

Fujitsu Software Systemwalker Operation Manager

Troubleshooting Guide

UNIX/Windows(R)

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Preface

Purpose of This Document

This document provides details on how to address any issues that may occur in SystemWalker/OperationMGR V5.0L10/5.0 or later.

Intended Readers

This document is intended for people who use Systemwalker Operation Manager.

Conventions Used in This Document

For descriptions and abbreviations of specific articles, refer to the "C.1 Abbreviations and Generic Terms Used".

Systemwalker Operation Manager Product Names

Systemwalker Operation Manager product names differ depending on the version. This document refers to the product explained herein as "Systemwalker Operation Manager". However, where the version can be identified, the product name for that version is used.

Version	Product name
V11.0L10/11.0 or later	Systemwalker Operation Manager
V10.0L20/V10.0L21/10.1	Systemwalker OperationMGR
Up to V10.0L10/10.0	SystemWalker/OperationMGR

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Contents	
Chapter 1 Troubleshooting Flow	1
Chapter 2 Common Troubleshooting	2
2.1 Problems with Installation	
2.1.1 Silent Installation Fails [UNIX Versions]	2
2.1.2 Message "The InstallShield engine (iKernel.exe) could not be launched. Access is denied." is Output du Startup of the Installer and Installation Ends Abnormally	
2.1.3 Systemwalker Operation Manager Error Messages are Displayed in an Environment in Which Networker Coexist	, etc.
2.1.4 Authentication of the Startup Account Fails When Installing the Software in an Environment Configured	
Backup Domain Controller of Active Directory	
2.1.5 The Service or Daemon Fails to Stop and Installation Fails	
2.1.6 Message "00872:Failed in installation process." is Displayed When Installation is 99% Complete	
2.1.7 The Warning Message "The Web Link function will be installed. However, Setup will not be performed bed	
IIS is not installed. " is Displayed during Installation [Windows Versions]	10
2.1.8 The System is Installed in English (ASCII) even though the System Encoding is Japanese [UNIX Version	s] 11
2.1.9 00103 Error Message is Output and Installation Cannot be Completed	12
2.1.10 The Message "Web server setup failed." is Displayed	13
2.2 Problems with Processes	14
2.2.1 A Process Error is Displayed	
2.2.2 A Process Error is Displayed during Check of the Process Running Status	17
2.2.3 Message "failed to obtain the monitored processes" is Displayed	18
2.2.4 Message "skipped monitoring, because of resource lack." Is Displayed	
2.2.5 A KERNEL32.DLL Initialization Error Occurs, Preventing the Systemwalker Operation Manager Process	From
Starting Up [Windows Versions]	
2.2.6 Unable to Collect IPC Resources [UNIX Versions]	
2.2.7 Message "Connection Failed or Server Process is Down" is Output in an Environment in Which Systemw Operation Manager Coexists With the Operation Management Server of Systemwalker Centric Mar	nager
2.2.8 Standard Output or Standard Error Cannot be Used Inside the Shell (mppmonsnd.sh) of the User	
Customization of Process Monitoring Function [UNIX Versions]	
2.2.9 CPU Usage is High for the f3crheeg and f3crhesv Processes [Windows Versions]	
2.2.10 Message "AP:F3CVSERV:Warning:3001:The time-out interval elapsed.(detail)" Is Displayed	
2.2.11 A java.exe Process Error is Displayed during Check of the Process Running Status [Windows Versions]	
2.3 Problems with Starting or Stopping.	
2.3.1 Unable to Start Systemwalker Operation Manager Services [Windows Versions]	
2.3.2 The F3CVSERV Service is Set to be Started Manually but is not Started during the Product Startup [Win	
Versions]2.3.3 Cluster Failover Takes Time or a Process Accessing Files Under /var/spool/mjes is Detected during Clu	
Failover [UNIX Versions]	
2.3.4 "MpAuditLogO: ERROR: 1: The audit log was not able to be initialized. The log is not output to the oper	
after this." is Output to the Event Log during a System Reboot or Shutdown [Windows Versions]	
2.3.5 If the Systemwalker Operation Manager Start Command (soperationmgr) is Executed via cron, Subsec	
Start Commands Fail [UNIX Versions]	
2.4 Problems with Systemwalker Operation Manager Infrastructure	
2.4.1 Error Messages Output By Systemwalker Operation Manager Infrastructure	
2.4.2 The Message " Failed to send the start parameters. Code=0xXXXXXXXX" (XXXXXXXX Represents a Co	
Displayed on the Environment Setup Client [UNIX Versions]	
2.4.3 Unable to Log In to the Server From a Systemwalker Operation Manager Client or Environment Setup (
[UNIX Versions][UNIX versions]	
2.4.4 A jmnetsv Daemon Error Occurs, Preventing Systemwalker Operation Manager From Starting Up [UN	
Versions]Versions]	
2.4.5 The mpjmsrv Process Crashes After Login From Systemwalker Operation Manager Client [UNIX Version	
2.4.6 The Error Message "MpJmSrv: ERROR: 0028: socket() Address family not supported by protocol" is Outp	
the Systemwalker Operation Manager Infrastructure [UNIX Versions]	
2.5 Problems with Access Rights	

2.5. Fit Connecting as a User Other than Superuser, the Project is not Displayed Even if the Access Rights hav	
Set [UNIX Versions]	
2.5.2 If Connecting as a Domain Account, the Project is not Displayed When Jobscheduler is Selected in the	-
Selection Window Even if the Access Rights have been Set [Windows Versions]	
2.5.3 Message "Incorrect user name or password." is Displayed, Projects cannot be Created or Deleted, a	
Owner Cannot be Changed	
2.5.4 Message "Could not get user definition information." Is Displayed When Trying to Set the Project Ad	
Rights in the Cluster System	
2.5.5 Message "Could not get domain name list.(0:0)" Is Displayed When the Project Access Rights are Se	
[Windows Versions]	
[Windows Versions]	
2.5.8 "Could not get domain name list.(0:0) (For Window) "	
2.5.9 If Failover is Performed in the Cluster System, the Information of Operation Manager Users That Shou been Registered is Restored [UNIX Versions]	
2.6 Problems with Policy	
2.6.1 Policy Distribution is not Implemented Correctly [UNIX Versions]	
2.6.2 The Message "Policy distribution is not allowed because destination server policy information is not a	
" is Output and Policies Cannot be Distributed	
2.6.3 Failover Occurs When Policies are Distributed in the Cluster Environment [UNIX Versions]	
2.6.4 The Message "Policy distribution is not allowed because destination server type is different." is Outp	
Policies Cannot be Distributed	
2.7 Problems with Utility Commands	
2.7.1 An Abnormal Completion Message is Output With the Completion Code 7 Even When a Service is St	
Normally Using the Service Start Command (f3crhsst.exe) [Windows Versions]	
2.8 Problems with Backup, Restore or Migration	
2.8.1 Backup or Restore Commands do not Run Normally if Executed by a Shell Script [UNIX Versions]	
2.8.2 Backup in Silent Mode Fails	
2.8.3 Message "Mplobsch: ERROR: 7300 func= OBSCH_dbfile_open:CreateFile()" Is Displayed [Windows Ve	
2.0.3 Plessage Pipjobsch. ERROR. 7300 fonc-jobsch-gabrite-gopen. Creater ite() is bisptayed [windows ve	
2.8.4 The jobschmsgevent Command Does not Run Normally when the Schedule Server is Migrated [Sola	
Versions]	
2.9 Problems with the Maintenance Information Collection Tool	
2.9.1 An Application Error Occurs for MsInfo32 if the Maintenance Information Collection Tool is Started F	
[obscheduler [Windows Versions]	
2.10 Problems with Other Products	
2.10.1 Systemwalker Operation Manager Provisioning Fails When Using ServerView Resource Coordinator	
Provisioning	
2.10.2 After the Password Change Command (pwchangeo.exe) is Executed, Error Message "Failed to char	
password." Is Displayed and the Systemwalker Centric Manager Service Fails to Start Up [Windo	
Versions]	
2.11 Problems with the Client	55
2.11.1 The Message "Failure in writing audit log." is Displayed	55
2.11.2 The Message "Run-time error '429': ActiveX component can't create object." is Displayed [Windows Ve	ersions]
2.12 Problems with the Web Console	56
2.12.1 Information is not Displayed during Operation of the Web Console	
2.12.2 When Login window will be displayed, Web site: "Internet Explorer cannot display the webpage" is v	
2.12.3 The pop-up message is displayed during Operation of the Web Console	
2.12.4 "INVALIDSESSION:" appears immediately after logging in to the web console	
Chapter 3 Troubleshooting Calendar/Power Control	
3.1 Power off is Not Operating Correctly	
3.1.1 PowerChutePLUS (APC product) Connects but only Shutdown is Performed, with no Power off [Wine	
Version]	59

3.1.2 The Power Goes off at the Day Change Time	
3.1.3 The Power Control Schedule has been Set, however, a Power off and Reboot are Not Performed [W	
3.1.4 A System Reboot or Shutdown Occurs at an Unexpected Time	
3.2 Power Control does Not Operate Normally	
3.2.1 Shutdown is Performed before Completion of Commands Executed at the Completion of Operation Shutdown Monitoring	n during
3.2.2 When Trying to Restart Multiple Servers using Batch Power Control, One or More Servers do Not Ro 3.2.3 Cannot Power on	63
3.3 Automatic Reflection Function for Calendar Information does Not Work during Cluster Operation	64
3.3.1 The Calendar Automatic Reflection Setup was Completed but the Calendar Information is not Refle	ected
Automatically	64
Chapter 4 Troubleshooting Jobscheduler	66
4.1 Groups are Not Operating as Expected	
4.1.1 A Job Net Starts even though the Preceding Job Net has not Been Executed	
4.1.2 Immediately after Completion of a Group, the Same Group is Continuously Started	
4.1.3 Job Nets Cannot be Added to a Group	
4.1.4 The Scheduled Startup Day of a Group Awaiting Execution becomes the Next Scheduled Startup Day	•
the Server is Restarted	
4.1.5 The Scheduled Start Time is not Displayed for Groups and Job Nets in a Group	
4.1.6 Job Nets in a Group Start up even if the Execution Conditions are not Met	
4.1.7 Even though the Preceding Job Net of the Job Nets in the Group Ended Normally, the Succeeding Job Not Start Instantly	
4.1.8 One of the Job Nets in the Group was not Started on the Current Day, or a Job Net not Scheduled to be	
was Started	
4.1.9 When the Job Net was Disabled, the Succeeding Job Net Started even though a Message Event was	
Generatedg	
4.1.10 The Group Ends Abnormally with Code 239	
4.1.11 The Group does not Start	
4.1.12 Startup Days of Job Nets in the Group were Changed, however the Change was not Reflected in th	ie
Scheduled Start Time	80
4.1.13 The Group Started after the Confirm Operation	81
4.1.14 Even though the Day Change Time is Reached, the Group does not Change to the "Waiting" Status	
4.1.15 A Job Net in the Group Started on an Unscheduled Day	
4.1.16 A Job Net in the Group did not Start on Startup Days	
4.1.17 Even though the Preceding Job Net of the Job Nets in the Group was Disabled, the Succeeding Job N	
not Start	
4.2 The Job Net Behavior is Abnormal	
4.2.1 A Job Net Started at an Unexpected Time	
4.2.3 A Job Net that Waits for a Message Event and a Startup Time is Started at an Unintended Time	
4.2.4 A Job Net that Waits for Message Events and the Execution Time is not Started, even if a Message Ev	
Generated and the Execution Time was Exceeded	
4.2.5 Job Nets that should Start when Multiple Message Events are Generated Started, even though Not All	
Message Events were Generated	•
4.2.6 A Job Net that should have Started Starts Again	
4.2.7 Even though the Job Net should not Start on the Current Day because of the Invalid period setting	
Startup days tab (V13.4.0 or later) or Operation period tab (V13.3.1 or earlier) in the Job Net Proposition window, it does Start	perties
4.2.8 Even though a Holiday was set in the Calendar, the Job Net is Started when a Message is Generated	
4.2.9 Even though a Message Event was Generated, the Job Net does not Start	
4.2.10 Even though a Message Event was not Generated, the Job Net Starts	
4.2.11 There is no Job Net Schedule, so the Job Net is not Started	
4.2.12 The Job Net is Refused, and does not Start	
4.2.13 The Job Net Starts at a Time that is not in Sync with the Registered Scheduled Start Time	
4.2.14 The Joh Not Starte One Day Later than the Projectored Startup Day	

4.2.15 A Job Net for which it was not the Startup Day was Scheduled, or Started	110
4.2.16 If a Failover has occurred on a Cluster Operation Server, an Unintended Job Net is Started	111
4.2.17 The Job Net that Ended Abnormally Yesterday still has the "Abended" Status Today	113
4.2.18 Job Nets are Not Completed	113
4.2.19 After the Day Change Time, a Job Net not Scheduled to Start Today Changed Status to the "Wait	
4.2.20 The Startup Delay Exit Started at an Unintended Time	
4.2.21 The Job Execution Control Attribute/Interstage Attribute Job are Running, but the Job Net Ends A	
40.00 The Figure Care Day II the ext Division and earlier Day the Day the Lab to the Marches Table Carlo	
4.2.22 The Execution Result is not Displayed on the Previous log tab in the Monitor - Job window, or in Output Info window	•
4.2.23 The Startup Day Information set in the Startup Days window or the Application Plan window is no	
4.2.25 The Startop Bay information set in the Startop Bays window of the Application 1 tan window is no	
4.2.24 Even though a Specific Day is Set as an Unscheduled Day in the Schedule Pattern, it is still a Star	
4.2.25 Cannot Copy the Job Net	
4.2.26 In a Cluster Operation, even though the Holiday Calendar was Changed, the Change is not Refle	
Startup Day	122
4.3 The Job Behavior is Abnormal	
4.3.11 do not Understand the Meaning of the Job Completion Code	
4.3.2 Although the Job Flow Execution Proceeds in the Monitor Job Net window, when the Job Execution	
Checked, it seems that the Job has not been Started	
4.3.3 The Job Net is Executing, but the Job in the Job Net is not Executed	
4.3.4 If the Restart Operation is Performed for a Job Net that Ended Abnormally, the Top Job will be Ex	
4.3.5 The Job Execution History "skipped" is Displayed in the Job Execution History	
4.3.6 All Jobs in the Job Net have the "Waiting" Status	
4.3.8 Even though File Transfer is not Complete, chkfile.exe, chkfile.sh, or jobschchkfile Ends	
4.3.9 The Job does not Start. Alternatively, even though the Job has actually Ended, it does not change	
"Ended" Status for Some Time	
4.3.10 Even though the Job Net or Group has the "Waiting" Status, the Job has the "Ended" Status	
4.3.11 The Job does not End [UNIX Versions]	
4.3.12 The Job does not Operate Normally [UNIX Versions]	
4.3.13 Even though the Parameters field was specified in the Add/Change - Job window, not all Param	eters are
Passed to the Command	
4.4 The Group/Job Net/Job Behavior is Abnormal	
4.4.1 A Paused Group/Job Net/Job Was Started after having changed to the "Continue" Status	
4.4.2 When Jobscheduler Starts, the Group/Job Net/Job Ends Abnormally with Completion Code 239	
4.4.3 The Group/Job Net does not Start after the Year Changes	
4.5 The Gantt Chart Display is Abnormal	134
4.5.1 "Disabled" is Displayed in the Gantt Chart for a Job Net for which the Disable Operation has not be	
Performed	
4.5.2 The Job Net Execution History is not Displayed in the Gantt Chart	
Completed) is Displayed	
4.6 The Multi-server Monitoring window Display is Abnormal	
4.6.1 The Multi-server Monitoring window Cannot be Displayed	
4.6.2 When the Host is Selected, "Connection not possible" is Displayed and Monitoring is Not Possible	
4.6.3 When the Host is Selected, "Access denied" is Displayed and Monitoring is Not Possible	
4.7 The Sample Source Behavior is Abnormal	
4.7.1 The Sample Source abendrerun.c was Used in a Cluster System, but there are Job Nets that Cannot	
4.8 The Termination Processing Job Net Behavior is Abnormal [Windows Versions]	140
4.8.1 When the Termination Processing Job Net is Started, it does not Start even when the Next Execu	tion Time
Arrives	
4.8.2 Job Net End Processing is not possible using the End Processing Exit	
4.8.3 Even if the Termination Processing Job Net is Completed, the Server does not Reboot/Shut Dow	
4.9 The Jobscheduler Command or API Behavior is Abnormal	142

4.9.1 The Error Message "Systemwalker Mpjobsch is being started" [windows versions]/"The daemon is b	_
started" [UNIX Versions] is Output, and the Command cannot be Executed	
4.9.2 The Error Message "Systemwalker MpJobsch is not started" [Windows Versions]/" The daemon was	
started." [UNIX Versions] is Output, and the Command cannot be Executed	
4.9.3 The Error Message "The LANG value is different" is Output [UNIX Versions]	
4.9.4 An Error Message is Output, and the Command cannot be Executed [Windows Versions]	
4.9.5 The Jobscheduler Command/API Called from the User Application does not Work Normally	
4.9.6 When you try to Obtain the Schedule Content using the jobschprint Command, an Error Message is	
4.9.7 The Calendar was Changed using the jobschsethol Command, but All Holidays outside the Part that	147
Changed Disappear	
4.9.8 The Jobscheduler API Returns with Return Code 4	
4.9.9 The Error Message The Job net is being saved or controlled is Displayed	
4.9.11 A Message Event that was already Registered cannot be Deleted using the jobschsetnet -nche Cor	
4.9.11 A Message Event that was already Registered Cannot be Deteted using the jobschsethet -nche Cor	
4.9.12 The Characters in the Job Status Field are Garbled using the jobschprint -p Command	
4.9.13 A New Job Net cannot be Created/an Existing Job Net cannot be Changed using the jobschsetnet Coi	
if there is no Execution Condition	
4.9.14 When the Job Net/Group is Registered using the jobschsetnet/jobschsetgrp Command Based on the	
Information that was Extracted using the jobschprint Command, Position Information about the Job	
InheritedInherited	
4.10 A Message Event is not Generated by the jobschmsgevent Command	
4.10.1 A Message Event is not Generated	
4.10.2 The Error Message "RegisterEventSource() 5: Access denied" is Output [Windows Versions]	
4.10.3 The Error Message "RegisterEventSource() 1722:RPC server is not available" is Output [Windows Versions]	
4.10.3 The Effort Plessage Register Eventsource() 1/22.RPC server is not available is Output [vviildows ve	_
4.10.4 The Error Message "ReportEvent() 997:Redundant I/O process" is Output [Windows Versions]	
4.10.5 The Message "Mplobsch: ERROR: 0309: Usage: jobschmsgevent event_name[:project_name[/	100
job_net_name] [message_text]] [-h host_name] [-t:INFO -t:WARN -t:ERROR]" is Output whe	n the
jobschmsgevent Command is Executed from a Schedule Job [UNIX Versions]	
4.11 The Message Event is not Recognized by the Job Net	
4.11.1 Message Events Generated for Job Nets using the jobschmsgevent command are not Recognized	
4.12 Cannot Reference the Job Properties	
4.12.1 When the Job Properties are Referenced in the Monitor Job Net window, "system error" is Displayed	
Versions]	
4.12.2 The Message "Failure in allocating information storage area." is Output	
4.12.3 About One Minute is Required to Display the Properties of the Jobs in the Job Net	
4.12.4 The Message "Resource with identifier '0' not found 0" is Output	
4.12.5 The Message "Disconnected because an invalid socket ID was specified." is Output	
4.13 The Jobscheduler Behavior is Abnormal	
4.13.1 After the System Time is Changed, the Job Net Does not Start on Schedule	
4.13.2 After the System Time is Changed, the History Information cannot be Displayed Correctly	
4.13.3 Many file name job name.oxxxx, job name.exxxx (xxxx is the job number) are Generated in the Hom	
Directory [UNIX Versions]	
4.13.4 The Jobscheduler Server Processing Hangs up [UNIX Versions]	
4.13.5 No Response when OK is Selected in the Host connection specification Dialog Box	
4.13.6 A Failover Occurs while the Cluster System is Running, and the Message "Specified host not found.	
Displayed	
4.13.7 Many Jobs that Wait for File have been Registered, so the CPU Load is High [UNIX Versions]	
4.13.8 The xxxxxxxx.exe application could not be initialized correctly. (xxxxxxxx is one of tskgrsrv, tskelsrv, ts	
tskbasrv, tskussrv, or tskevsrv) [Windows Versions]	
4.13.9 It takes a While until Jobscheduler Starts	
4.13.10 The Job Net Operation Takes a While	
4.13.11 The CPU Usage of the Process "tskussrv"/"tskgrsrv" is High [UNIX Versions]	
4.13.12 When SHUTDOWN.EXE is Executed, the Job Net Completion Code is 239 [Windows Versions]	
4.13.13 Cannot Perform the Operation for the lob Net that Corresponds to the Completed exit or Abended	

4.13.14 Cannot Start the Jobscheduler Service [Windows Versions]	178
4.13.15 Cannot Start the Jobscheduler Daemon [UNIX Versions]	178
4.13.16 "MpJobsch: ERROR: 0063: the daemon already started" is Output, and the Jobscheduler Daemon ca	
4.13.17 Illegal Information is Displayed in the Job Execution History (Output Information) [UNIX Versions]	
4.13.18 Even though Abended (*1) is selected on the Event output tab in the Define Jobscheduler Startup	17 7
Parameters window, this is not Output to the Event Log/SYSLOG when the Job Status has the "Cl status (Completion Code: 239)	
4.13.19 After the Restore, when Jobscheduler is Started the Group/Job Net/Job Ends Abnormally with Comp	
Code 239	180
4.13.20 The Jobscheduler Service does not Start [Windows Versions]	
4.13.21 There is a Large Number of Files in /var/tmp [UNIX Versions]	
4.13.22 The Startup Delay Exit is Started at the Scheduled Start Time of a Disabled Job Net	
4.13.23 The Jobscheduler Daemon/Service is not Running	
4.13.24 Even though the job net Started, Completed, or Ended Pseudo-normally, these Messages are not 0 to the Event Log/SYSLOG	
4.13.25 Controlling the desired status (Watching delay of job / job net) Function is not Working as Expecte	
4.13.26 Even though the Events Set in the Message table Were Generated, the Job Net does not Start [Wir Versions]	ndows
4.14 Error Message Notifications are Received from Jobscheduler	
4.14.1 The Warning Error Message "The size of log information has exceeded the maximum value" is Output	
4.14.2 A Jobscheduler Error Message is Displayed in the Event Log [Windows Versions]/SYSLOG [UNIX Ver	sions]
4.14.3 The Error Message "iconv()" is Displayed, as in "iconv() Illegal byte sequence", and "iconv() Invalid	
Argument" [UNIX Versions]	
4.14.4 The Error Message "Process cannot access the file" is Output [Windows Versions]	
4.14.5 The Error Message "Failure in accessing project DB" is Output	
4.14.7 The Error Message "Jobsch: ERROR: read() Connection timed out" or "Socket function error occurred Output	d" is
4.14.8 When Jobscheduler is Selected from the Systemwalker Operation Manager Client, an Error Message	
Output to the Event Log [Windows Versions]	
4.14.9 The Message "Failure in opening DB." is Output	
4.14.10 An Error Message is Displayed immediately after Day Change Time	
4.14.11 The Message "MpJobsch: Error :6052: Invalid format" is Output when Using the jobschprint Comman	
Obtain Job Schedule Information	
4.14.12 The Message "MpJobsch: ERROR: msgrcv() Invalid argument" or "MpJobsch: ERROR: msgrcv() Ident	
removed" is Output [UNIX Versions]	
4.14.13 The Message "0330:The job net has abnormal ended.CODE=XXX", or "330 The job net has ended abnormally. Job net comment=XXXX Job net name=YYYY Code=CCCC Project name=ZZZZ" is O	-
4.14.14 The Message "ERROR: 1000002: Check if the Systemwalker Operation Manager process (tskmnsrv)	
running properly." is Output [UNIX Versions]	
4.14.15 The Message "Failure in host information acquisition in the monitor authorization host file." is Display	
4.14.16 The Error Messages "write() File too large" and "The daemon failed to write job net output information Displayed [UNIX Versions]	
4.14.17 Even though the Jobscheduler Daemon has Stopped, the Error Message "Jobscheduler daemon is s	
The jobschoonvert command cannot be used" is Displayed [UNIX Versions]	
4.14.18 The Error Message "MpJobsch: ERROR: read() Bad file number" is Displayed [UNIX Versions]	
4.14.19 The Message "AP:Mplobsch: ERROR: 6305: Service: Write message failed at client (message queue	
Displayed during Service Stop Processing [Windows Versions]	
4.14.20 The Message "MpJobsch: ERROR: msgget() No space left on device" is Output to SYSLOG during S	
of Jobscheduler [UNIX Versions]	
4.14.21 The Message "Error /opt/FJSVJOBSC/etc/rc3.d/start_jobs daemon did not started" is Output and	
Jobscheduler is Unable to Start [UNIX Versions]	
4.14.22 The Error Message "Calendar information not found" is Displayed	
	/ 4

4.14.24 The Error Message "ReadFile() 6: Invalid handle" is Output [Windows Versions]	
4.14.25 The Message "MpJobsch: ERROR: 0189: XXXXX YYYYYY Failure in job net generation" is Output to SYSI	
[UNIX Versions]	
4.14.26 The Error Message "The requested operation cannot be performed on a file with a user-mapped sect	
open" is Output [Windows Versions]	.206
4.14.27 The Message "MpJobsch: ERROR: 0412: bind() Address already in use" is Output to SYSLOG [UNIX Version and Indian I	
4.14.28 The Error Messages "7022:Erroneous record exists in job net information of XXXX" and	
"7300:func=JOBSCH_dbfile_read:ReadFile() 170: The requested resource is in use" are Displayed	
[Windows Versions]	
4.14.29 The Error Messages "7000:func=jobschsetnet:ftruncate() No error" and "6007: Systemwalker MpJobsc	
failed to write job net information" are Displayed [Windows Versions]	
4.14.30 The Warning Message "Systemwalker MpJobsch failed to set policy information" is Output	
4.14.31 The Error Message "7300: Service :func=GetEventLog:ReadEventLog() 1500: The event log file is corrup	
Output [Windows Versions]	
4.14.32 The Error Message "getpwnam() No such file or directory" is Output [UNIX Versions]	
4.14.33 The Message "MpJobsch Event ID: 7012 Detail:Past EventLog record is trapped" is Output to the Event	
[Windows Versions]	
4.14.34 The Message "0017: The jobscheduler failed to attach shared memory" is Displayed after Executing a	
Jobscheduler Command [UNIX Versions]	
4.14.35 The Message "MpJobsch: ERROR: 0412: shmget() No space left on device" is Output to SYSLOG [UNI	
Versions]	
4.14.37 The Error Message "shmget() Invalid argument", "shmget() No space left on device" or "0009: The	∠13
jobscheduler failed to create shared memory" is Output [UNIX Versions]	212
4.14.38 The Start Delayed Message is Displayed at the Scheduled Start Time of a Disabled Job Net	
4.14.39 If the jobschmsgevent Command is Executed in the Subsystem Environment, "The daemon was not	. 214
started" is Output [UNIX Versions]	215
4.14.40 "func= OBSCH_dbfile_open:CreateFile() 32: Process cannot access the file. "MpJobsch: ERROR: 7300	
func=JOBSCH_dbfile_open:CreateFile() 32" is Output to the Event Log during Execution of Job Nets	
obs [Windows Versions]	
4.14.41 The Message "MpJobsch: ERROR: open() too many open files" is Output to SYSLOG [UNIX Versions]	
4.14.42 The Message "MpJobsch: ERROR: 0422: Failed to convert the standard output or the standard error code	
the job. The job result file contains illegal characters" is Output [UNIX Versions]	
4.14.43 The Error Messages "write() No space left on device" and "The daemon failed to write job net output	
information" are Output [UNIX Versions]	
4.14.44 The Error Message "MpJobsch: ERROR: 0412: socket() Address family not supported by protocol" is Ou	tput
[UNIX Versions]	. 218
4.14.45 The Error Messages "5: Access denied." and "MpJobsch: ERROR: 6208: Systemwalker MpJobsch failed	l to
read log information." are Output to the Event Log by Jobscheduler [Windows Versions]	
15 The Job Outputs a Code and Ends Abnormally	
4.15.1 The Job Outputs a Code and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally. Alternatively, the Job Outputs a Message and Abnormally. Alternatively, the Job Outputs a Message	
16 The Systemwalker Operation Manager Client Behavior is Abnormal	
4.16.1 After a Job such As Calendar or Jobscheduler is Selected, or the Connection Destination Host is Selecte	
the Job Selection window, the Pop-up "A connection timeout occurred." is Displayed	
4.16.2 When Jobscheduler is Selected in the Client, some of the Server Information is not Displayed	
4.16.3 The Client Response is Slow/Does not Return	
4.16.4 "Run-time error '6': Overflow" is Displayed	
4.16.5 The Systemwalker Operation Manager Client Function Displays the Pop-up "Run-time error", and may	
Abnormally (Error Code Undefined)	
4.16.6 The Message "Run-time error '339':Component 'comct232.ocx' or one of its dependencies not correct registered: a file is missing or invalid" is Displayed	
4.16.7 If Jobscheduler is Selected in the Systemwalker Operation Manager Client Immediately after the	. 221
Jobscheduler Service is Started, " Connection denied. Systemwalker Operation Manager Server is no	o+
activated or port number is incorrect." is Output	
	220

4.16.9 "Systemwalker Operation Manager" Remains Displayed in the Main Window	230
4.16.10 Even though this is a Subsystem Operation, the Subsystem is not Displayed in the Systemwa Manager Client Job Tree	lker Operation
4.16.11 The Message " Run-time error '35602':key not unique in collection." is Displayed when Jobso Opened	heduler is
4.16.12 The Message "Protocol data cannot be received. " is Displayed on the Client	
4.16.13 "Monitoring server is down due to an internal error. The client will exit." is Displayed in the I	Multi-server
Monitoring Client	
4.16.14 "No buffer area. (1113)" is Displayed	
4.16.15 The Job Output Info (Previous log of the job) is not Displayed [UNIX Versions]	
4.16.16 An Error Occurs when the Operation Manager Client Starts, and the User Name and Password to Connect [Windows Versions]	
4.16.17 It takes a while to display the Job History window	
4.16.18 The Pop-up Message "A connection timeout occurred." is Displayed	
4.16.19 The Pop-up Message " Job Output Info can not be displayed because it failed in the charac	
conversion." is Displayed	
4.16.20 "Connecting with Jobscheduler" Remains Displayed	
4.16.21 The Message " Connection denied. Systemwalker Operation Manager server is not activated of	
is incorrect." is Displayed when the Systemwalker Operation Manager Client is Started up	
4.16.22 "Could not get user name list." or "Could not get group name list." is Displayed on the Set I	
window	
4.17 "Link to Systemwalker Centric Manager" is Abnormal	
4.17.1 The "Link to Systemwalker Centric Manager" function does not Work	
4.17.2 A Message is Notified to Systemwalker Centric Manager in Duplicate	
4.17.3 A Message is not Notified to Systemwalker Centric Manager [UNIX Versions]	
4.18 Import/Export of Job Net Definitions is Operating Abnormally	
4.18.1 Importing is not Possible if a Parent Job Net is Specified for Another base job net in the Child Jo	
Days Settings	243
Charles E Tarabla de la Carle E de La Carle I	245
Chapter 5 Troubleshooting Job Execution Control	
5.1 The Job Execution Result is Abnormal	
5.1.1 do not Understand the Meaning of the Job Completion Code	
Monitor - Job window	_
5.1.3 The Job Completion Code is Always 0 [Windows versions]	
5.1.4 The Job Completion Code is Always 0 [UNIX versions]	
5.1.5 The COBOL Application Completion Code is Abnormal	
5.1.6 The stty or eucset Error is Output to the Output Result [UNIX versions]	
5.1.7 The Rights are Insufficient, so the Job Does Not Operate Normally [Windows versions]	
5.1.8 The Environment Variables are Insufficient, so the Job Does Not Operate Normally [Windows	
5:10 The Environment variables are misornelent, so the job bots Not operate Normally [Windows	
5.19 After Systemwalker Operation Manager is Restarted, the Joh Behavior Changes [LINIX version	_
5.1.9 After Systemwalker Operation Manager is Restarted, the Job Behavior Changes [UNIX version 5.1.10 Job behavior differs from previous	259
5.1.10 Job behavior differs from previous	
5.1.10 Job behavior differs from previous	259
5.1.10 Job behavior differs from previous	259 ge and Ends
5.1.10 Job behavior differs from previous	259 ge and Ends 260
5.1.10 Job behavior differs from previous	259 ge and Ends 260
5.1.10 Job behavior differs from previous	259 ge and Ends260261
 5.1.10 Job behavior differs from previous 5.2 The Job Ends Abnormally 5.2.1 The Job Outputs a Code and Ends Abnormally. Alternatively, the Job Outputs an Error Message Abnormally 5.2.2 When Antivirus Software is used, the Job Ends Abnormally [Windows versions] 5.2.3 The Job Ends Abnormally with Code 1 [UNIX versions] 5.2.4 The Job Ends Abnormally with Code 137, 138, or 139 [UNIX versions] 	259 ge and Ends260261261
5.1.10 Job behavior differs from previous	259 ge and Ends260261261262
5.1.10 Job behavior differs from previous	
5.1.10 Job behavior differs from previous	
 5.1.10 Job behavior differs from previous 5.2 The Job Ends Abnormally 5.2.1 The Job Outputs a Code and Ends Abnormally. Alternatively, the Job Outputs an Error Message Abnormally 5.2.2 When Antivirus Software is used, the Job Ends Abnormally [Windows versions] 5.2.3 The Job Ends Abnormally with Code 1 [UNIX versions] 5.2.4 The Job Ends Abnormally with Code 137, 138, or 139 [UNIX versions] 5.2.5 The Job Ends Abnormally with Code 239 5.2.6 The Job Ends Abnormally with Code 243 5.2.7 The Job Ends Abnormally with Code 250 (1) 5.2.8 The Job Ends Abnormally with Code 250 (2) 	
5.1.10 Job behavior differs from previous	
 5.1.10 Job behavior differs from previous 5.2 The Job Ends Abnormally 5.2.1 The Job Outputs a Code and Ends Abnormally. Alternatively, the Job Outputs an Error Message Abnormally 5.2.2 When Antivirus Software is used, the Job Ends Abnormally [Windows versions] 5.2.3 The Job Ends Abnormally with Code 1 [UNIX versions] 5.2.4 The Job Ends Abnormally with Code 137, 138, or 139 [UNIX versions] 5.2.5 The Job Ends Abnormally with Code 239 5.2.6 The Job Ends Abnormally with Code 243 5.2.7 The Job Ends Abnormally with Code 250 (1) 5.2.8 The Job Ends Abnormally with Code 250 (2) 5.2.9 The Job Ends Abnormally with Code 253 	

5.2.13 The Job Ends Abnormally with Code 0x40000999, or if 'Job' or 'Queue' is Selected in the Job	
window, Error Message:MJS819E is Output	273
5.2.14 The Job Ends Abnormally with Exception Code 0xC0000005, 0xe06d7363 [Windows version	ns]274
5.2.15 The Job Ends Abnormally with Exception Code 0xC0000135 [Windows versions]	
5.2.16 The Job Ends Abnormally with Exception Code 0xC0000142 [Windows versions]	
5.2.17 The Job Ends Abnormally with Exception Code 0x40000999 [Windows versions]	
5.2.18 The Job Ends Abnormally (with Other Code)	
5.2.19 The Jobs Outputs an Error Message and Ends Abnormally [UNIX versions]	
5.2.20 The Network Job that Shuts Down or Reboots Another Server Ends Abnormally	
5.2.21 Even if the Continuous Execution Mode is Enabled, if the Execution Server has Shut Down (
Network Job that is being Executed Ends Abnormally	
5.2.22 The Job that Uses Shared Memory Ends Abnormally [UNIX versions]	
5.2.23 64-bit/32-bit Application Jobs End Abnormally when they are Executed [Windows Versions	
5.3 The Job is not Executed	
5.3.1 The Job is not Executed [UNIX versions]	
5.3.2 Failed to Execute the Network Job (Error Message:MJS881S is Output)	
5.3.3 Failed to Execute the Network Job (Error Message:MJS844E is Output)	
5.3.4 Failed to Execute the Network Job (Error Message:MJS819E is Output)	
5.3.5 Failed to Execute the Network Job (Error Message:MJS830E is Output)	
5.3.6 Failed to Execute the Network Job (Error Message:MJS876E is Output)	
5.3.7 The Job is not Executed, and a Delay Occurs	
5.3.8 After JCL is Executed, the "Insufficient space for file name.line=nnn. job not queued." Error Mes	•
and the JCL Does Not Start	
5.3.9 The Network Job that was Running Does Not Run After the Version Upgrade	
5.3.10 An Error Occurs when the Policy Distribution Job is Executed	299
5.4 The Job Does Not Operate Normally	300
5.4.1 The Job Does Not Operate Normally [Windows versions]	
5.4.2 The Job Does Not Operate Normally [UNIX versions]	
5.4.3 The Job (Arcserve, COBOL, PowerSORT, SymfoWARE, and Others) Does Not Operate Norm	
versions]	
5.4.4 The Job was not Executed in the Directory Specified in Directory in the Standard information	
Change - Job Window	
5.4.5 The Job Does Not End (1)	
5.4.6 The Job Does Not End (2) [Windows versions]	
5.4.7 The Job Does Not End (3) [Windows versions]	
5.4.8 The Job Does Not End (4) [UNIX versions]	
5.4.9 The Network Job Takes a While to End	307
5.4.10 A Job that was being Executed before the System Failure Waits to be Executed, but is not E	
the System is Restarted	
5.4.11 The Application cannot Reference the Network Drive [Windows versions]	
5.4.12 The Job That Accesses RDBMS via ODBC Does Not Operate Normally [Windows versions]	
5.4.13 The Network Job Starts in Duplicate, and Seems to be Executing Even Though the Job has Ac	
Outputs Error Message: MJS881S and then Ends Abnormally	
5.4.14 The Command Name cannot be Referenced from the Script File [UNIX versions]	
5.4.15 The Network Job Ends Before the Estimated End Time	
5.4.16 The Job is Delayed and not Started, or the Start is Delayed	313
5.4.17 A Network Job from a Windows Server to a UNIX Server is Executed with Administrator Righ	
User who is the Owner	
5.4.18 Unintended Permissions were Set for the File or Directory Created in the Job [UNIX version	
5.4.19 If the Schedule Server is in a Cluster Configuration, the Network Job Ends Before the Estimate	
5.4.20 If the Schedule Server is in a Cluster Configuration, it Takes a While until the Network Job E	
5.4.21 The Job That Handles Microsoft Office Products (such as Excel or Access) Does Not Operation	
[Windows versions]	
5.5 The Job Execution Control Behavior is Abnormal	
5.5.1 The Content Defined in Define Operating Information is not Reflected	
5.5.2 The CPU Usage Time of misini exe Increases [Windows versions]	319

5.5.3 The "/etc/security/limits.conf" value is not Reflected in the Systemwalker Operation Manag	•
versions]5.5.4 A Job List File (job name. job number) is Created Unwillingly	
5.5.5 The Job Cannot be Canceled	
5.5.6 Nothing is Displayed in the View Queue Status/Operate Window if Queue is Selected in the	
Window [UNIX versions]	-
5.6 An Error Message is Notified from Job Execution Control	
5.6.1 Error Message "MpMjes: WARNING: 10113: mjsnetsv : TCP port number does not exist." is Ou	
versions]	
5.6.2 "MpMjes: ERROR: 10091 [UNIX versions] or 1011 [Windows versions]: The continuous execution	
server are not unified." is Output	
5.6.3 When Job or Queue was Selected in the Job Selection Window, or, the gstat Command is Exe	
to get queue information." is Output [Windows versions]	
5.6.4 When Job or Queue was Selected in the Job Selection Window, Error Message:MJS876E is O	
versions]	324
5.6.5 When the qistat Command is Executed, "System error occurred. function: FindFirstFile() cod	de: -1" is Output
or, when the qstat Command is Executed, "Unable to get system information." is Output	[UNIX versions]
5.6.6 When the qistat Command is Executed, "System error occurred. function: readjobinfo()" is C	
the qstat Command is Executed, "Unable to get queue information." or "Unable to get jo	
is Output [UNIX versions]	
5.6.7 "Failure in receiving parameter information file." is Displayed in the Client	
5.6.8 When the Job Execution Control Daemon Starts, the Error Message "MpMjes: ERROR: 10063: n	
environment of the sub-system number does not exist." is Output [UNIX versions]	
5.6.9 "MpMjes: mjsrjob : job information file read error." is Output [UNIX versions]	
5.6.10 Error Message "MpMjes: F3CUB_LOG_PIPE write system error occurred." is Output [UNIX of the control of th	
5.6.11 If Job is Selected in the Job Selection Window, a Message is Output and Information in the N	•
Operate Window Cannot be Referenced [UNIX versions]	329
Chapter 6 Troubleshooting Services/Applications	331
6.1 Problems during Service/Application Execution	
6.1.1 An Error Message is Displayed even though the Service/Application Starts Normally [Window	
	000
Chapter 7 Troubleshooting Event Monitoring and Action Control [Windows Versions]	
7.1 The Action Execution is Abnormal	
7.1.1 The Action is not Executed (General)	
7.1.2 The Action is not Executed (Application Execution)	
7.1.4 The Action is not Executed (Pop-up)	
7.1.5 The Action is not Executed (Mail)	
7.1.6 The Action is not Executed (Audio Notification)	
7.1.7 An Unintended Action is Executed	
7.1.8 A Large Number of Actions is Executed	
7.1.9 The Audio Notification Action Does not Stop	
7.1.10 The Pop-up Message is Delayed	
7.1.11 It Takes a While to Execute the Action after the Event has Occurred	
7.1.12 Strings, such as %HOST, are not Substituted	
7.1.13 Japanese Characters in the Email Sender Field are Garbled	
7.2 The Behavior of the Action Control Window is Abnormal	
7.2.1 Cannot Start the Action Control Window	
7.2.2 Cannot Delete the Email Action that is Executing	
7.3 The Event Monitoring Behavior is Abnormal	
7.3.1 "Past event has been retrieved." is Output Frequently	
7.4 The Behavior of the Monitored Event Table Window is Abnormal	
7.4.1 Cannot Start the Monitored Event Table Window	348
7.5 The Behavior of the Monitored Log File Setup Window is Abnormal	349
7.5.1 Cannot Start the Monitored Log File Setup Window	349
7.6 An Error Message is Notified from Event Monitoring	350

7.6.1 "MpAostB: ERROR: 1052: Falled to Write to the event log location file." or "MpAostB: ERROR: 7011: Err	
occurred in system function. Calling source: f3crheeg System function name: CopyFile() Reason:	
Output to the Event Log	350
Chapter 8 Troubleshooting Task Link	352
8.1 The File Control Behavior is Abnormal	
8.1.1 Compression Using the File Compression/Expansion Commands (fprssvr/fprscli) Fails	
8.1.2 Connection to the Shared Directory from the File Transfer Command (FCOPYSVR.EXE)/File Operation	
Command (FCTRLSVR.EXE) Fails [Windows Versions]	
8.2 The Application Startup Behavior is Abnormal	
8.2.1 When the Client Application Startup is Executed by the execacli Command, "0x13A" is Returned	
8.2.2 The Application Cannot be Started Using the execacli Application Startup Command	
8.3 The Client Power Control Behavior is Abnormal	
8.3.1 Remotely Powering On the Client Using the poncli Command Fails	
8.3.2 Remotely Powering Down the Client Using the poffcli Command Fails	
8.3.3 After Remotely Powering Down the Client, "Active Desktop Repair" Starts when the Client Starts	
8.3.4 The poffcli Command Ends Normally, but the Client Machine does not Shut Down	
8.4 The Client Task Link Engine Behavior is Abnormal	
8.4.1 An Error Occurs when the Client Task Link Engine is Started	
8.5 The Task Link Command Behavior is Abnormal	
8.5.1 The Client Task Link Command Registered in the Job Net keeps Running	
8.5.2 "0xb007(0x410e): The Task Link Engine process startup request was not accepted." is Displayed	
8.6 The Task Link Service (Systemwalker MpNjsosv) Behavior is Abnormal	
8.6.110307:Failed to receive the request of server search in the thread of server search. is Displayed [Win	
Versions]	
Chapter 9 Troubleshooting Schedule Distribution/Master Schedule Management Functions	
9.1 Creation of Schedule Information Fails	
9.2 A Schedule by Dates Project that has Exceeded the Number of Stored Generations of Schedule Informatio	
Deleted	
9.3 Because of Manual Startup, the Job Net that should have Completed is Scheduled and then Restarted	
9.4 A Message Event is Not Generated by the jobschmsgeventex Command	
9.4.1 A Message Event is Not Generated	365
A PANCE OF OUR THE	0//
Appendix A Maintenance Information Collection Tool	
A.1 Usage Method	
A.1.1 Windows Versions	
A.1.2 UNIX Versions.	
A.2 If the Maintenance Information Could not be Collected	
A.2.1 Windows Versions	
A.2.2 UNIX Versions	3/1
Appendix B How to Check the Process Running Status	373
B.1 Checking the Process Running Status	
B.2 Process Names	
B.2.1 Process Names [Windows Versions]	
B.2.2 Process Names [UNIX Versions]	
S.E.E 1 100000 Pairiou [OPERA VOIDIOTO]	5, 7
Appendix C Conventions Used in This Document and Trademarks	379
C.1 Abbreviations and Generic Terms Used	379
C 2 Trademarks	382

Chapter 1 Troubleshooting Flow

Before performing the procedures described in this document to address problems that occurred in Systemwalker Operation Manager V10.0L20/10.1 or later, it is recommended to collect the necessary maintenance information for investigating the cause immediately after the problem has occurred. This will make it possible to investigate and find the cause the problem.

Follow the steps below when a problem has occurred:

- 1. If you think a problem may have occurred, start by collecting maintenance information. Refer to "Appendix A Maintenance Information Collection Tool" for information on how to collect maintenance information.
 - [Windows versions]

Select Start, then click Systemwalker Operation Manager and select Collect Maintenance Information (In V10.0L20/V10.0L21, click Systemwalker_OperationMGR and select Collect Maintenance Tool) to display the Collect Maintenance Tool dialog box for collecting maintenance information.

[UNIX versions]

Execute the following command (refer to the *Systemwalker Operation Manager Reference Guide* for details):

/opt/FJSVftlo/swcolinf/swcolinf [-i <name>] -o <output path> [-c <comment>]

- 2. Perform the appropriate checks and actions described in this document for each symptom that has occurred.
- 3. If you have been able to resolve the problem, you can continue the operation.
- 4. If you cannot resolve the problem, send the maintenance information collected in step 1 to Fujitsu technical support, and ask them to conduct an investigation.



If the installation fails

If the installation fails, Maintenance Information will be collected automatically to the following directory, ask them to conduct an investigation.

[Windows versions]

System drive: \temp\OperationManager

[Solaris versions]

\var\temp\OperationManager

[Linux, HP-UX and AIX versions]

\temp\OperationManager

Chapter 2 Common Troubleshooting

2.1 Problems with Installation

2.1.1 Silent Installation Fails [UNIX Versions]

Error message

- [Solaris versions: 11.0 or later]

MPSS: ERROR: 0007: Because OS type in the definition file is different, it is not possible to install it.

- [AIX/HP-UX versions: 11.0 or later, Linux versions: V11.0L10 or later]

MPSS: ERROR: 0010: The specified file is not an installation file.

Applicable versions and levels

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action

Points to check

Did you insert the product media for the Solaris, AIX, or HP-UX version of Systemwalker Operation Manager 11.0 or later, or the Linux versions of Systemwalker Operation Manager V11.0L10 or later into the Windows machine, and run the installation support tool in the **Setup** window, which is displayed automatically, to create installation information files?

Cause

The installation information files created using the above procedure are not intended for use in the silent installation of Systemwalker Operation Manager, but are instead intended for use in the silent installation of Systemwalker Operation Manager (PC client).

Action method

Use installation information files created using the correct procedure for silent installation of Systemwalker Operation Manager. Refer to "Silent Installation" in the *Installation Guide* for details.

2.1.2 Message "The InstallShield engine (iKernel.exe) could not be launched. Access is denied." is Output during Startup of the Installer and Installation Ends Abnormally

Error message

The InstallShield engine (iKernel.exe) could not be launched.

Access is denied.

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Solaris versions: 10.0 or later (PC client only)

- Linux versions: V10.0L10 or later (PC client only)

Action

Points to check

Is the operating system one of the following?

- Windows(R) XP
- Windows Server 2003 STD/Windows Server 2003 DTC/Windows Server 2003 EE

This error only occurs on the above operating systems. If you are using one of above operating systems, perform the following procedure to check this error:

1. In the Windows Run dialog box, execute the DCOMcnfg command.

The Component Services window will be displayed.

- 2. In the tree view, expand Component Services, then double-click Computers to display My Computer.
- 3. Right-click My Computer, then select Properties to display the My Computer Properties window.
- 4. Click the COM Security tab.
- 5. In the Access Permissions group box, click Edit Default.

The **Access Permission** dialog box will be displayed.

Is a group or user name other than "SYSTEM" and "SELF" registered in the Group or user names list?

- If registered:

Perform the procedure described in "Action method" section below.

If not registered:

Another cause is possible. Use the Maintenance Information Collection Tool to obtain "common tools" and "integrated installer" information, and then contact Fujitsu technical support.

Cause

This error occurs due to a problem with InstallShield.

Action method

Perform the following procedure:

1. In the Windows Run dialog box, execute the DCOMcnfg command.

The Component Services window will be displayed.

- 2. In the tree view, expand Component Services, then double-click Computers to display My Computer.
- 3. Select My Computer, then Right-click it to display the My Computer Properties window.
- 4. Select the COM Security tab.
- 5. In the Access Permissions group box, click Edit Default.

The Access Permission dialog box will be displayed.

6. Remove all group and user names from the **Group or user names** list.

Make a note of all group and user names in the Group or user names list before removing them.

7. Click OK in the Access Permission dialog box, then click Apply and OK in the COM Security tab.

8. Perform installation again.

The default values "SELF" and "SYSTEM" are specified by performing step 5 in the Action method above. If you need to set group or user names other than "SELF" and "SYSTEM", do so after installation has completed.

2.1.3 Systemwalker Operation Manager Error Messages are Displayed in an Environment in Which Networker, etc., Coexist

Error message 1 [UNIX versions]

MpJmSrv: ERROR: bind() Address already in use

Applicable versions and levels

- Solaris versions: 5.0 or later

Action

Cause

This error occurs if NetWorker, etc., uses a port number (default: 9367/tcp) also used by the Systemwalker Operation Manager infrastructure.

Action method

Perform one of the following procedures:

- Ensure that the port number (default: 9367/tcp) used by Operation Manager common infrastructure is not used by NetWorker, etc.

Refer to "Action method if using NetWorker" for information on how to proceed when using NetWorker.

- Change the port number used by Systemwalker Operation Manager common infrastructure:
 - 1. Open the /etc/services file, and change the port number (default: 9367/tcp) associated with the service name "JMSRV".

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

2. Restart Systemwalker Operation Manager.

Error message 2

MpJmCal: ERROR: 0007: init_socket SSock <bind>() Address already in use (125)

Applicable versions and levels

- Solaris versions: 5.0 or later

Action

Cause

This error occurs if NetWorker, etc., uses a port number (default: 9368/tcp) also used by the calendar daemon.

Action method

Perform one of the following procedures:

- Ensure that the port number (default: 9368/tcp) used by calendar daemon is not used by NetWorker, etc. Refer to "Action method if using NetWorker" for information on how to proceed when using NetWorker.

- Change the port number used by the calendar daemon:
- 1. Open the /etc/services file, and change the port number (default: 9368/tcp) associated with the service name "IMCAL".

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

2. Restart Systemwalker Operation Manager.

Error message 3

MpJobsch: ERROR: 0412: bind() Address already in use

MpJobsch: ERROR: bind() Address already in use

Applicable versions and levels

- Solaris versions: 5.0 or later

Action

Cause

This error occurs if NetWorker, etc., uses a port number (default: 9297/tcp) also used by the Jobscheduler.

Action method

Ensure that the port used by Jobscheduler is not used by another application during Jobscheduler operations. Refer to the following manuals for information on how to check and change port numbers:

- 10.0 or later:
 - "Listing of Port Numbers" and "Changing Port Numbers" in the Installation Guide.
- 5.0/5.1/5.2:

"Changing Port Numbers" in the Installation Guide.



If the service name "jobsch_win" does not exist in the services file, the default port number will be used.

Perform one of the following procedures:

- Ensure that the port number (default: 9297/tcp) used by Jobscheduler is not used by NetWorker, etc.

 Refer to "Action method if using NetWorker" for information on how to proceed when using NetWorker.
- Change the port number used by Jobscheduler:
 - 1. Open the /etc/services file, and change the port number (default: 9297/tcp) associated with the service name "jobsch_win".

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

2. Restart Systemwalker Operation Manager.

Error message 4

AP:MpAosfB: ERROR: 3007: Failed to initialize the socket. Port: pppp (*1) Reason: Address already in use

*1: JMACT1, JMACT2, and JMEVT1 are output for pppp.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

This error occurs if NetWorker, etc., uses a port number (default: 9369/tcp, 9370/tcp, 9371/tcp) also used by Automatic Operation Support.

Action method

Perform one of the following procedures:

- Ensure that the port number (default: 9369/tcp, 9370/tcp, 9371/tcp) used by Automatic Operation Support is not used by NetWorker, etc.

Refer to "Action method if using NetWorker" for information on how to proceed when using NetWorker.

- Change the port number used by Automatic Operation Support:
 - 1. Open the /etc/services file, and change the port numbers associated with the following service names:

Service name	Port number
JMACT1	9369/tcp
JMACT2	9370/tcp
JMEVT1	9371/tcp

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

2. Restart Systemwalker Operation Manager.

Error message 5

MpMjes: ERROR: 10110: mjsnetsv : Failed in the bind of port number <number>/tcp.

Applicable versions and levels

- Solaris versions: 11.0 or later

Action

Cause

This error occurs if NetWorker, etc., uses a port number (default: 9327/tcp) also used by the Job execution control.

Action method

Perform one of the following procedures:

- Ensure that the port number (default: 9327/tcp) used by Job execution control is not used by NetWorker, etc. Refer to "Action method if using NetWorker" for information on how to proceed when using NetWorker.
- Change the port number used by Job execution control.
 - 1. Open the /etc/services file, and check if the service name "mjsnet" is registered.
 - If the service name "mjsnet" is registered:
 Change the port number (default: 9327/tcp) associated with the service name "mjsnet".

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

- If the service name "mjsnet" is not registered:

Register the service name "mjsnet" by associating it with a port number other than the default (default: 9327/tcp).

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

2. Restart Systemwalker Operation Manager.

Error message 6

MpMjes: ERROR: 10111: jmnetsv : Failed in the bind of port number <number>/tcp.

Applicable versions and levels

- Solaris versions: 11.0 or later

Action

Cause

This error occurs if NetWorker, etc., uses a port number (default: 9352/tcp) also used by the Job execution control.

Action method

Perform one of the following procedures:

- Ensure that the port number (default: 9352/tcp) used by Job execution control is not used by NetWorker, etc. Refer to "Action method if using NetWorker" for information on how to proceed when using NetWorker.
- Change the port number used by Job execution control.
 - 1. Open the /etc/services file, and check if the service name "jmnet" is registered.
 - If the service name "jmnet" is registered:

Change the port number (default: 9352/tcp) associated with the service name "jmnet".

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

- If the service name "jmnet" is not registered:
- Register the service name "jmnet" by associating with a port number other than the default (default: 9327/ tcp).

Refer to "Action method if using Systemwalker Operation Manager" for information on how to proceed when using Systemwalker Operation Manager.

2. Restart Systemwalker Operation Manager.

Action method if using NetWorker

Using windows to make changes

Start up the NetWorker administrator window (nwadmin).

1. Select Options >> Configure ports.

The Configure ports window will be displayed.

2. Enter the server name to be changed or IP address in **System** in the **Configure ports** window.

3. Click OK.

The Set ports window will be displayed.

- 4. Change the Service ports value to "7937-9230". (The default is 7937-9936)
- 5. Click **OK** to close the **Set ports** window.
- 6. Click Cancel to close the Configure ports window.
- 7. Select File >> Exit to close the NetWorker administrator window (nwadmin).

Using commands to make changes

1. Enter "nsrports" to confirm the current service ports.

```
# nsrports
service ports: 7937-9936
connection ports: 10001-30000
#
```

2. Execute the commands shown below to change the service ports.

```
# nsrports -S 7937-9230
```

3. Enter "nsrports" to confirm if the service ports have changed.

```
# nsrports
service ports: 7937-9230
connection ports: 10001-30000
#
```

Action method if using Systemwalker Operation Manager

- If Systemwalker Operation Manager coexists with NetWorker, change the port numbers so that they do not overlap the range of port numbers used by NetWorker (7937-9936, 10001-30000). Note that the port numbers used by NetWorker are subject to change in future versions. Check the relevant Networker document for information on the port numbers used.



Systemwalker Operation Manager port numbers

Refer to "Listing of Port Numbers" in the *Installation Guide* for information on the default port numbers used by each feature of Systemwalker Operation Manager.

2.1.4 Authentication of the Startup Account Fails When Installing the Software in an Environment Configured as a Backup Domain Controller of Active Directory

Error message

00195:The attempted logon invalid. The account name, password, or authentication information is incorrect, or may not be in sync with PDC. Check if it is in sync.?

