d	0x8577	0x857e	0x8580	0x8584
0x8587	0x8588	0x858a	0x8590	0x8591	0x8594	0x8597	0x8599	0x859b	0x859c
0x85a4	0x85a6	0x85a8	0x85a9	0x85aa	0x85ab	0x85ac	0x85ae	0x85af	0x85b0
0x85b0	0x85b9	0x85ba	0x85c1	0x85c9	0x85cd	0x85cf	0x85d0	0x85d5	0x85dc
0x85dd	0x85e4	0x85e5	0x85e9	0x85ea	0x85f7	0x85f9	0x85fa	0x85fb	0x85fe
0x8602	0x8606	0x8607	0x860a	0x860b	0x8613	0x8616	0x8617	0x861a	0x8622
0x862d	0x862f	0x8630	0x863f	0x864d	0x864e	0x8650	0x8654	0x8655	0x865a
0x865c	0x865e	0x865f	0x8667	0x866b	0x8671	0x8679	0x867b	0x868a	0x868b
0x868c	0x8693	0x8695	0x86a3	0x86a4	0x86a9	0x86aa	0x86ab	0x86af	0x86b0
0x86b6	0x86c4	0x86c6	0x86c7	0x86c9	0x86cb	0x86cd	0x86ce	0x86d4	0x86d9
0x86db	0x86de	0x86df	0x86e4	0x86e9	0x86ec	0x86ed	0x86ee	0x86ef	0x86f8
0x86f9	0x86fb	0x86fe	0x8700	0x8702	0x8703	0x8706	0x8708	0x8709	0x870a
0x870d	0x8711	0x8712	0x8718	0x871a	0x871c	0x8725	0x8729	0x8734	0x8737
0x873b	0x873f	0x8749	0x874b	0x874c	0x874e	0x8753	0x8755	0x8757	0x8759
0x875f	0x8760	0x8763	0x8766	0x8768	0x876a	0x876e	0x8774	0x8776	0x8778
0x877f	0x8782	0x878d	0x879f	0x87a2	0x87ab	0x87af	0x87b3	0x87ba	0x87bb

0x87bd	0x87c0	0x87c4	0x87c6	0x87c7	0x87cb	0x87d0	0x87d2	0x87e0	0x87ef
0x87f2	0x87f6	0x87f7	0x87f9	0x87fb	0x87fe	0x8805	0x8807	0x8807	0x880d
0x880e	0x880f	0x8811	0x8815	0x8816	0x8821	0x8822	0x8823	0x8827	0x8831
0x8836	0x8839	0x883b	0x8840	0x8842	0x8844	0x8846	0x884c	0x884d	0x8852
0x8853	0x8857	0x8859	0x885b	0x885d	0x885e	0x8861	0x8862	0x8863	0x8868
0x886b	0x8870	0x8872	0x8875	0x8877	0x887d	0x887e	0x887f	0x8881	0x8882
0x8888	0x888b	0x888d	0x8892	0x8896	0x8897	0x8899	0x889e	0x88a2	0x88a4
0x88ab	0x88ae	0x88b0	0x88b1	0x88b4	0x88b5	0x88b7	0x88bf	0x88c1	0x88c2
0x88c3	0x88c4	0x88c5	0x88cf	0x88d4	0x88d5	0x88d8	0x88d9	0x88dc	0x88dd
0x88df	0x88e1	0x88e8	0x88f2	0x88f3	0x88f4	0x88f5	0x88f5	0x88f8	0x88f9
0x88fc	0x88fd	0x88fe	0x8902	0x8904	0x8907	0x890a	0x890c	0x8910	0x8912
0x8913	0x891c	0x891c	0x891d	0x891e	0x8925	0x892a	0x892b	0x8936	0x8938
0x893b	0x8941	0x8943	0x8944	0x894c	0x894d	0x8956	0x895e	0x895f	0x8960
0x8964	0x8966	0x896a	0x896d	0x896f	0x8972	0x8974	0x8977	0x897e	0x897f
0x8981	0x8983	0x8986	0x8987	0x8988	0x898a	0x898b	0x898f	0x8993	0x8996
0x8997	0x8998	0x899a	0x89a1	0x89a6	0x89a7	0x89a9	0x89aa	0x89ac	0x89af
0x89b2	0x89b3	0x89ba	0x89bd	0x89bf	0x89c0	0x89d2	0x89da	0x89dc	0x89dd
0x89e3	0x89e6	0x89e7	0x89f4	0x89f8	0x8a00	0x8a02	0x8a03	0x8a08	0x8a0a
0x8a0c	0x8a0e	0x8a10	0x8a12	0x8a12	0x8a13	0x8a16	0x8a17	0x8a18	0x8a1b
0x8a1d	0x8a1f	0x8a23	0x8a25	0x8a2a	0x8a2d	0x8a31	0x8a33	0x8a34	0x8a36
0x8a37	0x8a37	0x8a3a	0x8a3b	0x8a3c	0x8a41	0x8a46	0x8a48	0x8a50	0x8a51
0x8a52	0x8a54	0x8a55	0x8a5b	0x8a5e	0x8a60	0x8a62	0x8a63	0x8a66	0x8a69
0x8a6b	0x8a6c	0x8a6d	0x8a6e	0x8a70	0x8a71	0x8a72	0x8a73	0x8a79	0x8a79
0x8a7c	0x8a82	0x8a84	0x8a85	0x8a87	0x8a89	0x8a8c	0x8a8d	0x8a91	0x8a93
0x8a95	0x8a98	0x8a9a	0x8a9e	0x8aa0	0x8aa1	0x8aa3	0x8aa4	0x8aa5	0x8aa6
0x8aa7	0x8aa7	0x8aa8	0x8aac	0x8aad	0x8ab0	0x8ab2	0x8ab9	0x8abc	0x8abe
0x8abe	0x8abf	0x8ac2	0x8ac4	0x8ac7	0x8acb	0x8acc	0x8acd	0x8acf	0x8ad2
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0x8ae4	0x8ae6	0x8ae7	0x8ae8	0x8aed	0x8aee	0x8af1	0x8af3	0x8af6	0x8af7
0x8af8	0x8afa	0x8afe	0x8b00	0x8b01	0x8b02	0x8b04	0x8b07	0x8b0c	0x8b0e
0x8b10	0x8b14	0x8b16	0x8b17	0x8b19	0x8b1a	0x8b1b	0x8b1d	0x8b20	0x8b21
0x8b26	0x8b28	0x8b2b	0x8b2c	0x8b33	0x8b39	0x8b3e	0x8b41	0x8b49	0x8b4c
0x8b4e	0x8b4f	0x8b53	0x8b53	0x8b56	0x8b58	0x8b5a	0x8b5b	0x8b5c	0x8b5f
0x8b66	0x8b6b	0x8b6c	0x8b6f	0x8b70	0x8b71	0x8b72	0x8b74	0x8b77	0x8b7d
0x8b7f	0x8b7f	0x8b80	0x8b83	0x8b8a	0x8b8c	0x8b8e	0x8b90	0x8b92	0x8b93
0x8b96	0x8b99	0x8b9a	0x8c37	0x8c3a	0x8c3f	0x8c41	0x8c46	0x8c48	0x8c4a
0x8c4c	0x8c4e	0x8c50	0x8c55	0x8c5a	0x8c61	0x8c62	0x8c6a	0x8c6b	0x8c6c
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0x8c8e	0x8c94	0x8c98	0x8c9d	0x8c9e	0x8ca0	0x8ca1	0x8ca2	0x8ca7	0x8ca8
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0x8cb4	0x8cb6	0x8cb7	0x8cb8	0x8cbb	0x8cbc	0x8cbd	0x8cbf	0x8cc0	0x8cc1
0x8cc2	0x8cc3	0x8cc4	0x8cc7	0x8cc8	0x8cca	0x8ccd	0x8cce	0x8cd1	0x8cd3
0x8cda	0x8cdb	0x8cdc	0x8cde	0x8ce0	0x8ce2	0x8ce3	0x8ce4	0x8ce6	0x8cea
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0x8d05	0x8d07	0x8d08	0x8d0a	0x8d0b	0x8d0d	0x8d0f	0x8d10	0x8d12	0x8d12