Applicable versions and levels

- Windows versions: V10.0L10 to V11.0L10
- Solaris versions: 10.0 to 11.0 (PC client only)

Action

Points to check

If all the following conditions are satisfied, a message box with the text in the "Error message" is output and authentication of the startup account fails:

- The operating system is Windows(R) XP, Windows Server 2003 STD, Windows Server 2003 DTC, or Windows Server 2003 EE
- Active Directory is installed.
- The environment is configured as a Backup Domain Controller.
- The software is installed with an account that already exists in the domain specified in the **Startup Account** registration window.

Cause

This error occurs due to a problem with the usage method for the LookupAccountSid function used by the installer.

Action method

Specify an account that does not exist in the domain at the **Startup Account** registration window that is displayed during installation on a machine that is configured as a Backup Domain Controller. After checking if the account specified at the subsequently displayed **Start of File Copy** window is synchronized with the Primary Domain Controller, perform installation.

If the conditions indicated in "Points to check" are not satisfied, another cause is likely. Use the Maintenance Information Collection Tool to obtain "common tools" and "integrated installer" information, and then contact Fujitsu technical support.

2.1.5 The Service or Daemon Fails to Stop and Installation Fails

Error message

- [Windows versions]

00260: Failed to stop service. Installation terminates.

- [UNIX versions]

swsetup: ERROR: Failed to stop daemons.

Failed to install this product.

Please remove the error, and execute the installation again.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: V5.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

Action

Points to check

Are you monitoring the performance of the RDB system (RDB system name: CENTRIC) of Systemwalker Centric Manager or Systemwalker Desktop Monitor in an environment that has the Operation Management Server of

Systemwalker Centric Manager installed, or has both Systemwalker Desktop Monitor and Systemwalker Service Quality Coordinator installed?

Cause

The Systemwalker Centric Manager or Systemwalker Desktop Monitor service/daemon stops during installation of Systemwalker Operation Manager. This issue occurs if Systemwalker Centric Manager or Systemwalker Desktop Monitor is stopped in an environment in which Systemwalker Service Quality Coordinator is monitoring the performance of the RDB system (RDB system name: CENTRIC) of Systemwalker Centric Manager or Systemwalker Desktop Monitor.

Action method

Before installing Systemwalker Operation Manager, stop Systemwalker Service Quality Coordinator and the performance information collection process for the RDB system. Refer to the Systemwalker Service Quality Coordinator Manual for details.

Remarks

Note that performance is monitored for the RDB system (RDB system name: CENTRIC) of Systemwalker Centric Manager by default in environments in which the Operation Management Server of Systemwalker Centric Manager and Systemwalker Service Quality Coordinator V13 Manager are installed.

2.1.6 Message "00872:Failed in installation process." is Displayed When Installation is 99% Complete

Error message

00872: Failed in installation process.

Applicable versions and levels

- Windows versions: V5.0L10 to V13.2.0
- Solaris versions: V5.0 to V13.2.0 (PC client only)

Action

Points to check

Are there any whitespace characters (which are not allowed) included in the startup account name?

Cause

This error occurs if an installation is performed with whitespace characters included in the startup account name.

Action method

Specify a startup account for installation whose name and password do not include whitespace characters.

Remarks

Refer to "Tasks Prior to Installation" in the Installation Guide before installation.

2.1.7 The Warning Message "The Web Link function will be installed. However, Setup will not be performed because IIS is not installed." is Displayed during Installation [Windows Versions]

Error message

<IIS is not installed.>The Web Link function will be installed. However, Setup will not be performed because IIS is not installed.

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Windows for Itanium versions: V13.2.0 or later

Action

Cause

IIS has not been installed.

Action method

If you want to use the Web link function, install IIS. After installing IIS, refer to the "Systemwalker Operation Manager Installation Guide" to configure the settings.

Description

Depending on the installation type of Systemwalker Operation Manager, the installation process of the Web linkage functions checks whether IIS (which is required for the function) is installed. If IIS in not installed in Windows, the Web linkage function is installed without the performing setup of the IIS environment. If the Web linkage function will be used after installing Systemwalker Operation Manager, you will need to set up IIS manually. If IIS is installed in the Windows environment, the environment setup will be automatically performed for IIS during installation of the Web linkage function.

2.1.8 The System is Installed in English (ASCII) even though the System Encoding is Japanese [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.2 or later

- Linux versions: 5.2 or later

- Linux for Itanium versions: V13.0.0 or later

- HP-UX versions: 5.2 to V13.2.0

- AIX versions: 5.1 to V13.2.0

Action

Points to check

Is the assignment expression for the LANG variable and the export command defined in one row as follows?

export LANG=ja

Check the following files for definitions.

Operating system name	File name
Solaris	/etc/default/init
Linux	Red Hat Enterprise Linux 6 or earlier: /etc/ sysconfig/i18n
	Red Hat Enterprise Linux 7 or later: /etc/locale.conf

Operating system name	File name	
HP-UX	/etc/rc.config.d/LANG	
AIX	/etc/environment	

Cause

The Systemwalker Operation Manager installer does not support assigning the LANG variable and exporting it in the same row.

Action method

Assign the LANG variable and export it in separate rows.

LANG=ja		
export LANG		

Note that if the product is already installed, you will need to uninstall it before changing the definition, and then reinstall.

2.1.9 00103 Error Message is Output and Installation Cannot be Completed

Error message

00103:

The path set by installing this product may be ineffective because too many paths are already set in the environment variable (PATH) of this system.

Please delete unnecessary paths to add the path.

Applicable versions and levels

- Windows versions: V13.3.1 or later

- Solaris versions: V13.3.1 or later (PC client only)

- Linux versions: V13.3.1 or later (PC client only)

Action

Points to check

Are you using Windows(R) 7 as your operating system?

Cause

The Systemwalker Operation Manager installer obtains the operating system type. This error occurs due to "Windows Vista" being returned in some cases even when "Windows 7" is used as the Windows operating system, and the upper limit of the environment variable (PATH) length cannot be correctly determined.

Action method

Perform the following procedure to install this product:

- 1. Insert the product media of Systemwalker Operation Manager into the drive device.
- 2. In Windows Explorer, right-click the product media swsetup.exe and select Properties.
- 3. In property of swsetup.exe, select the Compatibility tab, then click Change the settings for all users, and remove the compatibility mode in the compatibility for all users tab.

4. Execute swsetup.exe to install.

2.1.10 The Message "Web server setup failed." is Displayed

The action to be taken if the message "Web server setup failed." is displayed at the time of installation is as follows.

Applicable versions and levels

- Windows versions: V13.7.0 or later

- Solaris versions: V13.7.0 or later

- Linux versions: V13.7.0 or later

Action 1

Points to check

Is the port number to be used by the Web Server (the Web Console/ the Web API function [V17.0.0 or later]) being used by another application?

Cause

The port number to be used by the Web Server function is already being used by another application.

Action method

Follow the procedure below if the port to be used by the Web Server is already being used.

However, if the installation of Systemwalker Operation Manager is still in progress at this time, complete the installation first.

- 1. Execute the poperationmgr command to stop Systemwalker Operation Manager.
- 2. Perform either a. or b. below:
 - a. Release the port to be used by the Web Server.

The default value of the port to be used by the Web Server is between 9900 and 9908.

- b. Change the port to be used by the Web Server.
 - 1. Execute mpowebconfig (Web server configuration update command) with the -o option specified to output the Web server port definition file.
 - 2. Use a text editor to edit the output file, and change the port number to another available port number. Save the file.
 - 3. Specify the Web server port definition file that was saved in step 2 in the -i option of mpowebconfig (Web server configuration update command) and execute.
- 3. Execute mpowebsetup (Web server setup command) with the -u option specified to remove the Web server settings.
- 4. Execute mpowebsetup (Web server setup command) with no option specified to set up the Web server.
- 5. Execute the soperationmgr command to start Systemwalker Operation Manager.

Action 2

Points to check

Can the local host name be resolved?

Cause

The local host name cannot be resolved.

Action method

If the local host name cannot be resolved, perform the following procedure.

However, if the installation of Systemwalker Operation Manager is still in progress at this time, complete the installation first.

- 1. Execute the poperationmgr command to stop Systemwalker Operation Manager.
- 2. Check the name resolution methods such as the use of hosts file or DNS, and set the method so that the local host name can be resolved successfully.
- 3. Execute mpowebsetup (Web server setup command) with the -u option specified to remove the Web server settings.
- 4. Execute mpowebsetup (Web server setup command) with no option specified to set up the Web server.
- 5. Execute the soperationmgr command to start Systemwalker Operation Manager.

2.2 Problems with Processes

2.2.1 A Process Error is Displayed

Error message

The following messages are output to the application log or system log if any of the Systemwalker Operation Manager processes are not operating normally.

[Windows versions]

- [V10.0L20/V10.0L21 or later]

MpPmonO: ERROR: 1000002: Check if the Systemwalker Operation Manager process (XXXX) is running properly.

- [V11.0L10 or later]

MpPmonO: ERROR: 10002: Check if the Systemwalker Operation Manager process (XXXX) is running properly.

[UNIX versions]

- [10.1 or later]

MpPmonO: ERROR: 1000002: Check if the Systemwalker Operation Manager process (XXXX) is running properly.

- [11.0 or later]

MpPmonO: ERROR: 10002: Check if the Systemwalker Operation Manager process (XXXX) is running properly.

Applicable versions and levels

- Windows versions: V10.0L20 or later

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action 1

Cause

This error occurs if there is a problem with a process when monitoring Systemwalker processes.

Action method

Perform the following procedure to recover the machine on which this problem occurred:

1. Check the process running status.

On the machine in which the problem occurred, check the running status of the process for each function.

- Windows versions

<systemwalker install directory>\mpwalker.jm\bin\mppviewo

- UNIX versions

/opt/systemwalker/bin/mppviewo



🖳 Point

If a problem occurs for a process, a message such as the following will be displayed for the function.

>>>> ERROR: Process NOT Found!! : Monitering target process

2. Proceed according to the outcome of the previous step.

If an abnormal process is found, recover Systemwalker. Refer to "2.2.2 A Process Error is Displayed during Check of the Process Running Status" for information on how to take action for each process with a problem.

If an abnormal process is not found, refer to "Action 2".

Action 2

Cause

Did you edit the batch start/stop file (start control file) during startup of Systemwalker Operation Manager?

If the batch start/stop control file is edited during startup of Systemwalker Operation Manager, the process monitoring function may not operate correctly.

Action method

Perform the procedure below to restart Systemwalker Operation Manager:

- 1. Stop Systemwalker Operation Manager.
 - Windows versions

poperationmgr

- UNIX versions

/opt/systemwalker/bin/poperationmgr

- 2. Start Systemwalker Operation Manager.
 - Windows versions

soperationmgr

- UNIX versions

/opt/systemwalker/bin/soperationmgr

Action 3

Points to check

Is there an error in the definition file of the monitoring target process?

Action method

Refer to "Changing the Processes to be Monitored" in the *Installation Guide* for information on how to check if there are any errors in the definition file of the following processes to be monitored.

- Windows

```
<systemwalker operation manager install directory>
\mpwalker.jm\mpcmtool\pmon\etc\mppmon.usr
```

- UNIX versions

```
/etc/opt/FJSVftlo/pmon/mppmon.usr
```

If there are no errors in the file, use the Maintenance Information Collection Tool to obtain common tools information, and then contact Fujitsu technical support.

Action 4

Points to check

Have the processes to be monitored in a cluster environment been changed?

Cause

If the processes to be monitored in a cluster environment have not been changed, a process monitoring error may be displayed.

Action method

Perform the following procedure to change the processes to be monitored:

- 1. Open the definition file of the following processes to be monitored with a text editor such as vi or Notepad.
 - Windows

```
<systemwalker operation manager install directory>
\mpwalker.jm\mpcmtool\pmon\etc\mppmon.usr
```

- UNIX versions

```
/etc/opt/FJSVftlo/pmon/mppmon.usr
```

- 2. Edit the following rows as shown:
 - Windows versions

```
[Before]
Fujitsu MpWalker MpJobsch=1
Fujitsu MpWalker MpMjes=1

[After]
Fujitsu MpWalker MpJobsch=0
Fujitsu MpWalker MpMjes=0
```

- UNIX versions

```
[Before]
start_jobs=1
S99MJS=1

[After]
start_jobs=0
S99MJS=0
```

Refer to "Changing the Processes to be Monitored" in the Installation Guide for details.

Action 5

Points to check

Have appropriate system parameter (semaphore) values been tuned? (10.1 or later)

Action method

Refer to "Action 2" in "2.5.1 If Connecting as a User Other than Superuser, the Project is not Displayed Even if the Access Rights have been Set [UNIX Versions]" for information on the action to be taken.

Action 6

Cause

This error may occur during a shutdown or restart of the system. (Windows versions only)

Action method

No action is required, however, you can prevent messages from being output during a shutdown or restart of the system by performing one of the following:

- Execute the service/daemon termination command (poperationmgr) before a shutdown or restart of the system. Refer to the *Reference Guide* for details.
- Stop the process monitoring service (Systemwalker MpPmonC or Systemwalker MpPmonO) from the service window before a shutdown or restart of the system.
- Stop the process monitoring service (Systemwalker MpPmonC or Systemwalker MpPmonO) using "net stop" or the command for stopping system services before a shutdown or restart of the system.

2.2.2 A Process Error is Displayed during Check of the Process Running Status

The action to be taken if a process error occurs is as follows.

Error message

If an error occurs for a process, the following kind of message is displayed in the execution result of the command for displaying the process running status.

```
>>>> ERROR:Process NOT Found!! : Monetring target process
```

Applicable versions and levels

- Windows versions: V10.0L20 or later

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action method on Windows versions

1. Check the abnormal process and related processes.

Refer to "B.2.1 Process Names [Windows Versions]" for details.

2. End related processes.

If there are related processes, check them in the Windows Task Manager, which is provided as standard with Windows, and click **End Process** to end each process.

3. Restart the service.

Access **Services** from the **Control Panel**, and start the service of the abnormal process by selecting the service name.

Action method on UNIX versions

1. Check the abnormal process and related processes.

Refer to "B.2.2 Process Names [UNIX Versions]" details.

2. End related processes.

If there are related processes, check them using the ps command, and execute the kill command to end each process.

3. Restart the daemon.

Check the function names to be targeted, and execute the start command described in "B.2.2 Process Names [UNIX Versions]".

2.2.3 Message "failed to obtain the monitored processes" is Displayed

Error message

- V10.0L20/V10.0L21/10.1:

MpPmonO: WARNING: 1000005: Process Monitor (Local) for Systemwalker OperationMGR failed to obtain the monitored processes.[YYYY] [ZZZZ]

- V11.0L10/11.0 or later

MpPmonO: WARNING: 10005: Process Monitor (Local) for Systemwalker Operation Manager failed to obtain the monitored processes.[YYYY] [ZZZZ]

```
YYYY: Full file name or command name (including arguments) ZZZZ: Detail code
```

Applicable versions and levels

- Windows versions: V10.0L20 or later

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action 1

Points to check

Is the message detail code 64, and did the error occur during a shutdown of the system?

Cause

This error occurs if process monitoring is still operating for Systemwalker Operation Manager while the system shutdown process is placing a high load on the system. This message is also output if the system fails to obtain monitoring information due to Windows system resources being temporarily insufficient, such as the Windows desktop heap being insufficient.

Action method

No action is required. This message does not impact on the operation of Systemwalker Operation Manager.

Action 2

Points to check

- Is the message detail code 61, 63, 64, 65?
- How many times was the message output?

Cause

- a. This message is output if the system fails to obtain monitoring information due to Windows system resources being temporarily insufficient.
 - If the detail code is 61:

This error occurs in cases such as when unable to create processes due to a high load on the system.

- If the detail code is 63:

This message is output if the system fails to obtain monitoring information due to Windows system resources being temporarily insufficient. This error occurs in cases such as when execution of processes takes a long time due to a high load on the system.

- If the detail code is 64:

This message is output if the system fails to obtain monitoring information due to Windows system resources being temporarily insufficient. This error occurs in cases such as when the desktop heap is insufficient due to a high load on the system.

- If the detail code is 65:

This message is output if the system fails to obtain monitoring information due to Windows system resources being temporarily insufficient. This error occurs in cases such as when there is insufficient disk capacity or insufficient inodes for the file system due to a high load on the system or I/O.

b. This message may be output if process monitoring is performed while the antivirus software is active and as a result the system fails to obtain the monitoring information.

Action method

- If the message is output once:

No action is required. This message does not impact on the operation of Systemwalker Operation Manager.

- If the message is output at each monitoring interval:

Check if any error messages relating to insufficient system resources (desktop heap, file system, etc.) or the system load have been output to the event log. If this issue occurs even when there are sufficient system resources or the

system load is low, use the Maintenance Information Collection Tool to obtain all necessary information, and then contact Fujitsu technical support.

2.2.4 Message "skipped monitoring, because of resource lack." Is Displayed

Error message

- V10.0L20/V10.0L21/10.1:

MpPmonO: WARNING: 1000012: Process Monitor (Local) for Systemwalker OperationMGR skipped monitoring, because of resource lack.

- V11.0L10/11.0 or later

MpPmonO: WARNING: 10012: Process Monitor (Local) for Systemwalker Operation Manager skipped monitoring, because of resource lack.

Applicable versions and levels

- Windows versions: V10.0L20 or later

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 11.0 or laterAIX versions: 11.0 or later

Action

Cause

If the message is output only once, process monitoring may temporarily not be possible due to insufficient resources, such as memory.

Action method

No action is required. This message does not impact on the operation of Systemwalker Operation Manager.

If the message is output at each monitoring interval, access **Performance** from the **Control Panel** to check the usage status of the resources. If there are no issues, use the Maintenance Information Collection Tool to obtain all necessary information, and then contact Fujitsu technical support.

2.2.5 A KERNEL32.DLL Initialization Error Occurs, Preventing the Systemwalker Operation Manager Process From Starting Up [Windows Versions]

Error message

Initialization of the dynamic link library C:\WINNT\system32\KERNEL32.dll(Note) has failed. The process is terminating abnormally.

Note: This error may also be displayed for COMCTL32.dll or USER32.dll.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

Resources for console applications started from services of Systemwalker Operation Manager, etc., are stored in the default desktop heap area. If a large number of processes are started, the desktop heap area becomes depleted, resulting in a Kernel32.dll initialization error and process creation failure.

Action method

If using Windows Server 2008 or later, refer to the following manuals and modify the registry and expand the desktop heap size.

- If V13.8.0 or later

"Preventing depletion of the desktop heap" of "Tasks Prior to Installation" in the Installation Guide.



For the detail of ways of modifying registry and expanding desktop heap, refer to the Microsoft support for help Q126962. Also, for the desktop heap, refer to the Microsoft support for help Q184802.

.....

The registry file is an extremely important file in Windows. If you edit it incorrectly, there is a risk that Windows will not start up afterwards, which may require a reinstall of Windows, therefore, you should back up the system beforehand and be careful when changing it by doing gradually.

If the above action is too difficult, change the settings of Systemwalker Operation Manager while taking into consideration the operation mode or requirements, and limit the number of jobs executed simultaneously.

Refer to "Definition of Job Execution Control" in the *Installation Guide* for information on executing multiple jobs simultaneously.

2.2.6 Unable to Collect IPC Resources [UNIX Versions]

IPC (inter-process communication) resources are messages, shared memory, semaphores, and so on, that are used for sharing information between multiple processes and threads.

Error message

UX: mpipcmgr: WARNING: When stopping, Systemwalker could not remove some IPC resources

UX: mpipcmgr: WARNING: Systemwalker could not remove the following IPC resource. (TYPE=%1, ID=%2, KEY=%3)

UX: mpipcmgr: WARNING: When stopping, Systemwalker Operation Manager could not remove some IPC resources.

UX: mpipcmgr: WARNING: Systemwalker Operation Manager could not remove the following IPC resource. (TYPE=%1, ID=%2, KEY=%3)

Applicable versions and levels

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action 1

Cause

This error occurs if unable to collect IPC resources.

How to check

If IPC resources could not be collected, perform the following procedure to check which resources were not collected:

1. Display the status of the IPC resources.

```
/opt/systemwalker/bin/mpipcso
```

2. Check the execution result.

The IPC resources that could not be collected are displayed in the following portion of the execution result.

- 10.1:

```
Status of undeletion IPC from <stopping Systemwalker OperationMGR>
T ID KEY DATE TIME PID CMD
```

- 11.0:

```
Status of undeletion IPC from <stopping Systemwalker Operation Manager>
T ID KEY DATE TIME PID CMD
```

- T: Type (m: shared memory, q: message queue, s: semaphore)
- ID: ID
- KEY: Key
- DATE: Date of acquisition
- TIME: Time of acquisition
- PID: Process ID
- CMD: Process name
- 3. Use a system command (ipcrm) to delete the IPC resources that were not collected previously.

Action method

- Collect shared memory.

```
ipcrm -m <shmid>
```

Where <shmid> is the ID of the shared memory to be collected.

- Collect message queues.

```
ipcrm -q <msqid>
```

Where <msqid> is the ID of the message queue to be collected.

- Collect semaphores.

```
ipcrm -s <semid>
```

Where <semid> is the ID of the semaphore to be collected.

Example actions

Example 1

- Example message portion

```
q 1 0x0700404a 2002/3/7 08:43:47 24333 MpFwems
```

- Collection method

```
ipcrm -q 1
```

Example 2

- Example message portion

```
m 2 0x0700404b 2002/3/7 08:43:47 24333 MpFwems
```

- Collection method

```
ipcrm -m 2
```

Example 3

- Example message portion

```
s 33 0x07004050 2002/3/7 08:43:48 24335 MpFwls
```

- Collection method

```
ipcrm -s 33
```

Action 2

Cause

If the error occurred in a cluster system, did you execute the service/daemon termination command (poperationmgr) without stopping the Systemwalker Operation Manager daemon registered in the cluster system?

An error message is output if you execute the daemon stop command (poperationmgr) without stopping the Systemwalker Operation Manager daemon registered in the cluster system.

Action method

No action is required to address this cause.

2.2.7 Message "Connection Failed or Server Process is Down" is Output in an Environment in Which Systemwalker Operation Manager Coexists With the Operation Management Server of Systemwalker Centric Manager

Error message

- Windows versions

```
MPBCMUNAPI : ERROR : Connection failed or server process is down.
```

- UNIX versions

UX:Mp_UnusualNotifierSVR: ERROR: 1: ERROR : Connection failed or server process is down.

Applicable versions and levels

- Windows versions: V10.0L20 or later

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V13.2.0 or later

The above products are applicable if they coexist with the Operation Management Server of Systemwalker Centric Manager.

Action

Cause

This message is output if console notifications of the process monitoring function cannot be used when operating the Operation Management Server as a standby server of a cluster environment.

Action method

No action is required.

2.2.8 Standard Output or Standard Error Cannot be Used Inside the Shell (mppmonsnd.sh) of the User Customization of Process Monitoring Function [UNIX Versions]

Applicable versions and levels

- Solaris versions: 10.1 to 12.1

- Linux versions: V11.0L10, V12.0L10

Action

Cause

The process monitoring function operates as a daemon, and therefore with standard output and standard error closed. The user customization shell (mppmonsnd.sh) that operates as an extension of process monitoring also operates with standard output and standard error closed, therefore, standard output and standard error cannot be used by commands in the shell.

Action method

Redirect the output of commands in the user customization shell, and explicitly specify standard output and standard errors.

Remarks

An error may occur if attempting to execute the maintenance information collection command (swcolinf) from the shell of the user customization function, due to being unable to use standard output inside the user customization function. In this case, specify the standard output destination for the maintenance information collection command.

Example:

/opt/FJSVftlo/swcolinf/swcolinf -o /work > /dev/null

2.2.9 CPU Usage is High for the f3crheeg and f3crhesv Processes [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Are you using the monitoring function for security events in Windows?

Cause

The f3crheeg process monitors event logs in Windows and the f3crhesv process compares events output to the event log with the Event Monitoring Conditions Definitions. If the monitoring function is used for security events in Windows, then processing may be delayed due to a large number of messages being output for security logs in the event log.

Action method

Use the minimum amount of resources required for implementing Windows audits.

If the event monitoring function is not used, perform the following procedure to address this issue.

Change the Startup Type of the services below from Automatic to Manual:

- Systemwalker MpAosfB
- Systemwalker MpAosfX

Remarks

The monitoring function for security events in Windows is set up using User Manager in Windows NT(R), and Security Policy in Windows(R) 2000, Windows(R) XP, Windows Server 2003 STD, Windows Server 2003 DTC, Windows Server 2003 EE and later.

2.2.10 Message "AP:F3CVSERV:Warning:3001:The time-out interval elapsed.(detail)" Is Displayed

Error message

AP:F3CVSERV:Warning:3001:The time-out interval elapsed.(detail)

```
The following are examples of the content that might displayed in the detail (<row number> is a numerical value (undefined) and the <trace id> is a string (undefined)):

Example 1: Open line=<row number>, TraceID=<trace id>

Example 2: Close line=<row number>, TraceID=<trace id>
```

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is the above error message output continuously over a long period of time?

Cause

The above error message is output if attempting to open the same common trace file simultaneously from multiple processes or threads.

Action method

- If the above error message is output occasionally:

No action is required due to this being a temporary issue for which recovery is performed automatically.

- If the above error message is output continuously over a long period of time:

Perform the following procedure:

- 1. Restart Systemwalker Operation Manager.
- 2. If the problem still occurs, restart the system.

If this issue occurs even after performing the procedure above, use the Maintenance Information Collection Tool to obtain common tools information, and then contact Fujitsu technical support.

2.2.11 A java.exe Process Error is Displayed during Check of the Process Running Status [Windows Versions]

The action to be taken if a java.exe process error occurs is as follows.

Error message

If an error occurs for a java.exe process, the following kind of message is displayed in the execution result of the command for displaying the process running status.

>>>> ERROR:Process NOT Found!!: java.exe

Applicable versions and levels

- Windows versions: V13.7.0 or later

Action 1

Points to check

Are you using the Web Console function or the Web API function [V17.0.0 or later]?

Action method

If the Web Console function or the Web API function [V17.0.0 or later] is not being used, execute mpowebsetup (Web server setup command) to remove setup of the Web server.

If the Web Console function or the Web API function [V17.0.0 or later] is being used, check the other action methods.

Action 2

Points to check

Did you make the setting for disabling access to the registry editing tool?

<Setting examples where access to the registry editing tool is disabled>

Example 1:

```
- Registry
HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Policies\System
```

[Type] REG_DWORD
[Name] DisableRegistryTools

[Data] 2

Example 2:

- Policy

User Configuration

- + Administrative Templates
- + System
- + Prevent access to registry editing tools

Setting value: Enabled

Change the setting that disables access to the registry editing tool.

2.3 Problems with Starting or Stopping

2.3.1 Unable to Start Systemwalker Operation Manager Services [Windows Versions]

Error message 1

The referenced account is currently locked out and may not be logged on to.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Did you change the logon account for each service of Systemwalker Operation Manager?

Action method

Restore the logon account password to the value it had when it was operating normally for each service of Systemwalker Operation Manager. Alternatively, refer to the following manual for information on how to change the startup account.

- V10.0L20/10.1 or later

"Changing the Startup Account [Windows version]" in the Installation Guide

Error message 2

The XXXXX service failed to start due to the following error:

The service did not respond to the start or control request in a timely fashion.

XXXX: Name of the Systemwalker Operation Manager service that failed to start Note: The message may be different depending on the operating system used.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Did you change the startup account password of Systemwalker Operation Manager?

Cause

If only the startup account password was changed, the service fails to start due to a mismatch between the password information held by Systemwalker Operation Manager and the password set as logon information for services of Systemwalker Operation Manager.

Perform the following procedure:

- Restore the password.
- Restore the password by following the procedure for changing the startup account password.

 Refer to the following manual for details.
 - V13.8.0 or later:

"Changing the Startup Account" in the Installation Guide

- V10.0L20/10.1 to V13.3.1:
 - "Changing the Startup Account" in the Installation Guide
- V10.0L10 or earlier

"Q & A Relating to the Environment", "How Do I Change the Password for the Startup Account of Systemwalker Operation Manager" in the *Q&A Guide*.

Error message 3

The license key was not registered or the trial time limit passed. Please register the license key if you continue to use this product.

Applicable versions and levels

- Windows versions: V13.8.0 or later

- Solaris versions: V13.8.0 or later

- Linux versions: V13.8.0 or later

Action

Points to check

Did you install the evaluation version?

Action method

You need licence key. For detail, refer to the Release Note.

2.3.2 The F3CVSERV Service is Set to be Started Manually but is not Started during the Product Startup [Windows Versions]

The common trace service F3CVSERV is set to be started manually, and may not start during product startup.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

The F3CVSERV service is used to obtain common traces in environments in which V4.0 or earlier of the product is used. In environments using V5.0 or later, the service is set to start manually, and is not used.

In environments that are combined together with a V4.0 or earlier product, this module is provided for compatibility.

No action is required, because F3CVSERV is not used in environments using V5.0 or later.

2.3.3 Cluster Failover Takes Time or a Process Accessing Files Under /var/spool/mjes is Detected during Cluster Failover [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

Action

Points to check

Was a job started in the background (that is, suffixing it with ampersand (&))?

Cause

On the UNIX versions of Systemwalker Operation Manager, do not register commands or shell scripts that are started in the background as jobs, otherwise the process may be in an "executing" state even after they have completed. This might cause cluster failover to take time or a process accessing files under /var/spool/mjes to be detected during cluster failover.

Action method

Do not start a job in the background (that is, suffixing it with ampersand (&)).

2.3.4 "MpAuditLogO: ERROR: 1: The audit log was not able to be initialized. The log is not output to the operation after this." is Output to the Event Log during a System Reboot or Shutdown [Windows Versions]

Error message

MpAuditLogO: ERROR: 1: The audit log was not able to be initialized. The log is not output to the operation after this. (target:%1, detail code:%2)

%1: Name of audit log file that failed during initialization

%2: Detailed information on the cause of the error

Applicable versions and levels

- Windows versions: V13.2.0 to V13.3.1

Action

Cause

This warning message is output to the event log if audit log output fails due to a system stoppage. Systemwalker Operation Manager outputs the following audit log entries during a system stoppage:

- Jobscheduler server stoppage
- Systemwalker Operation Manager common infrastructure server stoppage

- Calendar server stoppage
- NIS server stoppage

This warning message is output depending on the timing of the above audit log output and the system stoppage. This issue occurs if a service of systems (such as Security Accounts Manager, required for output of audit logs) stops before output to audit logs. No action is required even if this warning message is displayed, because there is no impact on audit log output following a system restart.



If this message is being monitored by Systemwalker Centric Manager, you can stop it from being output to the Systemwalker Console by specifying that it should not be monitored during a system reboot or shutdown.

2.3.5 If the Systemwalker Operation Manager Start Command (soperationmgr) is Executed via cron, Subsequent Start Commands Fail [UNIX Versions]

Error message

Command soperationmgr rejected. already running: cess name>.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: V5.2 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

Action

Points to check

Are you executing the start command via cron?

Cause

When executing the start command via cron, the standard output and standard error output must be specified, otherwise the start command process information remains, the above error message is output, and the subsequent startups fail.

Action method

Specify standard output and standard error output when executing the start command:

/opt/systemwalker/bin/soperationmgr > /var/opt/FJSVftlo/daemon/StdOutErr.Log 2>&1

2.4 Problems with Systemwalker Operation Manager Infrastructure

2.4.1 Error Messages Output By Systemwalker Operation Manager Infrastructure

Error message

- Windows versions

MpJmSrv: ERROR: 4: Failure in communicating with the Systemwalker Operation Manager(client).

MpJmSrv: ERROR: 5: Failure in connecting with the Systemwalker OperationMGR(Client).

- UNIX versions

MpJmSrv: ERROR: 0004: Failure in communicating with the Systemwalker Operation Manager(client).

MpJmSrv: ERROR: 0005: Failure in connecting with the Systemwalker OperationMGR(Client).

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

A communication error occurred between the Systemwalker Operation Manager infrastructure service/daemon and a Systemwalker Operation Manager client.

The reason is described in an error message output at the same time, such as the examples below:

- Windows

ID:8301 func=JMSRV_read:recv() Socket function error occurred (code = 10054).

ID:8301 func=JMSRV_write:send() Socket function error occurred (code = 10054).

- UNIX versions

MpJmSrv: ERROR: write() broken pipe

MpJmSrv: ERROR: read() Connection reset by peer

MpJmSrv: ERROR: accept() Software caused connection abort

The main reason why this error might occur is if the Systemwalker Operation Manager client is wrongly disconnected during communication, preventing it from ending normally.

Action method

No action is required for this error message. However, if it is output frequently, you should review operation - the following are possible causes:

- The Systemwalker Operation Manager client does not end normally (for example, the client PC frequently resets).
- There is a problem on the network path.
- Inappropriate communication or unauthorized access from an external source was attempted.

2.4.2 The Message " Failed to send the start parameters. Code=0xXXXXXXXXX" (XXXXXXXX Represents a Code) is Displayed on the Environment Setup Client [UNIX Versions]

Error message

Failed to send the start parameters. Code=0xXXXXXXXX

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Are you able to mount the database directory of Jobscheduler?

If using cluster operation, are you connected to the active node server?

Cause

The Jobscheduler start parameter settings are saved to the start parameter file under the database directory of Jobscheduler. If using unmounted cluster operation, when unable to access the database directory of Jobscheduler due to the setup being on the standby node, you will be unable to set up the start parameters.

Action method

If using cluster operation, set up the start parameters after connecting to the active node. If the mount or symbolic link is out of alignment, remount or realign the symbolic link, and then perform the setup of the start parameters again.

2.4.3 Unable to Log In to the Server From a Systemwalker Operation Manager Client or Environment Setup Client [UNIX Versions]

Error message

Permission to use the specified project not granted to user.

Action 1

Applicable versions and levels

- HP-UX versions: 5.1 to V13.0.0

Points to check

Are passwords stored in /etc/shadow?

Cause

HP-UX versions 5.1 to V13.0.0 do not support /etc/shadow, therefore Systemwalker Operation Manager cannot authenticate passwords if they are stored in this file.

Action method

Consider one of the following operations to circumvent using /etc/shadow:

- Perform operation on a high-reliability system.
 - By enabling high-reliability mode (high-reliability system), shadow passwords will be stored under /tcb.
- Perform operation with passwords stored in /etc/passwd.

Action 2

Applicable versions and levels

Solaris version: V17.0.0 or later Linux version: V17.0.0 or later

Points to check

Do you have an LDAP user configured as the OS user assigned to the Operation Manager user of the Systemwalker Extended User Management feature?

Cause

Only OS local users can be assigned to the Operation Manager user of the Systemwalker Extended User Management feature

Action method

Register the OS local user in the Systemwalker Extended User Management feature.

2.4.4 A jmnetsv Daemon Error Occurs, Preventing Systemwalker Operation Manager From Starting Up [UNIX Versions]

Error message

component start : sh /opt/FJSVJMCMN/etc/rc3.d/start_jmcmn /opt/FJSVJMCMN/bin/jmnetsv: error while loading shared libraries: libelf.so.1: cannot open shared object file: No such file or directory component start : sh /opt/FJSVJMCMN/etc/rc0.d/stsjmcmn

Applicable versions and levels

- Linux versions: V13.2.0 or later

- Linux for Itanium versions: V13.2.0 or later

Action

Points to check

Is the elfutils package installed?

Cause

Due to the elfutils package not being installed, the libelf.so.1 file cannot be found during startup of the jmnetsv daemon, resulting in an error.

Action method

Install the latest elfutils package, and then restart Systemwalker Operation Manager. It is not necessary to restart the system.

Note that the elfutils package is a mandatory package of Systemwalker Operation Manager.

2.4.5 The mpjmsrv Process Crashes After Login From Systemwalker Operation Manager Client [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 to V13.2.0

Action

Points to check

Is the login user authentication not the default authentication (MD5, etc.)?

Cause

An unsupported authentication method might be in use to authenticate login users.

Action method

Use the default authentication to authenticate users.

2.4.6 The Error Message "MpJmSrv: ERROR: 0028: socket() Address family not supported by protocol" is Output by the Systemwalker Operation Manager Infrastructure [UNIX Versions]

Error message

MpJmSrv: ERROR: 0028: socket() Address family not supported by protocol

Applicable versions and levels

- Solaris versions: V13.6.0 or later

- Linux versions: V13.6.0 or later

Action

Cause

This message is output when the Systemwalker Operation Manager service starts up in environments where IPv6 is disabled in the settings of the operating system.

This issue does not affect environments that do not use IPv6 (environments using IPv4), so no action is required in such environments.

To use IPv6, enable the IPv6 environment.

2.5 Problems with Access Rights

2.5.1 If Connecting as a User Other than Superuser, the Project is not Displayed Even if the Access Rights have been Set [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Have you set the port number used by ACL Manager in the services file (service mpacImgr)? Moreover, are the port definitions correct?

Note that the services file directory varies according to the operating system.

- Windows

<system root>\system32\drivers\etc\services

- UNIX versions

/etc/services

Action method

Define the following in the services file of the server and client:

mpaclmgr 4013/tcp

Action 2

Points to check

Have the system parameters (semaphores) been tuned to appropriate values?

Action method

Check the system parameter (semaphore) settings.

- 5.0/5.1/5.2/10.0/10.1/11.0:

The following semaphore resources are used by Systemwalker Operation Manager. Change the system parameter values according to the additions/maximum values in the table.

[Solaris versions]

System parameters	Value	Addition/Maximum value
semsys:seminfo_semmni	2	Addition
semsys:seminfo_semop m	2	Maximum value
semsys:seminfo_semmn s	2	Addition
semsys:seminfo_semmn u	2	Addition
semsys:seminfo_semum e	2	Maximum value
semsys:seminfo_semmsl	1	Maximum value

If addition is used:

Add the value in the table above to the following:

- If value is set in /etc/system: value set in the file
- If value is not set in /etc/system: system default value

If maximum value is used:

If using only Systemwalker Operation Manager for operations, the system default values can be used as is.

If you make any changes to the values, you will need to restart the system.

If using Systemwalker Operation Manager together with another product, tune the system parameters so that they are aligned with the maximum values of the other product.

[Linux versions]

The parameter values are specified in the following format:

System parameters	Value	Addition/Maximum value
<para1></para1>	1	Maximum value
<para2></para2>	2	Addition
<para3></para3>	2	Maximum value
<para4></para4>	2	Addition

If addition is used:

Add the value in the table above to the following:

- If value is set in /etc/sysctl.conf: value set in the file
- If value is not set in /etc/sysctl.conf: system default value

If maximum value is used:

If using only Systemwalker Operation Manager for operations, the system default values can be used as is If you make any changes to the values, you will need to restart the system.

If using Systemwalker Operation Manager together with another product, tune the system parameters so that they are aligned with the maximum values of the other product.

[HP-UX versions]

System parameters	Value	Addition/Maximum value
semmni	2	Addition
semmns	2	Addition
semmnu	2	Addition
semume	2	Maximum value

Use Manager on the system to change the parameters according to table additions or maximum values, and reconfigure the kernel.

If addition is used:

Add the value in the table above to the value already set.

If maximum value is used:

If using only Systemwalker Operation Manager for operations, the system default values can be used as is.

If using Systemwalker Operation Manager together with another product, tune the system parameters so that they are aligned with the maximum values of the other product.

- 12.0 or later:

Refer to the following manual for information on how to tune the system parameters:

"Tuning System Parameters [UNIX]" in the Installation Guide.

Action 3

Points to check

- 5.0/5.1/5.2/10.0/10.1, and cluster configuration:

Are you implementing a standardized procedure for assigning project access rights?

Action method

Apply standardized access rights for operation node and standby node projects.

Refer to the following manuals for information on how to apply a standardized method.

- 10.0/10.1:
 - "Standardizing Systemwalker Operation Manager environment definitions" in the *Cluster Setup Guide*.
 - "Standardizing Systemwalker Operation Manager environment definitions" in the *Cluster Setup Guide*.

2.5.2 If Connecting as a Domain Account, the Project is not Displayed When Jobscheduler is Selected in the Job Selection Window Even if the Access Rights have been Set [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Are the following users specified for the startup account of the Systemwalker ACL Manager service?

Note that if Systemwalker Centric Manager version is newer than that of Systemwalker Operation Manager on the same server, the check must be based on the version of Systemwalker Centric Manager. The action method is the same for both

- V13.2.0 or earlier:

Administrator users on the domain

- V13.3.0 or later:

Local system accounts

In V13.3.0 or later, the local system account is set for the startup account of the Systemwalker ACL Manager service. Check if the setting has been mistakenly changed during system setup.

Action method

Perform the following procedure to change the startup account:

- V13.2.0 or earlier:
 - 1. Stop Systemwalker Operation Manager.
 - 2. Change the logon account of the Systemwalker ACL Manager service to a domain user who satisfies the following conditions:
 - Has the privileges necessary for the startup account of Systemwalker.
 - Belongs to the Administrators group and was granted the "Act as part of the operating system" privilege.
 - Has DomainAdmins group privileges.
 - 3. Start Systemwalker Operation Manager.
- V13.3.0 or later:
 - 1. Stop Systemwalker Operation Manager.
 - 2. Change the logon account of the Systemwalker ACL Manager service to the local system account.
 - 3. Start Systemwalker Operation Manager.

Action 2

Points to check

Is the domain account for which access rights were set registered under "Organization Unit (OU)" of Active Directory?

Action method

Register under "Users" of Active Directory the domain account for which you want set access rights.

2.5.3 Message "Incorrect user name or password." is Displayed, Projects cannot be Created or Deleted, and the Owner Cannot be Changed

Error message

Incorrect user name or password.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Refer to the following for information on how to proceed:

- Windows

"2.5.6 If Connecting as a General User, the Project is not Displayed Even if the Access Rights have been Set [Windows Versions]"

- UNIX versions

"2.5.1 If Connecting as a User Other than Superuser, the Project is not Displayed Even if the Access Rights have been Set [UNIX Versions]"

2.5.4 Message "Could not get user definition information." Is Displayed When Trying to Set the Project Access Rights in the Cluster System

Error message

Could not get user definition information.

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L21

Solaris versions: 5.0 to 10.1Linux versions: 5.2, V10.0L10HP-UX versions: 5.1, 10.0

AIX versions: 5.1, 10.0DS versions: V20L10

Action

Points to check

Are you implementing a standardized procedure for assigning project access rights?

Action method

Apply standardized access rights for operation node and standby node projects.

Refer to the following manuals for information on how to apply standardized method.

- V10.0L10/10.0/V10.0L20/V10.0L21/10.1:

"Standardizing Systemwalker Operation Manager environment definitions" in the Cluster Setup Guide.

2.5.5 Message "Could not get domain name list.(0:0) " Is Displayed When the Project Access Rights are Set [Windows Versions]

Error message

Could not get domain name list.(0:0)

Applicable versions and levels

- Windows versions: V5.0L20 or later

Action

Cause

If the operating system satisfies all of the following conditions, then this error occurs due to insufficient privileges for the "Systemwalker ACL Manager" service:

- A domain environment has been built.
- The operating system is on a member server in the domain.

Action method

Set the following users in the startup account of the "Systemwalker ACL Manager" service.

Note that if Systemwalker Centric Manager version is newer than that of Systemwalker Operation Manager on the same server, the setting must be based on the version of Systemwalker Centric Manager.

- V13.3.0 or later:

Local system accounts

2.5.6 If Connecting as a General User, the Project is not Displayed Even if the Access Rights have been Set [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

- V5.0L10/V5.0L20/V5.0L30/V10.0L10/V10.0L20/V10.0L21:

Are you implementing a standardized procedure for assigning project access rights?

Action method

Apply standardized access rights for operation node and standby node projects.

Refer to the following manuals for information on how to apply a standardized method.

- V10.0L10/V10.0L20/V10.0L21, and cluster configuration:
 - "Standardizing Systemwalker Operation Manager environment definitions" in the Cluster Setup Guide.
 - "Standardizing Systemwalker Operation Manager environment definitions" in the Cluster Setup Guide.

Action 2

Points to check

Is the hosts file definition for the connection destination server correct?

Action method

Check the following for the hosts file of the connection destination server.

- The correct IP address is set for the host name of the user's server.

2.5.7 Projects With Access Rights are not Displayed on the Client [UNIX Versions]

Applicable versions and levels

- Solaris versions: 12.0 or later

- Linux versions: V12.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: V13.0.0 or later

- AIX versions: V13.2.0 or later

Action

Points to check

Did you use operating system commands to change the group to which users belong?

Action method

If operating system commands were used to change the group to which users belong, execute the mpsetacl command as a superuser on Systemwalker Operation Manager server and reflect the group account information of the operating system to the access rights information.

The following example grants update privileges to "user1" for project "proj1":

```
mpsetacl -a -t mpjobsch/schedule/proj1 -u user1 -p w
```

The following example grants update privileges to "user1" for project "proj1" of subsystem number 2:

mpsetacl -a -t mpjobsch/schedule2/proj1 -u user1 -p w

2.5.8 "Could not get domain name list.(0:0) (For Window) "

Error message

Could not get domain name list.(0:0)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Does the Systemwalker Operation Manager server specified for the connection destination host name stop during login?

Action method

Execute the mppviewo.exe command to display the running status of Systemwalker Operation Manager server processes, and check if Systemwalker Operation Manager server has started or stopped.

If Systemwalker Operation Manager server has stopped, execute the soperationmgr command to start it, and then connect the client again.

Refer to the Reference Guide for information on mppviewo.exe and the soperationmgr command.

Action 2

Points to check

Has the domain controller stopped?

Action method

If the domain controller has stopped, start it, and then connect the client again.

Action 3

Points to check

Does the Systemwalker ACL Manager service start normally on the Systemwalker Operation Manager server of the connection destination?

Action method

Execute the mppviewo.exe command to display the running status of Systemwalker ACL Manager service processes, and check if Systemwalker ACL Manager services have started or stopped.

If a Systemwalker ACL Manager service has stopped, execute the soperationmgr command to start Systemwalker Operation Manager server, and then connect the client again.

Refer to the Reference Guide for information on mppviewo.exe and the soperationmgr command.

Action 4

Points to check

Have you set the port number used by ACL Manager in the services file (service mpacImgr)? Moreover, are the port definitions correct?

The services file directory is as follows:

<system root>\system32\drivers\etc\services

Action method

Define the following in the services file of the server and client.

mpaclmgr 4013/tcp

Action 5

Points to check

Are the following users specified for the startup account of the Systemwalker ACL Manager service?

Note that if Systemwalker Centric Manager version is newer than that of Systemwalker Operation Manager on the same server, the check must be based on the version of Systemwalker Centric Manager. The action method is the same for both.

- V13.2.0 or earlier:

Administrator users on the domain

- V13.3.0 or later:

Local system account

In V13.3.0 or later, the local system account is set for the startup account of the Systemwalker ACL Manager service. Check if the setting has been mistakenly changed during system setup.

Perform the following procedure to check if administrator users on the domain are specified for the startup account of the Systemwalker ACL Manager service:

- Select Control Panel >> Administrative Tools >> Services (if using Windows Server 2008, select Control Panel >>
 Programs >> Programs and Features >> Turn Windows features on or off >> composition >> Services) to display
 the Systemwalker ACL Manager properties, and check the account name in the Logon tab.
- 2. On the domain controller, select **Control Panel** >> **Administrative Tools** >> Active Directory users and computers, and check if the account listed in step 1 satisfies the following conditions:
 - Is registered under the "Users" object.
 - Is a member of Administrators and DomainAdmins.
- 3. On the domain controller, select **Control Panel** >> **Administrative Tools** >> **Domain Controller Security Policy**, and check if the following privileges have been set for the account listed in step 1:
 - Act as part of the operating system
 - Log on as a service
 - Adjust memory quotas for a process
 - Replace a process level token

If unable to perform a check at either of steps 2 and 3 above, take action in accordance with the method below.

Action method

Perform the following procedure to change the startup account:

- V13.2.0 or earlier:
 - 1. Execute the poperationmgr command (if Systemwalker Centric Manager is installed on the same machine, use poperationmgr /a) to stop Systemwalker Operation Manager.
 - 2. Change the logon account of the Systemwalker ACL Manager service to a domain user who satisfies the following conditions:
 - Has the privileges necessary for the startup account of Systemwalker.
 - Belongs to the Administrators group and was granted the "Act as part of the operating system" privilege.
 - Has DomainAdmins group privileges.
 - Is registered under the "Users" object of the domain.
 - 3. Execute the soperationmgr command (if Systemwalker Centric Manager is installed on the same machine, use soperationmgr /a) to stop Systemwalker Operation Manager.
- V13.3.0 or later:
 - 1. Execute the poperationmgr command (if Systemwalker Centric Manager is installed on the same machine, use poperationmgr /a) to stop Systemwalker Operation Manager.
 - 2. Change the logon account of the Systemwalker ACL Manager service to the local system account.
 - 3. Execute the soperationmgr command (if Systemwalker Centric Manager is installed on the same machine, use soperationmgr /a) to stop Systemwalker Operation Manager.

Refer to the Reference Guide for information on the poperationmgr and soperationmgr commands.

2.5.9 If Failover is Performed in the Cluster System, the Information of Operation Manager Users That Should have been Registered is Restored [UNIX Versions]

Applicable versions and levels

- Solaris versions: 12.0 to V13.2.0

- Linux versions: V12.0L10 to V13.2.0

- Linux for Itanium versions: V12.0L10 to V13.2.0

- HP-UX versions: V13.0.0 to V13.2.0

- AIX versions: V13.2.0

Action

Points to check

Are you executing the following security commands to add, modify or delete Operation Manager users, or set or delete passwords?

- mpadduser command
- mpmoduser command
- mpdeluser command
- mpsetpasswd command

Action method

If security commands (mpadduser, mpmoduser, mpdeluser, mpsetpasswd) were used to add, modify or delete Operation Manager users, or set or delete passwords, execute the mpcssave command to save the Operation Manager user information to the shared disk of the cluster system after the command is executed. Refer to the *Reference Guide* for information on the mpcssave command.

2.6 Problems with Policy

2.6.1 Policy Distribution is not Implemented Correctly [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

- Are there projects registered that have the same name but different capitalization?
- Are there job nets registered within the same project that have the same name but different capitalization?

Action method

If there are projects registered that have the same name but different capitalization, policies cannot be extracted correctly for the schedule information. In this case, use commands such as ftp to directly copy files in the database directory of Jobscheduler to the policy distribution destination server.

If there are job nets registered within the same project that have the same name but different capitalization, policies cannot be extracted correctly for the job information. In this case, use commands such as ftp to directly copy files in the /jobschprop database directory of Jobscheduler to the policy distribution destination server.

Action 2

Points to check

Is the account of the project owner registered in the operating system of the policy distribution destination server?

Cause

If the account of the project owner is not registered in the operating system of the policy distribution destination server, the project privileges setup fails, and policy distribution fails.

Action method

Register the account of the project owner in the operating system of the policy distribution destination server, and then restart Systemwalker Operation Manager.

2.6.2 The Message "Policy distribution is not allowed because destination server policy information is not applied. " is Output and Policies Cannot be Distributed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Did you apply policies after policy distribution?

Cause

After policy distribution, policies are applied by restarting Systemwalker Operation Manager server. This message is output if the previous policies are not applied.

Action method

Apply the previously distributed policies by restarting Systemwalker Operation Manager server, and then redistribute the policies.

Action 2

Points to check

Do accounts held by the project owner or with access rights exist on the policy distribution destination server?

Cause

Policy distribution fails if policies cannot be applied due to a project owner account or an account with access rights not existing on the policy distribution destination server during application of the previous policies.

Action method

Add a project owner account or account with access rights to the policy distribution destination, restart the Systemwalker Operation Manager service/daemon, and apply the policies.

Refer to "Distributing the Policy Data" in the *Installation Guide* for information on how to distribute the policy information.

Action 3

Points to check

Does the following file exist?

<systemwalker operation manager install dir>\mpwalker\mpaosfsv\policy\acldata.bat

Cause

If Systemwalker Centric Manager is installed, the above file is not deleted even when Systemwalker Operation Manager is uninstalled. This causes the system to consider that there are unapplied policies, which in turn causes the policies to not be distributed.

Action method

Rename the above file from "acldata.bat" to "acldata.bat.old", and redistribute the policies.

In the following cases, another cause is likely, therefore do not use the action method above:

- If Systemwalker Centric Manager is not installed.
- If Systemwalker Operation Manager is not uninstalled even once on the policy distribution destination server after the message is output.

2.6.3 Failover Occurs When Policies are Distributed in the Cluster Environment [UNIX Versions]

Applicable versions and levels

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 11.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

Is **Apply once.(Restart the service.)** or **Apply once.(Restart the daemon.)** selected in the **Apply Policy** window during application of policies?

Cause

Systemwalker Operation Manager stops and failover occurs automatically due to **Apply once (Restart the service.)** or **Apply once (Restart the daemon.)** being selected in the **Apply Policy** window during application of policies.

If performing cluster operation, select **Apply at the next service startup** or **Apply at the next daemon startup** in the **Apply Policy** window. After policy distribution, restart the Systemwalker Operation Manager service or daemon when applying policies.

- Stopping a service or daemon

After Systemwalker Operation Manager services and daemons register with the cluster system are stopped, the non-registered ones must be stopped by executing the poperationmgr command.

- Starting a service or daemon

After Systemwalker Operation Manager services and daemons not registered with the cluster system are started by executing the soperationmgr command, the registered ones must be started.

Refer to "Starting and Stopping Services on Cluster Systems" or "Starting and Stopping Daemons on Cluster Systems" in the *Cluster Setup Guide* for information on how to restart a service or daemon.

2.6.4 The Message "Policy distribution is not allowed because destination server type is different." is Output and Policies Cannot be Distributed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Did you omit a host name, or specify the host name of the operating system to which you cannot distribute, when you tried to distribute a policy?

Cause

Policy information can be extracted and distributed between the Solaris, HP-UX and AIX versions or between the Linux and Linux for Itanium versions. The policy information extracted from the Windows version can be distributed only to the Windows version.

If a host name is omitted, the policy will be distributed to the server that has logged in from the desktop (a server running Systemwalker Operation Manager environment setup client). Therefore, when you try to distribute policy information extracted from an operating system other than the Windows version, this pop-up message is displayed, and the policy cannot be distributed.

Action method

Specify a host name of the server to which a policy can be distributed, and then distribute.

If a host name is omitted, the policy will be distributed to the server that has logged in from the desktop (a server running Systemwalker Operation Manager environment setup client). If you want to distribute the policy to another server, specify the host name of the distribution destination server.

2.7 Problems with Utility Commands

2.7.1 An Abnormal Completion Message is Output With the Completion Code 7 Even When a Service is Started Normally Using the Service Start Command (f3crhsst.exe) [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Check the service status.

Select Control Panel >> Administrative Tools >> Services, to open the Services window, where you can check the service status.

Cause

The service start process may be slow if there is a high load on the system, such as when many services are started at once. In cases such as this, the system deems that the service start command failed to start the service, and the completion code 7 is returned.

Action method

No action is required if the service starts normally when the service start command is used, even if the service start command (f3crhsst.exe) is completed abnormally with the completion code 7.



Checking the service status

Systemwalker Operation Manager provides the service status confirmation command (chksrv) for checking the status of services.

Refer to the following manual for details.

- Refer to "chksrv Service Status Confirmation Command" in the Reference Guide.

2.8 Problems with Backup, Restore or Migration

2.8.1 Backup or Restore Commands do not Run Normally if Executed by a Shell Script [UNIX Versions]

Error message

Command <rejected command> rejected. already running: <command running>

Applicable versions and levels

- Solaris versions: 10.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 10.0 or later

- AIX versions: 10.0 or later

Action 1

Points to check

Execute the ps command to check if the process for <rejected command> in the error message exists.

Cause

This error occurs when the process for <rejected command> in the error message is running.

Action method

After the process for <command running> is completed, execute <rejected command> again.

Action 2

Points to check

Check if the name of the shell script includes <command running>.

Cause

This error occurs if the name of the shell script includes <command running>.

Action method

Change the name of the shell script so that it does not include <command running>.

2.8.2 Backup in Silent Mode Fails

Error message

- [Windows versions]

The following message is output to the event log:

Failed to back up.

(The specified directory already exists.)

- [Solaris versions]

The following message is output to standard output:

Directory

bkp target dir> is not empty.

Applicable versions and levels

- Windows versions: V10.0L20 or later

- Solaris versions: 10.1 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action

Points to check

Check if the backup command is being used in silent mode (in Windows using the /d option, and in UNIX using the -d option) If it is, then check if the file already exists in the backup target directory.

Cause

This error occurs if the file already exists in the backup target directory.

Action method

Empty the backup directory, and then execute the command again.

2.8.3 Message "MpJobsch: ERROR: 7300 func=JOBSCH_dbfile_open:CreateFile()" Is Displayed [Windows Versions]

Error message

Mpjobsch: ERROR: 7300 func=jOBSCH_dbfile_open:CreateFile()

Applicable versions and levels

- Windows versions: V10.0L10 or later

Action

Cause

This error occurs when the "mpbko /SN" command is executed while the schedule information file is read-only because it is being accessed during job execution.

Action method

Execute the "mpbko /SN" command when jobs are not being executed.

2.8.4 The jobschmsgevent Command Does not Run Normally when the Schedule Server is Migrated [Solaris Versions]

Applicable versions and levels

- Solaris versions: V13.0.0 or later

Action

Points to check

Did you migrate the server using the flarcreate command?

Cause

Systemwalker Operation Manager does not support migration by the flarcreate command.

Action method

Migrate the schedule server according to the procedure in "Procedure for Migrating to Another Machine" in the Systemwalker Operation Manager Upgrade Guide or Systemwalker Operation Manager Migration Guide.