0x8d13	0x8d14	0x8d16	0x8d64	0x8d66	0x8d67	0x8d6b	0x8d6d	0x8d70	0x8d71
0x8d73	0x8d74	0x8d76	0x8d76	0x8d77	0x8d81	0x8d85	0x8d8a	0x8d99	0x8da3
0x8da8	0x8db3	0x8dba	0x8dbe	0x8dc2	0x8dcb	0x8dcc	0x8dcf	0x8dd6	0x8dda
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0x8e4a	0x8e4c	0x8e50	0x8e55	0x8e59	0x8e5f	0x8e60	0x8e63	0x8e64	0x8e72
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0x8ecf	0x8ed2	0x8edb	0x8edf	0x8ee2	0x8ee3	0x8eeb	0x8ef8	0x8efb	0x8efc
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0x8f64	0x8f9b	0x8f9c	0x8f9e	0x8f9f	0x8fa3	0x8fa7	0x8fa8	0x8fad	0x8fae
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0x8ffd	0x9000	0x9001	0x9003	0x9005	0x9006	0x900b	0x900d	0x900e	0x900f
0x9010	0x9011	0x9013	0x9014	0x9015	0x9016	0x9017	0x9019	0x901a	0x901d
0x901e	0x901f	0x9020	0x9021	0x9022	0x9023	0x9027	0x902e	0x9031	0x9032
0x9035	0x9036	0x9038	0x9039	0x903c	0x903e	0x9041	0x9042	0x9045	0x9047
0x9049	0x904a	0x904b	0x904d	0x904e	0x904f	0x9050	0x9051	0x9052	0x9053
0x9054	0x9055	0x9056	0x9058	0x9059	0x905c	0x905e	0x9060	0x9061	0x9063
0x9065	0x9067	0x9067	0x9068	0x9069	0x906d	0x906e	0x906f	0x9072	0x9075
0x9076	0x9077	0x9078	0x907a	0x907c	0x907d	0x907f	0x9080	0x9081	0x9082
0x9083	0x9084	0x9087	0x9089	0x908a	0x908f	0x9091	0x90a3	0x90a6	0x90a8
0x90aa	0x90af	0x90b1	0x90b5	0x90b8	0x90c1	0x90ca	0x90ce	0x90db	0x90de
0x90de	0x90e1	0x90e2	0x90e4	0x90e8	0x90ed	0x90f5	0x90f7	0x90fd	0x9102
0x9112	0x9115	0x9115	0x9119	0x9127	0x9127	0x912d	0x9130	0x9132	0x9149
0x914a	0x914b	0x914c	0x914d	0x914e	0x9152	0x9154	0x9156	0x9158	0x9162
0x9163	0x9165	0x9169	0x916a	0x916c	0x9172	0x9173	0x9175	0x9177	0x9178
0x9182	0x9187	0x9189	0x918b	0x918d	0x9190	0x9192	0x9197	0x919c	0x91a2
0x91a4	0x91aa	0x91ab	0x91af	0x91b4	0x91b5	0x91b8	0x91ba	0x91c0	0x91c1

0x91c6	0x91c7	0x91c8	0x91c9	0x91cb	0x91cc	0x91cd	0x91ce	0x91cf	0x91d0
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0x91de	0x91de	0x91df	0x91e1	0x91e3	0x91e4	0x91e4	0x91e5	0x91e5	0x91e6
0x91e7	0x91ed	0x91ed	0x91ee	0x91ee	0x91f5	0x91f6	0x91fc	0x91ff	0x9206
0x9206	0x920a	0x920a	0x920d	0x920e	0x9210	0x9210	0x9211	0x9214	0x9215
0x921e	0x9229	0x922c	0x9234	0x9237	0x9239	0x9239	0x923a	0x923a	0x923c
0x923c	0x923f	0x9240	0x9240	0x9244	0x9245	0x9248	0x9249	0x924b	0x924e
0x924e	0x9250	0x9251	0x9251	0x9257	0x9259	0x9259	0x925a	0x925b	0x925e
0x9262	0x9264	0x9266	0x9267	0x9267	0x9271	0x9277	0x9277	0x9278	0x9278
0x927e	0x9280	0x9283	0x9285	0x9288	0x9288	0x9291	0x9293	0x9295	0x9296
0x9298	0x929a	0x929b	0x929c	0x92a7	0x92a7	0x92ad	0x92b7	0x92b9	0x92cf
0x92d0	0x92d0	0x92d2	0x92d3	0x92d3	0x92d5	0x92d5	0x92d7	0x92d7	0x92d9
0x92d9	0x92e0	0x92e0	0x92e4	0x92e7	0x92e7	0x92e9	0x92ea	0x92ed	0x92f2
0x92f3	0x92f8	0x92f9	0x92f9	0x92fa	0x92fb	0x92fb	0x92fc	0x92ff	0x92ff
0x9302	0x9302	0x9306	0x930f	0x9310	0x9318	0x9319	0x931a	0x931d	0x931d
0x931e	0x931e	0x9320	0x9321	0x9321	0x9322	0x9323	0x9325	0x9325	0x9326
0x9328	0x932b	0x932c	0x932e	0x932f	0x9332	0x9335	0x933a	0x933b	0x9344
0x9348	0x9348	0x934b	0x934d	0x9354	0x9356	0x9357	0x9357	0x935b	0x935c
0x9360	0x936c	0x936e	0x9370	0x9370	0x9375	0x937c	0x937e	0x938c	0x9394
0x9396	0x9397	0x939a	0x93a4	0x93a4	0x93a7	0x93ac	0x93ad	0x93ae	0x93b0
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0x93dd	0x93de	0x93de	0x93e1	0x93e4	0x93e5	0x93e8	0x93f8	0x93f8	0x9403
0x9407	0x9410	0x9413	0x9414	0x9418	0x9419	0x941a	0x9421	0x942b	0x9431
0x9431	0x9435	0x9436	0x9438	0x943a	0x9441	0x9444	0x9445	0x9445	0x9448
0x9448	0x9451	0x9452	0x9453	0x945a	0x945b	0x945e	0x9460	0x9462	0x946a
0x9470	0x9475	0x9477	0x947c	0x947d	0x947e	0x947f	0x9481	0x9577	0x9580
0x9582	0x9583	0x9587	0x9589	0x958a	0x958b	0x958f	0x9591	0x9592	0x9592
0x9593	0x9594	0x9596	0x9598	0x9599	0x95a0	0x95a2	0x95a3	0x95a4	0x95a5
0x95a7	0x95a8	0x95ad	0x95b2	0x95b9	0x95bb	0x95bc	0x95be	0x95c3	0x95c7
0x95ca	0x95cc	0x95cd	0x95d4	0x95d5	0x95d6	0x95d8	0x95dc	0x95e1	0x95e2
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0x9686	0x9688	0x968a	0x968b	0x968d	0x968e	0x968f	0x9694	0x9695	0x9697
0x9698	0x9699	0x969b	0x969c	0x969d	0x969d	0x96a0	0x96a3	0x96a7	0x96a8
0x96aa	0x96af	0x96af	0x96b0	0x96b1	0x96b2	0x96b4	0x96b6	0x96b7	0x96b8