2.9 Problems with the Maintenance Information Collection Tool

2.9.1 An Application Error Occurs for MsInfo32 if the Maintenance Information Collection Tool is Started From Jobscheduler [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Did you start the Maintenance Information Collection Tool from Jobscheduler?

Cause

If the MsInfo32.exe command is executed as a job of Systemwalker Operation Manager, operation may be abnormal. Because the Maintenance Information Collection Tool uses the MsInfo32.exe command, starting the former as a job causes an application error in the latter.

Action method

No action is required.

Remarks

The operating system information is not obtained by the MsInfo32.exe command. Note that there no problem occurs if you obtain resources using a command other than MsInfo32.exe.

2.10 Problems with Other Products

2.10.1 Systemwalker Operation Manager Provisioning Fails When Using ServerView Resource Coordinator (*1) Provisioning

*1: Systemwalker Resource Coordinator is the former product name of ServerView Resource Coordinator.

Error message

FJSVrcx:ERROR:61501:the provisioning handler terminated abnormally. product=SWOMGR(Systemwalker Operation Manager), xxxxx(*1)

*1: The detail varies according to the execution environment.

Applicable versions and levels

- Windows versions: V12.0L10 or later

- Solaris versions: 12.0 or later

- Linux versions: V12.0L10 or later

Action 1

Points to check

Check if Systemwalker Operation Manager is started on the site management server of ServerView Resource Coordinator. You can check this based on whether an error is displayed when the mppviewo command is executed.

Cause

Systemwalker Operation Manager may have stopped on the site management server of ServerView Resource Coordinator.

Action method

If Systemwalker Operation Manager is not started on the site management server of ServerView Resource Coordinator, execute the soperationmgr command on the site management server to start it before performing ServerView Resource Coordinator provisioning.

Action 2

Points to check

Execute the ServerView Resource Coordinator command (rcxatevt) to check if the provisioning operation definitions have been set for Systemwalker Operation Manager and Systemwalker Centric Manager.

Cause

If ServerView Resource Coordinator provisioning is used to build an environment that combines Systemwalker Operation Manager and Systemwalker Centric Manager, the provisioning operation definitions may have been set for only one of the products.

Action method

If ServerView Resource Coordinator provisioning is used to build an environment that combines Systemwalker Operation Manager and Systemwalker Centric Manager, set the provisioning operation definitions for both products before performing provisioning for ServerView Resource Coordinator.

Action 3

Points to check

Check if the server group to which the management target server for the image collection source of ServerView Resource Coordinator belongs has the same configuration as the host group of Systemwalker Operation Manager.

[How to check]

- 1. Execute the distributed execution status display command (mjdjstat) to check if the configuration matches that of the ServerView Resource Coordinator server group.
- 2. If the management target server of the image collection source is monitored by Systemwalker Centric Manager, perform the following procedure to check if Systemwalker Operation Manager is installed:
 - 1. Start the monitoring window as described in "Using console" in the Systemwalker Centric Manager User's Guide Monitoring Functions.
 - 2. Check if the image collection source nodes in each server group of ServerView Resource Coordinator are registered in the tree of the monitoring window.
 - 3. Display the properties window of the image collection source node checked in step 2, and check the following:
 - Systemwalker Operation Manager tab >> Systemwalker Operation Manager has been installed is checked
 - The Systemwalker Operation Manager operation type is set to **Job Server**.

Cause

The Systemwalker Operation Manager host group configuration may be different from that of the ServerView Resource Coordinator server group. Alternatively, Systemwalker Operation Manager may have been installed as the management target server of the image collection source.

Action method

Set the same configuration for the ServerView Resource Coordinator server group and Systemwalker Operation Manager host group before image collection by ServerView Resource Coordinator.

[Setup method]

Set up the Systemwalker Operation Manager host group as described in "Definition of Job Execution Control" in the *Installation Guide*.

After performing setup, collect images, and then check if ServerView Resource Coordinator collected them successfully.

[How to check]

- 1. Refer to the ServerView Resource Coordinator manual for information on how to check if images were collected successfully.
- 2. Refer to the system log, and check if the following messages have been output.
 - "WARNING: 00401: The node (<management target server>) may not be added completely. Please make a node addition manually."
 - "WARNING: 00402: The node (<management target server>) may not be deleted completely. Please make a node deletion manually."
- 3. Execute the mppviewo command to check if the Systemwalker Operation Manager daemon of the management target server has started.
- 4. If none of steps 1 to 3 can be confirmed, recheck the steps of the setting method above.

Action 4

Points to check

Check if the "Mpcmtoolo: WARNING: 00401" and "Mpcmtoolo: WARNING: 00402" messages are output to the system log.

Cause

Changing the configuration of the distributed execution server may have failed.

Action method

Perform the procedure described in the "System Administrator Response" subsection in the "Mpcmtoolo: WARNING: 00401" and "Mpcmtoolo: WARNING: 00402" messages in the *Message Guide*.

2.10.2 After the Password Change Command (pwchangeo.exe) is Executed, Error Message "Failed to change the password." Is Displayed and the Systemwalker Centric Manager Service Fails to Start Up [Windows Versions]

Error message

Failed to change the password.

Applicable versions and levels

- Windows versions: V13.3.0/V13.3.1

- Windows for Itanium versions: V13.3.0/V13.3.1

Action

Points to check

Check if the environment where the error occurred matches [Environment 1] or [Environment 2], and [Conditions] in an environment where Systemwalker Operation Manager and Systemwalker Centric Manager coexist.

[Environment 1]

- a. The following product is installed, with "Server" specified as the installation type. And,
 - Windows for Itanium version Systemwalker Operation Manager V13.3.0
- b. One of the following products is installed, and "Operation Management Server", "Section Management Server" or "Job Server" is specified as the installation type.
 - Windows for Itanium version Systemwalker Centric Manager V12.0L11
 - Windows for Itanium version Systemwalker Centric Manager V13.0.0
 - Windows for Itanium version Systemwalker Centric Manager V13.1.0

[Environment 2]

- a. The following product is installed, with "Server" specified as the installation type. And,
 - Windows version Systemwalker Operation Manager V13.3.0
- b. The following product is installed, and "Operation Management Server", "Section Management Server" or "Job Server" is specified as the installation type.
 - Windows version Systemwalker Centric Manager V13.2.0A or earlier

[Conditions]

- The environment is described in [Environment 1] or [Environment 2]. And,
- The same startup account is specified for Systemwalker Centric Manager and Systemwalker Operation Manager. And,
- The password change command (pwchangeo.exe) was executed to change the password for the startup account of Systemwalker Operation Manager.

Cause

In an environment where Systemwalker Operation Manager and Systemwalker Centric Manager coexist, Systemwalker Centric Manager service failed to start due to the password for the startup account of the Systemwalker Operation Manager service having been changed, but not the password for the startup account of Systemwalker Centric Manager. The service could not be started because the password for the startup account of the Systemwalker Centric Manager service is incorrect.

In this case, the following error is recorded in the event log (system):

Source: Service Control Manager

Event ID: 7000

Description:

The XXXXX service failed to start due to the following error:

The service did not respond to the start or control request in a timely fashion.

XXXXX: Systemwalker Centric Manager service name.

Execute the password change command (pwchangec.exe) to change the password for the startup account of Systemwalker Centric Manager so that it is the same as that for the startup account of Systemwalker Operation Manager. The password change command (pwchangec.exe) is used to perform batch changing of passwords for the startup account used for starting each service of Systemwalker Centric Manager.

pwchangec -p <*new pwd>* (*1)

2.11 Problems with the Client

2.11.1 The Message "Failure in writing audit log." is Displayed

Error message

Failure in writing audit log.

Applicable versions and levels

- Windows versions: V13.2.0 or later

- Solaris versions: V13.2.0 or later

- Linux versions: V13.2.0 or later

- Linux for Itanium versions: V13.2.0 or later

HP-UX versions: V13.2.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

Check the following:

- Is the 9352/tcp (jmnet) port isolated by the firewall between the server and client?
- Is there insufficient disk capacity specified for the output destination (server) of the audit log?
- Does the service account specified for each service of Systemwalker Operation Manager have system administrator (a user who belongs to the Administrators group) privileges? [Windows versions]

Cause

This error is thought to occur due to the cause described in "Points to check" above.

Action method

Remove the cause described in "Points to check".

2.11.2 The Message "Run-time error '429': ActiveX component can't create object." is Displayed [Windows Versions]

Applicable versions and levels

- Windows versions: V13.8.0 or later

^{*1: &}lt;new pwd> must be the same password that was changed for Systemwalker Operation Manager.

Action

Points to check

Did you install .NET Framework after installing a client?

Cause

After a client is installed, .NET Framework is installed.

Action method

Manually configure the settings that are normally set automatically when the client is installed.

Specifically, execute the following command from the command prompt with administrator privileges after the .NET Framework has been installed:

<Windows directory>\Microsoft.NET\Framework\v2.0.50727\regasm.exe < Operation Manager installation directory>\mpwalker.jm\bin\Fujitsu.OPMGR.Forms.Interop.dll /tlb: < Operation Manager installation directory>\mpwalker.jm\bin\com.Fujitsu.OPMGR.Forms.Interop.tlb

Refer to "Installing and uninstalling the .NET Framework" in the Systemwalker Operation Manager Installation Guide.

2.12 Problems with the Web Console

2.12.1 Information is not Displayed during Operation of the Web Console

In environments that use single sign-on linked to ServerView Operations Manager, information may not be displayed in the selection display area, main display area, or details display area during operation of the Web console.

Example: The flow is not displayed in the main display area when job net is selected from the selection display area in the Job Net Management window.

Applicable versions and levels

- Windows versions: V13.8.0

- Linux versions: V13.8.0

Points to check

Are you using single sign-on linked to ServerView Operations Manager?

Also, did you log out from the Web console of other products (ServerView Resource Orchestrator, etc.) using single sign-on linked to ServerView Operations Manager during use of the Web console?

Cause

This error occurs due to an "authentication expired" status upon logging out from the Web console of other products (ServerView Resource Orchestrator, etc.) using single sign-on linked to ServerView Operations Manager during use of the Web console.

Action method

Close all browsers, then restart the Web console and log in.

2.12.2 When Login window will be displayed, Web site: "Internet Explorer cannot display the webpage" is viewed.

It may not be accessed to the Web console with displaying message, "Internet Explorer cannot display the webpage" (It varies by environment).

Applicable versions and levels

- Windows versions: V13.8.0 or later

- Linux versions: V13.8.0 or later

Points to check

Is it correct in the FQDN of ServerView Operations Manager which specified in mpsetssoinfoo command to link single sign-on environment of ServerView Operations Manager or the port number for certified URL?

Action method

If the FQDN of ServerView Operations Manager which specified by mpsetssoinfoo command to link single sign-on environment of ServerView Operations Manager, or the port number for certified URL is incorrect, reset with correct FQDN and port number.

2.12.3 The pop-up message is displayed during Operation of the Web Console

In environments that use Web console, the following pop-up message is displayed during operation of the Web console.

Error<OM_INF_XXXXX>: Internal error is occurred.

XXXXX: Arbitrary number

Applicable versions and levels

- Windows versions: V13.8.0 or later

- Solaris version V13.8.0 or later

- Linux versions: V13.8.0 or later

Points to check

Are you starting multipule Internet Explorer when using the Web console of Systemwalker Operation Manager from browser?

Cause

To use the browser that started from other than **New session** of Internet Explorer menu, the information of session will be shared with other browser. Therefore, to diplay login window from the browser which started later, the session information to continue the operation in other browser will be cleared.

Action method

Close all browsers, then restart the Web console and log in. If you use Web console of Systemwalker Operation Manager from malutiple browser, use the browser that started from **New session** of Internet Explorer menu.

2.12.4 "INVALIDSESSION:" appears immediately after logging in to the web console

Immediately after logging in to the web console, "INVALIDSESSION:" may appear and the **Monitoring** window may not appear.

Applicable versions and levels

- Windows versions: V13.4.0 or later

- Solaris version V13.4.0 or later
- Linux versions: V13.4.0 or later

Points to check

In Internet Explorer, under Internet Options > Security, is the security level of the zone set to High?

Cause

If the security level for the zone is set to **High**, the above error may display because the authentication information is not properly passed to the web server.

Action method

You might be able to avoid this problem by setting the security level of the zone to **Medium High** or lower, for example, by registering the URL to which the web console connects to **Trusted Sites**.

Chapter 3 Troubleshooting Calendar/Power Control

3.1 Power off is Not Operating Correctly

3.1.1 PowerChutePLUS (APC product) Connects but only Shutdown is Performed, with no Power off [Windows Version]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

- Is the **PowerChutePLUS (APC product)** (For V 17.0.0 and later, select **PowerChute**.) option selected under **Select Power Control** tab in the **Power Control Schedule** dialog box?
- Is upssleep.exe installed on the server?

(Refer to the relevant PowerChute manual for information on how to install it.)

- Is there an upssleep path in the PATH environment variable of the system environment variables?
- Is an incorrect path specified in the PATH system environment variable?
 - Does the path include the module name (upssleep.exe)?
 - Does the path include a typological error?

Action method

- If power control is not selected, select the power control software (PowerChutePLUS) (For V 17.0.0 and later, select **PowerChute**) to be handled.
- Install the required module (upssleep.exe) for linking to the power control hardware if it is not already installed.
- Add the upssleep path to the system environment variables if it is not already there. After adding the path, restart the system.

3.1.2 The Power Goes off at the Day Change Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: V11.0L10 or later

Action

Points to check

Display the SYSTEM_CALENDAR and check the following items:

- Is the day change time of SYSTEM_CALENDAR the time of the power off?

Select **Day Change Time** from the **Options** menu to display the Register Day Change Time dialog box to check the day change time of SYSTEM_CALENDAR.

Was the server started manually, and a SYSTEM CALENDAR holiday fell on next day?
 Check the status of the next day (working day/holiday/individual/holiday - individual).
 The days on the calendar are color-coded to indicate the status. (Holidays are indicated in red)

Cause

Even if the server is started manually, if the next day is set as a SYSTEM_CALENDAR holiday, a shutdown is performed at the day change time in accordance with the automatic operation schedule of Systemwalker Operation Manager. This is because days set as SYSTEM_CALENDAR holidays are treated as days on which the server will not operate, and therefore, the power off will occur automatically.

Action method

If the next day is set as a holiday in SYSTEM_CALENDAR and you do not want a power off to occur automatically at the day change time of the next day, change the next day from a holiday to a non-holiday (working day/individual/holiday - individual) in SYSTEM_CALENDAR.

You can change the SYSTEM_CALENDAR status by clicking the day to select it and then clicking it again to make the change.

3.1.3 The Power Control Schedule has been Set, however, a Power off and Reboot are Not Performed [Windows Version]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is the "Systemwalker MpAosfP" service running?

Cause

The "Systemwalker MpAosfP" service may not have started.

Action method

If the "Systemwalker MpAosfP" service is not running:

- Windows NT(R):
 - Select Control Panel >> Services, and start the "Systemwalker MpAosfP" service.
- Windows(R) 2000, or Windows Server 2003 STD, Windows Server 2003 DTC, Windows Server 2003 EE or later:
 Select Control Panel >> Administrative Tools >> Services, and start the "Systemwalker MpAosfP" service.



The "Systemwalker MpAosfP" service is a power control service common to Systemwalker Centric Manager and Systemwalker Operation Manager. If it is stopped manually, the power control function will no longer operate for Systemwalker Centric Manager and Systemwalker Operation Manager.

3.1.4 A System Reboot or Shutdown Occurs at an Unexpected Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: V11.0L10 or later

Action

Points to check

Is the power control schedule of Systemwalker Operation Manager set as planned?

Cause

The power control schedule setting may be matching the intended plan.

Action method

After checking the power control schedule, if there is an error, correct the settings.

Refer to "3.1.2 The Power Goes off at the Day Change Time" if the time of shutdown is the day change time.

3.2 Power Control does Not Operate Normally

3.2.1 Shutdown is Performed before Completion of Commands Executed at the Completion of Operation during Shutdown Monitoring

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: V11.0L10 or later

Action

Points to check

Do the commands specified to be executed during shutdown monitoring complete in a short period of time?

Cause

Shutdown processing does not wait for commands defined in the **Execution Command Definition List** dialog box. If commands that are not completed in a short period of time are set in the **Execution Command Definition List** dialog box, the server may shut down with command processing not having been completed.

Action method

If you wish to complete the processing for the commands defined in the **Execution Command Definition List** dialog box before performing shutdown processing, use queuing completion notifications.

The setting procedure for using queuing completion notifications is as follows:

- From the Job Selection window of the Systemwalker Operation Manager window, select SYSTEM_CALENDAR
 Options >> Power Control Schedule.
- 2. In the Power Control Schedule dialog box, select the Completion Monitoring tab, and then click Details.
- 3. In the Completion Monitoring dialog box, select Notify Queuing Completion, and then click Completion Notification.
- 4. In the Queuing Completion Notification Definition dialog box, add the desired completion notification message.

5. Create a new batch file describing the commands that you wish to be queued and the queuing notification command (f3crheet), and register these in the **Command List** in the **Execution Command Definition List** dialog box.

Refer to the following manual for information on shutdown monitoring:

- "Setting Shutdown Monitoring Options" in the User Guide.

Description



Queuing completion notifications

The queuing completion notification function allows you to use the queuing completion notification command to stop a server after waiting until completion of a service, application or command.

The wait for completion of a service, application or command is defined in the **Queuing Completion Notification Definition** dialog box. Server stop processing starts when all defined message notifications have been issued using the queuing completion notification command.

The method of shutdown after waiting for completion of commands is shown below:

Example:

Using the queuing completion notification function in Windows to start shutdown processing after completion of the processing of XXXXX.exe:

- 1. 1.In the Completion Monitoring dialog box, select Notify Queuing Completion, and then click Completion Notification. In the Queuing Completion Notification Definition dialog box, add the desired message "YYYYY". (Shutdown processing is not performed until the message added here is notified using the queuing completion notification command.)
- 2. 2.Create a batch file (Windows) or shell script (UNIX) to run XXXXX.exe and issue the message using the queuing completion notification command.

Example description used in the batch file (XXX.bat):

XXXXX.exe f3crheet YYYYY

3. 3.Add the batch file (Windows) or shell script (UNIX) created in 2. to the **Execution Command Definition List** dialog box.

3.2.2 When Trying to Restart Multiple Servers using Batch Power Control, One or More Servers do Not Restart

Error message

- [Windows versions]

MpAosfP: WARNING: 301: Fails Power Off for the target agent(host name)

- [UNIX versions]

MpAosfP: WARNING: 301: Fails Power Off for the target agent(host name)

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Solaris versions: 10.0 - V13.8.0

- Linux versions: V11.0L10 - V13.8.0

Action

Points to check

- Are you using a power control device (hardware) that supports Systemwalker Operation Manager, such as a UPS, on a server that controls batch power control?
- Are you using a power control device that supports Systemwalker Operation Manager, such as a UPS, on a server controlled by a batch power control?

Refer to the following manual for information on how to check if the power control device supports Systemwalker Operation Manager:

- "Hardware Resources" in the Technical Guide.

Cause

A power control device (hardware) is required for all servers targeted for power control in order to use the batch power control function. Servers not equipped with a power control device cannot be automatically powered on/off or restarted.

Action method

If performing batch power control, use a power control device (hardware) on all target servers.

Refer to the following manual.

- "Power Control" in the Technical Guide.

Description



Restarting

If using batch power control, a power control device is required by the restart processing, because it performs a power on after the power off.

Single server power control

1. Restart the server that performs power control.

Note: A power control device is not required for performing a restart.

Batch power control

- 1. Power off the target servers.
- 2. Restart the server that performs power control.
- 3. Power on the target servers.

Note: A power control device is required for performing a restart.

3.2.3 Cannot Power on

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the target host in a standby state?

Cause

Startup cannot be performed when the target host is in a standby state. In Systemwalker Operation Manager, startup can only be performed when the target host is in a shutdown state.

Action method

Shut down the target host.

3.3 Automatic Reflection Function for Calendar Information does Not Work during Cluster Operation

3.3.1 The Calendar Automatic Reflection Setup was Completed but the Calendar Information is not Reflected Automatically

Applicable versions and levels

- Windows versions: V11.0L10 or later

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 13.2.0 or later

Action 1

Points to check

- Does the local host information described in the calendar destination host definition file (calcphost.def) match the host name or corresponding physical IP address of the operating system?
- Is the logical IP address described as the node information in the calendar destination host definition file (calcphost.def)?

Cause

The logical IP address may be described instead of the physical IP address in the calendar destination host definition file (calcphost.def).

Action method

Describe the host name or physical IP address in the calendar destination host definition file (calcphost.def).

 $Check\ if\ the\ node\ information\ for\ the\ correct\ physical\ IP\ address\ is\ described\ in\ the\ calendar\ destination\ host\ definition\ file\ (calcphost.def).$

Action 2

Points to check

Does the local node information described in the calendar destination host definition file (calcphost.def) match the host name or physical IP address that will be resolved by the operating system command "hostname"?

Cause

Does the local host information or physical IP address described in the calendar destination host definition file (calcphost.def) match the host name or physical IP address of the operating system?

Action method

In addition to the node information of the reflection destination, describe the local node information in the calendar destination host definition file (calcphost.def). For the local node information, describe the host name of the network interface card (NIC) corresponding to the host name obtained by executing the operating system command "hostname", or its physical IP address.

.....



Calendar destination host definition file (calcphost.def)

The calendar destination host definition file (calcphost.def) is stored in the directory below:

Windows versions	<systemwalker directory="" installation="" manager="" operation="">\MPWALKER.JM\mpjmcal\etc</systemwalker>
Solaris versions	/var/opt/FJSVjmcal/etc
Linux versions	/var/opt/FJSVjmcal/etc
HP-UX versions	/opt/FHPjmcal/etc
AIX versions	/opt/FAIXjmcal/etc

Action 3

Points to check

Is "127.0.0.1" configured as the IP address for the name of the local host in /etc/hosts of a node in the cluster system?

Cause

In Red Hat-based Linux and Solaris 11 or later, "127.0.0.1" is configured as the default IP address for the name of the local host in /etc/hosts. In this case, the calendar information may not be automatically reflected correctly.

Action method

Correctly configure the IP address for the name of the local host in /etc/hosts, as shown below in the [After] example.

[Before]

127.0.0.1 HostName localhost

[After]

127.0.0.1 localhost

xxx.xxx.xxx HostName (*1)

*1: xxx.xxx.xxx.xxx is the IP address of HostName (local host).

Chapter 4 Troubleshooting Jobscheduler

4.1 Groups are Not Operating as Expected

4.1.1 A Job Net Starts even though the Preceding Job Net has not Been Executed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the preceding job net removed from the job net configuration for that day due to the day not being a startup day of the preceding job net?

Action method

If the preceding job net was removed from the job net configuration, review the job net startup days.

Description



Startup days and job net configuration within a group

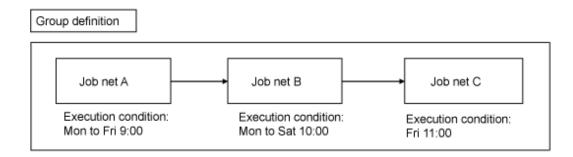
Each job net defined in a group has different execution conditions, so the configuration of job nets to be started in the group changes daily according to the execution conditions of each job net.

For example, suppose that there is a group set up to start job nets in the order "Job net A -> Job net B -> Job net C", and the execution conditions for each job net are as follows:

- Job net A: Monday to Friday 9:00
- Job net B: Monday to Saturday 10:00
- Job net C: Friday 11:00

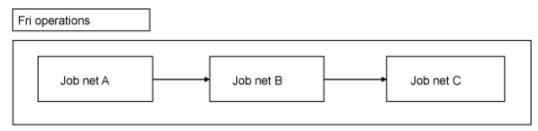
In this case, from Monday to Friday, the group starts in the order "Job net A -> Job net B", on Friday, "Job net A -> Job net B -> Job net C", on Saturday, "Job net B" only, and on Sunday the group does not start.

Also, due to the start time of the first job net for the applicable day being applied as the scheduled start time of the group, the schedule will start from 9:00 on Monday to Friday, and from 10:00 on Saturday.

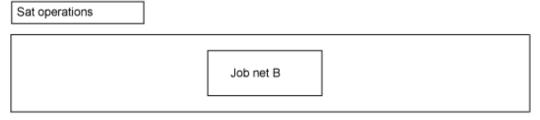




Job net A scheduled start time (9:00) will be the group scheduled start time



Job net A scheduled start time (9:00) will be the group scheduled start time



Job net B scheduled start time (10:00) will be the group scheduled start time

4.1.2 Immediately after Completion of a Group, the Same Group is Continuously Started

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is a group that was scheduled to start on the previous day or earlier carried over to the current day without being started, and the execution conditions for the current day's groups are already met when the group is started?

Action method

If there is an issue with groups operating continuously, stop the first job net in the group, and consider taking action so that the job net stops even if the group is started.

......

Description



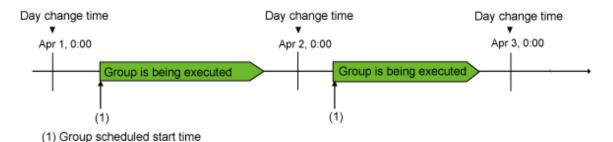
Carrying over groups to the next day or later

Groups are automatically started only once per day.

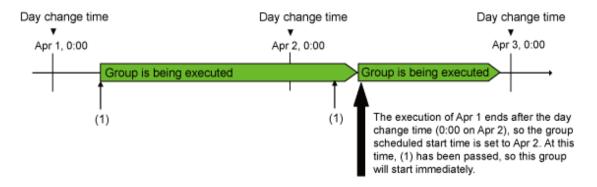
However, if execution of groups scheduled for the current day is not completed for reasons such as an extension in execution time of each job net or message events that were waited for not occurring, the startup schedule for groups is carried over as is to the following day. As soon as execution is completed for groups that were carried over from the previous day or earlier, scheduling of groups for the current day is delayed, causing the groups scheduled for execution on the current day to be in a waiting state.

If the execution conditions for the current day have already been met, the current day's groups are scheduled and started up immediately. Due to the current day's groups being started up immediately after the carried over groups, it appears as if the same group is started up twice consecutively in a single day.

When there is no problem because the group execution time is short

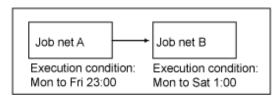


When the group is started instantly because the group execution time is long



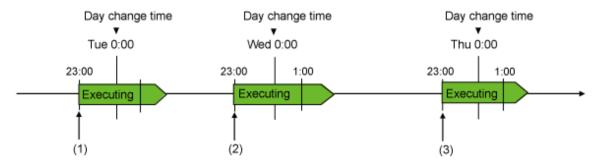
Example (assuming day change time is 0:00)

Group definition

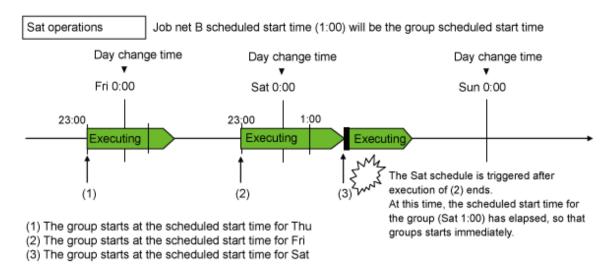


Mon to Fri operations

Job net A scheduled start time (23:00) will be the group scheduled start time



- (1) The group starts at the scheduled start time for Mon
- (2) The group starts at the scheduled start time for Tue
- (3) The group starts at the scheduled start time for Wed



Refer to the following manual:

- V10.0L20/10.1 or later

"Group Scheduling Method" in the User's Guide

4.1.3 Job Nets Cannot be Added to a Group

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Does the job net meet the conditions for being included in a group?

Cause

A group controls the execution of job nets, taking into account conditions such as startup day and execution time defined for the job nets contained in the group. While the execution conditions of individual job nets are taken into account when operating as group, the execution conditions of job nets that can be included in a group are restricted.

Action method

Check if the job net conditions meet the following.

- The job nets belong to the same project as the group.
- **Time** is specified as the **Execution condition** for a job net, and there is only one execution time registered (once per day) (If wishing to register for a group, do not specify **Interval**, **Start at the time of server startup**, or **Start only when message event has occurred**. Also, do not set multiple execution times for a single day)
- Valid during job net execution is not specified as an execution condition of message events (Do not specify this if wishing to register for a group)
- The job net is already registered for a group (The same job net cannot be registered multiple times for a single group)
- The job net is registered for another group (Job nets that are already registered for a group cannot be registered for another group.)

4.1.4 The Scheduled Startup Day of a Group Awaiting Execution becomes the Next Scheduled Startup Day when the Server is Restarted

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

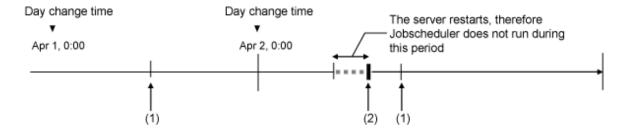
Points to check

Is a group carried over to the following day or later due to message events not matching?

Cause

If the Systemwalker Operation Manager server is restarted when a group that does not meet the execution conditions is carried over to the following day or later due to message events not matching, execution of the group is rescheduled to a new startup day during the restart.

This action takes into account cases when the server is stopped for a long period of time (ensuring that the action is not incorrectly performed for an old startup schedule), however, the startup schedule for the previous day may not be able to be performed as a result of this action.



- (1) Group scheduled start time, but on this occasion, none of the message events that the first job net in the group is waiting for have been generated, so the status is Waiting.
- (2) Jobscheduler (server) starts up. As a result, the start time for Apr 2 will be scheduled, not the start time for Apr 1.

Action method

Delete the group and then create a new one, and register the job net again.

4.1.5 The Scheduled Start Time is not Displayed for Groups and Job Nets in a Group

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The day-by-day flow of a group changes according to the startup days of job nets in the group. The scheduled start time of the group for that day and job nets in the group is decided by the day change time schedule process. Therefore, the scheduled start time is not displayed for groups or job nets that have already been executed or will not be executed on the current day.



Day change time schedule process

Groups are rescheduled, depending on the status, at the timing below:

- If a group scheduled for startup on the previous day or earlier has not been started up yet or is being executed when the day change time arrives:

After completion of execution for a group scheduled for the previous day or earlier

- If execution of a group scheduled for startup on the previous day or earlier ends abnormally or is canceled with confirm operations enabled when the day change time arrives:
 - At the moment a confirm operation is performed for a group (In V5.0L30/5.2 or later, cancellations can also be targeted for confirm operations).

4.1.6 Job Nets in a Group Start up even if the Execution Conditions are not Met

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Did you perform a startup operation on a group from the Systemwalker Operation Manager client or using the jobschctlgrp command before the scheduled start time for the group?

Cause

If a startup operation is performed on a group from the Systemwalker Operation Manager client or using the jobschotlgrp command, a message event occurs or a job net is started without waiting until the execution time arrives.

Action 2

Points to check

Have all of the following conditions been met?

- The scheduled start time for a group passes while the server is stopped
- In the Group Properties window, the Startup on power-on if power is off during scheduled execution check box is selected.
- The server was started up

Cause

A group that meets the conditions in "Points to check" above is started up during startup of the server.

Action method

If you do not want a group that meets the conditions in "Points to check" above to start, you can prevent this by disabling startup of the group before the server starts.

Action 3

Points to check

Was the group running according to the schedule of the previous day or earlier?

Cause

A job net in the group can be started when a message event that was waited for is generated and the execution time has arrived (the AND condition for time and messages). If a message event has not been generated even though the scheduled start time of the job net in the group has arrived, the job net will continue to wait for the message event to be generated, even if the day change time has arrived.

For this reason, if a message event occurs after the schedule of the previous day or earlier has carried over to the current day, it will appear as if the job nets in the group have started at or earlier than the scheduled start time for the current day.

Action method

- Action method after a problem has occurred

If the group has the "Waiting" status, the scheduled start for the current day will be skipped by performing the disable operation for the group. (The next day or thereafter will become the scheduled start day.)

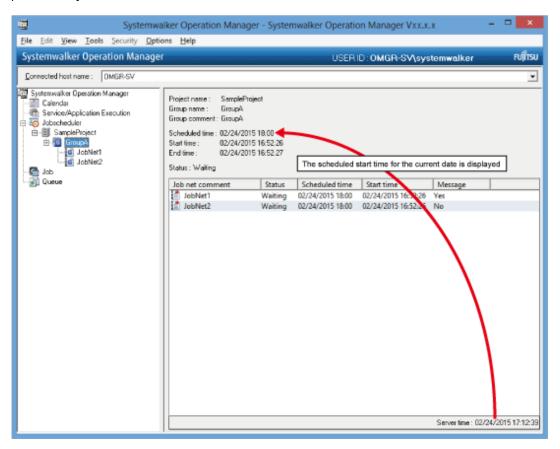
If the group is executing, perform the cancel operation.

- Action method to prevent a problem

Review the operation so that the message events that the job nets in the group are waiting for are generated on the startup day of the job nets in the group. For example, if the message events that the job nets in the group are waiting for have been set to be generated by a job in another job net, there is a method whereby a schedule pattern is used to set the startup day, so that the startup day of that job net and the job nets in the group matches.



The following example shows the **Job Net List** window if the group was started according to the schedule of the previous day or earlier.



Additionally, also refer to "4.2.3 A Job Net that Waits for a Message Event and a Startup Time is Started at an Unintended Time".

4.1.7 Even though the Preceding Job Net of the Job Nets in the Group Ended Normally, the Succeeding Job Net does not Start Instantly

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Valid execution time option set for the succeeding job net?

Cause

If the **Valid execution time** option has been set for the succeeding job net, the succeeding job net will start at the point when all the following conditions apply, regardless of whether or not the **Wait for startup time** option has been set (*1) for the succeeding job net:

- The preceding job net has ended normally, and
- The scheduled start time for the succeeding job net has arrived, and
- A message event that the succeeding job net is waiting for is generated (*2)

*1: This option can be set only when the job net waits for message events.

*2: Only a job net that waits for message events.

4.1.8 One of the Job Nets in the Group was not Started on the Current Day, or a Job Net not Scheduled to be Started was Started

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Is the current day the startup day of the job net that did not start?

Cause

The group references the startup day of the job net and then creates the flow for that day. Job nets for which the current day is not the startup day do not have flows created for them, and do not start.

Action method

Check the startup day of the job net in the group, and if there are job nets in the group that are unscheduled but should be started on the current day, set the current day as the startup day.



When changing the startup day of a job net in the group, consider the scheduled start time of the group for the current day, the timing of the generated message events, and the day change time, and perform this change during a time period that will not affect the startup of the group.

If the group starts at an unexpected time, or does not start today because the scheduled start of the group changes to tomorrow or later because of a reschedule, it may cause an unexpected problem such as the current day's group not starting.

Action 2

Points to check

Is a group running for which the scheduled start was the previous day or earlier?

Cause

When the day change time arrives, if groups for which the scheduled start is the previous day or earlier are not yet started or executing, the current day's job nets will be rescheduled once the confirm operation is performed for the group.

When the day change time arrives, if groups for which the scheduled start is the previous day or earlier have abended or were canceled when the confirm operation was enabled, the current day's job nets will be rescheduled once the confirm operation is performed for the group (Cancel can be checked in a confirm operation in V5.0L30/5.2 or later).

Description

For reschedule processing, a scheduled start time further in the future than the current time is set.

The past scheduled start time is discarded by the reschedule processing. If the job net and group exceed the scheduled start time without starting and are rescheduled, the job net start will be skipped once.

4.1.9 When the Job Net was Disabled, the Succeeding Job Net Started even though a Message Event was not Generated

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

Disabled job nets do not consider generated message events. For this reason, the job net will be skipped at the execution time of the job net, and the succeeding job net can be executed.

Action method

If you do not want to execute the succeeding job net, pause the preceding job net, and then perform the disable operation for the preceding job net when the execution conditions apply.

Description

If the continue operation is performed after the execution conditions apply when the job net has been paused, the job net that was continued will start. Additionally, if the disable operation is performed for the job net that was paused after the execution time arrived, the job net will be skipped at the same time as the disable operation.



Refer to the following for information on states where the job net cannot recognize the message:

- "4.11.1 Message Events Generated for Job Nets using the jobschmsgevent command are not Recognized"_in "4.11 The Message Event is not Recognized by the Job Net"

Also, refer to the following manual.

- V10.0L20/10.1 or later

"Operation Examples of Job Nets Waiting for Message Events" in the User's Guide

4.1.10 The Group Ends Abnormally with Code 239

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the structure of the job net changed because of the startup day of the job net in the group, or does its structure mean that the shutdown time was not reached, or the Systemwalker Operation Manager stop time was not reached?

Cause

The group structure changes daily depending on the startup days of job nets that comprise the group. If the group structure means that the system shutdown time was not reached, or the Systemwalker Operation Manager stop time was not reached, the execution will be stopped and the group will end abnormally.

Action method

Consider the structure and shutdown time of the job net in the group, and the Systemwalker Operation Manager stop time, and then perform the operation. Additionally, if this problem has occurred, perform the restart operation for the group.

Description

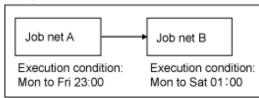


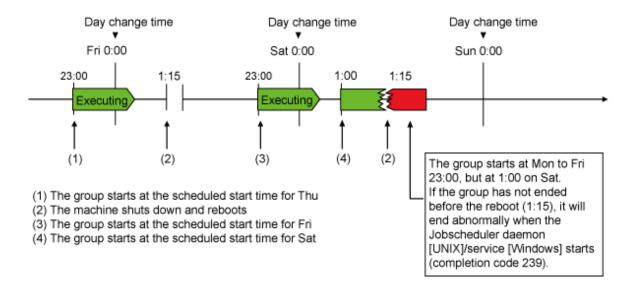
If the termination processing job net (JSHEND) is used in Windows versions, the group may end abnormally with 239. This is because the termination processing job net (JSHEND) does not wait for the group to end. The result is that all job nets in the group are shut down without ending, and the group ends abnormally with 239.

Trouble example (1)

The group is defined as shown below. Additionally, the machine is rebooted daily at 1:15.

Group definition

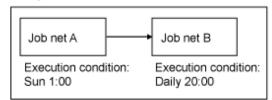


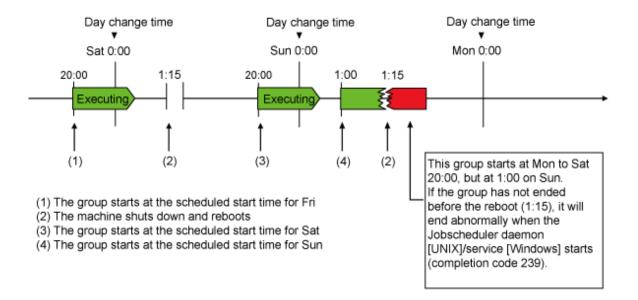


Trouble example (2)

The group is defined as shown below. Additionally, the machine is rebooted daily at 1:15.

Group definition





4.1.11 The Group does not Start

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the modify operation performed for a job net in a Waiting group after the current day's scheduled start time arrived?

Cause

If the flow, execution condition, or startup day was changed for a job net in a Waiting group after the current day's scheduled start time has arrived, a start further in the future than now will be rescheduled until tomorrow or later for the entire group, therefore the group will not be started on the current day.

Action method

Modify the job net in the group on or before the scheduled start time of the group, or after the group has ended.

Action 2

Points to check

Has the start operation for the group already been performed today?

Cause

If the start operation for the group is performed before the scheduled start time of the group, it will be assumed that the group has already started, so the group will not start at the scheduled start time for that day.

If **Scheduled time** in the **Job Net List** window is the next day or thereafter, it will be assumed that the group has already started on the current day.

Action method

Perform one of the following procedures:

- Register the group again before the scheduled start time of the group, or modify the group using the same definition content.
 - If the group is registered again or modified using the same definition content, after the scheduled start time of the group, the group will have the state described in "Cause" of "Action 1", and not start.
- Use the start operation of the group to start the group.

Note that, if the start operation is performed for the group, the succeeding job net will start immediately after the preceding job net has ended normally. (It will start without the arrival of the scheduled start time and any wait for message events.)

Note that the start operation for the group can be performed multiple times in one day.

Action 3

Points to check

Did the scheduled start time of the group arrive while the Jobscheduler service/daemon was paused?

Cause

The Jobscheduler service/daemon was paused, and the scheduled start time of the group arrived, when **Startup on power-on if power is off during scheduled execution** of the **group properties** was not selected.

Action method

Select Startup on power-on if power is off during scheduled execution as necessary.

4.1.12 Startup Days of Job Nets in the Group were Changed, however the Change was not Reflected in the Scheduled Start Time

Applicable versions and levels

- Windows versions: V5.0L10 or later
- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Does one of the following states apply?

- The applicable group has ended today
- The operation to modify the date/time for the startup was performed after the execution time of the group was exceeded, so the startup day will be today

Cause

If the group has ended, or it is the startup day for the group even though the execution time was exceeded, the group will be rescheduled to the next day change time.

The modify operation will be reflected after the day change time, so the next scheduled start day will be committed.

Action method

Wait for the day change time to arrive, and then check the scheduled start time.

4.1.13 The Group Started after the Confirm Operation

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the confirm operation performed after the scheduled start time of the group was exceeded?

Cause

If the confirm operation for the group is valid, the next start of the group will be rescheduled at the point when the confirm operation is performed. If the scheduled start time arrives after the scheduling, the group will start instantly.

Note that, if a group is waiting for message events, the group will start at the point when a message event is generated and the execution condition is met.

4.1.14 Even though the Day Change Time is Reached, the Group does not Change to the "Waiting" Status

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Did the group end abnormally, or was it canceled, last time?

In this case, was the confirm operation performed for the job net?

Cause

If you specified Validate group confirmation (*1) in the Advanced Settings for Verification window displayed when you click Details under Verification at error occurrence in the Use function1 tab in the Define Jobscheduler Startup Parameters window, the next time that the group that ended abnormally or was canceled is started will be suppressed by Jobscheduler until the confirm operation is performed.

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Use function1** tab.

Action method

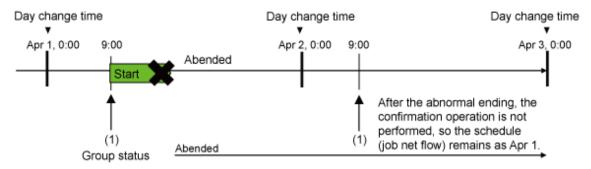
If action is required, take the action and then perform the confirm operation for the group.

If no action is required for all groups, clear **Validate group confirmation** and then restart the Jobscheduler service/daemon.

If the confirm operation was performed for the group after the day change time elapsed, the start of the group for the current day will be rescheduled at that point. An example is shown in the figure below.

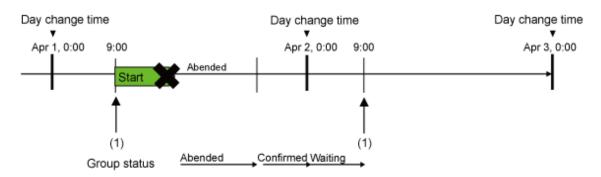
If the execution condition for the group has been prepared when the confirm operation is performed, the group will start instantly. If the execution condition for the group has not been prepared, the group will have the "Waiting" status.

When the group ends abnormally and the confirmation operation is not performed (trouble case)



(1) Group scheduled start time arrives

When the group ends abnormally and the confirmation operation is performed (non-trouble case)



(1) Group scheduled start time arrives

4.1.15 A Job Net in the Group Started on an Unscheduled Day

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is a group running with a scheduled start of the previous day or earlier, and was a message event that was waited for by a job net in the group generated?

Cause

If a message event that was waited for by a job net in the group has not been generated, the job net in the group will continue to wait for that message event to be generated. If the group has not ended even when the day change time arrives, the new start will not be scheduled, and the schedule of the previous day will be carried over. If a message event that was waited for arrives after the day change time was exceeded, the job net in the group will start on a different day to the startup day or unscheduled day.

Action method

Check the settings for the message events that the job net in the group is waiting for to ensure that they are generated on the job net startup day.

If this type of problem occurs, performing the disable operation will cause the current scheduled start to be skipped, and a new start to be scheduled based on the date at that point.

Description

In the following example, the scheduled start time is 9:00 and the group waits for a message event to be generated.

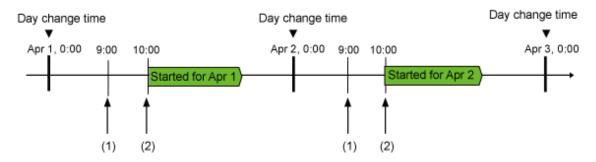
If the disable operation is performed between 9:00 on Apr 1 and 0:00 on Apr 2, the scheduled start time of the group will be Apr 2.

If the disable operation is performed between 0:00 on Apr 2 and 9:00 on Apr 2, the scheduled start time of the group will be 9:00 on Apr 2.

In these cases, the group will be started when a message event is generated on or after 9:00 on Apr 2. If the disable operation is performed between 09:00 on Apr 2 and 9:00 on Apr 3, the group will be started when a message event is generated on or after 9:00 on Apr 3.

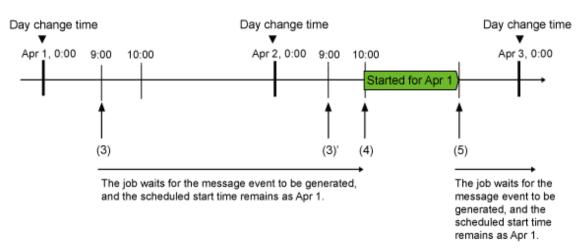
After the disable operation is performed, the enable operation is required.

Message event waited for by the job is generated on Apr 1 and 2 (normal)



- (1) The group scheduled start time arrives
- (2) The message event waited for by the job is generated

Message event waited for by the job is not generated on Apr 1 (abnormal)



- (3) The group scheduled start time arrives
- (3)' The group scheduled start time arrives
- (4) The message event waited for by the job is generated
- (5) The group start time for Apr 2 is scheduled, and the job waits for the new message event to be generated

4.1.16 A Job Net in the Group did not Start on Startup Days

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is a group running with a scheduled start of the previous day or earlier, and was a message event that was waited for by a job net in the group generated?

Refer to "4.1.15 A Job Net in the Group Started on an Unscheduled Day" for information on the cause and action method.

4.1.17 Even though the Preceding Job Net of the Job Nets in the Group was Disabled, the Succeeding Job Net does not Start

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Valid execution time option set for a disabled job net?

Cause

Even for a disabled job net, if the **Valid execution time** option is set, the job net will not be skipped if it does not satisfy the execution condition. For this reason, the succeeding job net will not start either.

Action method

Wait until the execution condition for the preceding job net is met.

4.2 The Job Net Behavior is Abnormal

4.2.1 A Job Net Started at an Unexpected Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

- Was the start operation performed?
- Was the restart operation performed?
- Was the continue operation performed?

Cause

If the start or restart operation was performed, the job net will start instantly.

The job net will also start if the execution condition was met at the point when the continue operation was performed.

Action 2

Points to check

Has the system time been changed?

Cause

If the system time is changed while Jobscheduler is running, it may run at an unintended time.

Action method

Action method when system time was changed during operation

- 1. Change the system time according to "To change the system time" below.
- 2. To restore the system time, delete the following files:
 - The jobdb1.log, jobdb2.log, and jobdb3.log files in the Jobscheduler database directory
 - All files under the net.spool subdirectory of the Jobscheduler database directory
 - Event log [Windows versions]
- 3. Start the Systemwalker Operation Manager service/daemon.

To change the system time

Change the system time using NTP (time server) and slew mode (adjust the time step by step). In this case, you can operate Systemwalker Operation Manager without problems.

If you cannot change the system time in slew mode using NTP, use the following procedure to change the system time depending on whether you are using a cluster system.

- When a cluster system has not been installed
 - Execute the poperationmgr command to stop the Systemwalker Operation Manager service/daemon, and then change the system time.
- When a cluster system has been installed

Use the cluster software to stop the Systemwalker Operation Manager cluster application, and then change the system time.

Do not change the system time while Jobscheduler is running.

Action 3

Points to check

Has the holiday calendar or schedule pattern been changed?

Cause

In V5.0L20 or earlier or V5.1 or earlier, the startup days are re-created if the holiday calendar or schedule pattern is changed.

In V5.0L30 or later or V5.2 or later, if the Halt recreation of startup days for holiday calendars and jobnets using a schedule pattern check box has not been selected on the Use function2 tab in the Define Jobscheduler Startup Parameters window, the startup day will be created again when the holiday calendar or schedule pattern is changed.

If the startup day is created again, the startup day may be changed according to the definition on the **Startup Days** tab and the **Calendar** tab (V13.3.1 or earlier) in the **Job Net Properties** window.

Action method

Review the startup day definition.

Action 4 [Windows versions]

Points to check

- Is the schedule server Windows Server 2003?
- Was system (operating system) time correction performed automatically by NTP?
- Is the BIOS clock (time) slow or fast?
- Was the job net that was started at the unintended time the first one to be executed after Jobscheduler starts?

Cause

In environments in which time compensation is performed automatically, if the BIOS clock (time) is slow or fast, time compensation for the system (operating system) clock is performed according to the NTP server clock when the system is started by the W32Time service.

In Jobscheduler, set the execution time of the job net to be executed first when the Jobscheduler service starts.

If the Jobscheduler service is started before the W32Time service, the first job net is started using the clock before time compensation is performed by the W32Time service.

For this reason, if the BIOS clock is slow or fast, the job net started first may be started at an unintended time.

Action method

If the difference in time between the BIOS clock and the NTP server clock is great (slow or fast), set the BIOS clock to the NTP server clock.



Normally, the BIOS clock is also compensated when the W32Time service ends, for example, so there is no great deviation between the NTP server and the BIOS clock.

However, in Windows Server 2003, the BIOS clock is not compensated when the W32Time service ends, so there are cases where the difference between the NTP server and the BIOS clock becomes gradually greater during operations that continue for a long time.

4.2.2 A Job Net or Job does not Start at the Intended Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Has the system time been changed?

Refer to "Action 2" in "4.2.1 A lob Net Started at an Unexpected Time" for information on the cause and action method.

Action 2

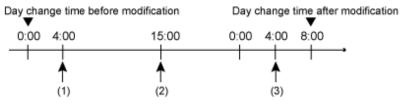
Points to check

Was the day change time changed?

Cause

If the day change time is changed after a job net for the current day has already started, the range may increase by one day, and the job net may not start.

An example is shown in the figure below.



- (1) Job net starts
- (2) Day change time is modified to 8:00
- (3) Job net does not start, because job nets for the day started in (1)

Action 3

Points to check

- Has the holiday calendar or schedule pattern been changed?
- Was the startup day set?
- Was "Invalid period" set as the operation period?

Action method

- If the holiday calendar or schedule pattern was changed

Reset the startup day in the **Startup Days** window or the **Application Plan** window.

In V5.0L20 or earlier or V5.1 or earlier, the startup days are re-created if the holiday calendar or schedule pattern is changed.

In V5.0L30 or later or V5.2 or later, if the Halt recreation of startup days for holiday calendars and jobnets using a schedule pattern check box has not been selected on the Use function2 tab in the Define Jobscheduler Startup Parameters window, the startup day will be created again when the holiday calendar or schedule pattern is changed.

If the startup day is created again, it may change.

- If the startup day has not been set
 - Set the startup day.
- If an invalid period has been set

Change the Invalid period setting as necessary. Invalid period can be changed in the following window.

[V13.3.1 or earlier]

Operation period tab in the Job Net Properties window

[V13.4.0 or later]

Startup days tab in the Job Net Properties window

Action 4

Points to check

Was the pause operation performed? Alternatively, was the disable operation performed?

Cause

If the pause operation or disable operation was performed, the job net is not started.

Action method

If the pause operation was performed ("Paused" status), perform the continue operation. If the disable operation was performed ("Disabled" status), perform the enable operation instead.

Note that, if the execution condition for the job net has been met, for example the arrival of the scheduled start time or the generation of a message event that is waited for, the job net will start at the point when the continue operation is performed.

Action 5

Points to check

Did the job net end abnormally, or was it canceled, last time? In this case, was the confirm operation performed for the job net?

Cause

If you selected Validate job net confirmation (*1) in the Advanced Settings for Verification window displayed when you click Details under Verification at error occurrence in the Use function1 tab in the Define Jobscheduler Startup Parameters window, and the job net ends abnormally, it will not be started until the confirm operation is performed. If you specified Check canceled (*1), even if the job net was canceled it will not be started until the confirm operation is performed.

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Use function1** tab.

.......



Validate job net confirmation check box

The statuses when the Validate job net confirmation check box is selected are as follows:

- UNIX versions: The confirm operation is enabled
- Windows versions: The confirm operation is disabled

If the confirm operation is invalid, in the Systemwalker Operation Manager client, **Confirm** of the job net operation will be grayed out and cannot be selected.

Action 6

Points to check

Are there a large number of job nets registered in the project?

Cause

If the number of job nets registered in the job net increases, this will affect the start performance of the job net.

Refer to the following guide.

SE versions:

Up to 255 job nets.

EE versions:

There is no limit, however use the following as a guide to the number of job nets that can be registered.

V17.0.0 or later

Windows/UNIX version: Up to 15000

V 13.8.0 and earlier

Windows versions: Up to 300

UNIX versions: Up to 500

Also, refer to the following manual.

- V10.0L20/10.1 or later
 - "Limit Values for Job Scheduling" in the Technical Guide.
 - "Notes When Registering a Large Number of Job Nets" in the *User's Guide*.
- V10.0L10/10.0

"Limit Values for Job Scheduling" in the Technical Guide.

Action method

The start performance can be improved by splitting large numbers of registered job nets into multiple projects.

The number of job nets per project can be confirmed by counting the number of job nets displayed using the jobschprint -n command.

Action 7

Points to check

- Is the Jobscheduler service/daemon running?
- Did you try to pause the Jobscheduler service/daemon using the job that was started?

Cause

The Jobscheduler service/daemon must be running at the point when the scheduled start time of the job net arrives.

If the **Startup on power-on if power is off during scheduled execution** check box has not been selected on the **Standard information** tab in the **Job Net Properties** window, the next start after the power-on will be scheduled.

Action method

- If the Jobscheduler service/daemon has stopped, start it.
- If the Jobscheduler service/daemon was stopped by the job, review the operation.
- If the **Startup on power-on if power is off during scheduled execution** check box is selected on the **Standard information** tab in the **Job Net Properties** window, the job net can be started the next time Jobscheduler starts after the power-on.

To check if the server function has started, check the following message that is recorded as soon as initialization is completed during startup.

- syslog [UNIX version]

```
MpJobsch: INFO: 0272: The jobscheduler daemon has been started. (*1)
```

- *1: It is necessary to configure the settings so that user.info information is recorded in /etc/syslog.conf.
- Event log [Windows versions]

```
MpJobsch:INFO:1308:Systemwalker MpJobsch has started normally.
```

Action 8

Points to check

Was a large number of job nets started at the same time?

Cause

If a large number of job nets is started at the same time, Jobscheduler will start them one at a time, so they may start later than the scheduled start time.

Action method

Examine if it is possible to distribute the scheduled start times of job nets so that processing is not concentrated.

Action 9

Points to check

Is the jobschprint command output stopped by the more command?

The following methods can be used to check.

[UNIX versions]

Execute the ps command to check if the jobschprint process exists.

[Confirmation example]

```
ps -ef | grep jobschprint
```

[Windows versions]

Use Task Manager on the server on which the server function is installed to check if the jobschprint process exists.

Cause

If the output of the jobschprint command was stopped using the more command, the schedule information file will be locked for a long time, so the job net start processing will wait for the schedule information file to be unlocked.

Action method

Redirect the jobschprint command output result to a file, for example, so that it can be referenced using a text editor.

[Confirmation example]

```
jobschprint -n > printn.txt
```

Action 10

Points to check

- Is a large number of Systemwalker Operation Manager clients connected?

The number of connected clients can be checked by executing the jobschprint -u command.

[Confirmation example]

jobschprint -u

Jobsch User List date: YYYY/MM/DD time: HH:MM

User Name Client Name

Administrator CL1(XXX.XXX.XXX.XXX)
Administrator CL2(xxx.xxx.xxx.xxx)

XXX.XXX.XXX and xxx.xxx.xxx is the client machine IP address

- Did you press F5 many times in a row on the Systemwalker Operation Manager client?

Cause

The Systemwalker Operation Manager client periodically obtains job net information and refreshes the window. At that time, the schedule information file on the Systemwalker Operation Manager server is read.

If the number of connected Systemwalker Operation Manager clients is increased, the number of window refreshes increases, and a schedule information file lock occurs on the server.

Also, even if F5 is pressed many times in a row on a single Systemwalker Operation Manager client, the same issue as that for a large number of connected Systemwalker Operation Manager clients occurs.

Action method

Keep the number of simultaneously connected Systemwalker Operation Manager clients to a minimum.

Also, do not press F5 too many times in a row on Systemwalker Operation Manager clients.

Ensure to verify sufficiently before deciding on the number of connections.

Action 11

Points to check

Was the Jobscheduler database directory placed on a disk with slow access speeds?

Cause

When the Jobscheduler database directory is placed on a disk with slow access speeds, file access performance drops and may prevent Jobscheduler from demonstrating the level of performance it was designed for.

The delays in starting job nets simultaneously are particularly significant when a large number of job nets are started.

Action method

It is recommended that you distribute the disk I/O load and place the job scheduler database directory on a high-performance (high access speeds) disk.

Action 12

Points to check

Did you add time-consuming processing to the exit at completion of job nets/jobs?

Cause

The Jobscheduler waits for the exit processing to end, and when they have ended, it receives the next request.

Accordingly, if processing that takes a while for a job net or job end exit is implemented, the next job net or job start may be delayed.

Action method

Do not implement processing that takes a while for a job net or job end exit. Alternatively, implement background exit processing.

Action 13

Points to check

Was virtual time set in test mode?

Action method

Select Release the virtual time on the Test mode tab in the Define Jobscheduler Startup Parameters window, that is displayed when Startup parameter is clicked in the Systemwalker Operation Manager Environment Setup window. Then, restart the Jobscheduler service/daemon.

Action 14

Points to check

Has a message event not been generated for a job net for which Wait for startup time is selected?

Cause

If **Wait for startup time** is selected, the job net will not be started even if the execution time arrives, unless a message event is generated.

Action 15

(V11.0L10/11.0 or later)

Points to check

Does the job net have "Carried over" status?

Cause

If the scheduled start time for today arrives and the job net has "Carried over" status, the job net will not start. Job nets for which the scheduled start is today will be "Refused".

Action 16

Points to check

Is the message queue depleted? Check this using the ipcs command.

Confirmation example

# ipcs -aq										
IPC status from <running system=""> as of 2005 August 8 (Mon), 11:26:23 JST</running>										
T ID	KEY	MODE OW	NER GRO	OUP CREAT	OR CGROU	P CBYTES Q	NUM QBY	TES I	SPID L	RPID
STIME RTIME	CTIME									
Message Queues:										
q 8300	0x2006528	-Rrw-rw-rw-	root	other	root	other	0	0	4096	7529
7528 11:22:19 1	11:22:19 11	:14:06								
q 3551 0	0x3006528	rw-rw-rw-	root	other	root ot	her 560	40	4096	7449	7530
11:22:49 11:21:44 11:14:07										
q 2102	0x5006528	-Rrw-rw-rw-	root	other	root	other	0	0	4096	7529
7531 11:22:19 1	11:22:19 11	:14:07								
q 2053	0x7006528	-Rrw-rw-rw-	root	other	root	other	0	0	4096	7355
7532 11:15:06 1	11:15:06 11	:14:07								

Check the CBYTES and QNUM fields. If the total of these values is large, it can be determined that the message queue is depleted.

Cause

The Jobscheduler daemon comprises multiple daemon processes, and uses the message queue (IPC resources) to operate while mutually synchronizing. If the Jobscheduler daemon performs retry processing because of a communication failure between processes, it may not be possible to display the job status correctly.

Action method

Tune the message queue. Alternatively, check if there is an application that is consuming the message queue abnormally.

Refer to "4.13.4 The Jobscheduler Server Processing Hangs up [UNIX Versions]" for information on message queue tuning.

Action 17

Points to check

Was a large number of changes made to the holiday calendar?

Cause

If large numbers of calendars are corrected and then saved, it may take a while to create the startup day again.

Action method

When changing holiday calendars, allow sufficient time for every change.

Action 18

Points to check

Has the job net or job end exit processing ended?

[Windows versions]

Use Task Manager to check if the exit process has ended.

[UNIX versions]

Execute the ps command to check if the exit process has ended.

Cause

Jobscheduler waits for the exits to end, and when they have ended, it receives the next request. Accordingly, if processing is stopped at the job net or job end exit, the job net or job start processing cannot be performed.

Action method

If the exit does not end, restart the Jobscheduler service or daemon. Additionally, correct the job net or job end exit processing.

Action 19

Points to check

Was a different day change time set for the active node and the standby node?

Action method

Set the same day change time for the active node and the standby node.

4.2.3 A Job Net that Waits for a Message Event and a Startup Time is Started at an Unintended Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was Wait for startup time selected?

Cause

If **Wait for startup time** is not selected, the job net time condition and the wait for message condition will be handled as separate execution conditions, so the job net will be started only when the startup time arrives, or when a message event is generated.

Action method

Ensure that Wait for startup time is selected on the Message tab in the Job Net Properties window.

Action 2

Points to check

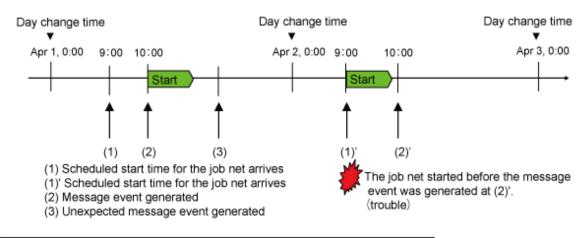
Are there message events that were waited for remaining?

Cause

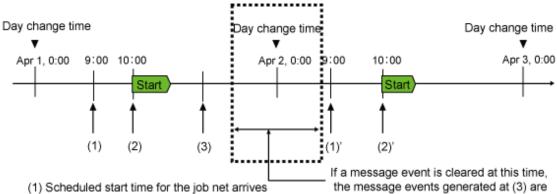
The number of occurrences of message events is counted as shown in the example below. If excessive message events occurred or message events remained due to job net start operations previously, job nets may start in combination with previous messages even if message events that were supposed to occur for that day did not occur.

For example, a job net that starts when the scheduled start time (9:00) arrives, and in which message events are generated every day, is registered. Here, if a message event that is waited for on Apr 1 is generated after the job net starts, it will be recognized that this message event was generated. As a result, when Apr 2 (9:00) arrives, the job net starts and may cause a problem.

Excess message events generated (trouble case)



Message events are cleared (non-trouble case)



- Scheduled start time for the job net arrives
- (1)' Scheduled start time for the job net arrives
- (2) Message event generated
- (2) Message event generated
- (3) Unexpected message event generated

Action method

Check the current occurrence status of message events in the jobschprint -a command execution result (an "*" mark is displayed for message events that have already occurred at the point when the jobschprint command is executed), or in the Message Event List window.

cleared, and the job net starts at (2)'.

If message events that were not expected to occur on this day have been notified, this could be due to past message events that still remain, therefore, execute the jobschmsgclear command to clear these messages.

Action 3

Points to check

Did the effective user of the jobschmsgclear command try to clear a message event without the message event clear rights, causing the message to remain?

Action method

To clear a message event, grant operation rights to the effective user of the jobschmsgclear command as the access rights for the project that the job net belongs to.

4.2.4 A Job Net that Waits for Message Events and the Execution Time is not Started, even if a Message Event was Generated and the Execution Time was Exceeded

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2. V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the scheduled start (startup day) or job net information changed after the message event was generated?

Cause

If the following changes were performed after the message event was generated but before the execution time arrived, Jobscheduler will create the scheduled start of the job net again (rescheduling processing).

- The job net startup days were changed
- Information was changed in the Job Net Properties window
- Job net temporary change information was set/changed/cleared
- The operation was scheduled
- The execution condition for the base job net was changed(*1)

The generated message event is cleared as a result of this rescheduling processing. For this reason, the job net is not started even if the execution time arrives.

*1: If Another job net is used as Another base job net on the Startup Days tab [V13.4.0 or later] or Standard information tab (V13.3.1 or earlier) in the Job Net Properties window, the scheduled start will also be created again when the execution condition for the selected base job net is changed. The execution condition for the selected base job net is changed in the following cases:

- The job net startup days were changed
- Information was changed in the Job Net Properties window
- Job net temporary change information was set/changed/cleared
- The startup day was changed in the Application Plan window

Action method

Change the job net information at a time that will not affect the job net operation.

Action 2

Points to check

Was the message event cleared using the jobschmsgclear command?

Action method

Execute the jobschmsgclear command at a time that will not affect the job net operation.

The message event can also be generated again using the jobschmsgevent command, however consideration should also be given to the effect on other job nets.

Action 3

Points to check

Was the server stopped at the point when the execution time arrived?

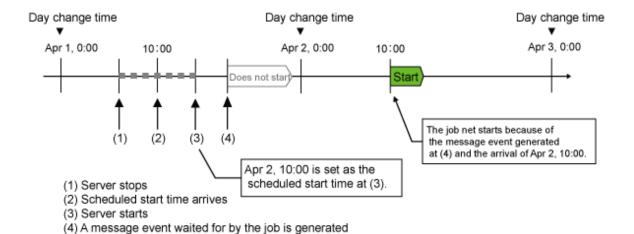
Cause

If **Startup on power-on if power is off during scheduled execution** is not selected on the **Standard information** tab in the **Job Net Properties** window, the scheduled start for that day will be skipped at the point when the server starts.

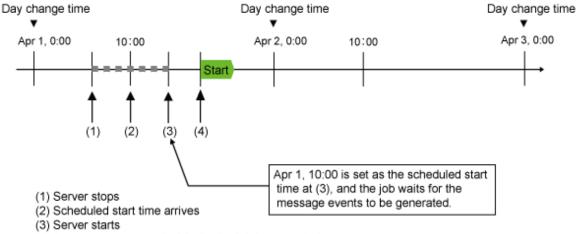
Action method

If the **Startup on power-on if power is off during scheduled execution** check box is selected on the **Standard information** tab in the **Job Net Properties** window, the job net will start the next time Jobscheduler starts.

When "Startup on power-on if power is off during scheduled execution" is not selected (trouble case)



When "Startup on power-on if power is off during scheduled execution" is selected (non-trouble case)



(4) A message event waited for by the job is generated

4.2.5 Job Nets that should Start when Multiple Message Events are Generated Started, even though Not All Multiple Message Events were Generated

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action 1

Points to check

On the **Message** tab in the **Job Net Properties** window, was **Start when a message event occurs** set as the wait condition?

Action method

To wait for all message events, select Start when all message events have occurred.

Action 2

Points to check

Have message events from other unintended job nets occurred?

Action method

Check if message events from other job nets have occurred.

Action 3

Points to check

Are there message events that were waited for remaining?

Cause

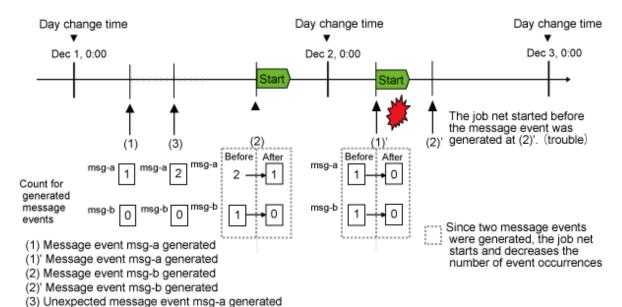
The cause may be the same as the cause described in "Action 2" of "4.2.3 A Job Net that Waits for a Message Event and a Startup Time is Started at an Unintended Time".

For job nets for which the only execution condition is "when the message event is generated", the number of times each message event is generated is counted.

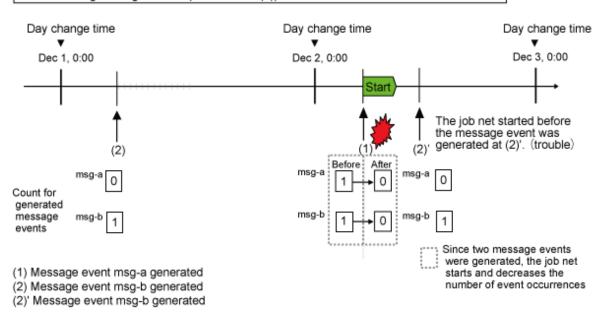
The number of occurrences of message events is counted as shown in the example below. If excessive message events occurred or message events remained due to job net start operations previously, job nets may start in combination with previous messages even if message events that were supposed to occur for that day did not occur.

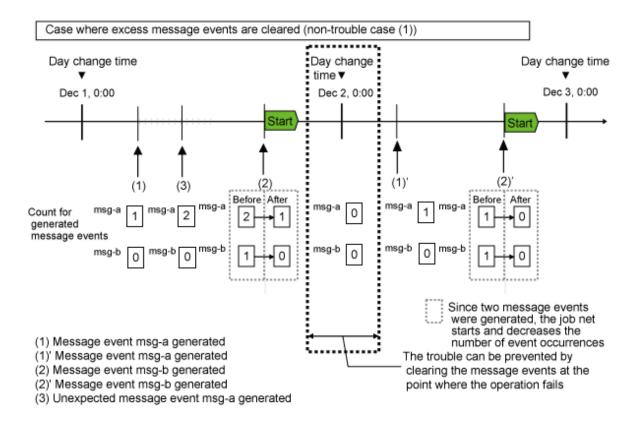
For example, in a job net that waits for msg-a and msg-b, msg-a was generated twice, and msg-b was generated once on Dec 1. The msg-a and msg-b message events were both generated on Dec 1, so the job net was started, but one extra msg-a event was generated. On the next day (Dec 2) when msg-a and msg-b are to be generated, the job net will be started when msg-b is generated even if msg-a is not generated yet (because msg-a remains from the previous day). If msg-a is generated after that, the job net will be started if msg-b is generated on the next day as well.

Excess message events generated (trouble case (1))

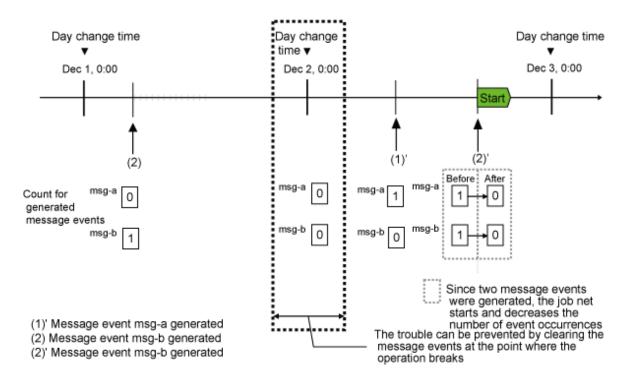


Some messages not generated (trouble case (2))









Action method

Perform the action method described in "Action 2" of "4.2.3 A Job Net that Waits for a Message Event and a Startup Time is Started at an Unintended Time".

Check the current occurrence status of message events in the jobschprint -a command execution result (an "*" mark is displayed for message events that have already occurred at the point when the jobschprint command is executed), or in the **Message Event List** window. If message events that were not expected to occur on this day have been notified,

this could be due to past message events that still remain, therefore, execute the jobschmsgclear command to clear these messages.

4.2.6 A Job Net that should have Started Starts Again

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was Valid during job net execution selected in the Message tab in the Job Net Properties window?

Cause

If the **Valid during job net execution** check box is selected, and a message event that is waited for is generated while the job net is executing, the job net restarts immediately after it has ended.

Action method

Review the Job Net Properties window >> Message tab settings.

Action 2

Points to check

Was the job net execution condition set to execute the job net multiple times?

Action method

Review the Job Net Properties window >> Standard information tab settings.

If multiple times were specified for **Execute at**, or **Interval** was specified, review the specified content and ensure that it is correct.

4.2.7 Even though the Job Net should not Start on the Current Day because of the Invalid period setting on the Startup days tab (V13.4.0 or later) or Operation period tab (V13.3.1 or earlier) in the Job Net Properties window, it does Start

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Was Start only when message event has occurred specified on the Standard information tab in Job Net Properties?
- Was the start operation performed for the job net?

Cause

If **Start only when message event has occurred** is specified and **Valid only on startup days** is not specified, the job net starts when a message event is generated. Additionally, for job nets for which the start operation is performed, the job will start even if **Invalid period** is set.

Action method

If you do not want the job net to start according to any execution condition, disable the job net.

4.2.8 Even though a Holiday was set in the Calendar, the Job Net is Started when a Message is Generated

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2. V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Valid only on startup days check box selected on the Message tab in Job Net Properties window?

Cause

If the Valid only on startup days check box is not selected, the job net is started regardless of the startup day.

Action method

Select the **Valid only on startup days** check box. Accordingly, the job net will not be started on a holiday, even if a message is generated.

4.2.9 Even though a Message Event was Generated, the Job Net does not Start

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Check the following:

- Was the message event cleared using the jobschmsgclear command?
- Was Wait for startup time selected, but the startup time has not arrived yet?
- Was Valid only on startup days selected, but the startup day was not set?
- Was Valid only on startup days selected, but the message event was generated on an unscheduled day?
- Was Start when all message events have occurred selected as the wait condition, but no message was generated?
- Is the host name that generated the message event valid?
- Is the subsystem number that generated the message event valid?
- Do the name of the generated message event, and the name of the message event that the job net waits for, match?
- Was the pause operation performed?
- Was the disable operation performed?
- Is the message queue depleted? Check this using the ipcs command.
- If the execution conditions selected for the job net are **Start only when message event has occurred** and **Once in a day**, has the job net already been started once today by the generated message event? (V11.0L10/11.0 or later)

Action method

If one of the above cases applies, review the definition.

Additionally, if the pause operation was performed ("Paused" status), perform the continue operation. If the disable operation was performed ("Disabled" status), perform the enable operation instead.

If the message queue is depleted, refer to "4.2.2 A Job Net or Job does not Start at the Intended Time" and take the action explained in "Action 16".

In Windows versions, the generation state of the message event can be checked in the event log (application log).



Messages generated while the job net has the "Paused" status will be recognized, but messages generated while the job net has the "Disabled" status will not be recognized.

Action 2

Points to check

- Was the day change time changed?

- [V11.0L10/11.0 or later]

Was the message event changed before the day change time for a job net for which **Once in a day** is specified in **Start only when message event has occurred** as the execution condition?

Cause

If Once in a day is specified in Start only when message event has occurred as the execution condition, the message event that is being waited for will be cleared when the day change time occurs. Additionally, if the day change time is changed, message events received by the job net for which Once in a day is specified in Start only when message event has occurred will be cleared at the point when the day change time is changed.

Action method

- Generate the message event within the day change time.
- After the day change time was changed, generate the message event again.

4.2.10 Even though a Message Event was not Generated, the Job Net Starts

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Are there message events remaining that were generated in the past?

Cause

Generated message events will remain if the job net started after the execution condition was met, or unless the message event was not cleared using the jobschmsgclear command.

If the job net was started manually, the message event will not be cleared.

Action method

Check the generation state of the message in the **Message Event List** window, and then clear the message using the jobschmsgclear command.

Action 2

Points to check

Was Start only when message event has occurred selected?

Cause

If **Start only when message event has occurred** is not selected, the job net may start by another execution condition being met.

Action method

To start the job net only after a message event has occurred, select **Start only when message event has occurred**. If there are also other execution conditions, review the execution conditions of the job net and then set the execution condition according to the operation.

Action 3

Points to check

Have message events from other unintended job nets occurred?

Action method

Check if message events from other job nets have occurred.

Note that, if jobschmsgevent is specified directly in the command field, the jobschprint-a command can be used to identify the job that generated the message event.

4.2.11 There is no Job Net Schedule, so the Job Net is not Started

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the execution condition changed for a job net not yet started for which the scheduled start time was exceeded?

Cause

When the job net execution condition is changed (this includes changes to calendars), the schedule will be created again. At this time, for a job net not yet started for which the execution time was exceeded, the next (future) schedule will be used.

Action method

Change the execution condition for the job net at a time that will not affect the job net operation.

Action 2

Points to check

Has the policy been distributed?

Cause

- When Systemwalker Operation Manager is restarted following distribution of the **Calendar** policy, the startup days for job nets that are using the changed calendar are re-created. For this reason, the startup days set in the **Startup Days** window or the **Application Plan** window will be cleared individually.

- If the only policy distributed is **Schedule DB/schedule pattern**, the startup days will not be re-created, and the information at the time the policy is extracted will be used for the startup days.

Action method

Firstly, in the **Startup Days** window, check if the applicable day is the startup day. Afterwards, perform the following procedure as necessary.

- After distributing the **Calendar** policy, reset the startup days in the **Startup Days** window or the **Application Plan** window individually.
- In V5.0L30/5.2 or later, to suppress again the creation of the job net startup day by the Calendar policy distribution, select Halt recreation of startup days on the Use function2 tab in the Define Jobscheduler Startup Parameters window (this window is displayed by clicking Startup parameter in the Systemwalker Operation Manager Environment Setup window) (*1). It is necessary to restart Jobscheduler afterwards.
- If the only policy distributed is **Schedule DB/schedule pattern**, use one of the following methods to correct the startup days setting.
 - Set the startup days individually in the Startup Days window or Application Plan window.
 - Change the startup days in the **Job Net Properties** window.
 - Change the schedule pattern and calendar used by the job net (*2)

*1: The startup days will not be re-created if the **Halt recreation of startup days** check box is selected under the **Use function2** tab in the **Define Jobscheduler Startup Parameters** window.

*2: This affects all job nets that use a schedule pattern and calendar.

4.2.12 The Job Net is Refused, and does not Start

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Was the execution condition met when the job net had the "Refused" status?

Cause

If the execution condition is met when the statuses are as follows, the job net will be "Refused", and will not be started:

- The execution condition is met when the job net has the "Executing" status or the "Warning" status.
- In an environment in which **Validate job net confirmation** (*1) is specified in the **Advanced Settings for Verification** window that is called from **Define Jobscheduler Startup Parameters**, the execution condition for the job net is met when the job net has the "Abended" status.
- In an environment in which **Check canceled** (*1) is specified in the **Advanced Settings for Verification** window that is called from **Define Jobscheduler Startup Parameters**, the execution condition for the job net is met when the job net has the "Canceled" status. (V10.0L20/10.1 or later only)

- When the job net is in the "Paused" status, two or more execution conditions are met.
- A job net that has the "Carried over" status has reached the current day's scheduled start time (V11.0L10/11.0 or later).

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Use function1** tab.

Action method

Review the operation as necessary, so that the job net is not "Refused".

4.2.13 The Job Net Starts at a Time that is not in Sync with the Registered Scheduled Start Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is Japan time used in the time zone? Was a zone that uses daylight saving time specified?

Action method

After stopping Jobscheduler, change the time zone to Japan time, and then restart Jobscheduler.

Refer to the following manual for information on precautions required when changing the system time.

- V10.0L10/10.0 or later:

"Cautions on Changing Time" in the User's Guide

4.2.14 The Job Net Starts One Day Later than the Registered Startup Day

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the scheduled start time earlier than the day change time?

Cause

The day change time is the time at which that working day starts. The time before the day change time will be the previous day.

Action method

Set the startup day one day earlier than the actual day.

4.2.15 A Job Net for which it was not the Startup Day was Scheduled, or Started

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Has the policy been distributed?

Cause

- When Systemwalker Operation Manager is restarted following distribution of the **Calendar** policy, the startup days for job nets that are using the changed calendar are re-created. For this reason, the applicable day may become the startup day.
- If the only policy distributed is **Schedule DB/schedule pattern**, the startup days will not be re-created, and the information at the time the policy is extracted will be used for the startup days.

Action method

Firstly, in the **Startup Days** window, check if the applicable day is the startup day. Afterwards, perform the following procedure as necessary.

- Even though it is not the startup day, if it becomes the startup day, change it to **Unscheduled** in the **Startup Days** window or the **Application Plan** window.
- In V5.0L30/5.2 or later, to suppress the creation of the job net startup day again by the Calendar policy being distributed, select the Halt recreation of startup days check box on the Use function2 tab in the Define Jobscheduler Startup Parameters window, that is displayed by clicking Startup parameter in the Systemwalker Operation Manager Environment Setup window (*1). It is necessary to restart Jobscheduler afterwards.
- If the only policy distributed is **Schedule DB/schedule pattern**, use one of the following methods to correct the startup days setting.
 - Set the startup days individually in the Startup Days window or Application Plan window.
 - Change the startup days in the **Job Net Properties** window.

- Change the schedule pattern and calendar used by the job net (*2)
- *1: The startup days will not be re-created if the **Halt recreation of startup days** check box is selected under the **Use function2** tab in the **Define Jobscheduler Startup Parameters** window.
- *2: This affects all job nets that use a schedule pattern and calendar.

Action 2

Points to check

Was an unscheduled day set without using the Yearly Holiday Setup window?

Cause

If the startup days or unscheduled days are set for only three years in the calendar without using the **Yearly Holiday Setup** window, the startup days or unscheduled days for the fourth year and thereafter will not be set.

Action method

Use the Yearly Holiday Setup window for these settings.

4.2.16 If a Failover has occurred on a Cluster Operation Server, an Unintended Job Net is Started

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 10.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

V11.0L10/11.0 or later

Were settings configured to reflect the calendar information automatically?

V10.0L21/10.1 or earlier

Are the following points different on the active and standby nodes?

- day change time
- SYSTEM CALENDAR schedule information
- Holiday information except for SYSTEM_CALENDAR

Cause

If the calendar information (day change time, SYSTEM_CALENDAR schedule information, holiday information except for SYSTEM_CALENDAR) on the active and standby nodes is different, the start schedule for the job net will also be different, so the job net may start on an unintended date/time.

Action method

V11.0L10/11.0 or later

Configure settings to reflect the calendar information automatically.

Refer to the following manual for information on the automatic reflection settings.

- The Cluster Setup Guide for each cluster

V10.0L21/10.1 or earlier

Unify the day change time, SYSTEM_CALENDAR schedule information, and holiday information except for SYSTEM CALENDAR, on the active and standby nodes.

The day change time, SYSTEM_CALENDAR schedule information, and holiday information (except for SYSTEM_CALENDAR) on both nodes can be unified by making the same change on the other node as well.

Additionally, the day change time, SYSTEM_CALENDAR schedule information, and holiday information except for SYSTEM CALENDAR on each node can also be unified using the method below.

[Windows versions]

Extract/distribute the policy information. The procedure for extracting the policy information on the active node and distributing it to the standby node is shown below.

1. Connect to the node that is running

In the **Start** menu, select **Systemwalker Operation Manager** from **All Programs**, and then click **Environment Setup** from the submenu that is displayed. The **Host connection specification** window will be displayed, so specify the node (active) from which the policy is to be extracted, and then click **OK**.

2. Extract the policy

In the **Systemwalker Operation Manager Environment Setup** window that is displayed, click **Extract policy**. The **Extract Policy** window will be displayed, so select the **Registration information** tab, and then select **Calendar**.

3. Specify the distribution destination

In the **Systemwalker Operation Manager Environment Setup** window, click **Distribute policy**. The **Distribution specification** window will be displayed, so specify the distribution destination node (standby) as the distribution destination, and then click **OK**.

4. Select the timing for applying the policy

The **Apply Policy** window will be displayed, so select the timing for applying the policy. In cluster operations (in which the "Operation Manager" service is running), select **Apply at the next service startup**. Note that, in cluster operations, **Apply at &once.** (**Restart the service.**) cannot be specified. If this is specified, an error message will be output. For this reason, to distribute the policy immediately, restart the service manually.

[UNIX versions]

Perform the following procedure:

1. Execute the rcp command to copy the following file to the other node:

```
/var/opt/FJSVjmcal/caldb/*.*
```

2. After unifying the calendar information, restart Systemwalker Operation Manager.

Note that, when the above policy extraction/distribution and file copy using the rcp command have been performed, the following information will also be unified on both nodes:

- SYSTEM_CALENDAR power schedule information
- SYSTEM CALENDAR completion monitoring information

Also refer to the following manual:

- V10.0L10/10.0 or later

"Standardizing Systemwalker Operation Manager environment definitions" in the Cluster Setup Guide.

4.2.17 The Job Net that Ended Abnormally Yesterday still has the "Abended" Status Today

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

In the schedule processing when the day change time arrives, if today is not the startup day, **Status** in the **Job List** window will display the status for the previous operation.

Action method

Check if today is the startup day.

- If today is the startup day, job nets started today will end abnormally.
- If today is not the startup day, the status for the previous operation will be displayed.

4.2.18 Job Nets are Not Completed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action 1

Points to check

Is the message queue depleted?

Refer to "Action 16" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 2

Points to check

Is jobschprint command output stopped by the more command?

Refer to "Action 9" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 3

Points to check

Did you add time-consuming processing to the exit at completion of job nets/jobs?

Refer to "Action 12" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 4

Points to check

Are the starting and ending of job nets or jobs concentrated within a short period of time?

Cause

Jobscheduler executes the job net or job start or end processing one at a time. If the job net or job start or end processing is concentrated within a short period of time, the processing may take a while.

Action method

Examine if it is possible to distribute the scheduled start times of job nets so that processing is not concentrated.

In the **Gantt Chart** window or the jobschprint -n command result, the concentration of start time, end time, starts, and ends for job nets can be checked.

4.2.19 After the Day Change Time, a Job Net not Scheduled to Start Today Changed Status to the "Waiting" Status

Applicable versions and levels

- Windows versions: V11.0L10 or later

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action

Points to check

Were the Start only when message event has occurred check box and the Once in a day check box selected on the Standard information tab in the Job Net Properties window?

Cause

Job nets for which the **Start only when message event has occurred** check box and the **Once in a day** check box were selected will all be Waiting when the day change time arrives.

4.2.20 The Startup Delay Exit Started at an Unintended Time

Applicable versions and levels

- Windows versions: V11.0L10 or later

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action

Points to check

Were the Start only when message event has occurred check box and Scheduled start time selected on the Standard information tab in the Job Net Properties window for the job net?

Cause

If the scheduled start time arrived when the job net for which the **Start only when message event has occurred** check box and **Scheduled start time** were selected was paused or disabled, the startup delay exit will start.

4.2.21 The Job Execution Control Attribute/Interstage Attribute Job are Running, but the Job Net Ends Abnormally

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Jobscheduler service/daemon paused or restarted while the Job Execution Control attribute/Interstage attribute job net was executing?

Cause

When the Jobscheduler service/daemon is paused, the job that is executing is not canceled. For this reason, even if only Jobscheduler is paused, Job Execution Control attribute jobs and Interstage attribute jobs (WorkUnits) continue running. When the Jobscheduler service/daemon next starts, the job net containing the Execution Control attribute/ Interstage attribute job will end abnormally.

Action method

To pause Jobscheduler while the Job Execution Control attribute/Interstage attribute job net is running, cancel the Job Execution Control attribute/Interstage attribute job net first.

Refer to the Interstage manuals for information on pausing the WorkUnit.

4.2.22 The Execution Result is not Displayed on the Previous log tab in the Monitor - Job window, or in the Job Output Info window

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

Action 1

Points to check

Was the job net skipped?

- DS versions: V20L10

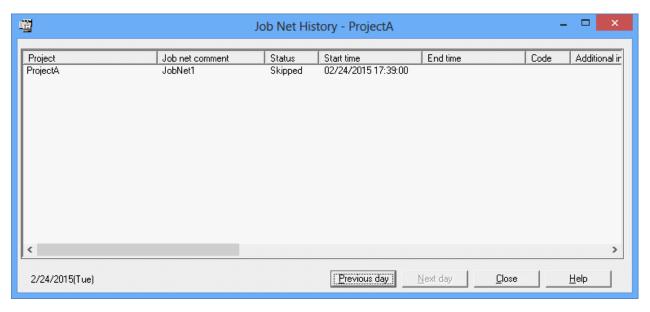
Cause

If the job net was skipped, it will be treated as though it was executed pseudo-normally. In fact, the job net has not been executed, therefore no output information for the job exists, so nothing will be displayed.

Note that the skipping of the job net occurs when the execution condition was established in a disabled state.

Whether or not the job net was skipped can be checked in the Job Net History window.

Job Net History window in V13.8.0



Action method

There is no action after the job net was skipped. Before the job net is skipped, back up the following file under the Jobscheduler database directory:

[Windows versions]

- - ctName>_<jobNetName>_nnn.log" (*1)

[UNIX versions]

- - projectName>_<jobNetName>.log" (*1)

Action 2 [UNIX versions]

Points to check

Was the job canceled? (V13.2.0 or earlier)

Cause

The output information for canceled jobs is not displayed.

Action method

No action is required.

4.2.23 The Startup Day Information set in the Startup Days window or the Application Plan window is not Reflected

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the information related to the startup day changed (on the **Startup Days/Calendar/Operation period** tab) in the **Job Net Properties** window?

Cause

If the following tabs are changed in the **Job Net Properties** window, Jobscheduler will create the startup day again according to the settings on each tab:

- The Startup days tab
- The Calendar tab (V13.3.1 or earlier)
- The Operation period tab (V13.3.1 or earlier)

For this reason, the startup day information (exception day) set in the **Startup Days** window or the **Application Plan** window will be cleared.

Additionally, if the jobschsetnet -ncheall command is executed, or if the job net control statement, in which the following operands are specified, is used to execute the jobschsetnet -nche command, the startup day will also be created again, so the startup day information (exception day) will be cleared.

If the following operands marked with an asterisk are specified, the startup day is created again only if you specify an operand value that differs from the value before the change.

- execpattern (*)
- execpatmode (*)
- basenet (*)
- annualydate
- annualyweek
- monthlydate
- monthlyweek
- bnsmode (*)
- bnsbase (*)
- bnsday
- bnslimit (*)
- offsetmode
- offsetday
- offsetholiday (*)
- holidaycalendar (*)
- holidaymode
- holidayshift (*)
- shiftlimit
- enablestart
- enableend
- disablestart
- disableend

Action method

To reset the startup day that was cleared, set the startup day information individually in the **Startup Days** window or **Application Plan** window of the job net.

4.2.24 Even though a Specific Day is Set as an Unscheduled Day in the Schedule Pattern, it is still a Startup Day

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

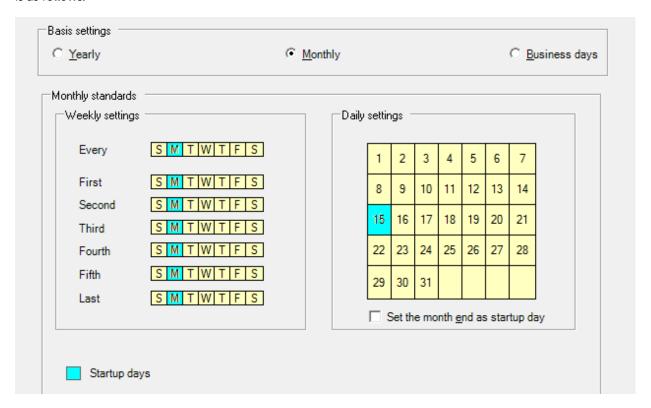
Points to check

Was the startup day set for a day of the week in the schedule pattern?

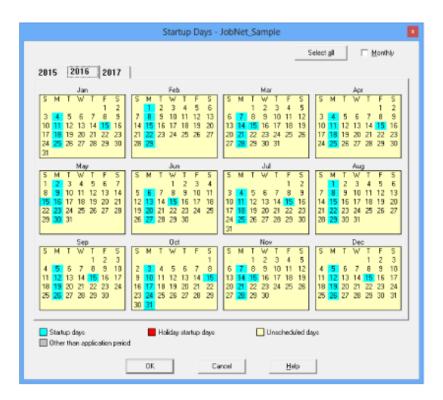
Cause

Even if a specific day is unscheduled, if the startup day is set for a day of the week, the job net will start when the unscheduled day and the day of the week set as the startup day overlap.

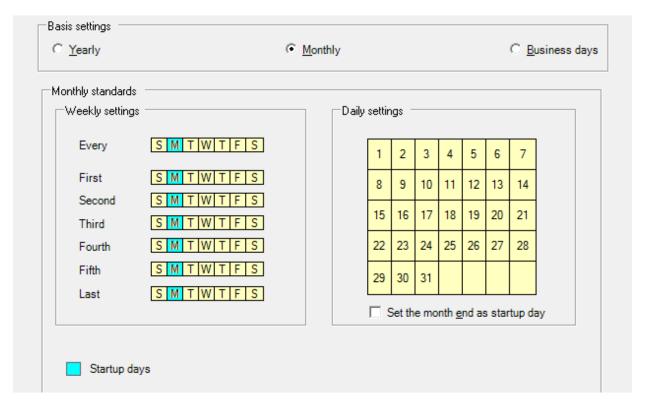
For example, the schedule pattern for using every Monday and the 15th of each month as startup days (V13.8.0 or later) is as follows:



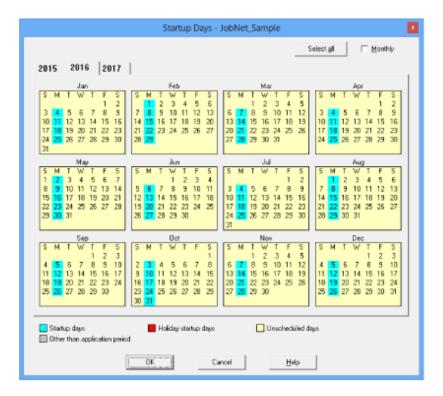
The job net startup days using this schedule pattern are as follows.



If the 15th of each month is set as an unscheduled day from the above schedule pattern, the schedule pattern is as follows:



The job net startup days using this schedule pattern are as follows.



Every Monday is set as the startup day, so in this case, the job net will start on May 15th, even if the 15th of each month is set as an unscheduled day.

Action method

Set the unscheduled day in the **Startup Days** window or the **Application Plan** window.

4.2.25 Cannot Copy the Job Net

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

<u>Action</u>

Points to check

Is the job net interval one minute?

Cause

In Systemwalker Operation Manager, if it was determined that it is now the execution time for the job net, the job net will start instantly. For this reason, if the setting is to start the job net at one minute intervals, it tries to start the job net instantly after a copy operation, and the copy operation will fail.

Action method

Change the startup interval for the job net before starting the copy operation.

4.2.26 In a Cluster Operation, even though the Holiday Calendar was Changed, the Change is not Reflected in the Startup Day

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L21

- Solaris versions: 5.0 to 10.1

- HP-UX versions: 10.0

Action

Points to check

Was the holiday calendar changed in a state where all subsystems were started?

Cause

It may have been determined that the subsystem environment does not exist.

If there is a subsystem structure in the cluster operation, and that subsystem is stopped, the subsystem environment that is placed on a shared disk, such as the Systemwalker Operation Manager database, will have unmounted status.

The changes made to the holiday calendar are reflected in the subsystem environment.

If a subsystem has not started, it will be determined that the environment for that subsystem does not exist, so the changes made to the holiday calendar are not reflected in the startup day of the job net.

Action method

Start all subsystems, and then modify the calendar in the same way on both the active node and the standby node. The procedure is explained below.

1. Check the subsystem number that has not started.

Check the Systemwalker Operation Manager running status using the process running status display command (mppviewo):

[Windows versions]

<systemwalker install directory>\mpwalker.jm\bin\mppviewo

[UNIX versions]

/opt/systemwalker/bin/mppviewo

2. Start the subsystems that have not started.

Follow the example below to perform the operation when starting the subsystem for any subsystem number manually.

[Example] Starting subsystem n

[Windows versions]

Start the following Systemwalker Operation Manager services from the **Services** dialog box opened from **Control Panel**:

- Systemwalker MpMjesn
- Systemwalker MpJobschn

Note:

- Systemwalker MpMjesn and Systemwalker MpJobschn must be started continuously.

- Start the services with the same subsystem number as MpMjes and MpJobsch.

[UNIX versions]

/bin/sh /etc/opt/FJSVMJS/etc/rc3.d/S99MJS -sys n /bin/sh /opt/FJSVJOBSC/etc/rc3.d/S99JOBSCH -sys n

Note:

- S99MJS and S99JOBSCH must be executed continuously.
- In the -sys parameter, specify the same subsystem number as S99MJS and S99JOBSCH.

If the subsystem cannot be started, restart Systemwalker Operation Manager or restart the system.

3. Change the calendar on all cluster systems.

4.3 The Job Behavior is Abnormal

4.3.1 I do not Understand the Meaning of the Job Completion Code

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

In addition to the application completion code, a completion code specific to Jobscheduler and Job Execution Control may be displayed as the job completion code.

Action method

Refer to the manuals below for information on the Jobscheduler and Job Execution Control-specific job completion codes. Completion codes not mentioned in the manual are set by the application, so check the meaning of the completion code in the application document.

- V11.0L10/11.0 or later
 - "Job Completion Codes" in the Reference Guide
 - "Completion Codes" in the Online Help
- V10.0L10/10.0 or earlier
 - "Job Completion Codes" in the Reference Guide
 - "Q & A Relating to Operation" in the Q & A Guide

4.3.2 Although the Job Flow Execution Proceeds in the Monitor Job Net window, when the Job Execution Result is Checked, it seems that the Job has not been Started

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the job disabled?

Cause

If the job was disabled, when the execution condition is prepared, the job will be skipped, and the succeeding job will start instead.

Action method

Check if the job has been disabled in the target job net. To do this, check the job status display in the **Monitor Job Net** window, or execute the jobschprint -p command and check the result.

Description



Behavior when the job is operated

When the job net is the Job Execution Control attribute, the cancel, restart, pause, continue, disable, and enable operations can be performed for the job. The behavior when each operation is performed is explained below.

- Cancel

Cancels a job that is executing, or that was delayed. The job changes to the "Canceled" status.

- Restart

If the job net has the "Warning" status, restart the job that ended abnormally or was canceled.

If a recovery job is executing, it cannot be restarted. Recovery jobs cannot be restarted either. If both cases, the operation will be ignored. (V11.0L10/11.0 or later)

- Pause

Pauses a job that is waiting to be executed, or a job that has ended. Even if an execution condition, for example the completion of the preceding job, is met for a job that was paused, the start will be suspended, so the job will not be executed. The job that succeeds the job that was paused will not be executed either.

- Continue

Continues a job that was paused. The status of the job is as follows:

- If a paused job is continued before the execution condition is met, the job status will revert to the status before it was paused.
- If the execution condition is met while the job is paused, the job will start after the continue operation is performed.

- Disable

Changes a job that is waiting to be executed, or that was paused or ended, to the "Disabled" status. A disabled job will be skipped if an execution condition has been prepared, and the succeeding job will start. If the execution condition is prepared while the job is paused, and the job is disabled, the job will be skipped at the point when it was disabled.

- Enable

Enables a job that was disabled. The status of the job is as follows:

- If the job was enabled before the execution condition was prepared, the job status will revert to the status before the disable operation was performed. However, if the job was paused before the disable operation was performed, the job status will revert to the status before it was paused.
- If the execution condition is prepared when the job was disabled, the job will be skipped and change to the "Completed" status.



Behavior when a recovery operation is performed for the job (V11.0L10/11.0 or later)

If the job net is a Job Execution Control attribute, the recovery operations "Start from Specified Job", "Restart from Specified Job", "Start from Next Job", and "Specified Job Only" can be performed for a job that ended abnormally or was canceled. The behavior when each operation is performed is explained below.

- Start from Specified Job

Starts from the specified job. When the job is completed normally or pseudo-normally, the succeeding job will be executed.

- Restart from Specified Job

Operations can be performed only on jobs that have a job net icon. Restarts from the specified job. When the job is completed normally or pseudo-normally, the succeeding job will be executed.

- Start from Next Job

Operations can only be performed on jobs that do not have a job net icon. Starts from the succeeding job leaving the specified job as it is. If that succeeding job has completed normally or pseudo-normally, the next succeeding job will be executed.

- Specified Job Only

Operations can only be performed on jobs that do not have a job net icon. Starts the specified job only. Even when the job is completed normally or pseudo-normally, the succeeding job will not be executed. Or, even when the job is abended, the recovery job will not be executed.

4.3.3 The Job Net is Executing, but the Job in the Job Net is not Executed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the job in the job net been paused?

Cause

If the job has been paused, it will not be executed even if the job net is executing. The succeeding job will not be executed either.

Action method

"Continue" the job. If an execution condition is prepared at the point when the job was continued, the job will be submitted instantly.

4.3.4 If the Restart Operation is Performed for a Job Net that Ended Abnormally, the Top Job will be Executed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was "Restart point" set for the top job?

Action method

On the **Control information** tab in the **Monitor - Job** window, check the "Restart point" setting, and review the setting if necessary.

Action 2

Points to check

After the job net ended abnormally, was the registration information for the job changed?

Cause

If the registration information for the job was changed, the job net and job will be reset to the "Waiting" status. For this reason, even if the restart operation is performed, all jobs will be executed.

Action method

- V11.0L10/11.0 or later

To change only the registration information for the job, without changing the status of the job net and job, change the job information using change recovery.

Alternatively, after changing the job information, perform the disable operation for the job you do not want to execute, and then "Restart" the job net.

- V10.0L21/10.1 or earlier

After changing the job information, perform the disable operation for the job you do not want to execute, and then "Restart" the job net.



Refer to the following for a description on the "Disabled" status:

"4.3.2 Although the Job Flow Execution Proceeds in the Monitor Job Net window, when the Job Execution Result is Checked, it seems that the Job has not been Started" in "4.3 The Job Behavior is Abnormal"

4.3.5 The Job Execution History "skipped" is Displayed in the Job Execution History

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the job disabled?

Cause

The job was disabled, so it was skipped.

Action method

Perform the enable operation for the job as necessary. The job will start the next time the job net starts.

4.3.6 All Jobs in the Job Net have the "Waiting" Status

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

AIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Has the registration information of jobs in the applicable job net been changed?

"Change" refers to an operation to click Save in the Change Job Net window.

Cause

If the registration information for the job was changed, the job net will be reset to the "Waiting" status. For this reason, each job will also be reset to the "Waiting" status.

Action method

While the job net has the "Waiting" status, change the registration information for the job. After that, change the status of each job (to the "Disabled" status, for example), as necessary.

Note that, in versions of V11.0L10/11.0 or later, the registration information for the job can be changed without changing the job status using the "Change Recovery" function.

4.3.7 The Job Net has a Job that Changed from "Disabled" or "Paused" to the "Waiting" Status

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the registration information of jobs in the applicable job net been changed?

"Change" refers to an operation to click **Save** in the **Change Job Net** window.

Refer to "4.3.6 All Jobs in the Job Net have the "Waiting" Status" for information on the cause and action method.

4.3.8 Even though File Transfer is not Complete, chkfile.exe, chkfile.sh, or jobschchkfile Ends

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Is the file waited for by chkfile.exe, chkfile.sh, or jobschchkfile large?

Cause

The chkfile.exe, chkfile.sh, and jobschchkfile commands wait for the file to be created, but do not wait for the creation of the file to complete. If file transfer is performed for a large file using the ftp command, for example, the file itself is created even though the transfer does not complete, so chkfile.exe, chkfile.sh, and jobschchkfile will end.

Action method

If file transfer is performed for a large file using chkfile.exe, chkfile.sh, or jobschchkfile, consider using a dummy (small) file for chkfile.exe, chkfile.sh, or jobschchkfile to wait for after the large file transfer is complete.

4.3.9 The Job does not Start. Alternatively, even though the Job has actually Ended, it does not change to the "Ended" Status for Some Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Is the message queue depleted?

Refer to "Action 16" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 2

Points to check

Is the jobschprint command output stopped by the more command?

Refer to "Action 9" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 3

Points to check

Did you add time-consuming processing to the exit at completion of job nets/jobs?

Refer to "Action 12" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 4

Points to check

Is the starting and closing of job nets or jobs concentrated within a short period of time?

Refer to "Action 4" in "4.2.18 Job Nets are Not Completed" for information on the cause and action method.

4.3.10 Even though the Job Net or Group has the "Waiting" Status, the Job has the "Ended" Status

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

Even if the job net or group has the "Waiting" status, a job with the "Ended" status will keep the status until the job net starts.

Because the job has the "Ended" status, when the job net is rescheduled, the previous status can be checked in the **Monitor Job Net** window.

Action method

No action is required.

4.3.11 The Job does not End [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the job waiting for the SIGINT signal or the SIGQUIT signal before ending?

Cause

According to the shell specification, applications started in the background ignore the SIGINT signal and the SIGQUIT signal.

All jobs started from the Jobscheduler daemon are executed in the background, therefore, if the job waits for the SIGINT signal or the SIGQUIT signal before ending, the signal will be ignored and the job will not end.

Action method

Change the method used to end the job.

4.3.12 The Job does not Operate Normally [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1 [Solaris versions] [HP-UX versions] [AIX versions] [DS versions]

Points to check

Was the LANG environment variable set in the startup shell?

Cause

The Jobscheduler daemon runs with C set as the LANG environment variable. For this reason, if the LANG environment variable is not set in the startup shell of the effective user of the job, the job will run with C set as the LANG environment variable. Accordingly, the execution result of the job may be abnormal.

Action method

Set the LANG environment variable and that value in the startup shell (for example, .login, .cshrc, or .profile) of the effective user of the job.

Example of the settings when the login shell is csh (Solaris)

Set the following for .login or .cshrc:

If the character set is EUC: setenv LANG ja

If the character set is SJIS: setenv LANG ja_IP.PCK

Example of the settings when the login shell is sh or ksh (Solaris)

Set the following for .profile:

If the character set is EUC: LANG=ja;export LANG

If the character set is SJIS: LANG=ja_JP.PCK;export LANG

Points to check

Was the LC_MESSAGES environment variable set in the startup shell?

Cause

Because the LC_MESSAGES environment variable is not set, the job may run abnormally.

Action method

Set the LC_MESSAGES environment variable and that value in the startup shell (for example, .login, .cshrc, or .profile) of the effective user of the job.

Action 3

Points to check

Was the LC_TIME environment variable set in the startup shell?

Cause

Because the LC_TIME environment variable is not set, the job may run abnormally.

Action method

Set the LC_TIME environment variable and that value in the startup shell (for example, .login, .cshrc, or .profile) of the effective user of the job.

Action 4

Points to check

Was the environment variable that is required for the job to run set in the startup shell?

Cause

Because the environment variable is not set, the job may run abnormally.

Action method

Set the environment variable that is required for the job to run and that value in the startup shell (for example, .login, .cshrc, or .profile) of the effective user of the job.

4.3.13 Even though the Parameters field was specified in the Add/Change - Job window, not all Parameters are Passed to the Command

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Points to check

Were 30 or more parameters specified?

Action method

A maximum of 29 parameters can be passed to the application.

To specify 30 or more parameters, define so that the command (application) starts from the batch file (Windows) or shell script (UNIX). Define the batch file or shell script in the command name field in the **Add/Change - Job** window.

4.4 The Group/Job Net/Job Behavior is Abnormal

4.4.1 A Paused Group/Job Net/Job Was Started after having changed to the "Continue" Status

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the execution condition met while the item was in the "Paused" status?

Action method

If you do not want to start the group/job net/job, disable it using the disable operation, not the pause operation, and enable it after the execution condition is met.

4.4.2 When Jobscheduler Starts, the Group/Job Net/Job Ends Abnormally with Completion Code 239

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Points to check

Was restore performed before Jobscheduler started?

Cause

If a group/job net/job with the "Executing" status is restored during the backup, the group/job net/job status will be initialized when Jobscheduler starts after the restore, so the execution is suspended.

Action method

If the confirm operation is enabled, perform the confirm operation.

So that the execution is not suspended, it is recommended that the backup be performed during a time period when the group/job net/job is not executing.

4.4.3 The Group/Job Net does not Start after the Year Changes

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the method used to set the startup day correct?

Cause

If the startup day was set from the **Startup Days** window, the startup day will be an exception day, so a startup day will not be created for each year.

Action method

To set a startup day for each year, set the startup day on the Startup Days tab in the Job Net Properties window.

4.5 The Gantt Chart Display is Abnormal

4.5.1 "Disabled" is Displayed in the Gantt Chart for a Job Net for which the Disable Operation has not been Performed

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L21

- Solaris versions: 5.0 to 10.1

- Linux versions: 5.2, V10.0L10

- HP-UX versions: 5.1, 10.0

- AIX versions: 5.1, 10.0

- DS versions: V20L10

Action

Points to check

At the time specified in **Execute at** on the **Standard information** tab in the **Job Net Properties** window, are job nets in a state where they cannot start because the Systemwalker Operation Manager server is stopped, and was **Startup on power-on if power is off during scheduled execution** selected?

Action method

No action is required.

Description

On the Standard information tab in the Job Net Properties window, if only one Execute at condition is specified, Startup on power-on if power is off during scheduled execution can be selected.

The job net behavior when the job net cannot be started because the Systemwalker Operation Manager server is stopped at the time specified in the **Execute at** condition will vary depending on whether **Startup on power-on if power is off during scheduled execution** was selected.

If **Startup on power-on if power is off during scheduled execution** was selected, when the Systemwalker Operation Manager server starts after that, the job net will start after a delay. If **Startup on power-on if power is off during scheduled execution** was not selected, however, the scheduled start for the job net will be ignored, and that job net will not be started.

A job net that could not start because the Systemwalker Operation Manager server was stopped will be displayed in the same color as the "Disabled" status in the position of the original scheduled start time, so that it can easily be recognized on the Gantt chart.

This indicates that the job net is not in fact disabled, but did not start because the scheduled start was ignored. The job net has not actually changed to the "Disabled" status, so there is no need to take any action (such as the enable operation).



How to distinguish between "Disabled" on the display, and "Disabled" when the disable operation was performed

The "Disabled" that is displayed when the job net could not start because the Systemwalker Operation Manager server was stopped is displayed as shown below, and can be distinguished from the actual disable operation that was performed.

- The band is displayed in a position to the left of the current time display on the Gantt chart.
- The job net does not have the "Disabled" status when its status is checked in the **Job Net Management** window.

If the disable operation was actually performed, the display is as follows:

- The job net has the "Disabled" status when the its status is checked in the **Job Net Management** window.

4.5.2 The Job Net Execution History is not Displayed in the Gantt Chart

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the execution history of the job net started today and displayed on the Gantt chart exceeded 24 generations?

Cause

The job net execution history displayed in the Gantt chart for the current day shows the history for up to 24 generations. For example, if job nets are being executed at intervals of five minutes, the history for only the last two hours is displayed.

Action method

To check the record status of a job net before the 24th generation, select **Job Net History** from the **Tools** menu of the Systemwalker Operation Manager client, and check the execution status.

4.5.3 After the Waiting Job Net, a Short Band that Indicates Completed (or Abended, Canceled, or Pseudo-normal Completed) is Displayed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the system time changed?

Cause

This problem occurs if the system time is reset to before the scheduled start time of the job net without deleting the files under the Jobscheduler database directory net.spool subdirectory after the job net is started.

Action method

Refer to "Action 2" in "4.2.1 A Job Net Started at an Unexpected Time" for information on the cause and action method.



Refer to "4.13 The Jobscheduler Behavior is Abnormal", "4.13.2 After the System Time is Changed, the History Information cannot be Displayed Correctly" for details.

4.6 The Multi-server Monitoring window Display is Abnormal

4.6.1 The Multi-server Monitoring window Cannot be Displayed

Applicable versions and levels

- Windows versions: V5.0L10 to V13.2.0

- Solaris versions: 5.0 to V13.2.0

- Linux versions: 5.2, V10.0L10 to V13.2.0

- Linux for Itanium versions: V12.0L10 to V13.2.0

- HP-UX versions: 5.1 to V13.2.0

- AIX versions: 5.1 to V13.2.0

- DS versions: V20L10

Action

Points to check

Was the login performed by a user with administrator rights?

Cause

The login to the Multi-server Monitoring window can be performed only by a user with administrator rights.

Action method

Log in as one of the following users:

- System administrator (in Windows versions, a user who belongs to the Administrators group, in UNIX versions the superuser)

4.6.2 When the Host is Selected, "Connection not possible" is Displayed and Monitoring is Not Possible

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

<u>Action</u>

Points to check

Was the Jobscheduler service started for the selected host?

Action method

Start the Jobscheduler service for the selected host.

4.6.3 When the Host is Selected, "Access denied" is Displayed and Monitoring is Not Possible

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the monitoring permission host definition performed correctly on the selected host (monitored server)?

Action method

Define the host name of the monitoring server correctly in the **Define Monitoring Permission Host** window of the selected host.

Action 2

Points to check

Was the name correctly resolved in the TCP/IP network environment of the selected host?

Action method

Ensure that the TCP/IP network environment of the selected host allows names to be resolved correctly.



Execute the ping command on the monitoring host, and check if the displayed IP address matches the IP address of the monitored host.

Refer to the relevant operating system manual for information on the ping command.

Action 3 [V11.0L10/11.0 or later]

Points to check

Did you try to connect to more clients on the monitoring server after the limit for the number of connected clients was exceeded?

Action method

Increase the limit value for the number of client connections on the monitoring server, or reduce the number of clients connected to the monitoring destination server.

Action 4

Points to check

On the monitored server, does the IP address obtained from the host name specified as the monitoring permission host after the name was resolved match the primary IP address of the monitoring host?

Action method

If the IP addresses do not match, specify the primary IP address of the monitoring host in the monitoring permission host



In the same way as for Action 2, execute the ping command to check the IP address obtained by resolving the name. Execute the ping command on the monitored host, and check if the displayed IP address matches the primary IP address of the monitoring host.

Refer to the relevant operating system manual for information on the ping command.

Action 5

Points to check

Is "127.0.0.1" configured as the IP address for the name of the local host in /etc/hosts?

Action method

The IP address for the name of the local host specified in /etc/hosts must be an address that can be connected from the client.

An example of /etc/hosts file settings is shown below.

[Before]

127.0.0.1 <host name> localhost

[After]

127.0.0.1 localhost xxx.xxx.xxx.xxx <host name>

Note: xxx.xxx.xxx is the IP address for <host name> (localhost).

Also refer to the following for details:

- V12.0L10/12.0 or later

"Installation in the UNIX System", "Notes Prior to Installation" in the Installation Guide

Action 6

Points to check

If the monitoring server is in the multiple NIC environment, did you write the host names and IP addresses that correspond to all NICs as monitoring permission hosts?

Action method

If the monitoring server is in the multiple NIC environment, write the host names and IP addresses that correspond to all NICs as monitoring permission hosts.

4.7 The Sample Source Behavior is Abnormal

4.7.1 The Sample Source abendrerun.c was Used in a Cluster System, but there are Job Nets that Cannot Restart

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Do the job nets to be restarted meet the following conditions?

- A job net included in the group has ended
- A large number of job nets was registered in a project

Cause

The abendrerun.c file is a sample source code that restarts job nets, and the following conditions have not been met:

- A job net included in the group has ended
- A large number of job nets was registered in a project

Action method

To also restart the job nets included in the group, before searching for job nets with the completion code 239 from the execution result of the jobschprint -n command, you must search for groups with the completion code 239 from the jobschprint -x command, and add processing to restart using the jobschctlgrp command.

Additionally, abendrerun.c references the standard output of the jobschprint command using the popen function, so when a large volume of list information is output, the buffer may not be sufficient to store the execution result of the jobschprint command, and the abendrerun.c processing may change to a deadlock state. If the volume of job nets to be registered is great, correct so that the jobschprint execution result is written to an external work file, not popen.