0x96b9	0x96bb	0x96bc	0x96c0	0x96c1	0x96c4	0x96c5	0x96c6	0x96c7	0x96c9
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0x9732	0x9733	0x9733	0x9738	0x9739	0x973b	0x973b	0x973d	0x973e	0x9742
0x9743	0x9743	0x9744	0x9746	0x9748	0x9749	0x974d	0x974d	0x974f	0x974f
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0x97b4	0x97c3	0x97c6	0x97c8	0x97cb	0x97d3	0x97dc	0x97ed	0x97ee	0x97f2
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0x9808	0x980c	0x980f	0x9810	0x9811	0x9812	0x9813	0x9817	0x9818	0x981a
0x9821	0x9824	0x982c	0x982d	0x9834	0x9837	0x9838	0x983b	0x983c	0x983d
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0x9858	0x985b	0x985e	0x9865	0x9865	0x9867	0x986b	0x986f	0x9870	0x9871
0x9873	0x9874	0x98a8	0x98aa	0x98af	0x98b1	0x98b6	0x98c3	0x98c4	0x98c6
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0x98f4	0x98fc	0x98fd	0x98fe	0x9903	0x9905	0x9909	0x990a	0x990c	0x9910
0x9912	0x9913	0x9914	0x9918	0x991d	0x991e	0x9920	0x9921	0x9924	0x9927
0x9927	0x9928	0x992c	0x992e	0x993d	0x993e	0x9942	0x9945	0x9949	0x994b
0x994c	0x9950	0x9951	0x9952	0x9955	0x9957	0x9996	0x9997	0x9998	0x9999
0x999e	0x999e	0x99a5	0x99a8	0x99ac	0x99ad	0x99ae	0x99b3	0x99b4	0x99bc
0x99c1	0x99c4	0x99c5	0x99c6	0x99c8	0x99d0	0x99d1	0x99d2	0x99d5	0x99d8
0x99db	0x99dd	0x99df	0x99e2	0x99ed	0x99ee	0x99f1	0x99f2	0x99f8	0x99fb
0x99ff	0x9a01	0x9a05	0x9a0e	0x9a0f	0x9a12	0x9a13	0x9a19	0x9a28	0x9a2b
0x9a30	0x9a37	0x9a3e	0x9a40	0x9a42	0x9a43	0x9a45	0x9a4d	0x9a4e	0x9a4e
0x9a55	0x9a57	0x9a5a	0x9a5b	0x9a5f	0x9a62	0x9a64	0x9a65	0x9a69	0x9a6a
0x9a6b	0x9aa8	0x9aad	0x9ab0	0x9ab8	0x9abc	0x9ac0	0x9ac4	0x9acf	0x9ad1
0x9ad3	0x9ad4	0x9ad8	0x9ad9	0x9ad9	0x9adc	0x9adc	0x9ade	0x9adf	0x9ae2
0x9ae3	0x9ae6	0x9aea	0x9aeb	0x9aed	0x9aee	0x9aef	0x9af1	0x9af4	0x9af7
0x9afb	0x9b06	0x9b18	0x9b1a	0x9b1f	0x9b22	0x9b23	0x9b25	0x9b27	0x9b28
0x9b29	0x9b2a	0x9b2e	0x9b2f	0x9b31	0x9b32	0x9b3b	0x9b3c	0x9b41	0x9b42
0x9b43	0x9b44	0x9b45	0x9b4d	0x9b4e	0x9b4f	0x9b51	0x9b54	0x9b58	0x9b5a
0x9b6f	0x9b72	0x9b72	0x9b74	0x9b75	0x9b75	0x9b83	0x9b8e	0x9b8f	0x9b8f
0x9b91	0x9b92	0x9b93	0x9b96	0x9b97	0x9b9f	0x9ba0	0x9ba8	0x9baa	0x9bab