4.8 The Termination Processing Job Net Behavior is Abnormal [Windows Versions]

4.8.1 When the Termination Processing Job Net is Started, it does not Start even when the Next Execution Time Arrives

Applicable versions and levels

- Windows versions: V5.0L10 or later

Cause

According to the specification, the starting of a new job net is suppressed at the point when the termination processing job net was started.

Action method

To start the job net at the next execution time, restart the Systemwalker MpJobsch service.

When the termination processing job net is complete, a completion shutdown exit will be started. The completion shutdown exit provided in the installation starts the "shutdown.exe" to shut down the server after the Systemwalker MpMjes service and Systemwalker MpJobsch service were stopped.

If the termination processing job net ended abnormally or was canceled, an abend shutdown exit will be started. The abend shutdown exit does not exist when Systemwalker Operation Manager is installed.

To restart the service automatically if the job net ended abnormally or was canceled, create an abend shutdown exit based on the completion shutdown exit.

Note that, if processing to restart the service is added to the abend shutdown exit, the service will be restarted each time the termination processing job net ended abnormally or was canceled.

Also, refer to the following manual.

- V10.0L10 or later
 - "Shutting Down the System at Optional Times [Windows version]" in the User's Guide
- V5.0L10 to V5.0L30

"Shutting Down the System at Optional Times" in the Technical Guide

4.8.2 Job Net End Processing is not possible using the End Processing Exit

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

At the point when the end processing exit is called, it is not guaranteed that the job net has the "Ended" status. In that case, the end processing may not be possible.

Action method

The job net will have the "Ended" status after the time elapsed, so if necessary, add processing such as a fixed time retry in case the operation fails.

4.8.3 Even if the Termination Processing Job Net is Completed, the Server does not Reboot/Shut Down

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Is the job net name (not the job net comment) "JSHEND"/"JSHFORCE"?

Action method

Even if the job net comment is "JSHEND"/"JSHFORCE", if the job net name is not "JSHEND"/"JSHFORCE", the Completed/Abended shutdown exit will not be called. Make the job net name "JSHEND"/"JSHFORCE".

Action 2

Points to check

Was |SHEND/|SHFORCE created in a project with the project name "SYSTEM"?

Note: In V13.3.1 or earlier, check if a project created with the same name as the user name registered in the Systemwalker MpJobsch service startup account was registered.

Action method

Create JSHEND/JSHFORCE in a project with the project name "SYSTEM".

Action 3

(V13.3.1 or earlier)

Points to check

Is a Windows x86 version Systemwalker Operation Manager running in a Windows 64-bit environment?

Cause

If a Windows x86 version Systemwalker Operation Manager is used in a Windows 64-bit environment, the operating system shutdown command cannot be executed even if it is defined in the shutdown exit. This is because the Windows x86 version Systemwalker Operation Manager is a 32-bit application, so the <system directory>\System32 directory cannot be accessed because of the file system redirection function of the operating system. Refer to the Microsoft Knowledge Base Article 942589 for details.

Action method

Take action according to the Microsoft Knowledge Base Article 942589.

4.9 The Jobscheduler Command or API Behavior is Abnormal

4.9.1 The Error Message "Systemwalker MpJobsch is being started" [Windows Versions]/"The daemon is being started" [UNIX Versions] is Output, and the Command cannot be Executed

Error message

- [Windows versions]

MpJobsch:ERROR:6273: Systemwalker MpJobsch is being started.

- [UNIX versions]

Mplobsch: ERROR: 0273: The daemon is being started.

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 10.0 or later

- AIX versions: 10.0 or later

Action

Points to check

Is the Jobscheduler initialization processing complete?

Cause

The Jobscheduler command can only be received after the Jobscheduler server function initialization is complete. This error message is output when the command is executed while the server initialization is processing.

Action method

Reexecute the command after the initialization processing is complete.

On the **Standard information** tab in the **Job Net Properties** window, if **Start at the time of server startup** is set, and a Jobscheduler command (such as jobscheduler) is registered as the job in that job net, the Jobscheduler server initialization will be processing, therefore this error may occur. In this case, take the sleep action for a few seconds until the start of the Jobscheduler server is complete.

Description



How to check if the initialization processing is complete

Jobscheduler records the message shown below in the syslog/event log at the point when the initialization processing for the server startup is complete. By checking the message that was recorded to the syslog/event log, the completion of the initialization processing can be checked.

- [UNIX versions]

MpJobsch: INFO: 0272: The jobscheduler daemon has been started.

Remarks:

It is necessary to configure the settings so that user.info information is recorded in /etc/syslog.conf.

- [Windows versions]

MpJobsch:INFO:1308:Systemwalker MpJobsch has started normally.

4.9.2 The Error Message "Systemwalker MpJobsch is not started" [Windows Versions]/" The daemon was not started." [UNIX Versions] is Output, and the Command cannot be Executed

Error message

- [Windows versions]

MpJobsch:ERROR: 6310: Systemwalker MpJobsch is not started.

- [UNIX versions]

Mplobsch: ERROR: 0014: The daemon was not started.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Jobscheduler service/daemon started?

Action method

Start the Jobscheduler service/daemon, and then reexecute the command.

To check if the server function has started, check the following message that is recorded as soon as initialization is completed during startup.

- syslog [UNIX version]

MpJobsch: INFO: 0272: The jobscheduler daemon has been started. (*1)

*1: It is necessary to configure the settings so that user.info information is recorded in /etc/syslog.conf.

- Event log [Windows versions]

MpJobsch:INFO:1308:Systemwalker MpJobsch has started normally.

4.9.3 The Error Message "The LANG value is different" is Output [UNIX Versions]

Error message

MpJobsch: WARNING: 0288: The LANG value is different.

MpJobsch: WARNING: 0288: The LANG value is different. Reset LANG environment. Rerun

command.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Do the LANG environment variable value of the language environment that was set during the installation, and the LANG environment variable value of the environment that executed the jobscheduler command, match?

Cause

When using UNIX, if the LANG environment variables for the language environment set during installation of Systemwalker and the environment in which Jobscheduler commands are executed do not match, an error message is output and Jobscheduler commands cannot be executed. For example, this error message is output in Solaris versions if "SJIS" was specified as the language type when Systemwalker Operation Manager was installed, and the LANG environment variable value of the user that executed the Jobscheduler command was "LANG=ja" (EUC).

Action method

In the above example, the Jobscheduler command can be executed if the LANG environment variable value is changed to "LANG=ja_JP.PCK" (SJIS).

Action 2

Points to check

If the Jobscheduler command was executed as the scheduled job, was the LANG environment variable specified in the startup shell (such as .cshrc or .profile) of the effective user of the job? Do the LANG environment variable value of the language environment that was set during the installation, and the LANG environment variable value that was specified in the startup shell, match?

Cause

When using UNIX, if the LANG environment variables for the language environment set during installation of Systemwalker and the environment in which Jobscheduler commands are executed do not match, an error message is output and Jobscheduler commands cannot be executed. This type of error message is output when the Jobscheduler command is executed as the scheduled job, and the LANG environment variable of the startup shell does not match the one set during the installation.

Action method

If the Jobscheduler command is executed as the scheduled job, set the LANG environment variable in the startup shell so that it matches the language type set during the installation.

4.9.4 An Error Message is Output, and the Command cannot be Executed [Windows Versions]

Error message

All the following messages are output:

MpJobsch:ERROR:7300:func=GetTsct:OpenFileMapping() 2:The specified file is not found.

MpJobsch:ERROR: 6017: Systemwalker MpJobsch failed to attach shared memory.

MpJobsch:ERROR: 6014: Systemwalker MpJobsch service not started.

Applicable versions and levels

- Windows versions: V5.0L10 to V13.2.0

Action

Points to check

Was the command executed on a remote desktop (Terminal Services client)?

Cause

The Jobscheduler command (such as jobschprint) does not support operations on a remote desktop (Terminal Services client). If this message is output, the Jobscheduler command may have been executed from a remote desktop (Terminal Services client).

Action method

To execute the Jobscheduler command, take action by executing it directly from the command prompt on the server on which the Systemwalker Operation Manager server is installed.

4.9.5 The Jobscheduler Command/API Called from the User Application does not Work Normally

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

After the user application closed the standard output or standard error output, was a command or API called?

Action method

After the user application closed the standard output or standard error output, a command or API should not be called. If the Jobscheduler command or API is started in a state where the standard output or standard error output was closed, it may destroy the Jobscheduler database, so the job net definition may be lost.

Action 2

Points to check

Was the user application executed from a multithreaded environment?

Cause

The Jobscheduler API is thread-unsafe (that is, it cannot be used by multiple threads at the same time). In a multithreaded environment, if the API is running at the same time, it may destroy the Jobscheduler database, so the job net definition may be lost.

Action method

To start the Jobscheduler API from a user application, it must not be executed from a multithreaded environment.

For example, when using Java, if the API is executed on the same Java VM from an application that runs on multiple instances, it may cause the API to run on multiple threads. In this case, take action by reducing the number of instances running on the VM to one, or create the API execution part as an external command, so that the external command will be called from Java.



Refer to "4.14 Error Message Notifications are Received from Jobscheduler", "4.14.5 The Error Message "Failure in accessing project DB" is Output " for details.

4.9.6 When you try to Obtain the Schedule Content using the jobschprint Command, an Error Message is Output

Error message

- [Windows versions]

MpJobsch: WARNING: 3011: Job net information not found.

- [UNIX versions]

MpJobsch: WARNING: 0011: job net information is not found

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2. V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Were reference rights to the project assigned to the effective user of the command?

Action method

If reference rights to the project were not assigned to the effective user of the command, assign them.

Action 2

Points to check

Is the size of the log file set for **Log file size** on the **Database** tab in the **Define Jobscheduler Startup Parameters** window small?

Cause

The information displayed using jobschprint -f or -g is stored in jobdbn.log (n is a number between 1 and 3), which is stored in the Jobscheduler database directory.

In jobdbn.log, the start/end history information for the job net or job is recorded. Immediately after the installation, if history information is recorded in jobdb1.log, and the file size reaches the set size (*1), the history information will be recorded in jobdb2.log. Thereafter, the information will be recorded in jobdb2.log > jobdb1.log cyclically.

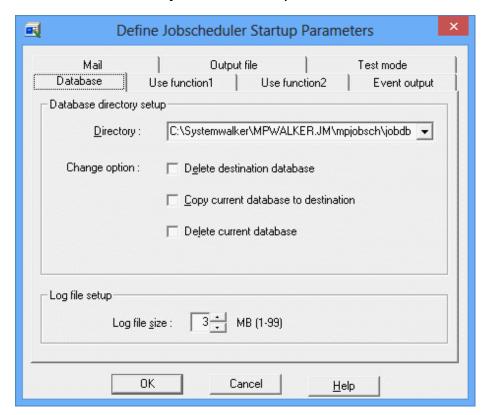
If the set size (*1) is small, the job net history information will be overwritten using the latest information, and the history information will not be displayed using jobschprint -f or -g.

*1: The log file size is specified in **Log file size** on the **Database** tab in the **Define Jobscheduler Startup Parameters** window.

Action method

Specify a suitable file size in Log file size on the Database tab in the Define Jobscheduler Startup Parameters window.

Database tab in the Define Jobscheduler Startup Parameters window





If a large size is set for the log file, and the **Job History** window and **Job Net History** window are displayed in the Systemwalker Operation Manager client, it may take a while to send the information, and it may seem as if the window processing has stopped. If the size was changed, investigate if there is a problem in the display in the **Job History** window and **the Job Net History** window.

4.9.7 The Calendar was Changed using the jobschsethol Command, but All Holidays outside the Part that was Changed Disappear

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Cause

The jobschsethol command updates all holiday calendars by overwriting them. For this reason, all days for which a holiday is not specified will be working days.

Action method

To reflect the holiday before the update using the jobschsethol command, register the date before the update in the holiday information control statement, or, after executing the jobschsethol command, set the holiday individually in the Systemwalker Operation Manager client.



If the holiday calendar is changed, the job net startup day will be created again (*1), which may cause a problem such as the job net starting on an unintended day, or not starting on the day on which it should start. When updating a holiday calendar, note the effect this may have on the operation.

*1: In versions of V5.0L30/5.2 or later, even if the holiday calendar is changed in the startup parameter settings, an option is provided that can suppress the creation of the startup day.

Refer to the following manual.

- Use function2 tab in the Define Jobscheduler Startup Parameters window in the Online Help

4.9.8 The Jobscheduler API Returns with Return Code 4

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Did this occur immediately after the operation target job net or group was registered/changed/copied?

Cause

The Jobscheduler server performed the scheduling processing immediately after the job net was registered/changed/copied. For this reason, job net operations using the API are limited.

Action method

If the API returned with return code 4, retry a few times and perform the job net operation.

4.9.9 The Error Message "The job net is being saved or controlled" is Displayed

Error message

0225 The job net is being saved or controlled.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Does one of the following apply?

- The operation was performed immediately after the operation target job net ended
- The same job net was operated at the same time
- An operation such as start was performed immediately after the job net was copied

Cause

The Jobscheduler service/daemon or other Jobscheduler command performs processing for the operation target job net while it was being saved or controlled.

This message may be displayed in the job net Completed exit or Abended exit when you try to delete a job net that has itself ended.

Action method

Wait for a while (a few seconds) until the Jobscheduler service/daemon or other Jobscheduler command processing is complete, and then reexecute the operation.

By creating an exit program so that the retry is performed a finite number of times every few seconds, it may be possible to avoid this problem.

Action 2

Points to check

Is a nested job net defined in the same definition file?

Cause

In the change processing of nested job nets, if you change a parent job net, the startup days may be re-created (change of job net). Following that, it is not possible to make changes to child job nets and linked job nets.

Action method

The job net control statements of child job nets and linked job nets must precede the job net statements of parent job nets in the definition file.

Action 3

Points to check

Are job nets using the base job net and startup day of the base job net defined in the same definition file?

Cause

In the change processing of base job nets, the startup day of job nets using the startup day of the base job net may be re-created (change of job net). In such cases, job nets using the base job net cannot be changed at the same time.

Action method

Define the job net control statement that is using the base job net and the startup day of that base job net in a separate definition file.

4.9.10 It takes a while to Execute the Jobscheduler Command, API or Web API

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Is there a large number of job nets per project?

Refer to "Action 6" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 2

Points to check

Was the execution of the Jobscheduler command concentrated in a short time?

Action method

The execution of a command should not be concentrated in a short time.

The number of Jobscheduler command processes during the time period when the problem occurred can be checked using Task Manager [Windows versions] or the ps command [UNIX versions].

Action 3

Points to check

Is the starting and closing of job nets or jobs concentrated within a short period of time?

Refer to "Action 4" in "4.2.18 Job Nets are Not Completed".

Action 4

Points to check

Was the jobschprint command result stopped using more?

Refer to "Action 9" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 5

Points to check

Is the IPC resource (message queue) depleted?

Check this using the IPC command, for example. Refer to "Action 16" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 6

Points to check

Is a large number of Systemwalker Operation Manager clients connected? Alternatively, did you press the F5 (refresh window) key continuously on the Systemwalker Operation Manager client?

Cause

The Systemwalker Operation Manager client refreshes the window, and loads the schedule information file of the Systemwalker Operation Manager server, periodically. If the number of connected Systemwalker Operation Manager clients is increased, the number of window refreshes increases, and a schedule information file lock occurs on the server.

Action method

Keep the number of simultaneously connected Systemwalker Operation Manager clients to a minimum. Also, do not press F5 too many times in a row on Systemwalker Operation Manager clients. Consider carefully before deciding on the number of connected clients. Note that the number of connected Systemwalker Operation Manager clients can be checked using the jobschprint -u command.

Action 7

Points to check

Are your Web API requests coming in too often?

Action method

Don't being concentrated your Web API request in a short time.

4.9.11 A Message Event that was already Registered cannot be Deleted using the jobschsetnet -nche Command

Error message

- [Windows versions]

MpJobsch: ERROR: 7084: The parameter is incorrect. <N> line.

N: Row number of the job net control statement

- [UNIX versions]

MpJobsch: ERROR: 0084: The parameter is incorrect. <N> line.

N: Row number of the job net control statement

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Did the job net control statement have the messagename operand?

Job net control statement definition example

```
NET
jobnetname samplene
jobnetcomment samplene
msgonly ON
annuallyweek 1,SUN,MON,TUE,WED,THU,FRI,SAT
holidayshift IGN
execattr JES
messagename
messagemode OR,UNC,ORTIME
job 1
;
JOB
jobname samplejob.exe
jobnumber 1
jobcomment CommandExecution
;
```

Action method

In the job net control statement, the parameter is mandatory for all operands.

To delete a registered message event, execute the jobschsetnet -sdel command.

4.9.12 The Characters in the Job Status Field are Garbled using the jobschprint -p Command

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Points to check

Were fullwidth characters specified in the command name field of the job?

Action method

Perform the following procedure:

- Define only the application name in the command name field of the job.
- Place the application in the directory specified in the PATH environment variable.
- V10.0L10/10.0 or earlier

Specify a halfwidth space between the command name and the parameter name.

- V10.0L20/10.1 or later

If there are fullwidth characters in the parameter, specify them in the parameter field.

4.9.13 A New Job Net cannot be Created/an Existing Job Net cannot be Changed using the jobschsetnet Command if there is no Execution Condition

Error message

MpJobsch: ERROR: 0075: The control statement or control statement sequence is incorrect

Applicable versions and levels

- Windows versions: V10.0L20 to V12.0L10

- Solaris versions: 10.1 to 12.1

Linux versions: V11.0L10 to V12.0L10Linux for Itanium versions: V12.0L10

HP-UX versions: 11.0AIX versions: 11.0

Action

Points to check

Was an unnecessary operand specified in the job net control statement?

Cause

There are operands in the job net control statement that cannot be specified at the same time.

Action method

Review the job net control statement.

Refer to "Job Net Control Statement" and "Job Control Statement" in the *Reference Guide* for information on the operands that cannot be specified at the same time.

4.9.14 When the Job Net/Group is Registered using the jobschsetnet/ jobschsetgrp Command Based on the Information that was

Extracted using the jobschprint Command, Position Information about the Job is not Inherited

Applicable versions and levels

- Windows versions: V5.0L10 to V13.2.0

- Solaris versions: 5.0 to V13.2.0

- Linux versions: 5.2, V10.0L10 to V13.2.0

- Linux for Itanium versions: V12.0L10 to V13.2.0

HP-UX versions: 5.1 to V13.2.0AIX versions: 5.1 to V13.2.0

- DS versions: V20L10

<u>Action</u>

Points to check

Was the jobschprint -r/-R command used?

Cause

The jobschprint -r/-R command does not output the position information about the job that was set in the Systemwalker Operation Manager client. Additionally, the position information about the job cannot be registered using the jobschsetnet and jobschsetgrp commands.

Remarks

In V13.3.0 or later, the jobschprint -r/-R command output result and position information (icon position) about the job in the jobschsetnet/jobschsetgrp command will be inherited.

4.10 A Message Event is not Generated by the jobschmsgevent Command

4.10.1 A Message Event is not Generated

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1 [Windows versions]

Points to check

- Does the host that generated the message event have a user account that can execute the jobschmsgevent command?

- Was the user account password invalid or expired?

Cause

The jobschmsgevent command functions to record events to the application event log of the specified host. For this reason, the user account that executes the jobschmsgevent command must pass authentication also on the host that generated the message.

Action method

Change the user account of the command executor so that it will be authenticated on the other host. For example, when executing the command as a job of Systemwalker Operation Manager, ensure that the Systemwalker MpMjes service startup account can pass the authentication on the host that generates message events.

Action 2 [Windows versions]

Points to check

Is the event log capacity of the host that generated the message event full?

Cause

If the event log capacity of the host that generated the message event is full, the execution of the jobschmsgevent command may fail because the event could not be recorded.

Action method

Before starting the operation, in the application event log properties of the host that generated the message event, ensure that the log size is sufficiently large, or set or configure to overwrite events as necessary, to ensure that the capacity of the event log is sufficient.

Action 3 [Windows versions]

Points to check

Was a firewall built between hosts that have message link, so that the NetBIOS interface port(445/tcp) was restricted?

Cause

The NetBIOS interface is used to record the event log, therefore if a firewall is built between hosts that have message link so that the NetBIOS interface port is restricted, the message will not be notified correctly.

Action method

Do not execute the job by specifying the host name in the jobschmsgevent command. Execute as a network job instead.

Action 4 [Windows versions]

Points to check

Was the Server service started?

Cause

It is mandatory that the Server service be started on the host that generates the message event using the jobschmsgevent command.

Action method

Start the Server service on the host that generates the message event.

Points to check

Did you use double quotation marks (") in the message event name?

Action method

Double quotation marks (") are recognized as normal characters, not symbols used for enclosing words, when the yen sign (\) is appended immediately before in the number shown below. This number varies according to the operating system. If double quotation marks (") are used in the message event name, take the action shown below.

- [Windows versions]
 - Append three yen signs ("\") before the double quotation marks (") of the message event name.
 - [Example] \\\"message event string\\\"
- [UNIX versions]
 - Append one yen sign ("\") before the double quotation marks (") of the message event name.
 - [Example] \"message event string\"

Action 6

Points to check

If the job net waiting for message event is in any of the following states, the message event cannot be recognized when it has occurred.

- The job net is "Executing". (*1)
- The job net is in a warning state. (*1)
- The job net is in an End delayed state. (*1)
- The job net is in a disabled state.
- The job net is in an abended state. (*2)
- The job net is in a Canceled state. (*3)
- The cumulative occurrence count of message events exceeded 255 times. (*4)
- The job net waiting for a message event falls on the unscheduled day. (*5)
- Once in a day is specified for Start only when message event has occurred, and the job net has already been started. (*6)
- *1: This is recognized if Valid during job net execution is selected.
- *2: This is recognized if the job net is included in a group. Additionally, even if the job net is not included in the group, it will be recognized if Validate job net confirmation is not selected in the Advanced Settings for Verification window.
- *3: This is recognized if the job net is included in a group. Additionally, even if the job net is not included in the group, it will be recognized if **Check canceled** is not selected in the **Advanced Settings for Verification** window.
- *4: If the execution condition of job net is specified as **Start only when message event has occurred**, it internally retains the number of message event occurrences. This occurrence count refers to the cumulative occurrence count. The cumulative occurrence count increases by one each time a message event occurs. However, the occurrence count decreases by one each time a job net is started by the occurrence of a message event. Note that the cumulative occurrence count of message events should not exceed 255.
- *5: This is recognized if Valid only on startup days is not selected.
- *6: This is recognized again after the Reinstate operation is performed.

Action method

Take an appropriate action, for example change the settings, or change the status by performing an operation.

Points to check

Does the job net history information show that a message event occurred immediately before or after job net startup and completion were output?

If a message event occurs at such times, on rare occasions the occurrence of the message event may not be recognized. The timing of this phenomenon will be within the short period when preprocessing for job net startup or postprocessing after job net termination is being performed. Occurrence of message events is not recognized during such preprocessing or postprocessing.

Action method

To receive message events while a job net is executing, display the **Job Net Properties** window for the job net that is to receive message events, click the **Message** tab, and select **Valid during job net execution**.

If the issue persists, make the generation of message events wait after job net termination by, for example, taking the sleep action for a few seconds.

4.10.2 The Error Message "RegisterEventSource() 5: Access denied" is Output [Windows Versions]

Error message

MpJobsch:ERROR:7300:func=jobschmsgevent - main:RegisterEventSource() 5:Access denied.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Does one of the following apply?

- The user account that can execute the jobschmsgevent command is not registered in the host that generated the message event
- The effective user of the jobschmsgevent command is invalid (the account is invalid) in the host that generated the message event
- The effective user of the jobschmsgevent command is locked out in the host that generated the message event
- The password of the effective user of the jobschmsgevent command has expired in the host that generated the message event

Cause

When a host name is specified using the jobschmsgevent command in Windows versions, the mechanism provided by the Windows operating system writes events directly to the event log on the other host.

If the user permission for the jobschmsgevent command are insufficient to access the event log on the host that generated the message event, a message indicating an execution error of the API used in the jobschmsgevent command internally will be output, the write operation to the event log will fail, and as a result the message event will not be notified to the other host

Action method

If this error was output, it means that the user account that executed the jobschmsgevent command could not pass the Windows authentication in the other host, therefore take one of the following actions:

- Change the user account of the command executor so that it will be authenticated on the other host. For example, when executing the command as a job of Systemwalker Operation Manager, ensure that the Systemwalker MpMjes service startup account can pass the authentication on the host that generates message events.
- Do not execute the job by specifying the host name in the jobschmsgevent command. Execute the job as a network job instead.

Action 2

Points to check

Was the host that generated the message event Windows Server 2003 or later, and did the effective user other than the Administrator?

Cause

In Windows Server 2003 or later, a security audit function related to the event log is installed.

For this reason, to generate a message event on the target host, the effective user must be an Administrator.

Action method

Execute the jobschmsgevent command as Administrator.

Additionally, to generate message events on another host, it is recommended that a network job be used to generate the message event on the request destination host. By using network job, you do not need to be aware of the users who execute them.

Remarks

The effective user of the jobschmsgevent command is as follows:

- If the command was started from Systemwalker Operation Manager, refer to "Q & A Relating to Job Execution Control" "Q: What Rights are Required for Executing Jobs?" in the Q & A Guide.
- If the command was started from the command prompt, the user will be the user who logged into the desktop, or the user specified in **Run as** of the command prompt.

4.10.3 The Error Message "RegisterEventSource() 1722:RPC server is not available" is Output [Windows Versions]

Error message

MpJobsch:ERROR:7300:func=jobschmsgevent - main:RegisterEventSource() 1722:RPC server is not available

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Does the other host that was specified exist? Additionally, is the operating system of the other host Windows?

Cause

When a host name is specified using the jobschmsgevent command in Windows versions, the mechanism provided by the Windows operating system writes events directly to the event log on the other host.

In the following case, it will not be possible to communicate with the other host without the Windows operating system mechanism, therefore a message indicating an execution error of the API used in the jobschmsgevent command internally will be output, and the execution of the jobschmsgevent command will fail.

- The specified remote host does not exist or is not running.
- Remote event log management communication is denied at the firewall of the remote host.
- The remote host is not a Windows OS (if it is a UNIX server).

Action method

Review the host name (Windows computer name) that was specified in the jobschmsgevent command, and correct it if it is invalid. If remote event log management communication permission is disabled on the firewall of the remote host, change the setting so that it is enabled. If the other host is a UNIX server, the host name cannot be specified in the jobschmsgevent command, therefore change the settings so that the job is executed as a network job.

Action 2

Points to check

Are firewalls built between hosts linked to each other to restrict the NetBIOS interface port (445/tcp)?

Cause

Because the NetBIOS interface is used to record event logs, if a firewall is set up between hosts that interact with messages and the ports of the NetBIOS interface are restricted, message notification will not be performed correctly.

Action method

Do not use jobschmsgevent with the host name specified, and instead execute it as a network job.

4.10.4 The Error Message "ReportEvent() 997:Redundant I/O process" is Output [Windows Versions]

Error message

MpJobsch: ERROR:7300:func=jobschmsgevent - main:ReportEvent() 997:Redundant I/O process.

Applicable versions and levels

- Windows versions: V5.0L10 to V11.0L10

Action

Points to check

Is the application event log capacity of the host that generated the message event full?

Cause

If this error message was output, it means that the application event log is full.

Action method

Perform the following procedure:

- Clear the application event log
- Increase the log size in the event log properties
- Configure the setting to overwrite events as necessary in the event log properties

4.10.5 The Message "MpJobsch: ERROR: 0309: Usage: jobschmsgevent event_name[:project_name[/job_net_name] [message_text]] [-h host_name] [-t:INFO | -t:WARN | -t:ERROR]" is Output when the jobschmsgevent Command is Executed from a Schedule Job [UNIX Versions]

Error message

- V13.2.0 or earlier:

MpJobsch: ERROR: 0309: Usage: jobschmsgevent event_name[:project_name[/ job_net_name] [message_text]] [-h host_name] [-t:INFO | -t:WARN | -t:ERROR]

- V13.3.0 or later:

MpJobsch: ERROR: 0309: Usage: jobschmsgevent event_name[:project_name[/ job_net_name] [message_text]] [-h host_name] [-t:INFO | -t:WARN | -t:ERROR] [-p param [-c suffix]]

Applicable versions and levels

- Solaris versions: 5.2 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Did you try to generate a message event to an SE version Systemwalker Operation Manager from an EE version Systemwalker Operation Manager?

Action method

Delete the environment variable "JOBSCH_SUB_SYSTEM", and then execute the jobschmsgevent command. An example of the shell script (UNIX)/batch file (Windows) is shown below.

[UNIX]

[jobschmsgevent.sh]
#!/bin/csh
unsetenv JOBSCH_SUB_SYSTEM
jobschmsgevent \$*
exit \$status

The following example shows the command name field for the job to execute the above script:

/<path name>/jobschmsgevent.sh MsgA -h HostName

[Windows]

[jobschmsgevent.bat]
set JOBSCH_SUB_SYSTEM=
jobschmsgevent %*
setecode.exe %ERRORLEVEL%

The following example shows the command field for the job to execute the above batch file:

<drive name>:\<path name>\jobschmsgevent.bat MsgA HostName

4.11 The Message Event is not Recognized by the Job Net

4.11.1 Message Events Generated for Job Nets using the jobschmsgevent command are not Recognized

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Does the job net that waits for the message have a status that does not recognize message events?

Action method

If the job net waiting for the message is in any of the following states, the message event cannot be recognized when it has occurred. Check if any of the following conditions apply.

- The job net has the "Executing" status. (*1)
- The job net has the "Warning" status. (*1) (*2)
- The job net has the "Disabled" status.
- The job net has the "Abended" status. (*3)
- The job net has the "Canceled" status. (*4)
- The cumulative occurrence count of message events exceeded 255 times. (*5)
- The job net waiting for the message falls on an unscheduled day. (*6)
- Once in a day is specified for Start only when wait event has occurred, and the job net has already been started. (*7) (V11.0L10/11.0 or later)
- *1: This is recognized if Valid during job net execution is selected.
- *2: Only a job net with the Job Execution Control attribute can be in a warning state.
- *3: This is recognized if the job net is included in a group. Additionally, even if the job net is not included in the group, it will be recognized if Validate job net confirmation is not selected in the Advanced Settings for Verification window

that is called from the **Define Jobscheduler Startup Parameters** window. Note that, in V13.2.0 or earlier, **Validate job net confirmation** is specified on the **Use function1** tab in the **Define Jobscheduler Startup Parameters** window.

- *4: This is recognized if the job net is included in a group. Additionally, even if the job net is not included in the group, it will be recognized if **Check canceled** is not selected in the **Advanced Settings for Verification** window that is called from the **Define Jobscheduler Startup Parameters** window. Note that, in V13.2.0 or earlier, **Check canceled** is specified on the **Use function1** tab in the **Define Jobscheduler Startup Parameters** window.
- *5: If the execution condition of job net is specified as **Start only when message event has occurred**, it internally retains the number of message event occurrences. This occurrence count refers to the cumulative occurrence count. The cumulative occurrence count increases by one each time a message event occurs. However, the occurrence count decreases by one each time a job net is started by the occurrence of a message event. Note that the cumulative occurrence count of message events should not exceed 255.
- *6: This is recognized if Valid only on startup days is not selected.
- *7: This is recognized again after the Reinstate operation has been performed.

Action 2

Points to check

Was the message event correctly generated?

Action method

Check if any of the following conditions apply.

- Do the generated message event and the message event defined in the job net match? (case-sensitivity is used.)
- Was the message event generated to the host that waits for the message event?
- Was the message event generated to the subsystem that waits for the message event?
- Was the message event generated to the job net that waits for the message event? (V11.0L10/11.0 or later)

Action 3

Points to check

Was the Systemwalker MpJobsch service started on the host that generated the message event?

Cause

Even if the message event was correctly generated, it will not be recognized by the job net if the Systemwalker MpJobsch service was not started.

Action method

Check if the Systemwalker Mplobsch service was started on the host that generated the message event.

Action 4

Points to check

Did you try to generate a message event to an SE version Systemwalker Operation Manager from an EE version Systemwalker Operation Manager?

Refer to "4.10.5 The Message "MpJobsch: ERROR: 0309: Usage: jobschmsgevent event_name[:project_name[/ job_net_name] [message_text]] [-h host_name] [-t:INFO | -t:WARN | -t:ERROR]" is Output when the jobschmsgevent Command is Executed from a Schedule Job [UNIX Versions]" for information on the cause and action method.

Action 5 [Windows versions]

Points to check

When the following check boxes were not selected on the **Use function1** (*1) tab in the **Define Jobscheduler Startup Parameters** window, was the "Systemwalker MpJobsch" service started?

- Use message waiting
- Application

Cause

If the "Systemwalker MpJobsch" service was started when the above check boxes were not selected, the message event will be discarded even if generated. (The job net will not start when the message event is generated.)

Action method

When the following check boxes are selected on the **Use function1** (*1) tab in the **Define Jobscheduler Startup Parameters** window, start the "Systemwalker MpJobsch" service:

- Use message waiting
- Applications

Action 6 [Windows versions]

Points to check

Was the output destination of the event log changed? Did you restart the operating system after changing the output destination?

Action method

Restart the operating system after changing the output destination of the event log.

4.12 Cannot Reference the Job Properties

4.12.1 When the Job Properties are Referenced in the Monitor Job Net window, "system error" is Displayed [UNIX Versions]

Error message

The following message is output to the SYSLOG:

MpJobsch:ERROR: iconv() XXXXX

XXXXX: Optional string. Typical strings are shown below:

- Incorrect byte sequence
- Incorrect argument
- Invalid byte string

Applicable versions and levels

- Solaris versions: 5.0 or later
- Linux versions: 5.2, V10.0L10 or later
- Linux for Itanium versions: V12.0L10 or later
- HP-UX versions: 5.1 or later

^{*1:} In V5.0L20 or earlier, the Options tab is used.

^{*1:} In V5.0L20 or earlier, the Options tab is used.

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Were illegal characters (such as binary code) mixed with the other characters in the standard output/standard error output (stdout/stderr) of the job itself, so that the character type could not be determined?

Cause

Jobscheduler automatically determines the character type (EUC, SJIS) of the character encoding output to the previous job log, and transfers the information in the previous job log after converting the information to a character type (SJIS) that can be displayed in the client. If illegal characters (such as binary code) are mixed with the other characters in the standard output/standard error output (stdout/stderr) of the job itself, so that the character type cannot be determined, an error may occur when the iconv function is executed, and it may not be possible to display the job properties.

Action method

Refer to the content of the previous job log, and ensure that garbled character encoding is not mixed with the other encoding.

The file names to be checked are roject name>_<job net name>.log (in V13.3.0 or later, this is roject name>_<job net name>_<nn>log, where <nn> is a number) in the Jobscheduler database directory.

Ensure not to output unconvertible character codes to the job output results.



Refer to "4.14 Error Message Notifications are Received from Jobscheduler", "4.14.3 The Error Message "iconv() ..." is Displayed, as in "iconv() Illegal byte sequence", and "iconv() Invalid Argument" [UNIX Versions]" for details.

4.12.2 The Message "Failure in allocating information storage area." is Output

Error message

"Failure in allocating information storage area."

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The Systemwalker Operation Manager client receives the data that was sent from the Systemwalker Operation Manager server in the dynamically obtained memory when displaying the job properties. This problem may occur at this time, because the dynamic memory could not be obtained from the system.

The Systemwalker Operation Manager server creates the data to be sent to the Systemwalker Operation Manager client based on the files that store the output content from the jobs shown below. This file size is always extremely large, therefore the amount of data that is sent to the Systemwalker Operation Manager client may be large, which may cause the memory of the Systemwalker Operation Manager client that receives it to be depleted.

File that stores the output content from the job:

[Windows versions]

| | obscheduler database directory\point| (*1)

[UNIX versions]

<jobscheduler database directory>/<project name>_<job net name>.log (*1)

*1: In V13.3.0 or later, this is <project name>_<job net name>_<nn>.log (nn can be any number)

The Jobscheduler database directory can be checked on the **Database** tab in the **Define Jobscheduler Startup Parameters** window, displayed when **Startup parameter** is clicked in the **Systemwalker Operation Manager Environment Setup** window.

Action method

Delete the above file that stores the output content from the applicable job.

Then, on the **Standard information** tab in the **Monitor - Job** window, select the **Do not save standard/error output** check box, or review the output content of the job, and consider an operation that reduces the output amount.

If all output content is required, ensuring that the job properties window is not used, use a text editor, for example, to back up the file that stores the output content from the above job directly, so that this file can be referenced.

4.12.3 About One Minute is Required to Display the Properties of the Jobs in the Job Net

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The cause may be the same as the one described in "4.12.2 The Message "Failure in allocating information storage area." is Output".

Action method

Perform the action method described in "4.12.2 The Message "Failure in allocating information storage area." is Output "

4.12.4 The Message "Resource with identifier '0' not found 0" is Output

Error message

Resource with identifier '0' not found 0

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

Because of the cause described in "4.12.2 The Message "Failure in allocating information storage area." is Output", the depleted memory status continues for a while, so an error may easily occur, for example the system resource or DLL cannot be loaded.

Action method

Wait for a while. If the released memory can be used, the above error message will not occur.

4.12.5 The Message "Disconnected because an invalid socket ID was specified." is Output

Error message

Disconnected because an invalid socket ID was specified.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Was the Jobscheduler service/daemon stopped?
- Was the Jobscheduler service/daemon restarted?

Cause

The above message is displayed as a pop-up in the client window if the Jobscheduler service/daemon is stopped or restarted while the Systemwalker Operation Manager client is being used.

Action method

End the Systemwalker Operation Manager client, and then reconnect to the Systemwalker Operation Manager server.



The message may be output as a result of the cause described in "4.12.2 The Message "Failure in allocating information storage area." is Output".

4.13 The Jobscheduler Behavior is Abnormal

4.13.1 After the System Time is Changed, the Job Net Does not Start on Schedule

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Was the system time changed after the Jobscheduler service/daemon was stopped?

Cause

Jobscheduler performs scheduling processing based on the current time of the system, therefore, if the system time is changed during the operation, the job net may not start according to schedule, and the service behavior may be abnormal.

Action method

Refer to "Action 2" in "4.2.1 A Job Net Started at an Unexpected Time" for information on the cause and action method.

4.13.2 After the System Time is Changed, the History Information cannot be Displayed Correctly

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

If the system time or date is reverted to the past, the outputs to the Jobscheduler log file will be temporally disordered, therefore a problem will occur whereby the Jobscheduler history information cannot be displayed correctly, or the wait for the message does not function correctly.

Action method

To revert the system time or date to the past, clear all log information output to the time series as above, and then restart the system.

In concrete terms, clear the following log files:

- Delete the jobdb1.log, jobdb2.log, and jobdb3.log files in the Jobscheduler database directory
- All files under the net.spool subdirectory of the Jobscheduler database directory
- Event log [Windows versions]

Refer to the following manual for information on precautions required when changing the system time.

- V10.0L10/10.0 or later:

"Cautions on Changing Time" in the User's Guide



Refer to "4.5 The Gantt Chart Display is Abnormal", "4.5.3 After the Waiting Job Net, a Short Band that Indicates Completed (or Abended, Canceled, or Pseudo-normal Completed) is Displayed" for details.

4.13.3 Many file name job name.oxxxx, job name.exxxx (xxxx is the job number) are Generated in the Home Directory [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

This file remains because of the specification that saves the execution result of the job that was executed on the Systemwalker Operation Manager Job Execution Control function.

The standard output (stdout) file and the standard error output (stderr) file that is output by the job started from Jobscheduler is generated in the home directory. The file name is job name.oxxxx, or job name.exxxx (xxxx is the job number). Additionally, if the conditions that output the job list apply, the job list file will be created using the file name of job name.lxxxx (xxxx is the job number).

Action method

To change the setting so that the execution result of the job that was started from Jobscheduler does not remain, select the **Delete job output file** check box on the **Output file** tab in the **Define Jobscheduler Startup Parameters** window, that is displayed by clicking **Startup parameter** in the **Systemwalker Operation Manager Environment Setup** window.

To enable the definition, the Jobscheduler daemon must be restarted.

4.13.4 The Jobscheduler Server Processing Hangs up [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

<u>Action</u>

Cause

If many job nets and jobs are executed at the same time, and there are many message startup job nets, the startup of the job nets and jobs may be delayed, and it may not be possible to correctly recognize the Job Execution Control attribute job status using Jobscheduler.

Action method

Perform the following procedure to extend the message queue:

Solaris 7/8/9:

Add the following settings to the /etc/system file, and then restart the system after editing the file.

set msgsys:msginfo_msgtql = <number of job nets to be started at the same time> (*1) x 4 set msgsys:msginfo_msgmnb = <number of job nets to be started at the same time> (*1) x 200 (*2)

set msgsys:msginfo_msgseg (*3) = <number of job nets to be started at the same time> $(*1) \times 200 (*2)$

/ <msginfo_msgssz value>

set msgsys:msginfo_msgmap (*3) = <msginfo_msgtql value> + 2 (*4)

set msgsys:msginfo_msgmni = 4 x <number of subsystems to be used> (*5)

- *1: To use a Job Execution Control attribute and an Interstage attribute job net, also add the number of jobs to be started at the same time.
- *2: "200" is the standard value, however, this will vary depending on the length of the path for the host name or output file. Perform sufficient verification, and set an appropriate value.
- *3: In Solaris8 or later, there is no need to set the "msgsys:msginfo_msgseg" and "msgsys:msginfo_msgmap" values.

- *4: Request the msgsys:msginfo_msgtql value first, and then calculate using that value as well.
- *5: This is for EE versions. In SE versions, set the number of subsystems used as "1".

Remarks: msgsys:msginfo_msgmnb and msgsys:msginfo_msgmap are parameters that specify the maximum value, therefore correct the current value if it is less than the above values. For other parameters, add the above values to the current values.

Solaris 10 or later

Change the values set in the /etc/project file to the following values:

process.max-msg-qbytes=(privileged,<number of job nets to be started at the same time> (*1) x 200 (*2),deny)
project.max-msg-ids=(privileged,4 x <number of subsystems to be used> (*3),deny)

- *1: Additionally, if using a job with Job Execution Control attributes, add the number of jobs to be started simultaneously.
- *2: "200" is the standard value, however, this will vary depending on the length of the path for the host name or output file. Perform sufficient verification, and set an appropriate value.
- *3: This is for EE versions. In SE versions, set the number of subsystems used as "1".

Remarks: The max-msg-qbytes and max-msg-ids operating system default values are as follows:

- max-msg-qbytes: 64KB
- max-msg-ids: 128

HP-UX versions:

Use a system manager to change the kernel parameters, and then create the kernel again.

msgtql <number of job nets to be started at the same time> (*1) x 4
msgmnb <number of job nets to be started at the same time> (*1) x 200 (*2)
msgseg <number of job nets to be started at the same time> (*1) x 200 (*2) / <msgssz
value>
msgmap <msgtql value> + 2 (*3)
msgmni 4 x <number of subsystems to be used> (*4)

- *1: Additionally, if using a job with Job Execution Control attributes, add the number of jobs to be started simultaneously.
- *2: "200" is the standard value, however, this will vary depending on the length of the path for the host name or output file. Perform sufficient verification, and set an appropriate value.
- *3: Request the msgtql value first, and then calculate based on that value.
- *4: This is for EE versions. In SE versions, set the number of subsystems used as "1".

Remarks: msgmnb and msgmap are parameters that specify the maximum value, therefore correct the current value if it is less than the above values. For other parameters, add the above values to the current values.

Linux versions:

Add the following settings to the /etc/sysctl.conf file, and then restart the system after editing the file.

kernel.msgmnb = <number of job nets to be started at the same time> (*1) x 200 (*2) kernel.msgmni = $4 \times \text{number of subsystems to be used> (*3)}$

- *1: Additionally, if using a job with Job Execution Control attributes, add the number of jobs to be started simultaneously.
- *2: "200" is the default value, however, this will vary depending on the length of the path for the host name or output file. Perform sufficient verification, and set an appropriate value.
- *3: This is for EE versions. In SE versions, set the number of subsystems used as "1".

Remarks: kernel.msgmnb is a parameter that specifies the maximum value, therefore correct the current value if it is less than the above values. For other parameters, add the above values to the current values.

(EE versions only)

To perform multi-subsystem operations in Linux versions, the number of message queues used will be four times greater than the number of subsystems. For this reason, the maximum number of message queues that can be used may be exceeded, which will mean that the subsystem cannot be started.

In this case, add the settings shown below to the /etc/sysctl.conf file to extend the maximum number of message queues that can be used in the system. After editing the file, restart the system.

kernel.msgmni (maximum number of message queues that can be used) = $4 \times number$ of subsystems to be used>

4.13.5 No Response when OK is Selected in the Host connection specification Dialog Box

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the port number used by Systemwalker Operation Manager being used by another application?

Action method

Check if the port number (9367/tcp) used by the Operation Manager common infrastructure daemon/service is being used by another application.

The confirmation method is shown below.

- 1. Stop the Systemwalker Operation Manager daemon or service.
- 2. Submit the netstat -an command, and check if the port number (9367/tcp) is being used.

If the port number 9367/tcp is being used by another application, change the port number to be used by Systemwalker Operation Manager. Refer to the following manuals for information on how to change the port number:

- V10.0L10/10.0 or later:

"Changing Port Numbers" in the Installation Guide

- V5.0L10/5.0/V5.0L20/5.1/V5.0L30/5.2:

"Changing Port Numbers" in the Installation Guide

4.13.6 A Failover Occurs while the Cluster System is Running, and the Message "Specified host not found." is Displayed

Error message

Specified host not found.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 10.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

Is there a monitored host definition on the standby node?

Cause

There may not be a monitored host definition on the standby node, or it may be invalid.

Action method

Correct the monitored host definition on the standby node to match the active node settings.

[Windows versions]

The extract/distribute policy functions are used to reflect the defined monitored host definition on the other node.

[UNIX versions]

Use a command such as rcp to copy the following file to the other node:

Solaris versions and Linux versions:

/var/opt/FJSVJMCMN/etc/monitor_hosts

HP-UX versions:

/opt/FHPJMCMN/db/etc/monitor_hosts

AIX versions:

/opt/FAIXJMCMN/db/etc/monitor_hosts

Refer to the following manuals for details:

- V10.0L10/10.0 or later:

"Standardizing Systemwalker Operation Manager environment definitions" in the Cluster Setup Guide.

4.13.7 Many Jobs that Wait for File have been Registered, so the CPU Load is High [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 to 10.1

- Linux versions: 5.2, V10.0L10

- HP-UX versions: 5.1, 10.0

- AIX versions: 5.1, 10.0

- DS versions: V20L10

Action

Cause

In the chkfile.sh that provides the samples, file update is checked at one-second intervals. Consider the CPU load, and change the interval to match the operating environment. Change the parts shown below in the chkfile.sh.

Example) Changing the file check interval from one second (the default value) to ten seconds

Before change: sleep 1 After change: sleep 10

4.13.8 The xxxxxxxx.exe application could not be initialized correctly. (xxxxxxxx is one of tskgrsrv, tskelsrv, tskwnsrv, tskbasrv, tskussrv, or tskevsrv) [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Were the desktop heap area settings changed?

Cause

The desktop heap area may not have been allocated when the Jobscheduler service started.

Action method

When using Windows Server 2008 or later, refer to the manual indicated below and modify the registry to expand the desktop heap size.

- V13.8.0 or later

Systemwalker Operation Manager Installation Guide - "Tasks Prior to Installation" - "Preventing depletion of the desktop heap"

In cases other than the above, perform the following procedure to enlarge the desktop heap by correcting the registry. There is no particular method for estimating an appropriate value, so increase the size gradually.

1. Open the registry editor.

Select Run from the Start menu. Enter "regedt32", and then click OK.

2. Move to the SubSystems key.

From the HKEY_LOCAL_MACHINE subtree, move to the following key.

\System\CurrentControlSet\Control\Session Manager\SubSystems

- 3. Select the Windows value.
- 4. Select Modify from the Edit menu.
- 5. Increase the desktop heap by changing the value of the SharedSection parameter.

Increase the value of the third item "zzzz" (in increments of 256 KB or 512 KB).

SharedSection=xxxx,yyyy,zzzz

Note: There is no need to change the first and second values ("xxxx" and "yyyy").

- Example: Before change

SharedSection=1024,3072,512

- Example: After change

SharedSection=1024,3072,1024

6. Restart the system.



Refer to Microsoft Knowledge Base Article 126962 for information on how to correct the registry to enlarge the desktop heap. Additionally, refer to Microsoft Knowledge Base Article 184802 for information on the desktop heap.

4.13.9 It takes a While until Jobscheduler Starts

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the Delete job output file check box cleared on the Output file tab in the Define Jobscheduler Startup Parameters window?

Additionally, was the job output file deleted periodically?

Cause

If the **Delete job output file** check box is cleared, the file may remain on the disk, which may cause the security check to take a while during the startup. Accordingly, the Jobscheduler start time will become longer.

Action method

Depending on the operation, select the **Delete job output file** check box, or periodically delete the job output file in the following directory.

- Windows
 - <Jobscheduler database directory>\work
- UNIX
 - <

Action 2

Points to check

Were there too many job net definitions?

Cause

In the initialization processing when the server starts, Jobscheduler reads all job net definition information, and schedules the scheduled start from the point when the server starts until the next day change time. If a large number of job nets are defined in one system, the job net schedule processing will take a while.

Action method

Collect linked multiple job nets that run as one job net, to reduce the number of job nets that are registered.

4.13.10 The Job Net Operation Takes a While

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Are there a large number of job nets registered in the project?

Cause

If the number of job nets registered in the project increases, this will affect the operation performance of the job net. Refer to the following guide.

SE versions:

Up to 255 job nets.

EE versions:

There is no limit, however use the following as a guide to the number of job nets that can be registered.

- Windows versions: Up to 300

- UNIX versions: Up to 500

Also, refer to the following manual.

- V10.0L20/10.1 or later
 - "Limit Values for Job Scheduling" in the Technical Guide.
 - "Notes When Registering a Large Number of Job Nets" in the User's Guide.
- V10.0L10/10.0

"Limit Values for Job Scheduling" in the Technical Guide.

4.13.11 The CPU Usage of the Process "tskussrv"/"tskgrsrv" is High [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the message queue depleted?

Refer to "Action 16" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method

4.13.12 When SHUTDOWN.EXE is Executed, the Job Net Completion Code is 239 [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

If SHUTDOWN.EXE was executed from a job in the job net, the daemon will stop executing, therefore the completion code may be 239.

Action method

Use the termination processing job net to perform the shutdown processing.

Refer to the following manuals for information on the termination processing job net:

- V10.0L10 or later:

"Shutting Down the System at Optional Times [Windows version]" in the User's Guide

- V5.0L10/V5.0L20/V5.0L30:

"Shutting Down the System at Optional Times" in the Technical Guide

4.13.13 Cannot Perform the Operation for the Job Net that Corresponds to the Completed exit or Abended exit

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

At the point when the exit is called, it is not guaranteed that the job net status has the "Ended" status (it will have that status when enough time elapses).

Action method

If necessary, in case the operation fails, consider adding fixed time retry processing, for example.

4.13.14 Cannot Start the Jobscheduler Service [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is the event log (application log) full?

Cause

If the event log is full, the process that monitors the event log may not be able to access the event log, and Jobscheduler may not be able to start.

Action method

Change the operating system settings so that the event log (application log) is overwritten. Then, start the "Systemwalker Mpjobsch" service.

4.13.15 Cannot Start the Jobscheduler Daemon [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Jobscheduler daemon ended using the kill command last time?

Cause

If the Jobscheduler daemon was ended using the kill command last time, it may not be possible to the start the daemon normally next time.

Action method

Do not end the daemon using the kill command. If you must end the daemon using the kill command, restart the system afterwards.

4.13.16 "MpJobsch: ERROR: 0063: the daemon already started" is Output, and the Jobscheduler Daemon cannot Start [UNIX Versions]

Error message

MpJobsch: ERROR: 0063: the daemon already started.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

If the daemon process of Jobscheduler is ended using a method other than that explained in the Systemwalker Operation Manager manuals, the process may end without deleting IPC resources.

Action method

Restart the system.

4.13.17 Illegal Information is Displayed in the Job Execution History (Output Information) [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was information displayed illegally the result of executing the startup file?

Cause

When the job is executed, the startup file of the shell of the user that executes it is read. The result (output result) that was executed using the startup file is also displayed as output information.

Action method

Change the startup file as necessary.

4.13.18 Even though Abended (*1) is selected on the Event output tab in the Define Jobscheduler Startup Parameters window, this is not Output to the Event Log/SYSLOG when the Job Status has the "Closed" status (Completion Code: 239)

*1: If using V13.3.0 or later, this is specified in the **Advanced Settings for Event Output** window, which is displayed by selecting **Define Jobscheduler Startup Parameters** >> **Event output** tab >> **Event output**, and then clicking **Details**.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was Jobscheduler restarted after Closed (*1) was selected on the Event output tab in the Define Jobscheduler Startup Parameters window?

*1: If using V13.3.0 or later, this is specified in the **Advanced Settings for Event Output** window, which is displayed by selecting **Define Jobscheduler Startup Parameters** >> **Event output** tab >> **Event output**, and then clicking **Details**.

Action method

To output "Closed" to the event log or SYSLOG, select the **Closed** check box, not the **Abended** check box, and then restart Jobscheduler.



After the Jobscheduler startup parameter was changed, the content that was set will be reflected by restarting Jobscheduler.

4.13.19 After the Restore, when Jobscheduler is Started the Group/Job Net/Job Ends Abnormally with Completion Code 239

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was a backup performed while the group, job net, or job was executing?

Cause

If a backup is performed while the group, job net, or job is executing, and that information is then restored, when Jobscheduler starts, the group, job net, or job that was executing when the backup was performed will change to the "Closed" status (completion code = 239).

Action method

Perform the backup while the group, job net, or job is not executing.

4.13.20 The Jobscheduler Service does not Start [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Are the service startup account settings correct?

Cause

The startup account for the Systemwalker Operation Manager service must meet the following conditions:

- a. The user belongs to the Administrators group on the local computer.
- b. The following privileges have been assigned to the user:
 - Log on as a service
 - Act as part of the operating system
 - Increase quotas
 - Replace a process level token
- c. The password does not expire.
- d. The user name and password do not include spaces.

Action method

Refer to the following manuals, and set the startup account for the service correctly.

- V13.3.1 or earlier
 - "Notes After Installation" in the Installation Guide
- V13.8.0 or later

"Changing the Startup Account" in the Installation Guide

4.13.21 There is a Large Number of Files in /var/tmp [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Were the temporary files, created when the following exit programs started, deleted?

- Job net Completed exit
- Job net Abended exit
- Job net Abended extended exit
- Job Completed exit

Cause

Jobscheduler records the job name, completion code, and job status in the temporary file before starting the exit programs described in "Points to check". Jobscheduler does not delete this temporary file, therefore it remains.

Action method

- Action when there is a large number of files

Check the file, and delete the file using the rm command if it contains the definitions in the following format:

Job name

Completion code

Status

- Action (preventive measure) so that there is not a large number of files

When the exit program is started, the name of the temporary file is passed as an argument. Delete the file that is passed as this argument from the exit program.

4.13.22 The Startup Delay Exit is Started at the Scheduled Start Time of a Disabled Job Net

Applicable versions and levels

- Windows versions: V11.0L10 or later

- Solaris versions: 12.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action

Cause

Even if job nets with the following execution conditions set are in a disabled state, the startup delay exit starts up at the scheduled start time.

- The Start only when message event has occurred check box is selected in the Standard information tab in the Job Net Properties window.
- The Once in a day check box is selected in the Standard information tab in the Job Net Properties window.
- Scheduled start time is set in the Standard information tab in the Job Net Properties window:

Action method

If you do not want to start the startup delay exit for the job net with the above execution conditions, in the **Startup Days** window, set the applicable job net as an unscheduled day.

4.13.23 The Jobscheduler Daemon/Service is not Running

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was a message output to the syslog/event log?

Action method

Check the messages in syslog/event log, and take action in accordance with the action method for each message described in "4.14 Error Message Notifications are Received from Jobscheduler".

4.13.24 Even though the job net Started, Completed, or Ended Pseudonormally, these Messages are not Output to the Event Log/ SYSLOG

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

In the Job net status (*1) group of the Advanced Settings for Event Output window, that is displayed by clicking Details under Event output on the Event output tab in the Define Jobscheduler Startup Parameters window, was the applicable item (Completed/ Pseudo-normal/Started) selected?

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Event output** tab.

Action method

In the **Job net status** check box, select the applicable item (**Completed/Pseudo-normal/Started**), and then restart the Jobscheduler service/Jobscheduler daemon.

Action 2 [UNIX versions]

Points to check

- Was the setting configured so that the user.info information will be output to /etc/syslog.conf?
- Are you sending HUP signals for syslogd?

Action method

If the job net is started, completed, or ended pseudo-normally, the facility level of each message output to SYSLOG is user.info.

Configure the setting so that the user info information is output to /etc/syslog.conf, and send the HUP signal to syslogd.

Note that, to output an info level message to the console or messages file, configure the following settings in syslog.conf:

user.info /dev/console
user.info /var/adm/messages

However, if the above setting was configured, note that all info level messages in the system will be output to the console or messages file.