0x9bad	0x9bae	0x9bb1	0x9bb1	0x9bb4	0x9bb9	0x9bbb	0x9bbb	0x9bc0	0x9bc6
0x9bc9	0x9bca	0x9bcf	0x9bd1	0x9bd2	0x9bd4	0x9bd6	0x9bdb	0x9be1	0x9be2
0x9be3	0x9be4	0x9be8	0x9bf0	0x9bf1	0x9bf2	0x9bf5	0x9c00	0x9c00	0x9c04
0x9c06	0x9c08	0x9c09	0x9c0a	0x9c0c	0x9c0d	0x9c10	0x9c12	0x9c13	0x9c14
0x9c15	0x9c1b	0x9c21	0x9c24	0x9c25	0x9c2d	0x9c2e	0x9c2f	0x9c30	0x9c32
0x9c39	0x9c3a	0x9c3b	0x9c3e	0x9c46	0x9c47	0x9c48	0x9c52	0x9c57	0x9c5a

0x9c60	0x9c67	0x9c76	0x9c78	0x9ce5	0x9ce7	0x9ce9	0x9ceb	0x9cec	0x9cf0
0x9cf3	0x9cf4	0x9cf6	0x9d03	0x9d06	0x9d07	0x9d08	0x9d09	0x9d0e	0x9d12
0x9d15	0x9d1b	0x9d1f	0x9d23	0x9d26	0x9d28	0x9d2a	0x9d2b	0x9d2c	0x9d3b
0x9d3e	0x9d3f	0x9d41	0x9d44	0x9d46	0x9d48	0x9d50	0x9d51	0x9d59	0x9d5c
0x9d5d	0x9d5e	0x9d60	0x9d61	0x9d64	0x9d6b	0x9d6b	0x9d6c	0x9d6f	0x9d70
0x9d70	0x9d72	0x9d7a	0x9d87	0x9d89	0x9d8f	0x9d9a	0x9da4	0x9da9	0x9dab
0x9daf	0x9db2	0x9db4	0x9db8	0x9dba	0x9dbb	0x9dc1	0x9dc2	0x9dc4	0x9dc6
0x9dcf	0x9dd3	0x9dd9	0x9de6	0x9ded	0x9def	0x9df2	0x9df8	0x9df9	0x9dfa
0x9dfd	0x9e19	0x9e19	0x9e1a	0x9e1b	0x9e1e	0x9e75	0x9e78	0x9e79	0x9e7d
0x9e7f	0x9e81	0x9e88	0x9e8b	0x9e8c	0x9e91	0x9e92	0x9e93	0x9e95	0x9e97
0x9e9d	0x9e9f	0x9ea5	0x9ea6	0x9ea9	0x9eaa	0x9ead	0x9eb8	0x9eb9	0x9eba
0x9ebb	0x9ebc	0x9ebe	0x9ebf	0x9ec4	0x9ecc	0x9ecd	0x9ece	0x9ecf	0x9ed0
0x9ed1	0x9ed1	0x9ed2	0x9ed4	0x9ed8	0x9ed9	0x9edb	0x9edc	0x9edd	0x9ede
0x9ee0	0x9ee5	0x9ee8	0x9eff	0x9ef4	0x9ef6	0x9ef7	0x9ef9	0x9efb	0x9efc
0x9efd	0x9f07	0x9f08	0x9f0e	0x9f13	0x9f15	0x9f20	0x9f21	0x9f2c	0x9f3b
0x9f3e	0x9f4a	0x9f4b	0x9f4e	0x9f4f	0x9f52	0x9f54	0x9f5f	0x9f60	0x9f61
0x9f62	0x9f63	0x9f66	0x9f67	0x9f6a	0x9f6c	0x9f72	0x9f76	0x9f77	0x9f8d
0x9f95	0x9f9c	0x9f9d	0x9fa0	0xf929	0xf929	0xf9dc	0xf9dc	0xfa0e	0xfa0e
0xfa0f	0xfa0f	0xfa10	0xfa10	0xfa11	0xfa11	0xfa12	0xfa12	0xfa13	0xfa13
0xfa14	0xfa14	0xfa15	0xfa15	0xfa16	0xfa16	0xfa17	0xfa17	0xfa18	0xfa18
0xfa19	0xfa19	0xfa1a	0xfa1a	0xfa1b	0xfa1b	0xfa1c	0xfa1c	0xfa1d	0xfa1d
0xfa1e	0xfa1e	0xfa1f	0xfa1f	0xfa20	0xfa20	0xfa21	0xfa21	0xfa22	0xfa22
0xfa23	0xfa23	0xfa24	0xfa24	0xfa25	0xfa25	0xfa26	0xfa26	0xfa27	0xfa27