The facility level of each message output to SYSLOG for the job net status is as follows:

- Started:
 - user.info
- Completed:
 - user.info
- Abended:
 - user.err
- Canceled:
 - user.err
- Closed:
 - user.err
- Refused:
 - user.warning

- Skipped:
 - user.warning
- Pseudo-normal:

user.info

4.13.25 Controlling the desired status (Watching delay of job / job net) Function is not Working as Expected

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

In the Controlling the desired status (Watching delay of job / job net) (*1) frame of the Advanced Settings for Event Output window, that is displayed by clicking Details under Event output on the Event output tab in the Define Jobscheduler Startup Parameters window, was the applicable item selected?

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Event output** tab.

In V13.8.0 or later, this is Watching delay of job / job net, not Controlling the desired status.

Action method

In the Controlling the desired status (Watching delay of job / job net) frame, select the applicable item, and then restart the jobscheduler service/jobscheduler daemon.

Action 2 [UNIX versions]

Points to check

- Was the setting configured so that the user.warning and daemon.warning information will be output to /etc/ syslog.conf?
- Are you sending HUP signals for syslogd?

Action method

The facility level of each message output to SYSLOG in the **Controlling the desired status** (**Watching delay of job / job net**) setting is as follows:

- Notify when job net is not started even after the specified start time is lapsed: user.warning
- Notify when job is not terminated even after the specified time is lapsed: daemon.warning

- Notify when job net is not ended even after the specified end time is lapsed: user.warning

Configure the setting so that the user.warning and daemon.warning information is output to /etc/syslog.conf, and send the HUP signal to syslogd.

Note that, to output a warning level message to the console or messages file, configure the following settings in syslog.conf:

user.warning;daemon.warning /dev/console
user.warning;daemon.warning /var/adm/messages

However, if the above setting was configured, note that all warning level messages in the system will be output to the console or messages file.

4.13.26 Even though the Events Set in the Message table Were Generated, the Job Net does not Start [Windows Versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

On the **Use function1** (*1) tab in the **Define Jobscheduler Startup Parameters** window, was the "Systemwalker MpJobsch" service started when the **Use message waiting** check box was not selected, or the following check boxes were not selected?

- Application (*2)
- Security (*2)
- System (*2)

Cause

If the "Systemwalker MpJobsch" service was started in a state where the above check box is not selected, the event log for items not selected will not be monitored.

Action method

If the event log to be monitored is selected on the **Use function1** tab (*1) in the **Define Jobscheduler Startup Parameters** window, start the "Systemwalker MpJobsch" service.

*1: In V5.0L20 or earlier, the Options tab is used.

4.14 Error Message Notifications are Received from Jobscheduler

4.14.1 The Warning Error Message "The size of log information has exceeded the maximum value" is Output

Error message

^{*1:} In V5.0L20 or earlier, this is the **Options** tab.

^{*2:} This will depend on the event log type that records events to be monitored.

The size of log information has exceeded the maximum value

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L10

Solaris versions: 5.0 to 10.0Linux versions: 5.2, V10.0L10

HP-UX versions: 5.1, 10.0AIX versions: 5.1, 10.0

- DS versions: V20L10

Action

Points to check

Was the log file switched?

Action method

The execution history log file size is recorded in the Jobscheduler database directory has exceeded the upper limit value, however no action is required.

The log file size (default value: 3MB) set on the **Database** tab in the **Define Jobscheduler Startup Parameters** window was exceeded, therefore the log file was switched.

Three log files are switched cyclically, therefore the old job history cannot be referenced, however as the operator there is no need to follow the action advised in the warning message.

4.14.2 A Jobscheduler Error Message is Displayed in the Event Log [Windows Versions]/SYSLOG [UNIX Versions]

Error message

One of the following messages is output:

- [Windows versions]

Source: MpJobsch Type: Error Event ID: 6198 Description: Failure in communicating with the jobscheduler(client).

Source: MpJobsch Type: Error Event ID: 6199 Failure in connecting with the jobscheduler (client).

- [UNIX versions]

MpJobsch: ERROR: 0198: Failure in communicating with the jobscheduler (client).

MpJobsch: ERROR: 0199: Failure in connecting with the jobscheduler (client).

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

An error occurred in communication between the Jobscheduler service/daemon and the Systemwalker Operation Manager client.

The reason for the communication error (the reason for the error in the TCP/IP socket level) is described in the error message that is output after the error.

A typical inherited error message that is output is as follows:

- [Windows versions]

Source:MpJobsch Type: Error Event ID: 8301 func=JOBSCH_read:recv() Socket function error occurred. (code=10054)

Source:MpJobsch Type: Error Event ID: 8301 func=JOBSCH_write:send() Socket function error occurred. (code=10054)

- [UNIX versions]

MpJobsch: ERROR: write() broken pipe

MpJobsch: ERROR: read() Connection reset by peer

MpJobsch: ERROR: 0412:write() broken pipe

MpJobsch: ERROR: 0412:read() Connection reset by peer

The main cause in each case is that the socket was illegally disconnected, or that the Systemwalker Operation Manager client was not stopped normally.

Action method

As the system action, the socket that was illegally disconnected will be correctly handled, therefore no action is required by the operator for this error message. However, if this message is output frequently, the following is possible, therefore, you should review operation.

- Operations in which the Systemwalker Operation Manager client is not disconnected normally (for example, when the client PC is frequently reset)
- Problems that occur on the network pathway
- Inappropriate communication or unauthorized access from an external source.

4.14.3 The Error Message "iconv() ..." is Displayed, as in "iconv() Illegal byte sequence", and "iconv() Invalid Argument" [UNIX Versions]

Error message

MpJobsch:ERROR: iconv() XXXXX

XXXXX: Optional string Typical strings are shown below:

- Incorrect byte sequence
- Incorrect argument
- Invalid byte string

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

At the applicable message output time, check the following output results for the job that you tried to display:

- Were halfwidth kana characters output?
- Were characters that cannot be converted from EUC code to SJIS code output?
- Were 996 bytes or more output on one line?

Action method

Ensure that the job does not output the results as described above.

If the above output absolutely must be performed, refer to the following files to reference the output result:

<jobscheduler database directory>//project name>_<job net name>.log (*1)

*1: In V13.3.0 or later, the file name is project name>_<job name>_<nn>.log (nn is any number)

From the beginning of the string to the halfwidth space (maximum 4 bytes) in the above file is used as the Jobscheduler internal information. Thereafter is output as the output result of the job.



Refer to "4.12 Cannot Reference the Job Properties", "4.12.1 When the Job Properties are Referenced in the Monitor Job Net window, "system error" is Displayed [UNIX Versions]" for details.

4.14.4 The Error Message "Process cannot access the file" is Output [Windows Versions]

Error message

func=JOBSCH_dbfile_open:CreateFile() 32: Process cannot access the file.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there an application that accesses the files under the Jobscheduler database directory?

Cause

This problem occurs if another application is already accessing the job net definition information file when Jobscheduler tries to access it.

Action method

Check if there is an application that is accessing the files in the Jobscheduler database directory, and take action so that the files in the Jobscheduler database directory are not accessed while Jobscheduler is running.

Backup software or virus detection software are possible examples of applications that access the files under the Jobscheduler database directory.

Refer to the following manuals for information on the notes on using backup software or virus detection software:

V10 0I 10 or later

User's Guide:

- "Cautions when Using Back-up Products [Windows version]"
- "Cautions when Using Virus Detection Products [Windows version]"

4.14.5 The Error Message "Failure in accessing project DB" is Output

Error message

Failure in accessing project DB.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Jobscheduler API executed on multiple threads?

Action method

If the Jobscheduler API is executed on multiple threads, it may corrupt the definition file, and an error message in the title may be displayed. Check if the Jobscheduler API was called from multiple threads.



Refer to "4.9 The Jobscheduler Command or API Behavior is Abnormal", "4.9.5 The Jobscheduler Command/API Called from the User Application does not Work Normally" for details.

4.14.6 The Error Message "Failure in accessing project DB." is Output [Windows Versions]

Error message

Failure in accessing project DB.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is another application (virus check software or backup software) that can access the Jobscheduler database directory running?

Cause

If an application accessed the Jobscheduler database directory while Jobscheduler is accessing the same directory, it may corrupt the job net definition file in the database directory and display the error message in the title.

Action method

Execute the mprso command to restore the backed up definition information. Note that the definition information is reverted to the point when the backup is taken.

While Jobscheduler is running, refrain from accessing the files in the Jobscheduler database directory.

Refer to the following manuals for information on the cautions required when using the backup software and virus check software:

- V10.0L10 or later:

User's Guide:

- "Cautions when Using Back-up Products [Windows version]"
- "Cautions when Using Virus Detection Products [Windows version]"

4.14.7 The Error Message "jobsch: ERROR: read() Connection timed out" or "Socket function error occurred" is Output

Error message

jobsch: ERROR: read() Connection timed out

8301 func=XXXX:YYYY() Socket function error occurred. (code=10054)

XXXX: Caller function name

YYYY: Function in which the error occurred

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Possible causes are as follows:

- The client was ended using Task Manager
- The client machine is down
- The Systemwalker Operation Manager client ended abnormally
- The client machine power was suddenly disconnected
- The network is unstable

Action method

To stop the Systemwalker Operation Manager client, perform the end operation described in the manuals. Review the environment and check if there is a problem with the network environment.

There is no need to take the action that is related to the error message that was output. However, if this problem occurs frequently, review the network environment.

Refer to the following manuals for information on the Systemwalker Operation Manager client end operation:

- V10.0L10/10.0 or later:
 - "Shutdown" in the User's Guide
- V5.0L10/5.0 to V5.0L30/5.2
 - "Shutdown" in the Technical Guide

4.14.8 When Jobscheduler is Selected from the Systemwalker Operation Manager Client, an Error Message is Output to the Event Log [Windows Versions]

Error message

The following message is output to the event log of the host on which the Systemwalker Operation Manager server was installed:

func=MDSRV_connection_hosts: connect(), Socket function error occurred. (code=XXXXX)

XXXXX: Winsock error code

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L21

Action

Points to check

Is the monitored host definition on the Systemwalker Operation Manager server invalid?

Action method

Display Host Properties, displayed from Monitored Host Configuration that is displayed by clicking Monitored host in the Systemwalker Operation Manager Environment Setup window, and check if IP addresses that cannot be connected from the server are defined.

Description



Behavior when connecting from the Systemwalker Operation Manager client to the server

When the Systemwalker Operation Manager client connects to the server, the monitored host definition is transferred from the server to the client.

Systemwalker Operation Manager connects to each function by combining the transferred monitored host tree and the function displayed in the job selection window.

Even if the Systemwalker Operation Manager client authentication was successful, if the correct IP address was not set in the monitored host definition on the Systemwalker Operation Manager server, there will be no connection to the "Jobscheduler" function, even if "Jobscheduler" is selected.

4.14.9 The Message "Failure in opening DB." is Output

Error message

Failure in opening DB.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Are the attributes in the "database directory", specified in the Jobscheduler startup parameter definition, read-only?

Action method

Ensure that all files under the "database directory" have read/write attributes. Additionally, do not change the file attributes in the "database directory" without good reason.

Action 2

Points to check

Is there an application that accesses the files under the Jobscheduler database directory?

Cause

When Jobscheduler tried to access the job net definition information file, another application may have been accessing this file

Action method

Check if there is an application that is accessing the files in the Jobscheduler database directory, and take action so that the files in the Jobscheduler database directory are not accessed while Jobscheduler is running.

Backup software or virus detection software are possible examples of applications that access the files under the Jobscheduler database directory.

Refer to the following manuals for information on the notes on using backup software or virus detection software:

- V10.0L10 or later:

User's Guide:

- "Cautions when Using Back-up Products [Windows version]"
- "Cautions when Using Virus Detection Products [Windows version]"

4.14.10 An Error Message is Displayed immediately after Day Change Time

Error message

- [Windows versions]

Error MpJobsch service 7300 func=JOBSCH_file_open:CreateFile() 2: The specified file is not found..

- [UNIX versions]

open() No such file or directory

Applicable versions and levels

- Windows versions: V5.0L10 to V5.0L30

- Solaris versions: 5.0 to 5.2

Linux versions: 5.2HP-UX versions: 5.1

- AIX version: 5.1

- DS versions: V20L10

Action

Points to check

Was an error message output immediately after the day change time?

Cause

As the day change time processing, there is processing that deletes the task information for displaying the Gantt chart for today. This problem may occur if you tried to reference/update the task information immediately after the processing.

Action method

The information you tried to reference/update is unnecessary, and does not affect the operation, therefore no action is required.

4.14.11 The Message "MpJobsch: Error :6052: Invalid format" is Output when Using the jobschprint Command to Obtain Job Schedule Information

Error message

MpJobsch: Error: 6052: Invalid format

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the obtained information for the previous year or earlier, or for three years from now or thereafter?

Action method

Jobscheduler retains schedule information for three years in the future, including this year. Schedule information outside this range cannot be obtained.

4.14.12 The Message "MpJobsch: ERROR: msgrcv() Invalid argument" or "MpJobsch: ERROR: msgrcv() Identifier removed" is Output [UNIX Versions]

Error message

MpJobsch: ERROR: msgrcv() Invalid argument

MpJobsch: ERROR: msgrcv() Identifier removed

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

This problem occurs because the message queue (IPC resource) obtained by the Jobscheduler daemon process was deleted

The message queue may have been deleted using the ipcrm command, or by an application.

Action method

Ensure that the message queue is not deleted using the command or by an application.

If this problem occurs, restart the system.

4.14.13 The Message "0330:The job net has abnormal ended.CODE=XXX", or "330 The job net has ended abnormally. Job net comment=XXXX Job net name=YYYY Code=CCCC Project name=ZZZZ" is Output

Error message

0330:The job net has abnormal ended.CODE=XXX

330 The job net has ended abnormally. Job net comment=XXXX Job net name=YYYY Code=CCCC Project name=ZZZZ

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

There is a problem with the job that ended abnormally.

Action method

Check the job itself from the job completion code.

Refer to "Chapter 5 Troubleshooting Job Execution Control" - "5.1 The Job Execution Result is Abnormal" for information on the job completion codes.

4.14.14 The Message "ERROR: 1000002: Check if the Systemwalker Operation Manager process (tskmnsrv) is running properly." is Output [UNIX Versions]

Error message

ERROR: 1000002: Check if the Systemwalker Operation Manager process (tskmnsrv) is running properly.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 10.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

Was a cluster system operation used?

Action method

In cluster systems, on active and standby nodes, remove Jobscheduler and Job Execution Control as monitored processes for the process monitoring function.

4.14.15 The Message "Failure in host information acquisition in the monitor authorization host file." is Displayed

Error message

Failure in host information acquisition in the monitor authorization host file.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Can the name of the host name (monitoring server) defined in the **Define Monitoring Permission Host** window be resolved? Additionally, can the name of the host to be monitored (monitored server) be resolved by the host (monitoring server) defined in the **Define Monitoring Permission Host** window?

Action method

Review the network definition so that the name of the host name (monitoring server) defined in the **Define Monitoring Permission Host** window can be resolved. Alternatively, review the network definition so that the name of the host to be monitored (monitored server) can be resolved by the host (monitoring server) defined in the **Define Monitoring Permission Host** window.

4.14.16 The Error Messages "write() File too large" and "The daemon failed to write job net output information" are Displayed [UNIX Versions]

Error message

MpJobsch: ERROR: write() File too large

MpJobsch: ERROR: 0037: The daemon failed to write job net output information.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

AIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Was in excess of 2 GB written to the previous log file of the job, so that a large volume of outputs was performed by the job?

[Previous log file of the job]

"project name_job net name.log" (*1) in the database directory

*1: In V13.3.0 or later, the file name is <project name>_<job name>_<nn>.log (nn is any number)

Cause

If the file size exceeds 2 GB, the write() system call returns the error "File too large".

In the previous log file of the job, the standard output and the standard error output are written to each temporary file, and join at the point when the job ends. When they join the previous log file of this job, the error also occurs when 2 GB is exceeded. If the file size has exceeded 2 GB, the processing will continue, however the content of the previous log of the job cannot be referenced.

Action method

The size of the previous log file cannot be extended. Ensure that the file size does not exceed 2 GB.

For example, consider selecting the **Do not save standard/error output** option in the **Add/Change - Job** window, or reducing the volume of logs that are output by the job, so that the previous log file of the job does not exceed 2 GB.



The previous log file of the job is created for each job net.

4.14.17 Even though the Jobscheduler Daemon has Stopped, the Error Message "Jobscheduler daemon is started. The jobschoonvert command cannot be used" is Displayed [UNIX Versions]

Error message

MpJobsch: ERROR:0278 Jobscheduler daemon is started. The jobschoonvert command cannot be used.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Was the backed up information restored while the Jobscheduler daemon was running?
- Did the error occur while the previous Jobscheduler daemon was stopped?

 If so, the error message can be checked while the daemon is stopped.

Cause

In the Jobscheduler database directory, a "temp" file is created when the Jobscheduler daemon starts, and deleted when the Jobscheduler daemon ends.

If the Jobscheduler database directory backup is performed while the Jobscheduler daemon is running, the "temp" file will also become a backup target.

If the backup information obtained while the Jobscheduler daemon was running is restored, the "temp" file will also be restored.

Additionally, if the Jobscheduler daemon was ended using an abnormal method, the "temp" file will remain without being deleted.

If there is a "temp" file, this problem will occur even if the Jobscheduler daemon process is not actually running.

Action method

If this problem has occurred, take action according to the following procedure:

- 1. Execute the ps -ef|grep tsk command to check if the Jobscheduler daemon process exists.
- 2. Execute the rm /var/opt/F|SV|OBSC/temp command to delete the "temp" file.



The "temp" file must not be deleted while the Jobscheduler daemon is running. The problem can also be avoided by stopping the Jobscheduler daemon when performing the backup.

4.14.18 The Error Message "MpJobsch: ERROR: read() Bad file number" is Displayed [UNIX Versions]

Error message

MpJobsch: ERROR: read() Bad file number.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was a file created by the customer stored in the Jobscheduler database directory?

Cause

The Jobscheduler daemon searches files in the database directory when obtaining the schedule information. If a file created by the customer is stored in the database directory, Jobscheduler may incorrectly assume that it created the file and perform an unexpected action.

Action method

Files created by the customer should not be stored in the database directory.

Description

The database directory is stored in the following directories:

[When multi-subsystem operations are not used]

Solaris:

/var/opt/FJSVJOBSC

Linux:

/var/opt/FJSVJOBSC

HP-UX:

/opt/FHPJOBSCH/db

AIX:

/usr/FAIXJOBSC/db

DS versions:

/var/opt/uxp|OBSCH

[When multi-subsystem operations are used]

Solaris:

/var/opt/FJSVJOBSC/JOBDBn

Linux:

/var/opt/FJSVJOBSC/JOBDBn

HP-UX:

/opt/FHPJOBSCH/db/JOBDBn

AIX:

/usr/FAIXJOBSC/db/JOBDBn

In the above "JOBDBn", "n" corresponds to each subsystem number (1 to 9).

4.14.19 The Message "AP:MpJobsch: ERROR: 6305: Service: Write message failed at client (message queue)" is Displayed during Service Stop Processing [Windows Versions]

Error message

AP:MpJobsch: ERROR: 6305: Service: Write message failed at client (message queue).

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

The write message operation may fail on rare occasions during the processing to stop the service.

Action method

If this error occurs during the processing to stop the Jobscheduler service, it will not affect the operation, so ignore the message.

If this error occurs at another time, collect the "Jobscheduler" information using the Maintenance Information Collection Tool, and contact Fujitsu technical support. Refer to "Appendix A Maintenance Information Collection Tool" for information on the Maintenance Information Collection Tool.

4.14.20 The Message "MpJobsch: ERROR: msgget() No space left on device" is Output to SYSLOG during Startup of Jobscheduler [UNIX Versions]

Error message

MpJobsch: ERROR: msgget() No space left on device

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

An application is consuming large numbers of the following system kernel parameter:

msgsys:msginfo_msgmni

Action method

Extend the "msginfo_msgmni" value. Add the following values to the current value:

 $4 \times \text{number}$ of subsystems used (This is for EE versions. In SE versions, the number of subsystems used is 1)

4.14.21 The Message "Error /opt/FJSVJOBSC/etc/rc3.d/start_jobs daemon did not started..." is Output and Jobscheduler is Unable to Start [UNIX Versions]

Error message

Error /opt/F|SV|OBSC/etc/rc3.d/start_jobs daemon did not started

Applicable versions and levels

- Solaris versions: 5.0 to 11.0

- Linux versions: 5.2 to V11.0L10

Action

Cause

If the daemon process of Jobscheduler is ended using a method other than that explained in the relevant Systemwalker Operation Manager manual, the process may end without deleting IPC resources.

Action method

Restart the system.

4.14.22 The Error Message "Calendar information not found" is Displayed

Error message

Calendar information not found.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Was policy distribution performed only for Schedule DB/schedule pattern?
- Does a calendar exist that is referenced by a job net on the policy distribution destination server?

Cause

This message is output if the calendar referenced by the job net does not exist. For example, if a calendar that exists on the policy extraction source was referenced by a job net, policy distribution may have been performed only for the schedule information to a server on which that calendar does not exist.

Action method

Perform one of the following procedures:

- Create a calendar that is referenced by the job net.
- Delete calendars that do not exist. Calendars that do not exist can be deleted by opening **Calendar** in **Details** on the **Startup days** tab in the **Job Net Properties** window and clicking **OK**.

Note that calendars referenced by the job net cannot be deleted.

4.14.23 A Jobscheduler Error Message is Displayed during Startup of the Cluster System [UNIX Versions]

Error message

MpJobsch: ERROR: 0027: The jobscheduler failed to retrieve day change time.

Applicable versions and levels

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

Action 1

Points to check

Was the calendar daemon (f3crhcs2) stopped?

Check whether the process is started by using the following command.

```
# ps -ef |grep f3crhcs2
```

Action method

If you stopped Systemwalker Operation Manager by using the poperationmgr command, start Systemwalker Operation Manager (calendar daemon) by using the soperationmgr command, and then start the job scheduler daemon from the cluster system.

Action 2

Points to check

Was the symbolic link of the script that starts the calendar daemon set correctly?

The following method can be used to check if the symbolic link was set correctly:

[Solaris versions]

```
# ls -l /etc/rc3.d/S28JMCAL
# ls -l /etc/rc2.d/S28JMCAL
```

[Linux versions]

V 13.8.0 or earlier, or Red Hat Enterprise Linux 6 or earlier

```
# ls -l /etc/rc3.d/S28JMCAL
# ls -l /etc/rc2.d/S28JMCAL
# ls -l /etc/rc5.d/S28JMCAL
```

Sample Output from the Is Command

```
#ls -1
lrwxrwxrwx 1 XXXXX XXXXX XX mm:dd hh:mm S79JMCAL -> /opt/FJSVjmcal/bin/S99JMCAL
```

Cause

The Jobscheduler daemon started when the calendar daemon is not running or while the startup is in progress.

For the Jobscheduler daemon to start, the calendar daemon must already have been started.

If the environment is not a cluster environment, the calendar daemon and the Jobscheduler daemon will be started by the Systemwalker Operation Manager startup script when the system starts up, and the startup order is guaranteed. However, in a cluster environment, the Jobscheduler daemon is started from the cluster daemon, not from the Operation Manager startup script.

For this reason, the cluster daemon may start before Systemwalker Operation Manager, and the Jobscheduler daemon may start before the calendar daemon startup completes.

Action method

For the schedule server or the schedule server and execution server:

Execute the calsetcluster commnd.

For the details of the calsetcluster command, refer to the "Settings for Automatic Reflection" in the "Systemwalker Operation Manager Cluster Setup Guide for UNIX" or the "Systemwalker Operation Manager Reference Guide".

For the execution server:

Execute the following command to create a symbolic link.

[Solaris version]

```
# ln -s /opt/FJSVjmcal/bin/S99JMCAL /etc/rc3.d/S28JMCAL
# ln -s /opt/FJSVjmcal/bin/S99JMCAL /etc/rc2.d/S28JMCAL
```

[Linux versions]

For Red Hat Enterprise Linux 6 and earlier

```
# ln -s /opt/FJSVjmcal/bin/S99JMCAL /etc/rc3.d/S28JMCAL
# ln -s /opt/FJSVjmcal/bin/S99JMCAL /etc/rc2.d/S28JMCAL
# ln -s /opt/FJSVjmcal/bin/S99JMCAL /etc/rc5.d/S28JMCAL
```

For Red Hat Enterprise Linux 7 (V13.8.0 and earlier)

```
# cd /etc/rc3.d
# ln -s ../init.d/JMCAL /etc/rc3.d/S28JMCAL
# cd /etc/rc2.d
# ln -s ../init.d/JMCAL /etc/rc2.d/S28JMCAL
# cd /etc/rc5.d
# ln -s ../init.d/JMCAL /etc/rc5.d/S28JMCAL
```

Refer to your operating system documentation for details on how to configure rc3.d.

Action 3

Points to check

Is the unit file that starts the calendar service set up?

How to check

You can check the setting status of the unit file in the following ways.

[Linux versions]

For V 17.0.0 or later and Red Hat Enterprise Linux 7 or later

systemctl list-unit-files --type=service | grep JMCAL.service

Sample Output from the systemctl Command

JMCAL.service enabled

Cause

The Jobscheduler daemon started when the calendar daemon is not running or while the startup is in progress.

For the Jobscheduler daemon to start, the calendar daemon must already have been started.

Action method

For the schedule server or the schedule server and execution server:

Execute the calsetcluster commnd.

For the details of the calsetcluster command, refer to the "Settings for Automatic Reflection" in the "Systemwalker Operation Manager Cluster Setup Guide for UNIX" or the "Systemwalker Operation Manager Reference Guide".

For the execution server:

Set the unit file that starts the calendar service.

[Linux versions]

For V 17.0.0 or later and Red Hat Enterprise Linux 7 or later

```
# cp -p /opt/FJSVjmcal/etc/unit/JMCAL.service /usr/lib/systemd/system/JMCAL.service
# chmod 644 /usr/lib/systemd/system/JMCAL.service
# chown root:sys /usr/lib/systemd/system/JMCAL.service
# systemctl daemon-reload
# systemctl enable /usr/lib/systemd/system/JMCAL.service
```

4.14.24 The Error Message "ReadFile() 6: Invalid handle" is Output [Windows Versions]

Error message

MpJobsch: Error:7300:func=JOBSCH_dbfile_read:ReadFile() 6: Invalid handle

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Was the file created in the Jobscheduler database directory?

Cause

There is a file other than those created by Systemwalker Operation Manager in the Jobscheduler database directory. If this file is referenced by Jobscheduler, this error message will be output, and the expected processing will not be performed.

Action method

If there are files in the Jobscheduler database directory, back up the files and then delete them from the directory. Do not place files in the Jobscheduler database directory.

The Jobscheduler database directory is set on the **Database** tab in the **Define Jobscheduler Startup Parameters** window.

4.14.25 The Message "MpJobsch: ERROR: 0189: XXXXX YYYYYY Failure in job net generation" is Output to SYSLOG [UNIX Versions]

Error message

MpJobsch: ERROR: 0189: XXXXX YYYYY Failure in job net generation.

XXXXX: Project name YYYYY: Job net name

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Were there sufficient system resources?

- Check if a message indicating that there are insufficient system resources was output to SYSLOG
- Execute the sar command or the df command to check if there is sufficient memory, SWAP area, and available disk area

Cause

If there are insufficient system resources, the process to start the job cannot be created.

Action method

Ensure that there are sufficient system resources.

4.14.26 The Error Message "The requested operation cannot be performed on a file with a user-mapped section open" is Output [Windows Versions]

Error message

func=XXXX:SetEndOfFile()1224: The requested operation cannot be performed on a file with a user-mapped section open

XXXX: Optional string

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there an application that accesses the files under the Jobscheduler database directory?

Refer to "4.14.4 The Error Message "Process cannot access the file" is Output [Windows Versions]" for information on the cause and action method.

4.14.27 The Message "MpJobsch: ERROR: 0412: bind() Address already in use" is Output to SYSLOG [UNIX Versions]

Error message

MpJobsch: ERROR: 0412: bind() Address already in use

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the port number used by Jobscheduler being used by another application?

Cause

This message is output if another application is using the port number used by Jobscheduler.

Action method

Ensure that the port used by Jobscheduler is not used by another application during Jobscheduler operations. Refer to the following manual for information on how to check and change port numbers.

- 10.0 or later:

"Listing of Port Numbers" and "Changing Port Numbers" in the Installation Guide.

- 5.0 to 5.2:

"Changing Port Numbers" in the Installation Guide.



If the service name "jobsch_win" does not exist in the services file, the default port number will be used.

Action 2

Points to check

Was the Jobscheduler daemon process "tskmnsrv" ended using the kill command?

Cause

Even if the process "tskmnsrv" was ended using the kill command, the Jobscheduler daemon will not end normally. For this reason, the above message will be output to the syslog and end when the Jobscheduler daemon is restarted.

Action method

Restart the system.

4.14.28 The Error Messages "7022:Erroneous record exists in job net information of XXXX" and "7300:func=JOBSCH_dbfile_read:ReadFile() 170: The requested resource is in use" are Displayed [Windows Versions]

Error message

Mplobsch: ERROR: 7022:XXXXX Erroneous record exists in job net information of XXXX.

MpJobsch: ERROR:7300:func=JOBSCH_dbfile_read:ReadFile() 170: The requested resource is in use.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there an application that accesses the files under the Jobscheduler database directory?

Cause

This problem occurs if another application is already accessing the job net definition information file when Jobscheduler tries to access it.

Action method

- Recovery method

Execute the mprso command to restore the resources that were backed up with the mpbko command.

- Action to prevent this problem

Check if an application that is accessing files in the Jobscheduler database directory exists. If it does, take action to ensure that it does not access the files in the Jobscheduler database directory while Jobscheduler is running.

Backup software or virus detection software are possible examples of applications that access the files under the Jobscheduler database directory.

Refer to the following manuals for information on the notes on using backup software or virus detection software:

- V10.0L10 or later:

User's Guide:

- "Cautions when Using Back-up Products [Windows version]"
- "Cautions when Using Virus Detection Products [Windows version]"

4.14.29 The Error Messages "7000:func=jobschsetnet:ftruncate() No error" and "6007: Systemwalker MpJobsch failed to write job net information" are Displayed [Windows Versions]

Error message

Mplobsch: ERROR: 7000:func=jobschsetnet:ftruncate() No error

MpJobsch: ERROR: 6007: Systemwalker MpJobsch failed to write job net information.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there an application that accesses the files under the Jobscheduler database directory?

Cause

This problem occurs if another application is already accessing the job net definition information file when lobscheduler tries to access it.

Action method

Refer to "4.14.28 The Error Messages "7022:Erroneous record exists in job net information of XXXX" and "7300:func=JOBSCH_dbfile_read:ReadFile() 170: The requested resource is in use" are Displayed [Windows Versions]" details

4.14.30 The Warning Message "Systemwalker MpJobsch failed to set policy information" is Output

Error message

MpJobsch: Warning: 4033: Service: < Operation Manager installation directory > \MPWALKER \mpaosfsv\policy\acIdata.bat Systemwalker MpJobsch failed to set policy information.

MpJobsch: WARNING: 0033: XXXXX/policy/acldata.bat Systemwalker MpJobsch failed to set policy information.

MpJobsch: WARNING: 0033: XXXXX/policy/acldata.bat The daemon failed to set policy information.

XXXXX: This is one of the following path names:
 [Solaris versions and Linux versions]
 /var/opt/FJSVJMCMN
[HP-UX versions]
 /opt/FHPJMCMN/db
[AIX versions]
 /usr/FAIXJMCMN/db
[DS versions]
 /var/opt/uxpJMCMN

Applicable versions and levels

- Windows versions: V5.0L10 or later
- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Does the account that exists in the policy extraction source also exist in the policy distribution destination?

Cause

When applying the policy, Jobscheduler sets the information related to the project privileges using the policy information.

This message is output when the account contained in the privileges information that is set in the policy extraction source does not exist.

Action method

Check the user account in the policy extraction source and the policy distribution destination, add the account lacking in the policy distribution destination, and then restart Jobscheduler.

Refer to the following manual for details:

- Installation Guide:

"Distributing the Policy Data" - "Distributing policies for Schedule DB/ schedule pattern information"

4.14.31 The Error Message "7300:

Service :func=GetEventLog:ReadEventLog() 1500: The event log file is corrupt" is Output [Windows Versions]

Error message

MpJobsch: ERROR: 7300: Service :func=GetEventLog:ReadEventLog() 1500: The event log file is corrupt.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

The event log file is corrupted for some reason.

Action method

Restore the event log file based on the associated documents of Microsoft or Windows.

4.14.32 The Error Message "getpwnam() No such file or directory" is Output [UNIX Versions]

Error message

MpJobsch: ERROR: 0412: getpwnam() No such file or directory

Applicable versions and levels

- Solaris versions: 5.0 to 11.0

- Linux versions: 5.2 to V11.0L10

- HP-UX versions: 5.1 to 11.0

- AIX versions: 5.1 to 11.0

- DS versions: V20L10

Action

Points to check

In the network job, was the effective user of the job registered on the request source server?

Action method

Register the effective user of the network job on the request source server of the job as well.

Also, refer to the following manual.

- 11.0 or later:
 - Installation Guide:

"Job Execution Privileges" - "User privileges required for network jobs and Distributed Execution function"

- 10.1 or earlier:
 - "Q & A Relating to Job Execution Control" "Q: What Rights are Required for Executing Jobs?" in the Q & A Guide

4.14.33 The Message "MpJobsch Event ID: 7012 Detail:Past EventLog record is trapped" is Output to the Event Log [Windows Versions]

Error message

Source: MpJobsch Event ID: 7012 Detail: Past EventLog record is trapped.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Action method

This message indicates that the Jobscheduler service process avoided the Windows API ReadEventLog()API error. No action is required.

4.14.34 The Message "0017: The jobscheduler failed to attach shared memory" is Displayed after Executing a Jobscheduler Command [UNIX Versions]

Error message

MpJobsch ERROR 0017: The jobscheduler failed to attach shared memory.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Cause

An inconsistency may have occurred in the shared memory used by Jobscheduler and the actual shared memory.

If an inconsistency has occurred in the common memory, the Jobscheduler command cannot be used. The command outputs this message in standard error output and then ends.

The inconsistency can be caused when the backed-up information is restored, or shared memory used by Jobscheduler is deleted while Jobscheduler is running.

Action method

Restart Jobscheduler.

If the problem cannot be resolved by restarting Jobscheduler, restart the system.

4.14.35 The Message "MpJobsch: ERROR: 0412: shmget() No space left on device" is Output to SYSLOG [UNIX Versions]

Error message

MpJobsch: ERROR: 0412: shmget() No space left on device

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the "shminfo_shmmni" value of the system kernel parameter (/etc/system file) estimated correctly? Was a small value set?

Cause

Jobscheduler uses shared memory per subsystem. If the "shminfo_shmmni" value is insufficient, the previously described message will be recorded in syslog, and the Jobscheduler daemon cannot be started.

Reestimate the value for shminfo_shmmni. Add the number of subsystems x 1 for Jobscheduler.

4.14.36 The Error Message "The requested resource is in use" is Output [Windows Versions]

Error message

funck=XXXX:ReadFile() 170: The requested resource is in use.

XXXX: Optional string

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there an application that accesses the files under the Jobscheduler database directory?

Refer to "4.14.4 The Error Message "Process cannot access the file" is Output [Windows Versions]" for information on the cause and action method.

4.14.37 The Error Message "shmget() Invalid argument", "shmget() No space left on device" or "0009: The jobscheduler failed to create shared memory" is Output [UNIX Versions]

Error message

MpJobsch: ERROR: shmget() Invalid argument

MpJobsch: ERROR: shmget() No space left on device

MpJobsch: ERROR: 0009: The jobscheduler failed to create shared memory.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was a value of 50000 bytes or more set when the system kernel parameter "shminfo_shmax" was set?

Cause

The shared memory obtained by the Jobscheduler daemon is insufficient.

If "shminfo_shmmax" is set, set a value of 50000 bytes or more.

Action 2

Points to check

Was a small value set for the system kernel parameter "shminfo_shmmni"?

Cause

Jobscheduler fails to obtain the shared memory because a small value was set for "shminfo_shmmni".

Action method

Reestimate the value for shminfo_shmmni. Add the number of subsystems x 1 for Jobscheduler.

4.14.38 The Start Delayed Message is Displayed at the Scheduled Start Time of a Disabled Job Net

Error message

MpJobsch: WARNING: 0310: XXXX YYYY did not start at scheduled time.

MpJobsch: WARNING: 4305:XXXX YYYY did not start at scheduled time.

XXXX: Project name YYYY: Job net name

Applicable versions and levels

- Windows versions: V11.0L10 or later

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Action

Cause

Even if job nets with the following execution conditions set are in a disabled state, the startup delay exit starts up at the scheduled start time.

- The Start only when message event has occurred check box is selected in the Standard information tab in the Job Net Properties window.
- The Once in a day check box is selected in the Standard information tab in the Job Net Properties window.
- Scheduled start time is set in the Standard information tab in the Job Net Properties window:

Action method

No action is required.



Note that, if the Notify when job net is not started even after the specified start time is lapsed (*1) check box is selected in the Advanced Settings for Event Output window, that is displayed by clicking Details under Event output on the Event output tab in the Define Jobscheduler Startup Parameters window, and the Jobscheduler daemon/service is not restarted, the above message will not be output even if the "Start delayed" status exists.

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Event output** tab.

4.14.39 If the jobschmsgevent Command is Executed in the Subsystem Environment, "The daemon was not started" is Output [UNIX Versions]

Error message

MpJobsch: ERROR: 0014: The daemon was not started.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

If the host name is specified in the jobschmsgevent command option registered as the schedule job, a message event will be generated to the subsystem in which the started job is included.

For this reason, this message is output if the same subsystem is not running on the generation destination host.

Action method

To specify the host name as the jobschmsgevent command option, and generate the message event in a different subsystem, specify the -sys parameter.

To generate the message event to subsystem 0 of the generation destination host, specify "-sys 0".



To generate the message event from EE versions to SE versions, refer to the following action method:

"4.10.5 The Message "MpJobsch: ERROR: 0309: Usage: jobschmsgevent event_name[:project_name[/job_net_name] [message_text]] [-h host_name] [-t:INFO | -t:WARN | -t:ERROR]" is Output when the jobschmsgevent Command is Executed from a Schedule Job [UNIX Versions]"

4.14.40 "func=JOBSCH_dbfile_open:CreateFile() 32: Process cannot access the file. "MpJobsch: ERROR: 7300 func=JOBSCH_dbfile_open:CreateFile() 32" is Output to the

Event Log during Execution of Job Nets and Jobs [Windows Versions]

Error message

MpJobsch: ERROR: 7300 func=JOBSCH_dbfile_open:CreateFile() 32: Process cannot access the file.

Applicable versions and levels

- Windows versions: V10.0L10 or later

Action

Points to check

Were the mpbko/SN commands executed while the job net and job were executing?

Cause

If the mpbko/SN commands are executed while the job is executing, the mpbko/SN commands may have accessed an excluded schedule information file.

Action method

Execute the mpbko/SN commands during a time period in which the job net and job are not running.

Remarks

The job net and job behavior is not affected.

4.14.41 The Message "MpJobsch: ERROR: open() too many open files" is Output to SYSLOG [UNIX Versions]

Error message

MpJobsch: ERROR: open() too many open files

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

This error message is output when there are insufficient program file descriptors as a result of the Operation Manager client being canceled, or not ending correctly.

By sending an HUP signal to the tskwnsrv process, the invalid socket is released, and the cause of the error may be removed

Additionally, by using the keepalive function, the illegal socket can be recovered.

[Method to enable the keepalive function]

Refer to the Action method in "Action 11" in "4.16.3 The Client Response is Slow/Does not Return" for information on how to enable the keepalive function.

4.14.42 The Message "MpJobsch: ERROR: 0422: Failed to convert the standard output or the standard error code for the job. The job result file contains illegal characters" is Output [UNIX Versions]

Error message

MpJobsch: ERROR: 0422: Failed to convert the standard output or the standard error code for the job. The job result file contains illegal characters.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Were characters that cannot be converted using character encoding included in the output result of the job?

Cause

If binary data is output to the standard output or standard error output of the job, the conversion using character encoding will fail.

Action method

Ensure not to output unconvertible character codes to the job output results.

Action 2

Points to check

Was a network job executed between servers with different character encoding?

Cause

On the schedule server, Convert character code of files (for network jobs) was not selected on the Options tab in the Define Operating Information window.

On the schedule server, select the above **Convert character code of files (for network jobs)**. Then, restart the Systemwalker Operation Manager Job Execution Control daemon/service. The character encoding for the output result of the job executed after that will be converted.

4.14.43 The Error Messages "write() No space left on device" and "The daemon failed to write job net output information" are Output [UNIX Versions]

Error message

write() No space left on device

The daemon failed to write job net output information.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the Jobscheduler database directory depleted?

Cause

The previous log file of the job is stored in the Jobscheduler database directory. If the Jobscheduler database directory is depleted, the write() system call will return the "No space left on device" error.

Action method

Secure sufficient free space for the Jobscheduler database directory.

4.14.44 The Error Message "MpJobsch: ERROR: 0412: socket() Address family not supported by protocol" is Output [UNIX Versions]

Error message

MpJobsch: ERROR: 0412: socket() Address family not supported by protocol

Applicable versions and levels

- Solaris versions: V13.6.0 or later

- Linux versions: V13.6.0 or later

Action

Cause

This message is output when the Systemwalker Operation Manager service starts up in environments where IPv6 is disabled in the settings of the operating system.

Action method

This issue does not affect environments that do not use IPv6 (environments using IPv4), so no action is required in such environments.

To use IPv6, enable the IPv6 environment.

4.14.45 The Error Messages "5: Access denied." and "MpJobsch: ERROR: 6208: Systemwalker MpJobsch failed to read log information." are Output to the Event Log by Jobscheduler [Windows Versions]

Error message

The error messages below are output in sequence.

MpJobsch: ERROR: 7300: MpJobsch func=jobdb_log_umber:GetCompressedFileSize() 5:

Access denied.

MpJobsch: ERROR: 6208: Systemwalker MpJobsch failed to read log information.

Applicable versions and levels

- Windows versions: V11.0L10 or later

Action

Cause

Because the log files (jobdb1.log/jobdb2.log/jobdb3.log) of Jobscheduler are switched cyclically, the messages may be output depending on the timing of accessing log files.

Action method

No action is required. Log output is not affected.

4.15 The Job Outputs a Code and Ends Abnormally

4.15.1 The Job Outputs a Code and Ends Abnormally. Alternatively, the Job Outputs a Message and Ends Abnormally

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The job may end abnormally with the code described in "Job Completion Codes" of the Reference Guide.

Additionally, the job may output one of the messages described in the *Message Guide* (V11.0L10/11.0 or later) or "Messages list" in the *Online Help* (V10.L21/10.1 or earlier), and then end abnormally.

If the job has ended abnormally, it may be possible to determine the cause of the error and the action required by investigating the code or the output message.

Action method

Refer to the following documents:

- V11.0L10/11.0 or later
 - "Job Completion Codes" in the Reference Guide
 - "Messages list" in the Message Guide
 - "Completion Codes" in the Online Help
- V10.0L21/10.1 or earlier
 - "Job Completion Codes" in the Reference Guide
 - "Messages list" in the Online Help

The job completion codes are also described in "Chapter 5 Troubleshooting Job Execution Control" - "5.1 The Job Execution Result is Abnormal".

4.16 The Systemwalker Operation Manager Client Behavior is Abnormal

4.16.1 After a Job such As Calendar or Jobscheduler is Selected, or the Connection Destination Host is Selected, in the Job Selection window, the Pop-up "A connection timeout occurred." is Displayed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the IP address of a host connectable from the Systemwalker Operation Manager client registered in the monitored host configuration information?

Register the IP address of a host that can be connected to from the Systemwalker Operation Manager client in the monitored host configuration information.

4.16.2 When Jobscheduler is Selected in the Client, some of the Server Information is not Displayed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Was the Jobscheduler service started for the selected host?

Action method

Start the Jobscheduler service for the selected host.

Action 2

Points to check

Was the name correctly resolved in the TCP/IP network environment of the selected host?

Action method

Ensure that the TCP/IP network environment of the selected host allows names to be resolved correctly.

Action 3

Points to check

Was the monitoring permission host definition performed on the monitored host?

Action method

Perform the monitoring permission host definition from the **Systemwalker Operation Manager Environment Setup** window.

4.16.3 The Client Response is Slow/Does not Return

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Are there a large number of job nets registered in the project?

Cause

If the number of job nets registered in the project increases, this will affect the processing performance of the Systemwalker Operation Manager client.

Consider the following as a guide to the number of job nets to register in the project:

SE versions:

Limited to up to 255 job nets.

EE versions:

There is no limit, however use the following as a guide to the number of job nets that can be registered.

- Windows versions: Up to 300
- UNIX versions: Up to 500

Also, refer to the following manuals:

- V10.0L20/10.1 or later
 - "Limit Values for Job Scheduling" in the Technical Guide.
 - "Notes When Registering a Large Number of Job Nets" in the User's Guide.
- V10.0L10/10.0
 - "Limit Values for Job Scheduling" in the Technical Guide.

Action method

Set the access rights for the project, and limit the number of projects to display. By limiting the number of projects to display, the display target job nets are reduced, so the display time may be shortened.

Action 2

Points to check

Was a large number of job nets started at one time?

Cause

If a large number of job nets were started at one time, Jobscheduler will start them one at a time. For this reason, the schedule information file is locked, and the request from the Systemwalker Operation Manager client waits until the lock is released.

Action 3

Points to check

Is the jobschprint command output stopped by the more command?

Refer to "Action 9" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 4

Points to check

- Is a large number of Systemwalker Operation Manager clients connected?
- Did you press F5 many times in a row on the Systemwalker Operation Manager client?

Cause

The Systemwalker Operation Manager client periodically obtains job net information and refreshes the window. At that time, the schedule information file on the Systemwalker Operation Manager server is read.

If the number of connected Systemwalker Operation Manager clients is increased, the number of window refreshes increases, and a schedule information file lock occurs on the server.

Also, even if F5 is pressed many times in a row on a single Systemwalker Operation Manager client, the same issue as that for a large number of connected Systemwalker Operation Manager clients occurs.

Action method

Keep the number of simultaneously connected Systemwalker Operation Manager clients to a minimum.

Also, do not press F5 too many times in a row on Systemwalker Operation Manager clients.

Ensure to verify sufficiently before deciding on the number of connections.

Action 5

Points to check

Was the Jobscheduler database directory placed on a disk with slow access speeds?

Cause

When the Jobscheduler database directory is placed on a disk with slow access speeds, file access performance drops and may prevent Jobscheduler from demonstrating the level of performance it was designed for.

The delays in starting job nets simultaneously are particularly significant when a large number of job nets are started.

Action method

It is recommended that you distribute the disk I/O load and place the job scheduler database directory on a high-performance (high access speeds) disk.

Action 6 [UNIX versions]

Points to check

Is the message queue on the server depleted? Check this using the ipcs command.

Cause

The Jobscheduler daemon comprises multiple daemon processes, and uses the message queue (IPC resources) to operate while mutually synchronizing. The Jobscheduler daemon performs retry processing because the communication between the processes failed, however as a result, communication with the Systemwalker Operation Manager client is not possible.

Action method

Tune the message queue. Alternatively, check if there is an application that is greatly consuming the message queue.

Refer to "4.13.4 The Jobscheduler Server Processing Hangs up [UNIX Versions]" for information on message queue tuning.

Action 7

Points to check

Was processing that takes a while added for the job net/job end exit?

Refer to "Action 12" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 8

Points to check

Was a client machine with slow performance used?

Cause

The Jobscheduler service or daemon communicates with each connected client separately and performs processing. If even one client machine with slow performance connects, the communication with the client machine with slow performance will cause a bottleneck, and the entire operation performance may deteriorate.

Action method

If at all possible, avoid using a client machine with slow performance.

Action 9

Points to check

Was a large amount of job information or previous log information collected?

Cause

The Jobscheduler service or daemon communicates with each connected client separately and performs processing.

To display the job properties, the client receives the output information for the job from the server. When the job is executed, if a large amount of information is output in standard output/standard error output, the client will receive that large amount of data via the network. The server will experience a bottleneck in the processing to send that, and delays in sending and receiving the data to/from other client machines will occur.

Action method

Review the output information of the job and, wherever possible, minimize the job information and previous log information to be obtained.

Action 10

Points to check

Did an error occur in the connection destination server?

Cause

If the server cannot return a response to the processing request from the client because of the server stopped responding, or because the server ended abnormally during processing, the client response may not return.

Action method

Check if a problem has occurred on the server. If it has, resolve the problem, shut down the unresponsive client, and then reconnect the client window.

Also, refer to the following manual.

- User's Guide - "If the Jobscheduler Function does not Respond"

Action 11

Points to check

After executing jobschprint -u on the server, are there many invalid sessions remained?

Cause

Some sessions are remained due to a reason such as a temporary network disconnection, and the number of clients that can be connected to the Systemwalker Operation Manager server (Jobscheduler) is exceeded (up to 62 clients by default (*1)).

*1: The maximum value may vary depending on the operating system.

Action method

Restart Systemwalker Operation Manager.

Consider to enable the keepalive function according to the needs as a permanent measure. By using the function, invalid sessions (sessions that stopped responding) can be recovered.

[Method to enable the keepalive function]

1. Define the following two lines at the end of the Jobscheduler startup parameter file (jobschev.txt):

[SOCKET]
KEEP_ALIVE=ON

Note that the storage location of the startup parameter file (jobschev.txt) is as follows:

[Windows]

<Installation directory>\MPWALKER.JM\mpjobsch\etc\jobschev.txt

Alternatively, <installation directory>\MPWALKER.JM\mpjobsch\etc\jobschevn.txt

"n" of "jobschevn" corresponds to each subsystem number (1 to 9).

[UNIX]

Solaris: /var/opt/FJSVJOBSC/etc/jobschev.txt

Or, /var/opt/FJSV|OBSC/|OBDBn/etc/jobschev.txt

HP-UX: /opt/FHPJOBSCH/db/etc/jobschev.txt

Or, /opt/FHP|OBSCH/db/|OBDBn/etc/jobschev.txt

AIX: /usr/FAIX|OBSC/db/etc/jobschev.txt

Or, /usr/FAIXJOBSC/db/JOBDBn/etc/jobschev.txt

Linux: /var/opt/FJSVJOBSC/etc/jobschev.txt

Or, /var/opt/FJSV|OBSC/|OBDBn/etc/jobschev.txt

"n" of "|OBDBn" corresponds to each subsystem number (1 to 9).

2. Restart Jobscheduler.

Note 1: In subsystem operations, this must be set for each subsystem.

Note 2: By enabling the keepalive function, the packet that checks the generation will be routed across the network periodically. Enable this as necessary.

Remarks

The keepalive function is an operating system function. In Solaris, refer to the tcp_keepalive_interval parameter of the ndd command.

4.16.4 "Run-time error '6': Overflow" is Displayed

Error message

Run-time error '6': Overflow

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L21

Solaris versions: 5.0 to 10.1Linux versions: 5.2, V10.0L10HP-UX versions: 5.1, 10.0

AIX versions: 5.1, 10.0DS versions: V20L10

Action 1

Cause

The client operating environment file (Jobschr.ini) is corrupted. (V5.0L10/V5.0L20, or 5.0/5.1)

Action method

Delete the following client operating environment file:

<system root>\Jobschr.ini

The effects of deleting this file are as follows:

- When the Systemwalker Operation Manager client ends, the window display position is retained, however the display position information is initialized. Accordingly, when the next startup is performed, the window display position will not be the same as when the previous operation client ended.
- The history data entered in the Jobscheduler function input field (for example, the job command name field input information history) is initialized. Accordingly, when the next startup is performed, the history data that was entered in the Jobscheduler function input field will not be displayed.

Action 2

Points to check

The port number range that can be defined in jobsch_winn (n is the subsystem number) that is defined in the services file is 1 to 32767. Was a number in this range set?

Action method

From the port numbers (1 to 32767) that can be defined in jobsch_winn (n is the subsystem number) that is defined in the services file, set an unused port number.

4.16.5 The Systemwalker Operation Manager Client Function Displays the Pop-up "Run-time error", and may End Abnormally (Error Code Undefined)

Error message

Run-time error

Applicable versions and levels

- Windows versions: V5.0L10 to V5.0L30

- Solaris versions: 5.0 to 5.2

- Linux versions: 5.2

- HP-UX versions: 5.1

- AIX versions: 5.1

- DS versions: V20L10

Action

Points to check

Check if all the following conditions apply:

- The operating system of the machine on which the client function was installed is one of the following:
 - Windows(R) 95
 - Windows(R) 98 (including Second Edition.)
 - Windows NT(R)
 - Windows(R) Me
- The rich text control (richtxt32.ocx) version is 5.xx or 6.xx
- In one of the following windows, select the output content from the rich text control, and then drag and drop it to any location:
 - Job Net History window
 - Job History window
 - Job Output Info window (V5.2, V5.0L30 only)

Cause

The operating system file "richtx32.ocx" was replaced with a module in which there is a problem.

Action method

Reinstall the Systemwalker Operation Manager client. Normally, the operating system file "richtx32.ocx" will be replaced with a new file.

4.16.6 The Message "Run-time error '339':Component 'comct232.ocx' or one of its dependencies not correctly registered: a file is missing or invalid" is Displayed

Error message

Run-time error '339':Component 'comct232.ocx' or one of its dependencies not correctly registered: a file is missing or invalid

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The operating system file "comct232.ocx" was replaced with an old module.

Action method

Reinstall the Systemwalker Operation Manager client. The operating system file "comct232.ocx" will be replaced with a new file.

4.16.7 If Jobscheduler is Selected in the Systemwalker Operation Manager Client Immediately after the Jobscheduler Service is Started, "
Connection denied. Systemwalker Operation Manager server is not activated or port number is incorrect." is Output

Error message

Connection denied. Systemwalker Operation Manager server is not activated or port number is incorrect.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Cause

The Jobscheduler service does not receive requests from the Systemwalker Operation Manager client until its startup is complete.

Possible causes of the Jobscheduler service startup to take a while are as follows:

- There are many files in the Jobscheduler database directory (Jobscheduler checks the privileges when it starts)
- There is an extremely large amount of schedule information (schedule processing takes a while)

Wait for a while, and then select Jobscheduler again in the Systemwalker Operation Manager client.

Description



How to check that the Jobscheduler initialization processing is complete

Jobscheduler records the message shown below to the SYSLOG/event log at the point when the initialization processing for the server startup is complete. By checking the message that was recorded to the SYSLOG/event log, the completion of the initialization processing can be checked.

- UNIX versions

MpJobsch: INFO: 0272: The jobscheduler daemon has been started.

Remarks. It is necessary to configure the settings so that user.info information is recorded in /etc/syslog.conf.

.....

- Windows versions

MpJobsch: INFO:1308: Systemwalker MpJobsch has started normally.

Action 2 [UNIX versions]

Points to check

Is the message queue depleted?

Refer to "Action 16" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 3

Points to check

Is the jobschprint command output stopped by the more command?

Refer to "Action 9" in "4.2.2 A Job Net or Job does not Start at the Intended Time" for information on the cause and action method.

Action 4

Points to check

Is the starting and closing of job nets or jobs concentrated within a short period of time?

Refer to "Action 4" in "4.2.18 Job Nets are Not Completed" for information on the cause and action method.

Action 5

Points to check

In the following version levels, was a policy distributed with a different continuous execution mode?

- Windows versions: V5.0L10 to V5.0L30
- Solaris versions: 5.0 to 5.2

- HP-UX versions: 5.1

- AIX versions: 5.1

Action method

Change the continuous execution mode of the policy extraction source, and then extract (extract the startup parameter)/distribute the policy again.

4.16.8 The Gantt chart Switches at a Different Time to the Day Change Time

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

In the Systemwalker Operation Manager client, a time axis from 00 minutes to 25 hours is displayed for the display start time (if this was omitted, this will be the day change time instead). If the day change time or display start time is specified not using 00 minutes, for example xx hours 30 minutes, the Gantt chart switches at a different time to the day change time.

Action method

If an unintended time was specified as the display start time, correct the specified display start time. The display start time can be set/checked in the **Display Start Time Setup** window, that is displayed by selecting **Display Start Time** from the **View** menu in the **Systemwalker Operation Manager** window. Refer to the *Online Help* for details.

Note that the schedule processing will be performed on the specified day change time. The date does not change according to the timing of the Gantt chart switch. Schedule processing is not performed either.

4.16.9 "Systemwalker Operation Manager" Remains Displayed in the Main Window

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the IP address that was set in the monitored host definition correct?

Cause

If the IP address that was set in the monitored host definition is incorrect, monitoring cannot be performed correctly.

Action method

Change the IP address for each host set in the monitored host definition, so that it is correct.



In Red Hat Linux and Solaris 11, the server name set during the installation is defined in the /etc/hosts file as shown below. 127.0.0.1 will be set as the IP address, therefore this must be changed to the actual IP address as in the "After" example below.

[Before]

127.0.0.1 HostName localhost

[After]

127.0.0.1 localhost

XXX.XXX.XXX HostName (*1)

*1: xxx.xxx.xxx is the IP address of HostName (local host).

4.16.10 Even though this is a Subsystem Operation, the Subsystem is not Displayed in the Systemwalker Operation Manager Client Job Tree

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the port number set in the services file of the connection destination server of the Systemwalker Operation Manager client? Alternatively, is the port definition correct?

Note that the services file storage destination will be different depending on the type of operating system used.

Windows versions:

<system root>\system32\drivers\etc\services

UNIX versions:

/etc/services

Cause

In subsystem operations, a port is required to communicate with the Systemwalker Operation Manager client.

Action method

In the services file, define the following items:

jobsch_winn xxxxx/tcp [Enter]

```
n is the subsystem number (1 to 9) xxxxx is the port number
```

Refer to "Assigning Subsystem Port Numbers" in the *Installation Guide* for information on the port number settings for subsystems.