0xfa28	0xfa28	0xfa29	0xfa29	0xfa2a	0xfa2a	0xfa2b	0xfa2b	0xfa2c	0xfa2c
0xfa2d	0xfa2d	0xff01	0xff02	0xff02	0xff03	0xff04	0xff05	0xff06	0xff07
0xff07	0xff08	0xff09	0xff0a	0xff0b	0xff0c	0xff0d	0xff0e	0xff0f	0xff10
0xff11	0xff12	0xff13	0xff14	0xff15	0xff16	0xff17	0xff18	0xff19	0xff1a
0xff1b	0xff1c	0xff1d	0xff1e	0xff1f	0xff20	0xff21	0xff22	0xff23	0xff24
0xff25	0xff26	0xff27	0xff28	0xff29	0xff2a	0xff2b	0xff2c	0xff2d	0xff2e
0xff2f	0xff30	0xff31	0xff32	0xff33	0xff34	0xff35	0xff36	0xff37	0xff38
0xff39	0xff3a	0xff2f	0xff30	0xff3b	0xff3c	0xff3d	0xff3e	0xff3f	0xff40
0xff41	0xff42	0xff43	0xff44	0xff45	0xff46	0xff47	0xff48	0xff49	0xff4a
0xff4b	0xff4c	0xff4d	0xff4e	0xff4f	0xff50	0xff51	0xff52	0xff53	0xff54
0xff55	0xff56	0xff57	0xff58	0xff59	0xff5a	0xff5b	0xff5c	0xff5d	0xff5e
0xff61	0xff62	0xff63	0xff64	0xff65	0xff66	0xff67	0xff68	0xff69	0xff6a
0xff6b	0xff6c	0xff6d	0xff6e	0xff6f	0xff70	0xff71	0xff72	0xff73	0xff74
0xff75	0xff76	0xff77	0xff78	0xff79	0xff7a	0xff7b	0xff7c	0xff7d	0xff7e
0xff7f	0xff80	0xff81	0xff82	0xff83	0xff84	0xff85	0xff86	0xff87	0xff88
0xff89	0xff8a	0xff8b	0xff8c	0xff8d	0xff8e	0xff8f	0xff90	0xff91	0xff92
0xff93	0xff94	0xff95	0xff96	0xff97	0xff98	0xff99	0xff9a	0xff9b	0xff9c

0xff9d	0xff9e	0xff9f	0xffe0	0xffe1	0xffe2	0xffe3	0xffe4	0xffe5	
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Information

The following code, it can be used as a boundary value when it is specified as input enable chars.

0x0001	0x0002	0x0003	0x0004	0x0005	0x0006	0x0007	0x0008	0x0009	0x000a
0x000b	0x000c	0x000d	0x000e	0x000f	0x0010	0x0011	0x0012	0x0013	0x0014
0x0015	0x0016	0x0017	0x0018	0x0019	0x001a	0x001b	0x001c	0x001d	0x001e
0x001f	0x007f	0x00b0							

BreakIterator.getCharacterInstance()

When BreakIterator.getCharacterInstance() is specify to JFTTextArea#setWordWrapIterator(BreakIterator), use the following boundary value.

- The all input enabled chars of JFTTextArea

Information

The following code, it can be used as a boundary value when it is specified as input enable chars.

0x0009	0x000a	0x007f	0x00a7	0x00b0	0x00b6
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