4.16.11 The Message "Run-time error '35602':key not unique in collection." is Displayed when Jobscheduler is Opened

Error message

Run-time error '35602':key not unique in collection.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the policy distributed between servers with different language types? [UNIX versions]

If the error occurred during a normal operation in which policies are not applied, was the schedule information file (croject name.dbx file (*1)) corrupted?

 * 1: In V13.3.0 or later, the schedule information file is "ct name.dbz ".

Cause

The schedule information file is corrupt, or the policy was distributed between servers with different language types [UNIX versions].

Action method

If the error occurred because the policy was applied, extract/distribute/apply the policy again.

If the policy was distributed between servers with different language types, execute the jobschconvert command to perform the code conversion [UNIX versions].

If the error occurred during a normal operation, restore from the backed up information.

4.16.12 The Message "Protocol data cannot be received." is Displayed on the Client

Error message

Protocol data cannot be received.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the network disconnected because of a temporary communication load?

Cause

The network may have been temporarily disconnected during the communication between the Systemwalker Operation Manager server and client.

Action method

Reconnect from the Systemwalker Operation Manager client to the Systemwalker Operation Manager server. Note that this message does not affect the schedule processing or job net start processing on the server.

4.16.13 "Monitoring server is down due to an internal error. The client will exit." is Displayed in the Multi-server Monitoring Client

Error message

Monitoring server is down due to an internal error. The client will exit.

Applicable versions and levels

- Windows versions: V11.0L10 or later

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 5.1 or later

Action

Cause

Possible causes are as follows:

- The network was disconnected temporarily during communication between the Systemwalker Operation Manager server and client.
- The Systemwalker Operation Manager server stopped during the connection.

Action method

Perform the following tasks according to the cause:

- If there is a problem in the network, review the network. By reconnecting the client, the client window will be displayed.
- If the Systemwalker Operation Manager server has stopped, start the Systemwalker Operation Manager server and then reconnect the client.

4.16.14 "No buffer area. (1113)" is Displayed

Error message

No buffer area. (1113)

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is there sufficient memory on the machine that runs the Systemwalker Operation Manager client?

Cause

If there is insufficient memory on the client machine, communication with the server is not possible.

Action method

Extend the available memory, for example by ending other applications.

4.16.15 The Job Output Info (Previous log of the job) is not Displayed [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the job canceled (V13.2.0 or earlier), or skipped?

Cause

The output information for canceled jobs is not displayed. (V13.2.0 or earlier)

Additionally, the output information for a job that was skipped because it was disabled will also not be displayed.

Action method

If there is a possibility that a job will have the "Canceled" status, save the output result to a file during the job processing.

4.16.16 An Error Occurs when the Operation Manager Client Starts, and the User Name and Password are Specified to Connect [Windows Versions]

Error message

Permission to use the specified project not granted to user.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Are the service startup account settings correct?

Refer to "4.13.20 The Jobscheduler Service does not Start [Windows Versions]" for information on the cause and method.

4.16.17 It takes a while to display the Job History window

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was a large value set for **Log file size** in the **Define Jobscheduler Startup Parameters** window of the Systemwalker Operation Manager environment settings?

Cause

The content of the log file is used to obtain the history information for the job. If the size of the log file is large, the log file processing time takes longer, and it takes a while to display the **Job History** window.

Action method

Estimate the log file size, and then set an appropriate value. As a guide, if the log file size of the estimated result exceeds 20 MB (*1), consider sufficiently the effect on the time taken to display the **Job History** window and on the response to other Operation Manager clients before setting it.

*1: The value that is appropriate for the log file size will vary depending on the machine performance or communication performance. Use this value only as a reference.

To estimate the log file size, consider the following:

size for one day > = size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be started > size x < number of job nets to be size x < number of job nets to be size x < number

<job net log size>=<job net start, termination log size> + <job log size> x <number of jobs>

<job net start, termination log size>=(<sum of server name, project name, job net name, and job net comment length + 50 bytes>) x 2 (for start and termination)

<job log size>=(<sum of server name, project name, job net name, job net comment, job name, and job comment length + 50 bytes>) x 2 (for start and termination)

4.16.18 The Pop-up Message "A connection timeout occurred." is Displayed

Error message

A connection timeout occurred.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

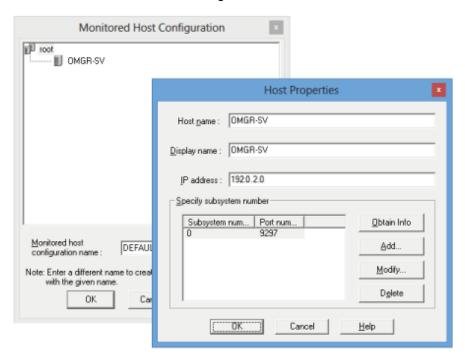
- DS versions: V20L10

Action

Points to check

Was the server host name or IP address registered in the Monitored host name list correctly?

In the **Monitored Host Configuration** window, correctly register a connection server host name or IP address that can be connected to from the monitoring server, and then restart the client window.



4.16.19 The Pop-up Message " Job Output Info can not be displayed because it failed in the character-code conversion." is Displayed

Error message

Job Output Info can not be displayed because it failed in the character-code conversion.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Did the job standard output or standard error output receive content with a character encoding different from the Systemwalker Operation Manager one?

Cause

If the job outputs content with a character encoding different from the one when Systemwalker Operation Manager was installed, then code conversion cannot be performed correctly.

Ensure that content sent to the job standard output or standard error output uses the same character encoding as the Systemwalker Operation Manager one. To check the character encoding, refer to the following files and environment variables.

File name

Operating system name	File name	
Solaris	/etc/default/init	
Linux	Red Hat Enterprise Linux 6 or before:/etc/ sysconfig/i18n	
	Red Hat Enterprise Linux 7 or later: /etc/locale.conf	
HP-UX	/etc/rc.config.d/LANG	
AIX	/etc/environment	

Environment variable priority

Environment variables	Priority
LC_ALL	Has priority over all variables below.
LC_MESSAGE S	Valid when LC_ALL is not set.
LANG	Valid when LC_ALL or LC_MESSAGES is not defined.

Setting value and character encoding

Operating system name	Setting value of the above file	Systemwalker character encoding
Solaris	ja	EUC
	ja_JP.eucJP (*1)	EUC
	ja_JP.PCK	SJIS
	ja_JP.UTF-8	UTF-8
HP-UX	ja_JP.eucJP	EUC
	ja_JP.SJIS	SJIS
	ja_JP.utf8	UTF-8
AIX	ja_JP	EUC
	Ja_JP	SJIS
	JA_JP	UTF-8
Linux	ja_JP.UTF-8	UTF-8

^{*1: &}quot;ja_JP.eucJP" is supported in Solaris8 or later.

4.16.20 "Connecting with Jobscheduler ..." Remains Displayed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Is there a large number of connections to the Systemwalker Operation Manager server (Jobscheduler function) from the Systemwalker Operation Manager clients?

Cause

The connection was attempted from a client after the limit value for the number of connections to Jobscheduler was exceeded, so connections cannot be made to Jobscheduler in this state.

Action method

As a rough guide, do not connect more than eight Systemwalker Operation Manager clients to a particular Systemwalker Operation Manager server at the same time out of consideration for the response from each client.

Remarks

The following are used in the count of the number of connections:

- **Jobscheduler** was selected in the Systemwalker Operation Manager client **Job Selection** window, and then the connection was made to the Jobscheduler server
- The connection was made to the Jobscheduler server using the Jobscheduler information print client
- The server is a monitoring target server of a multi-server monitoring client

Note that the number of client connections can also be checked using the jobschprint -u command.

Action 2

Points to check

Did the Systemwalker Operation Manager client end using the correct method?

Cause

The Systemwalker Operation Manager client end may not have been recognized because the Systemwalker Operation Manager client was disconnected unexpectedly.

Action method

Possibilities are as follows, so review the operation:

- The clients provided by Systemwalker Operation Manager do not end normally (for example, the client PC was reset frequently, or the system was shut down with the client window still active).
- There is a problem on the network path.

Remarks

The correct method to terminate the client is to click **X** in the client window. Do not use Task Manager to terminate the client, or shut down the system while the client is running.

4.16.21 The Message " Connection denied. Systemwalker Operation Manager server is not activated or port number is incorrect." is Displayed when the Systemwalker Operation Manager Client is Started up

Error message

Connection denied. Systemwalker Operation Manager server is not activated or port number is incorrect.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is the port number used by Systemwalker Operation Manager being used by another application?

Cause

This message is output if another application is using the port number used by Jobscheduler.

Action method

Ensure that the port used by Jobscheduler is not used by another application during Jobscheduler operations. Refer to the following manual for information on how to check and change port numbers.

- V10.0L10/10.0 or later:

"Changing Port Numbers" in the Installation Guide

- V5.0L10/5.0/V5.0L20/5.1/V5.0L30/5.2:

"Changing Port Numbers" in the Installation Guide.

4.16.22 "Could not get user name list." or "Could not get group name list." is Displayed on the Set Permissions window

Error message

Could not get user name list. (4:13)

Could not get group name list. (4:13)

Applicable versions and levels

- Windows versions: V17.0.0 or later

- Solaris versions: V17.0.0 or later

- Linux versions:V17.0.0 or later

Action

Points to check

Are there too many users or groups visible to the Systemwalker Operation Manager server you are connecting to?

Cause

If there are too many users or groups visible to the Systemwalker Operation Manager server to which you are connected, the window will become unresponsive or this message will be output.

Action method

Use the following methods to reduce the number of users and groups that are visible to the Systemwalker Operation Manager server to which you are connected.

When the destination Systemwalker Operation Manager server environment is joined to an Active Directory domain.

Delete unnecessary users and groups on the domain controller in the Active Directory to which you are joining.

When you are using an LDAP client in the Systemwalker Operation Manager server environment to which you are connecting.

Review the search base DN, scope, and filter criteria for the LDAP client configuration to limit the scope of users and groups.

For information about how to change the configuration, refer to the documentation for your LDAP client.

If you are unable to reduce the number of users or groups that can be referenced, run the mpsetacl command on the Systemwalker Operation Manager server to which you are connected to set access rights for the project. For more information about the mpsetacl command, refer to the "Systemwalker Operation Manager Reference Guide".

4.17 "Link to Systemwalker Centric Manager" is Abnormal

4.17.1 The "Link to Systemwalker Centric Manager" function does not Work

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The Jobscheduler service/daemon must be restarted after the startup parameter is changed.

Action method

Restart the Jobscheduler service/daemon.

4.17.2 A Message is Notified to Systemwalker Centric Manager in Duplicate

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Have all of the following conditions been met?

- In the Advanced Settings for Event Output (*1) window, that is displayed by clicking Details under Event output on the Event output tab in the Define Jobscheduler Startup Parameters window, one of the following is selected for the monitored Job net status:
 - Abended
 - Canceled
 - Closed
- Automatic notification/handling is selected for Link to Systemwalker Centric Manager on the Event output tab in the Define Jobscheduler Startup Parameters window

*1: On V13.2.0 or earlier, open the **Define Jobscheduler Startup Parameters** window and specify this setting in the **Event output** tab.

Cause

If both conditions mentioned in "Points to check" are met, the message will be notified in duplicate.

Action method

Select one of the check boxes.

To monitor abended, canceled, or closed statuses, it is recommended that only the **Automatic notification/handling** check box be selected.

4.17.3 A Message is not Notified to Systemwalker Centric Manager [UNIX Versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was a monitored message notified last time, and a message that starts "last messages repeated..." notified to Systemwalker Centric Manager this time?

Cause

If the same message as the one notified to Systemwalker Centric Manager last time is notified, the message notified by the syslog daemon of the operating system may change to a message that starts "last messages repeated...". For this reason, actual notification messages are not notified to Systemwalker Centric Manager.

Action method

This is caused by the syslog daemon action, so no action can be taken for the fact that the message is changed. After the first monitored message is notified, check the status of the applicable job net from the Systemwalker Operation Manager client out of consideration for the fact that messages may be output consecutively.

4.18 Import/Export of Job Net Definitions is Operating Abnormally

4.18.1 Importing is not Possible if a Parent Job Net is Specified for Another base job net in the Child Job Net Startup Days Settings

Applicable versions and levels

- Windows versions: V13.3.0 or later

- Solaris versions: V13.3.0 or later

- Linux versions: V13.3.0 or later

- Linux for Itanium versions: V13.3.0 or later

- HP-UX versions: V13.3.0 or later

- AIX versions: V13.3.0 or later

Action

Points to check

Are the respective definitions of parent job nets and child job nets as follows?

- Parent job nets

Base job net is selected on the Startup days tab in the Job Net Properties window.

- Child job nets

A parent job net is selected as the base job net, based on **Another job net** on the **Startup days** tab in the **Job Net Properties** window.

Cause

Job nets configured as above cannot be imported.

If starting a child job net on the same startup day as the parent job net, unselect (disable) **Valid only on startup days** in the child job net definitions.

If there is a day when child job nets are not started on an exceptional basis, use the same schedule pattern as that for parent job nets in the child job net definitions, and select **Valid only on startup days**, and set the individual non-startup days for the exceptional days when the child job nets are not started.

Chapter 5 Troubleshooting Job Execution Control

5.1 The Job Execution Result is Abnormal

5.1.1 I do not Understand the Meaning of the Job Completion Code

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

In addition to the application completion code, a completion code specific to Jobscheduler and Job Execution Control may be displayed as the job completion code.

Action method

The job completion codes specific to Jobscheduler and Job Execution Control are explained below. Completion codes not mentioned here are set by the application, so check the meaning of the completion code in the documentation for the application.

The job completion codes are also explained in the following manuals. Use these in conjunction with this document.

- V11.0L10/11.0 or later
 - "Job Completion Codes" in the Reference Guide
 - "Completion Codes" in the Online Help
- V11.0L10/11.0 or earlier
 - "Job Completion Codes" in the Reference Guide

Jobscheduler completion codes

Of the job completion codes, the values between 201 and 256 are set in Jobscheduler. The job completion codes returned by Jobscheduler, and their meanings, are shown below.

[Windows versions]

Completion code	Meaning
201 - 231	The job has ended abnormally.
232 - 238	Unused (reserved by Jobscheduler).
239	The Jobscheduler service stopped while executing the job. (*1)
240 - 241	Unused (reserved by Jobscheduler).
242	Copy and startup of the job net failed.

Completion code	Meaning
243 - 244	The job you requested Job Execution Control to execute has failed.
245	The variable parameter, job definition variable, or job net variable value contains invalid characters. Alternatively, the full path has not been specified for the job standard output file name or standard error output file name.
246	As a result of replacing a variable parameter, job definition variable, or job net variable, the upper limit for the string length was exceeded. Alternatively, the upper limit (640) that can be retained by the job net variable was exceeded.
247	Failed to read/write the job definition variable information or the job net variable.
248	While waiting for OR conditions, the succeeding job starts because one of the preceding jobs has already ended normally. As a result, the job ends without these conditions being met.
249	While waiting for OR conditions, one of the preceding jobs ends abnormally. As a result, the conditions cannot be evaluated and the job ends.
250	The specified job does not exist.
251 - 254	Unused (reserved by Jobscheduler).
255	The job completion code is 256 or more. (*2)
256	The job was canceled.

^{*1:} If backup is performed while a job is executing, and the information that is backed up is restored, the job that is executing ends abnormally with completion code 239.

... ended code=255.(Actual completion code)

[UNIX versions]

Completion code	Description
201 - 231	[Job Execution Control attribute] The job ended abnormally. [Normal attribute] The job ended with a signal. The completion code is "200 + signal number". However, if the completion code is 201, 213, 218, 224, 226, or 227, it is ignored by Jobscheduler.
232 - 237	Unused (reserved by Jobscheduler).
238	Failed to set the job net administrator rights (initgroups system call).
239	Jobscheduler daemon stopped while executing the job. (*1)
240 - 241	Unused (reserved by Jobscheduler).
242	Copy and startup of the job net failed.
243 - 244	Failed to execute the job.
245	The variable parameter, job definition variable, or job net variable value contains invalid characters.

^{*2:} If the actual completion code is 256 or more, the following is displayed in the **Job History** window:

Completion code	Description
	Alternatively, the full path has not been specified for the job standard output file name or standard error output file name.
246	As a result of replacing a variable parameter, job definition variable, or job net variable, the upper limit for the string length was exceeded. Alternatively, the upper limit (640) that can be retained by the job net variable was exceeded.
247	Failed to read/write the job definition variable information or the job net variable.
248	While waiting for OR conditions, the succeeding job starts because one of the preceding jobs has already ended normally. As a result, the job ends without these conditions being met.
249	While waiting for OR conditions, one of the preceding jobs ends abnormally. As a result, the conditions cannot be evaluated and the job ends.
250	Failed to obtain the job net administrator information (getpwnam system call). Note that, if the attribute is other than Normal, the specified job may not exist. (*2)
251	Failed to set the job net administrator rights (setgid system call).
252	Failed to set the job net administrator rights (setuid system call).
253	Failed to change to the directory specified in the job (chdir system call).
254	Failed to start the job (execvp system call).
255	Failed to start the job (fork system call). If the attribute is other than Normal, the job completion code is 256 or more. (*3)
256	The job was canceled.

^{*1:} If backup is performed while a job was executing, and that information is restored, the job that was executing ends abnormally with completion code 239.

...ended code=255.(Actual completion code)



Completion codes other than 201 to 256, and completion codes from 201 to 256 that are not used, are not values set by Systemwalker Operation Manager. They are values output by the job, for example the command, batch file, or shell script registered in the job command field.

Additionally, consider not making the completion code of the command, batch file, or shell script registered as the job 201 to 256. If 201 to 256 are used as the return value of the job, it will be difficult to tell whether the completion code was set by the job or by Jobscheduler. Note that if the return value of the job is 255 or greater, it will be handled as 255.

Job Execution Control completion codes

For the job completion codes output by Job Execution Control, the values shown below are set according to the job type.

^{*2:} If the job does not exist when the attribute is other than Normal, an error message is output to the **Previous log** tab of the job.

^{*3:} If the actual completion code is 256 or more, the following is displayed in the Job History window:

Job type	Job completion code
Batch file	Batch file return code
Program	Program return code
JCL (Job Control Language)	Maximum value for each step/completion code of the last step
Shell script	Shell script return code

Note that, if the job execution is canceled, a special value is set in the job completion code. The causes of the cancellation of the job, and the job completion code set when the job is canceled, are shown below.

[Windows versions]

Cause of the cancellation of the job	Completio n code (V5.x)	Completio n code (V10.x)	Completion code (V11.x or later)
An exception occurred during the execution of the job.	Exception code (*6)	Exception code (*6)	Exception code (*6)
 In the execution of the network job using JCL, the format specified for the network job control command (*1) is invalid. Alternatively, an error occurred in the Job Execution Control internal processing for the network job. 			
- One of the following errors occurred when a job submitted to a distributed execution queue was started on the execution server (different remote host to the schedule server):	8	8	0x400000 08
- The input file does not exist			
- The output file does not exist			
 If the destination that the network job is submitted to is a Windows version server, the desktop heap may be depleted (*2). 			
In the execution of the network job using JCL, the format specified for the control statements for job steps (*3) is invalid.	12	12	0x4000001 2
An error occurred when submitting the network job on the remote server.	16	16	-
- An error occurred when submitting the network job on the remote server.			
- A job in which the request host is specified was submitted to the distributed execution queue, therefore, the execution request was refused.	-	-	0x4000001 6
- There is insufficient disk space on either the schedule server or the execution server.			
In the request from the schedule server to the execution server when a network job was executed, a function not supported by previous versions was being used. As a result, an error occurred, resulting in failure to connect to	-	-	0x400000 20

Cause of the cancellation of the job	Completio n code (V5.x)	Completio n code (V10.x)	Completion code (V11.x or later)
the server running a previous version that does not support extension functions.			
An error occurred when submitting the network job on the remote server. The effective user of the job is restricted by the effective user control list.	-	-	0x400000 24
- The network job could not continue because of a line error or because the other server is down.			
- One of the following errors occurred when a job submitted to a distributed execution queue was started on the execution server (different remote host to the schedule server):			0x4000013
- A network-type error during input/output file transfer processing	132	132	2
- A system error during input/output file transfer processing			
- There is insufficient disk space on either the schedule server or the execution server.			
The job was canceled by a user operation from the screen, the qdel command, or the job deletion API.	0x400002 22	0x400002 22	0x400002 22
The job was canceled because the cut-off execution time (job execution time-out) has elapsed.	0x400003 22	0x400003 22	0x400003 22
In the execution of the job using JCL, the executable file specified in the job step does not exist.	0x400008 06	0x400008 06	0x400008 06
If the function that executes the job with job owner rights is enabled, an error occurs in the user authentication processing when the job is executed (*4). Alternatively, for Distributed Execution jobs (*5) and network jobs, an error occurred in the authentication processing on the remote server.	0x400009 13	0x400009 13	0x4000091 3
The network job could not continue because of a line error or because the other server is down. Alternatively, for Job Execution Control processing, the job could not continue because the error occurred.	0x400009 99	0x400009 99	-
For Job Execution Control processing, the job could not continue because the error occurred.	1	-	0x400009 99
[V13.2.0 or later] The user application accessed illegal memory area.	-	-	0xC00000 05
[V13.2.0 or later] Division by zero was performed by the user application.	-	-	0xC00000 94
[V13.2.0 or later] Cannot find the DLL required to execute the user application (the required DLL path does not exist in the PATH environment variable).	-	-	0xC00001 35
[V13.2.0 or later] Failed to initialize the DLL required to execute the user application. The desktop heap may be depleted (*2).	-	-	0xC00001 42

- *1: The commands are as follows:
- connect
- send
- execute
- receive
- disconnect
- *2: In Windows Server 2003 or later, the following event is output to the event log when the first desktop heap insufficiency occurs after starting the operating system:

Type: Warning Source: Win32k

Event ID: 243

Description: Failed to allocate desktop heap.

- *3: The control statements are as follows:
- file
- exec
- *4: Possible causes are as follows:
- The settings that are required to execute the job with owner authority were not configured.

 Refer to the Systemwalker Operation Manager Technical Guide for information on the required settings.
- The domain controller (PDC, BDC) was stopped or restarted.
- The Windows Internet Naming Service (WINS) is not operating normally.
- *5: In V10.0L21 or earlier, this is "load distribution job".
- *6: This is set in V13.1.0 or earlier.

When the application makes the exception (abnormal end), the exception code 0xC******* (in hexadecimal) is set by the operating system. This code is reserved by the operating system. It is not a code set by Job Execution Control. Consider the following action methods for information on exception code 0xC0000005, 0xC0000135, 0xC0000142:

"5.2.14 The Job Ends Abnormally with Exception Code 0xC0000005, 0xe06d7363 [Windows versions]"

[UNIX versions]

Cause of the cancellation of the job	Completion code (5.x)	Completion code (10.x)	Completion code (11.0 or later)
An exception (signal received, core occurrence) occurred while the job was being executed.	Exception code (*4)	Exception code (*4)	Exception code (*4)
- In the execution of the network job using JCL, the format specified for the network job control command (*1) is invalid. Alternatively, an error occurred in the Job Execution Control internal processing for the network job.	8	8	0x400000 08
 One of the following errors occurred when a job submitted to a distributed execution queue was started on the execution server 			

[&]quot;5.2.15 The Job Ends Abnormally with Exception Code 0xC0000135 [Windows versions]"

[&]quot;5.2.16 The Job Ends Abnormally with Exception Code 0xC0000142 [Windows versions]"

Cause of the cancellation of the job	Completion code (5.x)	Completion code (10.x)	Completion code (11.0 or later)
(different remote host to the schedule server):			
- The input file does not exist			
- The output file does not exist			
- If the destination that the network job is submitted to is a Windows version server, the desktop heap may be depleted (*2).			
In the execution of the network job using JCL, the format specified for the job step control statement (*3) is invalid.	12	12	0x4000001 2
An error occurred when submitting the network job on the remote server.	16	16	-
- An error occurred when submitting the network job on the remote server.			
 A job in which the request host is specified was submitted to the distributed execution queue, therefore the execution request was refused. 	-	-	0x4000001 6
- There is insufficient disk space on either the schedule server or the execution server.			
In the request from the schedule server to the execution server when a network job was executed, a function not supported by previous versions was being used. As a result, an error occurred, resulting in failure to connect to the server running a previous version that does not support extension functions.	-	-	0x400000 20
An error occurred when submitting the network job on the remote server. The effective user of the job is restricted by the effective user control list.	-	-	0x400000 24
The network job could not continue because of a line error or because the other server is down.			
- One of the following errors occurred when a job submitted to a distributed execution queue was started on the execution server (different remote host to the schedule server):	132	132	0x4000013 2
- A network-type error during input/ output file transfer processing			
- A system error during input/output file transfer processing			
- There is insufficient disk space on either the schedule server or the execution server.			

Cause of the cancellation of the job	Completion code (5.x)	Completion code (10.x)	Completion code (11.0 or later)
The job was canceled by a user operation from the screen, the qdel command, or the job deletion API.	0x4000022	0x400002	0x400002
	2	22	22
The job was canceled because the cut-off execution time (job execution time-out) has elapsed.	0x4000032	0x400003	0x400003
	2	22	22
In the execution of the job using JCL, the executable file specified in the job step does not exist.	1	1	0x400008 06
For Distributed Execution jobs and network jobs, an error occurred in the authentication processing on the remote server.	128	128	0x4000091 3
For Job Execution Control processing, the job could not continue because the error occurred.	0x4000099	0x400009	0x400009
	9	99	99

^{*1:} The commands are as follows:

- connect
- send
- execute
- receive
- disconnect

*2: In Windows Server 2003 or later, the following event is output to the event log when the first desktop heap insufficiency occurs after starting the operating system:

Type: Warning Source: Win32k

Event ID: 243

Description: Failed to allocate desktop heap.

- *3: The control statements are as follows:
- file
- exec
- *4: This is set in V13.1.0 or earlier.

When the application receives the signal (abnormal end), the exception code 128 + signal number (octal: 200 + signal number) is set by the operating system. This code is set by the operating system (shell). It is not a code set by Job Execution Control.

Refer to the following action method for information on code 137,138, and 139:

"5.2.4 The Job Ends Abnormally with Code 137, 138, or 139 [UNIX versions]"

[Windows versions/UNIX versions (common)]

If the online job execution has been canceled, the job completion codes shown below are set:

Meaning	Completion code (V5.x/5.x)	Completion code (V10.x/10.x)	Completion code (V11.x/11.x or later)
The online job ended normally.	0	0	0
Failed to start the online job, because Interstage is not installed on the system.	1	1	1
Failed to start the online job, because an error occurred in Interstage while initializing the online job startup environment.	2	2	2
Failed to start the online job, because an error occurred in Interstage while starting the online job.	3	3	3
Failed to start the online job, because an error occurred in Interstage while monitoring the online job.	4	4	4
Failed to stop the online job, because an error occurred in Interstage while stopping the online job.	5	5	5
The online job ended abnormally.	6	6	6
The online job was canceled before it started.	256	256	256
- The network job could not continue because of a line error or because the other server is down.	132	132	0x40000132
- There is insufficient disk space on either the schedule server or the execution server.	132		
The limit value for the execution time-out was exceeded, or the cut-off execution time has elapsed while the job was being executed, therefore the online job was forcibly terminated.	0x40000322	0x40000322	0x40000322
Failed to start the online job, because a system error occurred.	0x40000999	0x40000999	0x40000999

5.1.2 Even if the Job Completion Code is 256 or more, "255" is Displayed as the Code in the Previous log tab of the Monitor - Job window

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

Even if the job completion code is 256 or more, the specification is that "255" is displayed in **Code** in the **Previous log** tab of the **Monitor - Job** window.

For the actual job completion code, check the value in brackets displayed after "code=255." in the **Job History** window displayed when **Job History** is selected from the **Tools** menu.

5.1.3 The Job Completion Code is Always 0 [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

The last line in the batch file may be REM or the goto command. In this case, the batch file returns 0.

The next batch file may appear to end with completion code 10 or 90, however it always ends with 0.

Example of a batch file in which the completion code is always 0

```
if "%1" == "" goto argerr
setecode.exe 10
goto end
:argerr
setecode.exe 90
rem
:end
```

Action method

To make the above batch file end with completion code 10 or 90, add the exit command to the end of the batch file, or define the file as follows so that REM or the goto command is not executed last.

Example of a batch file that ends with any completion code

```
if "%1" == "" goto argerr
setecode.exe 10
exit
:argerr
setecode.exe 90
```

5.1.4 The Job Completion Code is Always 0 [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Does the .logout file exist in the home directory of the person submitting the job?

Cause

If the login shell (information registered in the password entry) of the person submitting the job is a C shell, and the .logout file exists in the home directory of the person submitting the job, the command defined in the .logout file after the application was executed is executed. Accordingly, the completion code set by the application may be lost, and 0 may be set.

Action method

Correct the .logout file so that the completion code set by the application is not lost. Refer to the following manual for information on how to do this:

- 10.0 or later:

"Cautions when the Job Submitter's Login Shell is the C Shell [UNIX version]", "Changing the .logout file" in the *User's Guide*

- 5.0 to 5.2:

"Changing the .logout file" in the Technical Guide

5.1.5 The COBOL Application Completion Code is Abnormal

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

The COBOL application may not have set a completion code.

Action method

If the application was created using Fujitsu PowerCOBOL, set the completion code in the special register PROGRAM-STATUS.

5.1.6 The stty or eucset Error is Output to the Output Result [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

When the job is started, the effective user's dot file (file prepended with ".") is read and then executed, however, processing such as executing terminal setting commands is performed.

Action method

Correct the dot file (file prepended with ".") so that processing such as executing terminal setting commands, is not performed.

Refer to the following manual for information on how to do this:

- 10.0 or later:

User's Guide

- "Changing the Shell Startup File [UNIX version]"
- "Cautions when the Job Submitter's Login Shell is the C Shell [UNIX version]"
- 5.0 to 5.2:

Technical Guide

- "Changing the Shell Startup File [UNIX version]"
- "Considering Shell Scripts as Jobs"

5.1.7 The Rights are Insufficient, so the Job Does Not Operate Normally [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Can the registered job be operated using the rights of the service startup account (the default value is the "systemwalker" local account) specified when Systemwalker was installed?

Cause

In the Windows versions Systemwalker Operation Manager, normally the job operates using the rights of the "Systemwalker MpMjes" service. The job may not operate normally because the service startup account has insufficient rights.

Action method

Use one of the following actions to assign sufficient rights to start the job:

- Prepare the job operating environment so that the job can operate using the rights of the service startup account (the default value is the "systemwalker" local account)
- Change the "Systemwalker MpMjes" service startup account to an account that can execute jobs. (*1)
- Configure the settings so that the job is executed with job owner rights. (*2)
- *1: When changing the service startup account, do not forget to configure the advanced user rights for the account. The setting can be configured in the following windows:

- Windows NT(R): User Manager

Windows(R) 2000/Windows Server 2003 STD/Windows Server 2003 DTC/Windows Server 2003 EE/Windows Server 2008 or later: Local Security Policy, or Domain Security Policy

The required rights are as follows:

- Log on as a service
- Act as part of the operating system
- Increase quotas or Adjust memory quotas for a process (depending on the operating system)
- Replace a process level token

Additionally, the user must belong to the Administrators group on the local computer, and "Password never expires" must be set.

*2: Refer to the action method in "5.2.11 The Job Ends Abnormally with Code 0x40000913 [Windows versions]" for information on the procedure to execute a job with owner rights.



Review whether the "Systemwalker MpMjes" service startup account that executes the job is a user that has rights to execute jobs. It may not be possible to start jobs (the operating environment is not prepared) if the user has not installed the application or has never logged in to the desktop.

......

5.1.8 The Environment Variables are Insufficient, so the Job Does Not Operate Normally [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Has the environment variable value been set for the system environment variable?

Cause

The only type of environment variables that can be referenced by applications started from Systemwalker Operation Manager is system environment variables. User environment variables, which are the user specific information, and environment variables set using autoexec.bat, cannot be referenced by applications started from Systemwalker Operation Manager.

Action method

If the application uses an environment variable registered as a user environment variable, one of the following actions is required:

- Register the user environment variable that is required to execute the application as a system environment variable (this can be set using **Control Panel** >> **System**). Note that the system must be restarted in order for the system environment variable to take effect.
- Create a batch file to start the application, and then register the environment variable that is required to execute the application at the start of the batch file.
- In V10.0L20 or later, register the environment variable that is required to execute the application in **Environment** variables in the **Detail information** tab of the **Add/Change Job** window.



In the Windows versions Systemwalker Operation Manager, the job operates as part (child process) of the "Systemwalker MpMjes" service.

The service can only reference system environment variables, therefore, even if the environment variable required to operate the application has been set as a user environment variable, the service cannot see it. As a result, unintended behavior may occur, for example the executable file is not found, or the environment variables required to execute the job are insufficient.

5.1.9 After Systemwalker Operation Manager is Restarted, the Job Behavior Changes [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is there any difference in the startup method with the previous Systemwalker Operation Manager startup? (For example, the environment variable that is effective when the soperationmgr command is executed.)

Cause

Because of differences in the environment variable when Systemwalker Operation Manager is started, a change has occurred in the environment variable inherited to the job, therefore the job behavior changes. For example, when the user becomes superuser with the su command to execute the soperationment command, the inherited environment variable changes depending on whether the su command "-" option is set or not.

Action method

The environment variable that is required to operate the job must be set in the login shell or shell before it is required.

Remarks

The methods to read the environment variables referenced by the job are as follows:

When the job is submitted

- Environment variable that takes effect when the soperationmgr command is executed
- Job directory path (PATH environment variable)
- Path defined in the PATH statement (only when ICL is used)

When the job is executed

- Environment variable set when the job is submitted
- Environment variable set in Environment variables in the Detail information tab of the Add/Change Job window
- Environment variable set in the login shell

5.1.10 Job behavior differs from previous

Applicable versions and levels

- Windows versions: V17.0.1 or later

- Solaris versions: V17.0.1 or later

- Linux versions: V17.0.1 or later

Action

Points to check

Is the specification different from the previous PATH environment variable definition file?

Cause

The behavior of the job has changed because the environment variables passed to the job have changed due to a change in the PATH environment variable definition file. When the PATH environment variable definition file is changed, the inherited environment variables change.

Action method

Check the PATH environment variable definition file to see what has been changed, and then revise the definition file as necessary.

Be sure to set the environment variables required for job operation in the PATH environment variable definition file before they are needed.

Remarks

The environment variables referenced by the job are loaded as follows.

[For job submission]

- Path specified in the Directory field
- Job folder path (PATH environment variable)
- PATH path specified in the environment variable definition file
- Path in the PATH statement (ICL only)

[For job execution]

- PATH environment variable set at job submission
- Environment variable set in Add/Monitor Job window Detail information sheet Environment variables
- Environment variables set in the login shell

5.2 The Job Ends Abnormally



If the job that was started via Systemwalker Operation Manager has ended abnormally, the cause may be that the application that was started as the job has ended abnormally. As a guide to check if the application has ended abnormally, see if the completion code is other than 0x40000nnn or other than 200 to 256.

If the application has ended abnormally, refer to the application manual for information on the completion code or output message of the application you are using, and check the cause and action method.

5.2.1 The Job Outputs a Code and Ends Abnormally. Alternatively, the Job Outputs an Error Message and Ends Abnormally

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20I 10

Action

Cause

The job may end abnormally with the code described in "Job Completion Codes" in the Reference Guide.

Additionally, the job may output one of the messages described in the *Message Guide* (V11.0L10/11.0 or later) or "Messages List" in the *Online Help* (V10.0L21/10.1 or earlier), and then end abnormally.

If the job has ended abnormally, it may be possible to determine the cause of the error and the action required by investigating the code or the output message.

Action method

Refer to the following documents:

- V11.0L10/11.0 or later
 - "Job Completion Codes" in the Reference Guide
 - Message Guide
 - "Completion Codes" in the Online Help
- V10.0L21/10.1 or earlier
 - "Job Completion Codes" in the Reference Guide
 - "Messages List" in the Online Help

The job completion codes are also described in "5.1.11 do not Understand the Meaning of the Job Completion Code" of "5.1 The Job Execution Result is Abnormal".

5.2.2 When Antivirus Software is used, the Job Ends Abnormally [Windows versions]

Error message

Request is rejected by Systemwalker MpMjes service. Job not queued.

Unable to rename job directory. Job not queued.

MJS830E BATCH JOB REQUEST PROCESS IS FAILED

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

When antivirus software is used, the job may end abnormally because of a file conflict.

Action method

The job that ended abnormally was abnormal in the internal processing before it was executed, so take appropriate action by reexecuting the job.

5.2.3 The Job Ends Abnormally with Code 1 [UNIX versions]

Error message

/var/opt/FJSVMJS/var/spool/mjes/mjespool/<queue name>/<job number>/<shell script

name>: command not found

ksh: /var/opt/FJSVMJS/var/spool/mjes/mjespool/<queue name>/<job number>/<shell script

name>: not found

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

When transferring the shell script developed on the Windows machine to the UNIX server using ftp, did you transfer it in "binary" mode?

Cause

If the shell script developed on the Windows machine was transferred to the UNIX server in "binary" mode using ftp, the line feed code in the file was not recognized by UNIX, and could not be executed normally as shell script, therefore the script ended abnormally.

Action method

When transferring the shell script developed on the Windows machine to the UNIX server using ftp, transfer the script in "ASCII" mode.



In version level 10.1 or earlier, for jobs executed using JCL, the completion code "1" is output even if the executable file specified in the job step does not exist.

5.2.4 The Job Ends Abnormally with Code 137, 138, or 139 [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check for

Has the job received the signal SIGKILL, SIGBUS, or SIGSEGV?

Cause

If the job has ended abnormally with code 137,138, or 139, it may have received signal SIGKILL, SIGBUS, or SIGSEGV and then ended. If the job has received a signal and then ended, the completion code is 128 + signal number (octal: 200 + signal number). (The signal numbers for SIGKILL, SIGBUS, and SIGSEGV are 9, 10, and 11 respectively.)

The job may have ended abnormally because the user program is invalid.

Action method

Review the user program processing.

5.2.5 The Job Ends Abnormally with Code 239

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Cause

Code 239 is set by Jobscheduler, and means that "The Jobscheduler service/daemon stopped while the job was being executed".

It shows that this job was being executed when the service/daemon stopped last time. This status will be recognized the next time the service/daemon starts, and at that point will be treated as having ended abnormally. For this reason, the job will not actually have been started at that time.

Action method

When stopping the Jobscheduler service/daemon, ensure that no jobs are being executed.

5.2.6 The Job Ends Abnormally with Code 243

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Check all applicable actions below to resolve the issue.

Action 1

(V10.0L10/10.0 or earlier)

Points to check

- In **Job name** in the **Standard information** tab of the **Add/Change Job** window, does the job name contain characters that cannot be specified?
- Is the error message "Unable to create command line file." or "Unable to create spooled script file." output to **Output Info** in the **Previous log** tab of the **Monitor Job** window?

Cause

A job in which the following halfwidth characters were specified in **Job name** in the **Standard information** tab of the **Add/Change - Job** window ended abnormally with code 243.

/ ? * ; , \ " < > | : () ' .

Action method

Spaces, user-defined characters, and the following halfwidth characters cannot be specified in **Job name**, so take action by deleting these characters or using other characters (for example, fullwidth characters).

/ ? * ; , \ " < > | : () ' .

For network jobs and Distributed Execution jobs, & cannot be specified either.

Action 2

Points to check

- Have the Systemwalker Operation Manager user restrictions been set in the **Define Operation Manager Shared**Parameter window that is displayed by specifying **Shared parameter** in the **Systemwalker Operation Manager**Environment Setup window?
- Is the error message "Not registered to swadmin group." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

If the Systemwalker Operation Manager user restrictions have been set in the **Define Operation Manager Shared Parameter** window that is displayed by specifying **Shared parameter** in the **Systemwalker Operation Manager Environment Setup** window, jobs cannot be executed by unauthorized users.

The system administrator must allow the user to belong to the swadmin group, if the user should be allowed for operations. Note that the user must belong to the swadmin group as the secondary group, not the primary group.

Action 3 [UNIX versions]

Points to check

- Is the cluster system environment setup correct?
- Is the error message "Unable to create job directory." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

When the cluster system is installed and the environment is set up, a symbolic link is created on each node so that the resources that were migrated to the shared disk can be used on both the active and the standby nodes. This symbolic link may not have been created correctly.

Action method

Refer to the following manual, and create the symbolic link correctly.

- 10.0 or later:
 - "Moving Resources to the Shared Disk" in the Cluster Setup Guide

Action 4

Points to check

- Has the project owner or effective user (*1) been deleted from the user information managed by the operating system?
- For a network job, has the effective user (*1) been registered in the user information managed by the operating system of the schedule server?
- Is the error message "No such user on this machine." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?
- *1: Effective user name in the Detail information tab of the Add/Change Job window (10.1/V10.0L20 or later)

Cause

If the project owner or effective user has not been registered in the user information managed by the operating system, the job ends abnormally with code 243.

Action method

Register the project owner or effective user in the user information managed by the operating system.

Action 5

Points to check

- Is the number of jobs that can be submitted to the queue correct?
- Is the error message "Over the job limit." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

If the number of jobs that can be submitted to the queue is incorrect, the job ends abnormally with code 243.

Refer to the following manual, and set an appropriate number of jobs that can be submitted to the queue.

- "Controlling Job Execution Environments" in the Technical Guide



To submit multiple jobs at the same time, increase the number of jobs that can be submitted to the queue. If the number of jobs that can be submitted to the queue is 1, only one job can be submitted to that queue. To submit multiple jobs at the same time, increase the number of jobs that can be submitted to the queue.

Action 6

Points to check

- Is there sufficient available space for the disk on which the Job Execution Control spool directory exists?
- Is the error message "Error creating spooled version of script file.", "Unable to write job information file.", or "Unable to create job directory" output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

If there is insufficient available space for the disk on which the Job Execution Control spool directory exists, the job ends abnormally with code 243.

Action method

Increase the available space for the disk on which the Job Execution Control spool directory exists.

The spool directory is located as follows:

- [Windows version (default)]
 - $<System walker\ Operation\ Manager\ installation\ directory > \ MPWALKER. JM\ mpmjess v\ mjespool\ more on the control of th$
- [UNIX versions]
 - /var/spool/mjes

Action 7 [Windows versions]

Points to check

- Is antivirus software being used?
- Is the error message "Request is rejected by Systemwalker MpMjes service." or "Unable to rename job directory." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

When antivirus software is used, the job may end abnormally because of a file conflict.

Action method

The job that ended abnormally was abnormal in the internal processing before it was executed, so take appropriate action by reexecuting the job.

Action 8 [Windows versions]

Points to check

- Was the domain controller (PDC, BDC) stopped or restarted while the job was running?
- Is the error message "No such user on this machine." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

If the domain controller was stopped or restarted while the job was running, user authentication processing to the domain controller error is output, and the job ends abnormally with code 243.

Action method

Do not stop or restart the domain controller while the job is running. Stop or restart the domain controller during a period when the job is not running.

Action 9 [UNIX versions]

Points to check

- Has the Job Execution Control directory become a file?
- Is the error message "Unable to create job directory." output to **Output Info** or **Job result (Standard output or standard error output)** in the **Previous log** tab of the **Monitor Job** window?

Cause

If the file system of the operating system is faulty, the directory may become a file. If the directory has become a file, the job ends abnormally with code 243, because Job Execution Control creates the file in the following directories:

- /var/spool/mjes/mjespool/_neti
 If the subsystem is n, /var/spool/mjes/mjesn/mjespool/_neti
- /var/spool/mjes/mjespool/_inpt
 If the subsystem is n, /var/spool/mjes/mjesn/mjespool/_inpt

Action method

Create the following Job Execution Control directories manually as owner: root, group: other, access rights: 777:

- /var/spool/mjes/mjespool/_neti
 If the subsystem is n, /var/spool/mjes/mjesn/mjespool/_neti
- /var/spool/mjes/mjespool/_inpt
 If the subsystem is n, /var/spool/mjes/mjesn/mjespool/_inpt

Example) Deleting file _inpt, and creating directory _inpt manually:

```
# cd /var/spool/mjes/mjespool
# rm _inpt
# mkdir _inpt
# chown root _inpt
# chgrp other _inpt
# chmod 777 _inpt
```

Action 10

Points to check

Is the error message "The job file is empty. Job not queued." output to **Output Info** in the **Previous log** tab of the **Monitor** - **Job** window?

Cause

The job for which an empty job file (file size: 0 bytes) was specified in **Command** in the **Standard information** tab of the **Add/Change - Job** window ends abnormally with code 243.

Action method

An empty file (file size: 0 bytes) cannot be specified in Command, therefore specify a correct job file.

5.2.7 The Job Ends Abnormally with Code 250 (1)

Error message

Unable to find the job file specified.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Is there a spelling mistake in the file name for the specified job file?

- Have similar-looking characters been specified?

The number 1 and the letter l, the number 6 and the letter b, the number 8 and the letter B

Cause

The file name for the specified job file is incorrect.

Action method

Specify the correct file name, and then submit the job again.

Action 2

Points to check

Has the job file been stored in the specified directory?

Cause

The job file does not exist in the specified directory.

Action method

Store the job file in the specified directory, and then submit the job again.

Action 3

Points to check

- Has the full path of the job file been specified in the Command field?
- Has the full path of the name of the directory in which the job file is stored been specified in the Directory field?
- Is the directory that stores job files registered in the PATH environment variable definition file? [V17.0.1 or later]
- Has the directory in which the job file is stored been registered in the PATH system environment variable [Windows versions]?

Cause

The directory in which the job file is stored has not been registered in the PATH environment variable.

The following directories are not searched when Systemwalker Operation Manager starts the job file:

- Directories set in the PATH environment variable of the user environment variables [Windows versions]
- Directories registered in the PATH environment variable of the startup file (for example, "/etc/profile", ".profile") [UNIX versions]

Action method

Take one of the following actions.

- Specify the full path of the job file in the Command field.
- Specify the full path of the name of the directory in which the job file is stored in the Directory field.
- In the PATH environment variable definition file, specify the directory that stores job files. [V17.0.1 or later]
- Register the directory in which the job file is stored in the PATH system environment variable, reboot the operating system, and then submit the job again. [Windows versions]

Action 4 [Windows versions]

Points to check

Was a file name that contains an extension specified?

Cause

An extension (for example, ".exe" or ".bat") must be specified in the file name of the job file.

Action method

Correct the file name so that it includes the extension, and then submit the job again.

Action 5

Points to check

Did you try to execute a JCL file stored on another server?

Cause

JCL files stored on another server cannot be executed as network jobs.

Action method

Execute the batch file or script file as a network job, not as a JCL file.



The JCL file must be executed on the job submitter server. The JCL file cannot be executed on the execution server specified in **Request host**. Even if **Transmission of execution command** is selected, it will be ignored.

Action 6

Points to check

Has **Transmission of execution command** in the **Standard information** tab of the **Add/Change - Job** window (V10.0L10/10.0 or earlier) or the **Detail information** tab of the **Add/Change - Job** window (V10.0L20/10.1 or later) been selected?

Cause

For a network job, there is no need to select **Transmission of execution command** to execute the job file stored on the execution server.

Action method

Clear Transmission of execution command.

Action 7

Points to check

Does the specified path contain space characters?

Action method

Take action using one of the following methods:

- In Command of the job properties, do not specify a directory or file containing halfwidth spaces.
- Remove halfwidth spaces from path and command names.

5.2.8 The Job Ends Abnormally with Code 250 (2)

Error message

Unable to open script file: <script file name>.

<script file name>: The file name specified in Command in the Standard information tab of the Add/
Change - Job window is output.

or,

MJS844E EXECUTE: jobfile: INVALID JOB FILE

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Have you granted read permissions for the job file to the "Systemwalker MpMjes" service logon account?

Cause

Read permissions for the job file have not been granted, therefore Systemwalker Operation Manager cannot start the job file.

Action method

Configure the settings so that read permissions for the job file are granted to the "Systemwalker MpMjes" service logon account, and then submit the job again.

5.2.9 The Job Ends Abnormally with Code 253

Applicable versions and levels

- Windows versions: V5.0L10 to V5.0L30

- Solaris versions: 5.0 to 5.2

Linux versions: 5.2HP-UX versions: 5.1AIX versions: 5.1

- DS versions: V20L10

Action

Cause

Code 253 is set by Jobscheduler. This means "failed to change to the specified directory".

This error occurs if the directory registered as the job information does not exist. Additionally, specify a local machine directory even for a network job that sends the execution request to another host. This error also occurs if a remote machine directory is specified.

Action method

Specify the correct directory. Specify a local machine directory, even for a network job. To specify a remote machine directory, specify the full path in the **Command** field.

5.2.10 The Job Ends Abnormally with Code 201 - 256

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

This completion code is reserved by Systemwalker Operation Manager (Jobscheduler). It is expressed in decimal.

Refer to "5.1.1 I do not Understand the Meaning of the Job Completion Code" of "5.1 The Job Execution Result is Abnormal" for information on the meaning of each completion code.

If the job completion code is 256 or more, Jobscheduler displays the completion code as 255.

The actual completion code of the job can be checked in the Job History window.

If an application registered as a job returns a completion code from 201 to 256, it will not be possible to identify from the information displayed in the **Job History** window whether that completion code was set by Jobscheduler, or is a completion code that was returned by the application.

In this case, the completion code that was returned by the application can be checked using the misview command.

The job completion codes are also explained in the following manuals. Use these in conjunction with this document.

- V11.0L10/11.0 or later
 - "Job Completion Codes" in the Reference Guide
 - "Completion Codes" in the Online Help
- V11.0L10/11.0 or earlier
 - "Job Completion Codes" in the Reference Guide

5.2.11 The Job Ends Abnormally with Code 0x40000913 [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Have the settings that are required to execute the job with owner rights been set?

Cause

If the settings that are required to execute the job with owner rights have not been set, the job ends abnormally with code 0x40000913.

Action method

To execute the job with owner rights, configure the settings according to the following procedure:

- Select Execute jobs under the respective job owner's authority in the Options tab of the Define Operating Information window, which is displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window. For a network job from one Windows server to another Windows server, to execute the job with owner rights, select the corresponding check box for both the schedule server and the execution server.
- 2. When the **Define Operating Information** window is closed, the **Set Startup Mode of Job Execution Control** dialog box will be displayed. Select **Enable the saved operating information definitions from the next startup.** (in version levels of V10.0L21 or earlier), and then click **OK**.
- 3. From the Control subject box in the Systemwalker Operation Manager Environment Setup window, select Job execution control, and then click Start to restart the same service (at this time, the Jobscheduler service is also restarted).
- 4. Register the job owner set for the project (Jobscheduler definition item) or job folder (Job Execution Control definition item) in the **Define Job Owner's Information** Window, which will be displayed when **Job owner** is clicked

in the **Systemwalker Operation Manager Environment Setup** window. Also, if job execution users are specified in the **Detail information** tab of the **Add/Change - Job** window in the Systemwalker Operation Manager client, it is necessary to register the user ID and password of those users in the **Define Job Owner's Information** window.

For a network job from one Windows server to another Windows server, to execute the job with owner rights, register the job owner on the schedule server.

- 5. Grant the "Log on as a batch job" right to the account used as the job startup account. Even for domain users, perform this operation on both the server that will submit the jobs and the server that will execute them.

 Use the following to configure the settings:
 - Click Control Panel >> Administrative Tools, and open Local Security Policy
 - If the server that executes the job is the domain controller, configure the settings in the domain security policy.
 - If the server that executes the job is the domain server, configure the settings in the local security policy.

Action 2

Points to check

Was the domain controller (PDC, BDC) stopped or restarted while the job was running in a state where the domain user was specified as the effective user of the job?

Cause

If the domain controller was stopped or restarted while the job was running, the user authentication processing to the primary domain controller returns an error, and the job ends abnormally with code 0x40000913.

Action method

Do not stop or restart the domain controller while the job is running.

Stop or restart the domain controller during a period when the job is not running.

Action 3

Points to check

Has an error occurred in Windows Internet Naming Service (WINS)?

Cause

If WINS is not operating normally, Job Execution Control cannot recognize the domain controller and the job ends abnormally with code 0x40000913.

Action method

Take action according to the WINS error.

Action 4

Points to check

Was a mistake made in the trust host definition?

Cause

For a network job, if the trust host definition on the execution server side is invalid because a mistake was made in the definition, the job will not be executed.

Check if the host name defined in the trust host matches the host name output when the hostname command was executed on the schedule server (if the schedule server is UNIX, this is the uname -n command).

5.2.12 The Job Ends Abnormally with Code 0x40000913 [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Is the trust host definition invalid?

Cause

For a network job, if the trust host definition on the execution server side is invalid, the execution of the job will be refused

Action method

Check if the host name defined in the trust host matches the host name output when the uname -n command was executed on the schedule server (if the schedule server is Windows, this is the hostname command).

Action 2

Points to check

Is the execution server Windows, and is the **Execute jobs under the respective job owner's authority** check box selected in the **Options** tab of the **Define Operating Information** window on the execution server?

Cause

If the schedule server is UNIX and the execution server is Windows when running a network job, and **Execute jobs under the respective job owner's authority** is enabled on the execution server, the job terminates abnormally.

Action method

Disable Execute jobs under the respective job owner's authority on the execution server.

5.2.13 The Job Ends Abnormally with Code 0x40000999, or if 'Job' or 'Queue' is Selected in the Job Selection window, Error Message:MJS819E is Output

Error message

MJS819E USERNAME <user name> REFUSED BY HOST(<host name>),BECAUSE PERMISSION DENIED

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Have the settings that restrict the users of Systemwalker Operation Manager been configured for the **Shared** parameter function in the **Systemwalker Operation Manager Environment Setup** window?

Cause

If the settings that restrict the users of Systemwalker Operation Manager have been configured for the **Shared** parameter function in the **Systemwalker Operation Manager Environment Setup** window, operations are not possible by users that are not allowed to use Systemwalker Operation Manager.

Action method

Users for whom the error occurs are not allowed to use Systemwalker Operation Manager. The system administrator must allow the user to belong to the swadmin group, if the user should be allowed for operations. Note that the user must belong to the swadmin group as the secondary group, not the primary group.

5.2.14 The Job Ends Abnormally with Exception Code 0xC0000005, 0xe06d7363 [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

- Has the user application accessed illegal memory area?
- Is there a problem in the processing of the user application?

Cause

If the user application accesses illegal memory area, the job ends abnormally with exception code 0xC0000005. The reason for the illegal memory area access is usually that there is a problem in the processing logic of the application, or of a library that is linked to the application, (for example, if the application accesses Oracle, the library provided in Oracle should be linked).

If the application ends abnormally, the exception code 0xe06d7363 is output. There may be a problem in the processing of the application, or of a library that is linked to the application.

To determine the cause of the problem, the following tasks must be performed:

- Use windbg, which is available on the Microsoft website, analyze the dump that is created when the application is started, and review the processing logic of the application.
- Analyze the application crash dump that is created when the application ends abnormally, and review the processing logic of the application.

If the cause must be determined, send the following data to the "Application Author", and ask them to analyze it:

- The dump created when the application was started using windbg

5.2.15 The Job Ends Abnormally with Exception Code 0xC0000135 [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Has the path in which the dll that is required to execute the application exists been set in the PATH environment variable?

Cause

If the path in which the dll that is required to execute the application exists has not been set in the PATH environment variable, the job ends abnormally with exception code 0xC0000135.

Action method

Refer to the following action methods:

"5.1.8 The Environment Variables are Insufficient, so the Job Does Not Operate Normally [Windows versions]" or "5.4.3 The Job (Arcserve, COBOL, PowerSORT, SymfoWARE, and Others) Does Not Operate Normally [Windows versions]"

5.2.16 The Job Ends Abnormally with Exception Code 0xC0000142 [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

If the application started by Systemwalker Operation Manager, or the processing to start an application that is started under that application, fails, the job ends abnormally with exception code 0xC0000142. 0xC0000142 means "Failed to initialize the DLL required to execute the application".

The cause of the failure to initialize the DLL required to execute the application may be that the desktop heap (an area managed by Windows) was depleted.

Note that the exception code 0x40000999 may be output at the same time as the exception code 0xC0000142.

Reduce the number of jobs executed simultaneously. Alternatively, adjust the desktop heap size.

When using Windows Server 2008 or later, refer to the manual indicated below and modify the registry to expand the desktop heap size.

- V13.8.0 or later

Systemwalker Operation Manager Installation Guide - "Tasks Prior to Installation" - "Preventing depletion of the desktop heap"



Refer to Microsoft Knowledge Base Article 126962 for information on how to change the registry to adjust the desktop heap size. Additionally, refer to **Microsoft Knowledge Base - 184802** for information on the desktop heap.

The registry is an extremely important file in Windows. If mistakes are made when editing the registry, there is a risk that Windows may not start, or may have to be setup again, for example. For this reason, take sufficient care by backing up the system beforehand, or increasing or decreasing the size a little at a time, for example, when making changes.

The tuning method used to adjust the size will vary depending on the status of the following settings:

- If Execute jobs under the respective job owner's authority is selected in the Options tab of the Define Operating Information window

Decrease the value (underlined part) for the third item of SharedSection.

- If Execute jobs under the respective job owner's authority is not selected in the Options tab of the Define Operating Information window

Increase the value (underlined part) for the third item of SharedSection.

5.2.17 The Job Ends Abnormally with Exception Code 0x40000999 [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

<u>Action</u>

Cause

If the processing to start the process that manages the job fails in Systemwalker Operation Manager, the job ends abnormally with completion code 0x40000999. At this time, the "MJSINI.EXE application error" dialog box is displayed in the desktop, and the process that manages the job ends with exception code 0xC0000142. 0xC0000142 means "Failed to initialize the DLL required to execute the application".

The cause of the failure to initialize the DLL required to execute the application may be that the desktop heap (an area managed by Windows) was depleted.

Action method

Refer to "5.2.16 The Job Ends Abnormally with Exception Code 0xC0000142 [Windows versions]" for details.

5.2.18 The Job Ends Abnormally (with Other Code)

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Has the application that was started as the job ended abnormally?

Cause

If the job that was started via Systemwalker Operation Manager has ended abnormally, the cause may be that the application that was started as the job has ended abnormally.

Action method

Refer to the application manual for information on the completion code or output message of the application you are using, and check the cause or action method.

5.2.19 The Jobs Outputs an Error Message and Ends Abnormally [UNIX versions]

Error message

No such file or directory bad number

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

AIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Have the following variable strings been defined in the shell script?

Script example

```
proc1 > ${FILE} 2>&1
CODE=`tail -1 ${FILE}`
exit $CODE
```

Cause

In the above example, an unintended string is stored in the \$CODE variable if an error message is output as the proc1 execution result. In this case, the error message shown below is returned from the shell, however it may be misunderstood that the message was output by Systemwalker Operation Manager, and not by the shell.

Example of the shell error message that is output by the exit statement

\$ exit errormessage
errormessage: bad number

Action method

In the shell script variable value, check if an unintended string was stored because an error occurred.



Basically, Systemwalker Operation Manager displays the content for the standard output (stdout) and standard error output (stderr) of the job in the previous log for the job without any special processing.

If an error message is output to the previous log for the job, check if the job may have been output first.

5.2.20 The Network Job that Shuts Down or Reboots Another Server Ends Abnormally

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

MJS819E USERNAME <user name> REFUSED BY HOST(<host name>),BECAUSE PERMISSION DENIED

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

If a network job that shuts down or reboots another server is started, then after the job has ended, the following processing that precedes obtaining the job execution results may result in an error, causing the job to end abnormally.

- Network connection processing from the schedule server to the execution server (error message: MJS881S)
- User authentication processing on the execution server (error message: MJS819E)

The reason why the above processing results in an error is that the processing is performed while the execution server is midway through shutting down or while the system is beginning to start. This problem occurs as a result of the shutdown or reboot processing being performed normally, and does not indicate a problem with the behavior of Systemwalker Operation Manager.

For network jobs that shut down or reboot other servers, consider ignoring the completion code by selecting **Ignore** completion code in the **Standard information** tab of the **Add/Change - Job** window.



Network jobs in Systemwalker Operation Manager are completed by performing the processing to obtain the job execution results (obtaining the completion code and the standard output file). For this reason, completion of a network job that shuts down or reboots another server only indicates the fact that the command was issued correctly (it does not guarantee the actual shutdown or reboot of the target server). After that, it will be necessary to use another method to confirm whether the shutdown or reboot was actually performed normally.

5.2.21 Even if the Continuous Execution Mode is Enabled, if the Execution Server has Shut Down (Failover), the Network Job that is being Executed Ends Abnormally

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Cause

Even if the continuous execution mode is enabled, if the execution server (a different server to the schedule server) has shut down (failover), the network job that is being executed ends abnormally, and the execution does not continue. The continuous execution mode is not a setting that determines whether to continue a job when the execution server shuts down, it is a setting that determines whether to continue the job when the schedule server shuts down.

Action method

Check the processing status of the application that was started as the job, and perform recovery action accordingly, for example restart the network job that ended abnormally.

5.2.22 The Job that Uses Shared Memory Ends Abnormally [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

Action

Points to check

Has the shared memory of the system parameters been tuned to an appropriate value?

Cause

If jobs that use shared memory are started from Systemwalker Operation Manager, the shared memory size must be tuned taking the size of the shared memory used by the job process into consideration. If the shared memory is not tuned, or an application that consumes a large amount of shared memory exists, the shared memory may be insufficient

Action method

The Solaris shared memory tuning is as follows:

[Solaris 7/8/9]

Jobscheduler uses shared memory for each subsystem individually. If shminfo_shmmni is set in the etc/system file, add the amount needed for the number of subsystems (subsystem x 1). If this value is insufficient, the Jobscheduler daemon cannot start.

If shminfo_shmmax is set in the etc/system file, set a value of 50000 bytes or more. If this value is not set correctly, the Jobscheduler daemon cannot start.

[Solaris 10 or later]

Jobscheduler uses shared memory. Set the values shown below for "project.max-shm-memory" of the system and user.root entries in the etc/project file. If these values are not set correctly, the Jobscheduler daemon cannot start.

project.max-shm-memory = 70000 x number of subsystems used (*1)

*1: In EE versions. In SE versions, set the number of subsystems used as "1".

5.2.23 64-bit/32-bit Application Jobs End Abnormally when they are Executed [Windows Versions]

Applicable versions and levels

- Windows versions: V13.3.0 - V13.8.0

Action

Points to check

Is the startup mode of the job process trace mode (*1), and does either of the following apply?

- A 64-bit application job was executed from a Windows x86 version Systemwalker Operation Manager.
- A 32-bit application job was executed from a Windows x64 version Systemwalker Operation Manager.

*1:

Enable job object mode is not selected in the Options tab of the Define Operating Information window.

Cause

If a job is executed in a trace mode with either of the following combination, the job may end abnormally.

- A 64-bit application job was executed from a Windows x86 version Systemwalker Operation Manager.
- A 32-bit application job was executed from a Windows x64 version Systemwalker Operation Manager.

Action method

Change the startup mode of the job process to the job object mode.

How to set the job object mode

- Select Enable job object mode in the Options tab of the Define Operating Information window, and click OK.
- 2. Restart Systemwalker Operation Manager.

5.3 The Job is not Executed

5.3.1 The Job is not Executed [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the cp command been executed to copy the spool (/var/spool/mjes)?

Cause

Systemwalker Operation Manager creates a pipe file under /var/spool/mjes, and uses this pipe file for communication between processes. If the -R option is not specified when the directory containing this file is copied using the cp command, the pipe communication is intercepted by the cp command, and Systemwalker Operation Manager stops while waiting for the communication to complete. In this state, requests to execute jobs cannot be received, and jobs are not executed.

Action method

To copy the spool (/var/spool/mjes), use one of the following:

- tar command
- Specify the cp command with the -R option

5.3.2 Failed to Execute the Network Job (Error Message:MJS881S is Output)

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20I 10

Check all applicable actions below to resolve the issue.

Action 1

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

```
<code1>:2
<code2> depends on the schedule server operating system type, as follows:
  Windows versions: 274D
  Solaris versions: 0092
  HP-UX versions: 00ef
  AIX versions: 004f
  Linux versions: 006f
```

Points to check

Does the misnet port number match on the schedule server and the execution server?

Cause

If the misnet port number does not match on the schedule server and the execution server, the network job ends abnormally.

Action method

Ensure that the port number of misnet or misnetn (n is the subsystem number from 1 to 9) defined in the services file matches on the schedule server and the execution server.

To reflect the changes made to the port number of the execution server, the Job Execution Control service/daemon of the execution server must be restarted.



The port number default values when misnet is not defined in the services file are as follows:

- Windows version V5.0L30 or earlier version levels: 28452
- Windows version V10.0L10 or later version levels, UNIX versions: 9327

In Windows version V5.0L30 or earlier version levels, to describe the misnet definition on the final line of the services file, a line feed must be entered after the line on which misnet is defined.

Action 2

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

```
<code1>:2
<code2> depends on the schedule server operating system type, as follows:
Windows versions: 274D
Solaris versions: 0092
HP-UX versions: 00ef
AIX versions: 004f
Linux versions: 006f
```

Points to check

Has a request to execute a network job been made for a subsystem number for which an operation has not been performed on the execution server?

Cause

A request to execute a network job registered as subsystem number n (0 to 9) on the schedule server was made for the same subsystem number on the execution server. The port number used for communication is different for each subsystem number, therefore, if the operation is not performed for the same subsystem number n as the schedule server, a communication error occurs in the network job, and it cannot be executed.

Action method

Unify the subsystem numbers that perform the network job operation on the schedule server and the execution server.

Note that, when the schedule server is V10.0L10/5.2 or later and the execution server is V5.0L30/5.2 or later, the mjsnet port number (default: 9327/tcp) is used in all subsystem numbers, and the execution of network jobs with all subsystem numbers on the schedule server is requested for subsystem number 0 on the execution server according to the procedure shown below.

However, if this action is performed, network jobs with the same subsystem number cannot be executed.

- 1. If the misnet1 to misnet9 port numbers are defined in the services file of the schedule server, delete the misnet1 to misnet9 port number settings.
- 2. Restart the Job Execution Control service/daemon of the schedule server.

Action 3

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

```
<code1>: 2 or 3
<code2>: Not fixed
```

Cause

This error occurs if software such as NetWorker uses a port number (default: 9327/tcp) also used by Job Execution Control.

Action method

Perform the "Action method" in Error message 5 "MpMjes: ERROR: 10110: mjsnetsv: Failed in the bind of port number <port number>/tcp." of "2.1.3 Systemwalker Operation Manager Error Messages are Displayed in an Environment in Which Networker, etc., Coexist".

Action 4

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

```
<code1> depends on the execution server operating system type, as follows:
Windows: 3 or 4
UNIX: 2

<code2> depends on the schedule server operating system type if the execution server is Windows, as follows:
Windows versions: 2746
Solaris versions: 0083
HP-UX versions: 00e8
AIX versions: 0049
Linux versions: 0068
```

 $<\!code2\!>$ depends on the schedule server operating system type if the execution server is UNIX, as

follows:

Windows versions: 274C Solaris versions: 0091 HP-UX versions: 00ee AIX versions: 004e Linux versions: 006e

Points to check

Have many network jobs been submitted at the same time?

Cause

If many network jobs have been submitted at the same time, it may not be able to receive them sequentially on the execution server. The network jobs that could not be processed on the execution server end abnormally.

Note that the number of network jobs that can be processed on the execution server depends on the server performance.

Action method

Spread the timing at which the network jobs are submitted.

Action 5

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

```
<code1>: Not fixed
<code2>: Not fixed
```

Points to check

Has a line error occurred between the schedule server and the execution server?

Cause

This problem occurs if a line error has occurred between the schedule server and the execution server.

Action method

Refer to the following manuals, and establish the cause of the line error from the meaning of <code1> and <code2> that are output.

- V11.0L10/11.0 or later

The description for "M|S881S" in the Message Guide

- V5.0L10/5.0 to V10.0L21/10.1

The description for "M|S881S" of "Messages" in the Online Help

Note that, in V13.0.0 or later, the retry behavior can be changed if a line error has occurred in the network job. Refer to "Defining the System Operating Information" in the *Installation Guide* for information on how to change the details.

Action 6

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(<code1>,<code2>)

```
<code1>: Not fixed
<code2>: Not fixed
```

Points to check

Is there a firewall between the schedule server and the execution server?

Cause

This problem occurs if communication in the port used by Systemwalker Operation Manager is not possible because of a firewall between the schedule server and the execution server.

Action method

Operations in environments in which there is a firewall between the schedule server and the execution server are possible by setting the firewall so that communication using the ports shown below is possible. Consider and verify these settings thoroughly before configuring them. Refer to "Listing of Port Numbers" in the *Installation Guide* for information on port numbers.

- mjsnet (default: 9327/tcp)

Consider the settings so that communication from the schedule server to the execution server is possible.

- jmnet (default: 9352/tcp)

Consider the settings so that the following communication is possible:

- Communication from the schedule server to the execution server
- Communication from the execution server to the schedule server
- Communication from the client to the server

Action 7 (UNIX versions V17.0.0 or later)

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR hostname,CODE(<code1>,<code2>)

```
<code1>: Not fixed
<code2>: Not fixed
```

Points to check

Has a timeout occurred in the network job?

Cause

This issue occurs due to the timeout of the network job.

The default timeout values are the following:

- Communication path connection process: 30 seconds
- Data send/receive process: 60 seconds

Action method

Customize the default timeout value for the communication path connection process and data send/receive process. This way, the time until a processing error is detected can be adjusted when an execution server is stopped, or a network error occurs.

The setting can be made in a definition file. The definition takes effect for the communication path connection process and data send/receive process performed on the server where the setting is defined. The following shows the setting method.

Setting method

- In subsystem operations, the setting must be defined for each subsystem.
- Create a definition file using an editor such as vi, and set the value.
- Set read permissions to the created file for all users.
- In a system with a cluster configuration, the following definition file is located on the shared disk. There is no need to create a definition file on each node. Create a definition file on the active node that can access to the shared disk.

Definition file name

If not operating subsystems, or subsystem number is 0

/etc/mjes/mjconf.ini

If subsystem number is 1 to 9

/etc/mjes/mjesN/mjconf.ini

N: 1 to 9

File format

[Socket]

ConnectTimeout=NNN

SendRecvTimeout=nnn

[Socket]

Specify this section when customizing the communication path connection process and data send/receive process for the network job.

ConnectTimeout=NNN

Specify the timeout value to *NNN* in seconds to set the timeout duration of the communication path connection process for the network job when the process stops responding. Specify a value from 5 to 300 (seconds).

This key is optional. The default value of 30 (seconds) will be used if this is omitted, the file format is incorrect, or a definition file is not created.

SendRecvTimeout=nnn

Specify the timeout value to *nnn* in seconds to set the timeout duration of the data send/receive process for the network job when the process stops responding. Specify a value from 10 to 300 (seconds).

This key is optional. The default value of 60 (seconds) will be used if this is omitted, the file format is incorrect, or a definition file is not created.

Cautions

- Do not include characters that do not belong to the format, such as tabs and spaces, between the section name and key name.
- Do not create a file that is not in the above format, such as omitting the value for key name.
- If a definition file that configures definitions for another function already exists with the same name, the above definitions can be added to the file.

Setting examples

Definition file setting example

[Socket]

ConnectTimeout=30

SendRecvTimeout=30

Read permission setting example

chmod 444 /etc/mjes/mjconf.ini

When the setting takes effect

The settings take effect for jobs that are executed after creating the mjconf.ini definition file.

There is no need to stop the Systemwalker Operation Manager daemon.

Cancel the settings

Delete the setting key.

Output messages

The following message is output to the SYSLOG if the specified file format is invalid:

This message may be output multiple times for a single job execution. If the file format is invalid, the default value will be used.

- If the key is ConnectTimeout

MpMjes: ERROR: 10133: Internal configuration file is invalid.(Section=Socket,Key=ConnectTimeout)

[Description]

The specified file format is invalid. (Section name=Socket, Key name=ConnectTimeout)

- If the key is SendRecvTimeout

MpMjes: ERROR: 10133: Internal configuration file is invalid.(Section=Socket,Key=SendRecvTimeout)

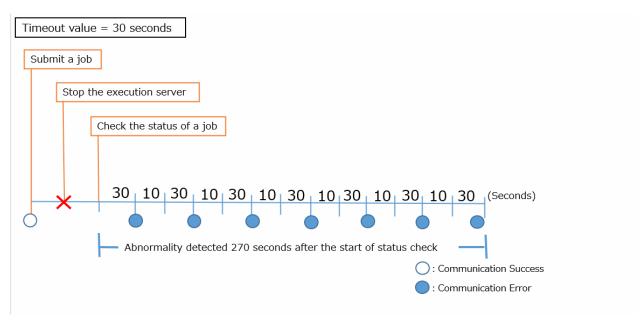
[Description]

The specified file format is invalid. (Section name=Socket, Key name=SendRecvTimeout)

Notes on operation

- This setting is for operations of network jobs or distributed execution jobs. There is no effect on operations of local jobs or jobs that use a JCL file.
- When setting the timeout value using this function, consider the temporary network load, and perform sufficient verification before operation. If the setting value is too small, timeout may occur due to the temporary system load or network load. If the setting value is greater than the system function timeout provided by the operating system, timeout may occur before the set value.
- If the continuous execution mode is enabled and a communication error occurs while processing a network job, a retry process to connect to the execution server is performed. (Normally, 6 retries will be performed at

intervals of 10 seconds.) Therefore, if the process stop responding after submitting a job, the job becomes abnormal after the retry is complete.



- The definition file that was created is a target of the backup and restore of Systemwalker Operation Manager.
- The definition file that was created is a target of the Systemwalker Operation Manager backup command for migration and conversion/registration command for migration.
- The definition file that was created is not a target of policy extraction and distribution of Systemwalker Operation Manager. If distributing policies to another server, the settings need to be reconfigured.

5.3.3 Failed to Execute the Network Job (Error Message:MJS844E is Output)

Error message

MJS844E EXECUTE : jobfile : INVALID JOB FILE

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

AIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Check the points to check described for each action in "5.2.7 The Job Ends Abnormally with Code 250 (1)", and then take action.

5.3.4 Failed to Execute the Network Job (Error Message:MJS819E is Output)

Error message

MJS819E USERNAME <user name> REFUSED BY HOST(<host name>),BECAUSE PERMISSION DENIED

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Has the schedule server host name been defined in **Define Trust Host** of the execution server?

Cause

If the schedule server host name has not been defined in **Define Trust Host** of the execution server, network jobs are refused.

Action method

- V11.0L10/11.0 or later

In **Define Trust Host** of the execution server, select **Execution request from all hosts is approved.**, or **Execution request from the hosts who registered is approved.**, and then define the schedule server host name.

- V5.0L10/5.0 to V10.0L21/10.1

In **Define Trust Host** of the execution server, define the schedule server host name. Alternatively, if there is no need to restrict network jobs received from other servers on the execution server, clear **Define Trust Host** in **Define Trust Host** on the execution server.

Action 2

Points to check

If **Operation Manager user restrictions** has been set on the execution server, does the effective user of the job belong to the swadmin group?

Cause

If **Operation Manager user restrictions** has been set on the execution server, and the effective user of the job does not belong to the swadmin group, network jobs cannot be executed.

Add the effective user of the execution server to the swadmin group.

5.3.5 Failed to Execute the Network Job (Error Message:MJS830E is Output)

Error message

MJS830E BATCH JOB REQUEST PROCESS IS FAILED

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Does the job owner have the required permissions (read, write, execute) for the directory indicated by <execution server symbolic link>/var/spool/mjes (when the execution server is UNIX)?

Cause

If the job owner does not the required permissions for the directory indicated by <execution server symbolic link>/var/spool/mjes, network jobs cannot be received from other servers.

Action method

Grant the job owner the required permissions (read, write, execute) for the directory (the top level directory must be checked first) indicated by <execution server symbolic link>/var/spool/mjes.

Action 2

Points to check

Does the execution server have one of the following statuses?

- Heavy system load
- Insufficient swap area
- Insufficient hard disk space

Cause

If the execution server has the status shown in "Points to check" above, network jobs cannot be received from other servers.

If the execution server has the status shown in "Points to check" above, improve the status of the execution server.

Action 3

Points to check

Has the primary domain controller (PDC) or backup domain controller (BDC) of the domain to which the execution server belongs been stopped or restarted (when the execution server is Windows)?

Cause

If the PDC or BDC is stopped or restarted while the job request is being processed on the execution server, a user authentication processing error occurs in the PDC or BDC and the job request processing fails.

Action method

Do not stop or restart the PDC or BDC of the domain to which the execution server belongs while the network job is running.

Stop or restart the PDC or BDC during a period when the network job is not running.

Action 4

Check the content described in "Action" of "5.2.2 When Antivirus Software is used, the Job Ends Abnormally [Windows versions]", and then take action.

Action 5

Points to check

Is the host name or IP address specified in the request host correct?

Cause

The host resolved from the host name or IP address specified in the execution server is different to the assumed host, therefore the job file specified in the host is not found.

Action method

Check if the following settings are valid:

- Request host in the Standard information tab of the Add/Change Job window
- Default host name in the Standard information tab of the Job Net Properties window
- Host name specified in the -rh option of the qsub command
- hosts file

Action 6

Points to check

Has the IP address of the schedule server been set to 127.0.0.1 in the hosts file of the schedule server?

Cause

When the status of the schedule server is as indicated in "Points to check", communications from the execution server to the schedule server are unable to be performed correctly, which may result in a job that is operating on the execution server to be considered not needed and then being deleted.

Refer to "4.16.9 "Systemwalker Operation Manager" Remains Displayed in the Main Window" for information on setting the correct IP address for the schedule server in the hosts file of the schedule server.

5.3.6 Failed to Execute the Network Job (Error Message:MJS876E is Output)

Error message

MJS876E FILE TRANSFER ERROR OCCURRED, CODE(<code>)

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

[<code> is FFFFFF68]

Is the Job Execution Control spool directory capacity on the execution server depleted?

Note that the Job Execution Control spool directory is as follows:

- [Windows]

 $<System walker\ Operation\ Manager\ installation\ directory > \ \ MPWALKER. JM\ \ mpmjess v \ \ mjespool$

- [UNIX]

/var/spool/mjes

Cause

If Transmission of execution command is selected in the Standard information tab of the Add/Change - Job window, or the qsub command -jft option is specified, the command defined in the Command field is transmitted to the execution server.

If the Job Execution Control spool directory on the execution server is depleted, the command transmission may fail.

Action method

Reserve sufficient free space for the Job Execution Control spool directory.

Action 2

Points to check

[<code> is FFFFF6B]

Has the antivirus software or backup software accessed the Job Execution Control spool directory?

Note that the Job Execution Control spool directory is as follows:

- [Windows]

<Systemwalker Operation Manager installation directory>\MPWALKER.|M\mpmjessv\mjespool

- [UNIX]

/var/spool/mjes

Cause

This problem may occur if the antivirus software or backup software has accessed the Job Execution Control spool directory, because the Job Execution Control service/Job Execution Control daemon will not be able to access files or directories.

Action method

Configure the settings so that the antivirus software or backup software does not access the Job Execution Control spool directory while the Job Execution Control service/Job Execution Control daemon is running.

Action 3

Points to check

[<code> is FFFFFF46]

Does one of the following apply?

- The file specified in the send destination file name of the JCL SEND command already exists, and there are no write permissions.
- There are no write permissions to the parent directory of the file specified in the send destination file name of the JCL SEND command.
- The parent directory name of the file specified in the send destination file name of the JCL SEND command is invalid.

Action method

If the transmission destination directory does not exist, create the directory. If the required write permissions have not been granted, then grant them.

5.3.7 The Job is not Executed, and a Delay Occurs

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Check all applicable actions below to resolve the issue.

Action 1

Cause

The limit for the number of jobs that can be executed simultaneously has been reached. The job waits until the number falls below the limit (this can be specified for the entire system, or per individual queue) before being executed.

Review the limit set for the number of jobs that can be executed simultaneously.

Check the limit set for the entire system in the following window:

- Max Execution Jobs in the Operating control tab of the Define Operating Information window

Check the limit set per individual queue in the following window:

- Max Execution Jobs in the View Queue Status/Operate window

Additionally, consider the following operations:

- Submit the job to a queue that has not reached the limit.
- Reduce the number of jobs executed at the same time.

Action 2

Cause

The queue has stopped.

Action method

The job can be executed by starting the job execution queue.

Check the queue status by displaying the **View Queue Status/Operate** window or by submitting the qstat command. Then, to start the queue that has stopped, use the start operation on the window, or use the qstart command.

Action 3

Cause

If the version level is V5.0L20/5.1 or earlier, or **Disable simultaneous execution of jobs with an identical name** is selected in a version level of V5.0L30/5.2 or later, multiple jobs with the same name are not executed at the same time. The execution of a job requested later does not start until the execution of the job that was requested first completes, therefore a delay occurs. (However, in a subsystem environment, there is a control per individual subsystem, therefore multiple jobs with the same job name that is used across subsystems are executed at the same time.)

Action method

Change the job name so that multiple jobs do not have the same job name.

To execute jobs with the same job name at the same time, take one of the following actions (V5.0L20/5.1 or earlier version levels cannot be used for this):

- V11.0L10/11.1 or later

Clear Disable simultaneous execution of jobs with an identical name in the Backward compatibility tab of the Define Operating Information window, which will be displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window.

- V5.0L30/5.2 or later, V10.0L21/10.1 or earlier

Select Disable simultaneous execution of jobs with an identical name in the Options tab of the Define Operating Information window, which will be displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window.

To enable the definition, restart the Job Execution Control service/daemon.



If the "Job Name (J)" field is not entered, the directory path name from the path name specified in "Command Name (C)" and the name except for the extension part form the job name.

Action 4

Cause

This job is trying to allocate the resource already allocated to the job that is currently being executed. The job in the queue will not be executed until the job that is currently being executed and is using the same resource completes.

Action method

Display the View Job Status/Operate window or submit the qistat command to check jobs with an executing status, and jobs that have not been executed. Then, for each job, compare the resource definitions in **Resource name** in the **Standard information** tab of the **Monitor - Job** window.

Action 5 (UNIX version V17.0.0 or later)

Cause

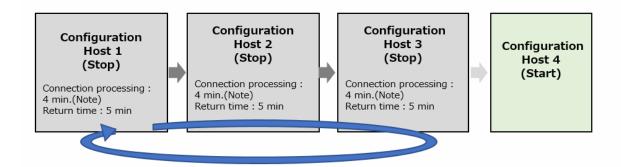
In the distributed execution function, the host that fails to connect is returned to the configured host in a fixed period of five minutes (five minutes after determining that the host that failed to connect is down).

With this 5-minute return time, the longer the connection timeout period is, for example, during host down or reboot, the more likely the reconnect will fail. If a reconnect fails and a subsequent attempt to connect to a subsequent host fails, the attempt is repeated only among the hosts that are down and not submitted to another host that can run the job.

In the following example, the timeout period for a connection is set to 5 minutes (300 seconds), and the timeout period is set to 4 minutes (the default value for Solaris) in the OS settings, as described in Action 7 of "5.3.2 Failed to Execute the Network Job (Error Message:MJS881S is Output)".

In this example, configuration host 1 - 3 fails to connect because it is down, but configuration host 1 returns for 5 minutes before it reaches configuration host 4. Therefore, it will attempt to reconnect to configuration host 1, which has returned.

As a result, reconnections are repeated among the down configuration hosts 1 - 3, and configuration host 4 does not check connectivity and jobs do not run.



Note)

If the OS setting value is smaller than the connection timeout value set by Action 7 of "5.3.2 Failed to Execute the Network Job (Error Message:MJS881S is Output)", the operation times out with the OS setting value. Therefore, in this example, the timeout occurs in 4 minutes.

Action method

Change the return time, which is normally 5 minutes, so that connections to more hosts can be attempted to avoid repeated reconnections between down hosts.

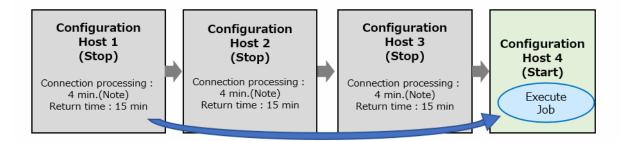
You can specify a return time between 5 and 60 minutes.

Here is an example solution.

In this example, the resume time is 15 minutes (900 seconds).

Even if the connection processing of configuration host 1 - 3 fails, the total timeout value is 12 minutes, so the

connection of configuration host 4 is verified and the job is executed before the recovery time of configuration host 1 elapses of 15 minutes.



Note)

If the OS setting value is smaller than the connection timeout value set by Action 7 of "5.3.2 Failed to Execute the Network Job (Error Message:MJS881S is Output)", the operation times out with the OS setting value. Therefore, in this example, the timeout occurs in 4 minutes.

How to set

Set on the input server.

This definition takes effect in the distributed execution destination determination processing performed on the specified input server.

Here's how to set them.

For subsystem operation, define it for each subsystem.

Use an editor such as vi to create the definition file and set the values.

Make sure all users have read rights to the created file.

On a clustered system, the following definition files are located on the shared disk. You do not need to create a definition file for each node. Create a definition file on a primary node that can access the shared disk.

Definition file name

No subsystem operation - For subsystem 0

/etc/mjes/mjconf.ini

For subsystem 1 - 9

/etc/mjes/mjesN/mjconf.ini

N:1-9

File format

[Disthost]
Revival=nnnn

[Dishost]

To use this function, specify this section.

If omitted, the return time is 300 seconds (the default value).

[Revival=nnnn]

Specify *nnnn* as the number of seconds to wait before resuming when a connection failure occurs on the distribution-destination configuration host. Specify this setting in the range of 300 - 3600 (seconds).

This key is optional. If this option is omitted, the definition file is not created, or the specified file format is invalid, the default value is 300 (seconds).

Notes

Do not include unformatted characters such as tabs or spaces between section and key names.

Do not create a file in any other format, such as omitting the value for the key name.

All configured host groups are affected when this function is set.

If each group has a different number of configured hosts, use the information from the configured host group that has the most registered hosts for the number of hosts in the formula shown in "**How to estimate settings**".

If a definition file with the same name already exists with a definition different from this function, the definition can be mixed with another definition.

Setting examples

Example of setting the definition file

[Disthost] Revival=1800

Example of setting read permissions

chmod 444 /etc/mjes/mjconf.ini

When the setting takes effect

The settings take effect for jobs that are executed after the mjconf.ini definition file is created.

You do not need to stop the Systemwalker Operation Manager daemon.

Unset Settings

Deletes the set key "Revival".

How to estimate settings

The return time to the configured host is calculated using the following formula.

If the calculated result is less than or equal to 300 seconds, no change is required.

(Number of hosts registered as configuration hosts -1) * n seconds

n:

If the OS setting value is smaller than the connection timeout value set by Action 7 of "5.3.2 Failed to Execute the Network Job (Error Message:MJS881S is Output)", the times out with the OS setting value.

Example) Maximum number of configuration hosts that can be registered (10 hosts)

If n is 34 seconds or more, a value larger than the calculated value is set as the return time.

If the configured host is a 10 host, the formula is as follows, so the minimum number of seconds over 300 is 34 seconds. Therefore, if n is less than or equal to 33 seconds, no changes are required.

(10-1) * 34 = 306

If n is 100 seconds, the formula is as follows, set "Revival = 900".

(10-1) * 100 = 900

5.3.8 After JCL is Executed, the "Insufficient space for file name.line=nnn. job not queued." Error Message is Output, and the JCL Does Not Start

Error message

Insufficient space for file name. line=<nnn>.(<nnn> is the JCL line number)

Job not queued.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Were tens of file statements defined in ICL?

- Were tens of file names specified in the file statements in JCL?

Cause

When the JCL syntax is interpreted, an area that manages the file statement information per individual step is allocated. If a large number of file statements is defined, or a long file name is defined in the file statement, the number of characters that can manage the information exceeds the limit. As a result, an error message may be output and the job may fail to start.

Action method

Reduce the number of lines for the file statement specified in the step, or consider making each file name specified in the file statement shorter.

5.3.9 The Network Job that was Running Does Not Run After the Version Upgrade

Error message

Unable to find the job file specified.

Job not queued

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 10.0 or later

- AIX versions: 10.0 or later

Action

Points to check

Check if the job meets all the following conditions:

- It is a network job.
- Transmission of execution command in the Detail information tab of the Add/Change Job window is selected.
- In the **Command** field in the **Standard information** tab of the **Add/Change Job** window, the job was not specified using the full path. (The path information is not included.)
- In the **Directory** field in the **Standard information** tab of the **Add/Change Job** window, the name of the directory in which the jobs are stored on the schedule server is set.
- The directory in which the jobs are stored is not set in the job folder.

Cause

If migration is performed from a version of V5.0L30/5.2 or earlier to a version of V10.0L10/10.0 or later, the job moves to the directory specified when it is registered, and the job does not execute in the default behavior setting.

Action method

Take action using one of the following methods:

- In the Operation information >> Backward compatibility tab of the Systemwalker Operation Manager environment setup client (V11.0L10/11.0 or later), or the Operation information >> Options tab of the Systemwalker Operation Manager environment setup client (V10.0L10/10.0 to V10.0L21/10.1), clear Before job execution, change to directory specified at job registration to restart the Systemwalker Operation Manager server in initialization mode next time.
- In the **Command** field in the **Standard information** tab of the **Add/Change Job** window, define the command name by specifying the full path.
- Set the directory specified in the **Directory** field in the **Standard information** tab of the **Add/Change Job** window as the job folder on the schedule server.

5.3.10 An Error Occurs when the Policy Distribution Job is Executed

Error message

Unable to find the job file specified. Job not queued.

no such user on this machine. job not queued.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Are the following environments on the policy extraction source server and the distribution destination server different?

- User registered in the operating system
- Directory structure related to the job

Cause

If the following environments on the policy extraction source server and the distribution destination server are different, the job in the distribution destination does not run:

- User registered in the operating system
- Directory structure related to the job

Action method

On the distribution source server and distribution destination server, unify the user and directory environments.

5.4 The Job Does Not Operate Normally

5.4.1 The Job Does Not Operate Normally [Windows versions]

Applicable versions and levels

- Windows versions: V13.2.0 or later

Action 1

Points to check

Is a file on the network being used for the job?

Cause

A local system account has been set as the startup account of the "Systemwalker MpMjes" service.

Local system accounts do not have network connection rights.

Action method

For the effective user of the job, specify an account that can access the network. (In this case, select **Execute jobs under the respective job owner's authority** in the **Options** tab of the **Define Operating Information** window, which will be displayed when **Operation information** is clicked in the **Systemwalker Operation Manager Environment Setup** window.)

Alternatively, change the startup account of the "Systemwalker MpMjes" service to an account that can access the network. Refer to "Changing the Startup Account" in the *Systemwalker Operation Manager Installation Guide* for information on these changes.

Applicable versions and levels

- Windows versions: V5.0L10 to V13.3.1

Action 2

Points to check

- Can the resource (for example, file) used by the job be accessed?
- For example, when the access to the directory or file fails, does the job end abnormally with a code set by the job or is an error message output?

Cause

If a resource that is required to execute the job cannot be accessed, the job does not operate normally. If the default definition information is used immediately after the installation, the job is executed with the logon account rights of the "Systemwalker MpMjes" service. For this reason, if the job does not operate normally, the cause of the problem may be

that a resource required to execute the job cannot be accessed using the logon account of the "Systemwalker MpMjes" service.

Action method

To make the job operate normally, take one of the following actions:

- a. Set appropriate rights for the account or resource, so that the resource required to execute the job can be accessed using the logon account of the "Systemwalker MpMjes" service.
- b. Use any user account that can access the resource required to execute the job as the job startup account.

The procedure that is required to perform the action in b. is as follows:

- Select Execute jobs under the respective job owner's authority in the Options tab of the Define Operating Information window, which will be displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window.
- 2. When the **Define Operating Information** window is closed, the **Set Startup Mode of Job Execution Control** dialog box will be displayed. Select **Enable the saved operating information definitions from the next startup.** (in versions of V10.0L21 or earlier), and then click **OK**.
- 3. From the Control subject box in the Systemwalker Operation Manager Environment Setup window, select Job Execution Control, and then click Start to restart the same service (the Jobscheduler service is also restarted).
- 4. Register the job owner set for the project (Jobscheduler definition item) or job folder (Job Execution Control definition item) in the **Define Job Owner's Information** Window, which will be displayed when **Job owner** is clicked in the **Systemwalker Operation Manager Environment Setup** window.
- 5. Using **Control Panel** >> **Administrative Tools** >> **Local Security Policy**, grant the "Log on as a batch job" right to the account used as the job startup account.

5.4.2 The Job Does Not Operate Normally [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Has the command that requires tty been executed?

Cause

In UNIX versions of Systemwalker Operation Manager, the job operates as the daemon process extension. If a command that requires tty (ps, passwd, ttytype, stty, tset, tty, eucset, and so on.) is executed to operate a job in an environment from which tty has been separated out, the job may not operate normally.

Action method

Check if the command that requires tty is contained in the shell script that was started as a job. If this was started from Systemwalker Operation Manager, correct the script so that the relevant line is not executed in the script.

Action 2

Points to check

Has the environment variable required to execute the job been set in the startup file of the shell?

Cause

Job Execution Control starts the shell to interpret the shell script of the job. At this time, Job Execution Control loads the shell startup file, described below, as though the user logs in.

For example, if the login shell of the job submitter (*1) is a Bourne shell or a Korn shell, Job Execution Control loads /etc/ profile and .profile of the job owner's home directory, and if the login shell of the job submitter is a C shell, Job Execution Control loads /etc/.login, .login of the job owner's home directory, and .cshrc of the same directory.

*1: The login shell of the job submitter can be checked from the password entry.

Action method

By executing the env command from the job, check the environment variable that can be referenced by the job, and if required, set this in the job, or configure the environment variable settings in the startup file.

5.4.3 The Job (Arcserve, COBOL, PowerSORT, SymfoWARE, and Others) Does Not Operate Normally [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Has the environment variable that is required to execute the job been set?

Cause

If an environment variable that is required to execute the job has not been set, the job may not operate normally. For example, the following cases may apply:

- The PATH environment variable that is required to load the Arcserve or COBOL dll has not been set, therefore the job ends abnormally with exception code 0xC0000135.
- The TEMP or TMP environment variable that is required to execute PowerSORT has not been set, therefore the job ends abnormally or does not end.
- The RDBNAME environment variable that is required to execute SymfoWARE has not been set, therefore the job ends abnormally.

Action method

The job is executed as an extension of the service (background), therefore the environment variable that forms the user specific information cannot be referenced. If an application (program) that is started as a job must reference an environment variable that has been set only as a user environment variable, take one of the following actions:

- Register the user environment variable that is required to execute the application as a system environment variable (after it is registered, the server must be restarted).
- Create a batch file to start the application, and then register the environment variable that is required to execute the application at the start of the batch file.
- In V10.0L20 or later, register the environment variable that is required to execute the application in **Environment** variables in the **Detail information** tab of the **Add/Change Job** window.

5.4.4 The Job was not Executed in the Directory Specified in Directory in the Standard information Tab of the Add/Change - Job Window

Applicable versions and levels

- Windows versions: V5.0L10 to V5.0L30

- Solaris versions: 5.0 to V5.2

Linux versions: 5.2HP-UX versions: 5.1AIX versions: 5.1

- DS versions: V20L10

Action

Points to check

Is the job a network job?

Cause

The directory specified in **Directory** in the **Standard information** tab of the **Add/Change - Job** window is not valid on the host side that executes the network job. For this reason, for a network job, even if a directory is specified in **Directory** in the **Standard information** tab of the **Add/Change - Job** window, the network job is not executed in that directory.

Action method

For a network job, use the cd command in the batch file or shell script to change to another directory.

5.4.5 The Job Does Not End (1)

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the application that was started as the job ended?

Cause

If the job does not end, the cause may be that the application (*1) that was started as the job has not ended.

*1: If a child process and grandchild processes are started from the application, these processes are also included.

In Windows versions, use Task Manager (in UNIX versions, use other ways such as using the ps -ef command) to check if the application (including the child or grandchild processes) has ended. If the application has not ended, there may be a problem in the application, so perform a review.

5.4.6 The Job Does Not End (2) [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Has an application that involves window output been started as a job?

Cause

If a job does not end, it may have been started as an application that involves window output.

Action method

Applications that involve window output cannot be executed as jobs (except when the Task Link client application startup commands are used).

If the application outputs a pop-up to the window, take action so that this is not output. Additionally, use the Task Link client application startup commands to execute an application that involves window output.

If the problem is reproduced, check the application status according to the confirmation procedure in "5.4.5 The Job Does Not End (1)".

Action 2

Points to check

Has a print application been started as a job?

Cause

If a print application does not have a printer set as a print destination, and the default printer of the Windows operating system is set as the print destination, the job may end with nothing printed, or the job may not end.

Action method

By taking the following actions, it may be possible to print normally.

- Use the print application to use a printer other than the printer set as the default printer.
- Before starting the print application from Systemwalker Operation Manager, log on to Windows locally using the "Systemwalker MpMjes" service logon account. (If **Execute jobs under the respective job owner's authority** is selected in the **Options** tab of the **Define Operating Information** window, log on to Windows locally using the job owner account.)

5.4.7 The Job Does Not End (3) [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Check all applicable actions below to resolve the issue.

Action 1

Points to check

- Is the job waiting for input?
- Does the application output a message box when an error occurs?

Cause

When an error occurs, a message box may be output, and there may be a wait state for **OK** button input. Alternatively, an interactive command or a command that makes an input request (such as format, backup, pause) may have been defined in the batch file.

Action method

Consider taking the following actions:

- If a command or function that makes an input request is contained in the application, investigate if the application can be modified so that these commands or functions do not run.
- If there is a possibility that the application stopped because it was in an input wait state when the error occurred, the job will not end, so consider configuring a setting to make the job end after a fixed period has elapsed.

For example, in **Specify the time limit of job execution.** of the **Edit Queue** window, consider setting a limit value to execute the job in a particular queue, so that jobs that run for a long time are treated as having ended abnormally.

- To start an interactive job, also consider using the Task Link client application startup commands.



Systemwalker Operation Manager jobs operate in environments in which the window cannot be seen (background), therefore the request to click **OK** remains unnoticed. For this reason, jobs that have fallen into an input wait state do not end.

Action 2

Points to check

Has a resident application been started?

Cause

The operating status of a job started from Systemwalker Operation Manager is monitored until the descendent processes of that job. Even if the structure of the job is that a resident process is started from the batch file, and the batch file ends, it does not mean that job has ended just because the batch file ends.

Action method

In Systemwalker Operation Manager, the job does not end until all processes started from the job, for example child processes, grandchild processes, and descendent processes, have ended.

If a batch that makes a request to start resident processes, for example, is started from Systemwalker Operation Manager, the job does not end. Consider performing operations with a prerequisite to have jobs that do not end or operations starting this type of application from other than Systemwalker Operation Manager.

Action 3

Points to check

Is the application in an infinite loop?

Cause

The job may have caused an unintended error, and as a result, it may be in an infinite loop caused by an abnormal route that is should not normally follow.

Action method

Check if the CPU time of the job has been increased by Task Manager, for example.

If the application that was started as the job is in an infinite loop, the cause cannot be investigated from the perspective of the Systemwalker Operation Manager behavior.

First, check if there is a problem in the operating environment. If there are no problems, debug from the perspective of the application behavior.

5.4.8 The Job Does Not End (4) [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Has an interactive command (such as more, pg) or a shell script that makes an input request been executed?

Cause

The job has fallen into an input wait state, therefore the job may not end.

Action method

- If a command or function that makes an input request is contained in the application, investigate if the application can be modified so that these commands or functions do not run.
- If there is a possibility that the application stopped because it was in an input wait state when the error occurred, the job will not end, so consider configuring a setting to make the job end after a fixed period has elapsed.

For example, in **Specify the time limit of job execution.** of the **Edit Queue** window, consider setting a limit value to execute the job in a particular queue, so that jobs that run for a long time are treated as having ended abnormally.

Action 2

Points to check

Is the application in an infinite loop?

Cause

If the job that was started from Systemwalker Operation Manager is in an infinite loop, or has stopped status because of having to wait for some reason, the job does not end. (Note that Systemwalker Operation Manager does not wait until descendent processes such as child processes and grandchild processes are complete.)

If the target application that was started as a job using the ps command exists, there is a possibility that the application has not ended.

Action method

Debug to find out why the application has not ended. If the application process can be confirmed using the ps command, it may be possible to debug the application by executing the truss command for this process.

5.4.9 The Network Job Takes a While to End

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20I 10

Check all applicable actions below to resolve the issue.

Action1

Points to check

- Has the correct schedule server IP address been obtained by resolving the name from the schedule server host name on the execution server?
- Could communication be made with the schedule server using the IP address obtained by resolving the name from the schedule server host name on the execution server?
- Was NAT conversion performed between the schedule server and the execution server?

Cause

The mechanism is that, after the request to start the network job is made by the schedule server to the execution server, the job runs on the execution server, and when the job ends, a completion notification is sent from the execution server to the schedule server.

The completion notification of the network job cannot be sent by the execution server in the following cases:

- When the correct schedule server IP address cannot be obtained by resolving the name from the schedule server host name on the execution server
- When communication could not be made with the schedule server using the IP address obtained by resolving the name from the schedule server host name on the execution server
- When the schedule server IP address value is converted using NAT conversion

However, schedule server checks the job status of the execution server at fixed intervals, therefore the schedule server is able to recognize that a job has ended.

For this reason, there may actually be a delay from the end of the job on the execution server until the schedule server recognizes this.

Action method

Using the IP address obtained by resolving the name from the schedule server host name on the execution server, take action so that the connection can be made with the schedule server.

If the schedule server is in a cluster configuration, and Systemwalker Operation Manager is one of the following version levels, the problem can be resolved by registering a logical IP address on the schedule server:

- Windows versions: V11.0L10/V12.0L10

- Solaris versions: 11.0/12.0

- Linux versions: V11.0L10/V12.0L10

When registering a logical IP address, use the following procedure to set this IP address on all schedule servers configured in the cluster system, both active and standby.

- 1. Open the Cluster settings tab of the Define Operating Information window, which will be displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window.
- 2. Select Register the logical IP address, and register the logical IP address of the cluster.
- 3. Save the operating information definition, and then restart the Job Execution Control service/daemon.



The logical IP address is used as the recipient of the job completion notification.

By registering the logical IP address of the cluster, even if the schedule server fails over while the network job is being executed and switches to the standby server, the execution server can send the job completion notification to the schedule server.

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Action 2

Points to check

Does the Systemwalker Operation Manager startup account match on the schedule server and the execution server?

Cause

[Windows versions]

If it takes a while until the network job ends, the Systemwalker Operation Manager startup account may not match on the schedule server and the execution server. In this case, the network job completion notification cannot be sent, therefore the schedule server cannot recognize that the job has ended until it checks (at fixed intervals) the status of the job on the execution server.

Action method

Unify the Systemwalker Operation Manager startup account on the schedule server and the execution server.

Refer to the notes in the following manual for information on how to change the startup account.

- "Notes on the Post-installation Procedure" in the Installation Guide

Refer to the following manual for information on how to change the startup account.

- V10.0L20 or later

"Changing the Startup Account" in the Installation Guide

Action 3

Points to check

Has the jmnet port number (9352) communication between the execution server and the schedule server been blocked by a firewall?

Cause

The jmnet port number (9352) communication may have been blocked by a firewall.

Configure the firewall settings so that the jmnet port number (9352) communication is possible.

5.4.10 A Job that was being Executed before the System Failure Waits to be Executed, but is not Executed even if the System is Restarted

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the queue, in which the job that was being executed before the system failure occurred, stopped?

Cause

If one of the following settings is configured, and the system stops because of a system failure or a power failure, a job that is being executed changes to Waiting status (queue stopped) the next time the system starts, and the job will not be executed until the queue is started.

- An operation is performed in a state where the qinactive parameter has been specified in the initialization file.

Stop all queues when started in the recovery or (V11.0L10/11.0), Stop all queues when starting the service is selected in the Options tab of the Define Operating Information window, which will be displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window.

Action method

After taking the required action, start the queue to resume the operation using one of the following operations:

- Select the operation target queue in the View Queue Status/Operate window. Then, from the File menu, select Queue Operation >> Start (alternatively, click Queue Operation >> Start from the right-click pop-up menu).
- Start the gueue using the gstart command (in UNIX versions, the gstart command is under /usr/lib/mjes).

The settings described in "Cause" can be used to check the server or job status. Take the required action before resuming the operation. However, if this is not required, take one of the following actions:

- Delete the qinactive parameter from the initialization file.
- Clear Stop all queues when started in the recovery or (V11.0L10/11.0 or later) Stop all queues when starting the service, in the Options tab of the Define Operating Information window, which will be displayed when Operation information is clicked in the Systemwalker Operation Manager Environment Setup window.

5.4.11 The Application cannot Reference the Network Drive [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Cause

If the application was started from Systemwalker Operation Manager, this application may not be able to reference the network drive.

Action method

The network drive can be referenced by using one of the following methods:

- In Windows NT(R) or Windows(R) 2000, before executing the job, log on to the system locally using the "Systemwalker MpMjes" service logon account, and then connect to the network. In this case, when the logoff is performed, the network drive will be disconnected, therefore, while jobs that use the network drive are being executed, the operation will be performed in a logged on state.

In Windows Server 2003 STD/Windows Server 2003 DTC/Windows Server 2003 EE or later, the specification for the drive letter management method is different to Windows(R) 2000 or earlier, therefore the action cannot be performed using this action method. Consider taking action using one of the following methods:

- Notate files that exist in a network path using the UNC (Universal Naming Convention) path.

(The UNC path can be used instead of specifying the network drive.)

Notate the UNC path as follows:

\\<computer name>\<share name>

When the data.txt file that exists in the "share" shared directory of the FILESVR computer is notated in the UNC path, the result is as follows:

\\FILESVR\share\data.txt

- If the application cannot use the UNC path instead of the network drive name, ensure that the application is started from the batch file, and add the command that connects to/disconnects from the network to the start and end of the batch file.

Connect to network : net use z: \\remote\share

Disconnect from network : net use z: /delete

In this case, while this batch file is being executed as a job, other jobs, or users who have logged on locally, cannot allocate the same drive letter (in the above example, "z" refers to the drive) to another network path for use.

Additionally, even if another job or user who has logged on locally is connected to the network, note that you cannot assign the same drive letter to a job that you are about to start.

Note that, if the network connection is complete, you must disconnect and then close the batch file. If you do not disconnect, it may not be possible to use that drive until you reboot.



It is highly recommended that you place the resources that are referenced by the job on a local drive.

5.4.12 The Job That Accesses RDBMS via ODBC Does Not Operate Normally [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Has the data source name been registered?

Cause

If an application that accesses RDBMS via ODBC is executed as a job, register the data source name for one of the following data sources:

- System data source
- Systemwalker Operation Manager logon account user data source

To register the data source name for the user data source, log on to Windows using the "Systemwalker MpMjes" service logon account, and then register the data source name.

5.4.13 The Network Job Starts in Duplicate, and Seems to be Executing Even Though the Job has Actually Ended, or Outputs Error Message: MJS881S and then Ends Abnormally

Error message

MJS881S jobname(<job number>) COMMUNICATION ERROR OCCURRED FOR <host name>,CODE(3,0000)

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Does the continuous execution mode match on the schedule server and the execution server?

Cause

If the continuous execution mode does not match on the schedule server and the execution server, the network job starts in duplicate, and seems to be executing even though the job has actually ended, or outputs error message MJS881S and then ends abnormally.

Action method

Use the following procedure to check the current status of the continuous execution mode on each server, and if they do not match, unify them to a mode that is appropriate for the operation.

1. On each of the schedule server and the execution server, check if the continuous execution mode is enabled or disabled:

```
jmmode check [-sys { all|<subsystem number>} ]
```

If the characters displayed to the right of JOB are on, the mode is enabled. If the characters displayed to the right of JOB are off, the mode is disabled.

2. If the continuous execution modes do not match, stop the Systemwalker Operation Manager daemon/service on one of the servers, and then enable or disable the continuous execution mode:

To enable

```
jmmode continue -func JOB [-sys { all|<subsystem number>}]
```

To disable

```
jmmode cancel -func JOB [-sys { all|<subsystem number>} ]
```

Then, start the Systemwalker Centric Manager service/daemon that was stopped.

5.4.14 The Command Name cannot be Referenced from the Script File [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the command name been obtained using the shell variable \$0?

Cause

- 5.0 to 10.1

Systemwalker Operation Manager copies the script file to the spool, and the copied file is started using the specified full path. For this reason, the full path is set in the shell variable \$0 in the script file.

- 11.0/12.0

If Copy the scripts specified when registering jobs before execution is selected in the Backward compatibility tab of the Define Operating Information window, Systemwalker Operation Manager copies the script file to the spool, changes the name of the copied file to "job number", and starts the file using the specified full path. For this reason, the full path containing the "job number" in the file name is set in the shell variable \$0 in the script file.

If this is not selected, Systemwalker Operation Manager directly starts the script file. For this reason, the file name specified in **Command** in the **Standard information** tab of the **Monitor - Job** window is set as is in the shell variable \$0.

- 5.0 to 10.1

To extract only the command name part in \$0, consider using the basename command.

Script example (sample.sh)

```
#! /usr/bin/csh
echo `basename $0`
```

- 11.0 or later

Consider an operation in which Copy the scripts specified when registering jobs before execution is cleared in the Backward compatibility tab of the Define Operating Information window. Note that, to extract only the command name part in \$0, consider using the basename command, as mentioned previously.

5.4.15 The Network Job Ends Before the Estimated End Time

Applicable versions and levels

- Windows versions: V5.0L10 to V12.0L11

- Solaris versions: 5.0 to 12.1

- Linux versions: 5.2, V10.0L10 to V12.0L10

- Linux for Itanium versions: V12.0L10

HP-UX versions: 5.1 to 11.0AIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Have multiple network cards been installed on the schedule server? Additionally, has the primary host name of the schedule server been resolved on the execution server?

Cause

If multiple network cards have been installed on the schedule server, the execution server communicates with the schedule server using the primary host name or IP address of the schedule server.

If the continuous execution mode of the network job is disabled, the execution server communicates with the schedule server to confirm whether it is running while the network job is being executed. If multiple network cards have been installed on the schedule server, and the primary host name of the schedule server cannot be resolved on the execution server, it cannot communicate with the schedule server. The execution server determines that the schedule server is not running, and cancels the job.

Action method

Take action so that the primary host name of the schedule server can be resolved on the execution server.

5.4.16 The Job is Delayed and not Started, or the Start is Delayed

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is a character string specified that does not fall under any of the following conditions in **Default host name** in the **Standard information** tab of the **Job Net Properties** window, or in **Request host** in the **Standard information** tab of the **Add/Change - Job** window?

- Host name of the local server
- Character string specified for **Define Operating Information** window **Cluster settings** sheet **Logical IP address**

Cause

If any of the following is set for **Default host name** in the **Job Net Properties** window - Basic Information sheet or **Request host name** in the **Add/Change - Job** window - **Standard information** sheet, the job is a network job to the local server

- IP address of the local server
- Host name that does not match the string obtained by the uname -a command/hostname command
- IP address/host name that does not match the character string specified for Define Operating Information window
 Cluster settings sheet Logical IP address

When a network job is submitted, the job is started on the schedule server and the execution server. By starting a single job twice on the local server, the concurrency limit may have been reached and the job may have Waiting status. Additionally, because of the concurrency restriction, the start of the new job may be delayed.

Action method

When executing the job on a local server, there is no need to specify **Default host name** in the **Standard information** tab of the **Job Net Properties** window, or **Request host** in the **Standard information** tab of the **Add/Change - Job** window. Do not specify anything.

5.4.17 A Network Job from a Windows Server to a UNIX Server is Executed with Administrator Rights by a General User who is the Owner

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

If the following conditions are met, the job is executed on the UNIX server with administrator rights (root):

- The job from the Windows server to the UNIX server is a network job
- The project owner (effective user of the job) belongs to the Administrators group on the Windows server

Action method

Take one of the following action methods:

- Remove the project owner (effective user of the job) from the Administrators group
- Create a new user who does not belong to the Administrators group, and make this user the project owner (effective user of the job)

5.4.18 Unintended Permissions were Set for the File or Directory Created in the Job [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has umask been specified in the startup file of the shell of the effective user of the job?

The startup files are as follows:

- When the login shell of the effective user is sh or ksh
 /etc/profile, and .profile of the home directory of the effective user
- When the login shell of the effective user is csh

/etc/.login, .login of the home directory of the effective user, and .cshrc of the same directory

Cause

The Job Execution Control daemon is running with 0000 set as the umask value. For this reason, if the startup file of the shell of the effective user of the job, or the umask value in the application, has not been set, the application runs with 0000 set as the umask value.

Action method

Set an appropriate umask value in the startup file of the shell of the effective user of the job, or in the application. Example setting)

umask 022

5.4.19 If the Schedule Server is in a Cluster Configuration, the Network Job Ends Before the Estimated End Time

Applicable versions and levels

- Windows versions: V5.0L30 to V12.0L11

- Solaris versions: 5.2 to 12.1

- Linux versions: 5.2, V10.0L10 to V12.0L10

- Linux for Itanium versions: V12.0L10

HP-UX versions: 10.0 to 11.0AIX versions: 10.0 or later

Action

Points to check

Have multiple logical IP addresses with different network segments been allocated to the schedule server?

Cause

If the continuous execution mode of the network job is disabled, and the network job is being executed, the execution server communicates with the schedule server to confirm whether it is running.

If multiple logical IP addresses with different network segments have been allocated to the schedule server, the IP address of a network segment to which the execution server does not belong may be used as the IP address that is used as the recipient for periodic communication.

In this case, communication from the execution server to the schedule server is not possible. The execution server determines that the schedule server is not running, and cancels the job.

Action method

In the node name definition file of the execution server, define the logical IP address of a schedule server that the execution server can communicate with.

Use the following to define the node name definition file:

- V11.0L10/11.0 or later

In the **Cluster settings** tab of the **Define Operating Information** window, define the schedule server node name in **Nodes** of **Server settings**.

- V5.0L30/5.2 to V10.0L21/10.1

Select **Define node names of the cluster system** in the **Options** tab of the **Define Operating Information** window, and define the node name of the schedule server in the cluster configuration in **Node Name 1**: and **Node Name 2**:

5.4.20 If the Schedule Server is in a Cluster Configuration, it Takes a While until the Network Job Ends

Applicable versions and levels

- Windows versions: V5.0L30 or later

- Solaris versions: 5.2 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 10.0 or later

- AIX versions: 10.0 or later

Action

Points to check

Have multiple logical IP addresses with different network segments been allocated to the schedule server?

Cause

The mechanism is that, after the request to start the network job is made by the schedule server to the execution server, the job runs on the execution server, and when the job ends, a completion notification is sent from the execution server to the schedule server.

If multiple logical IP addresses with different network segments have been allocated to the schedule server, the IP address of a network segment to which the execution server does not belong may be used as the IP address that is used as the recipient for the completion notification. In this case, the execution server cannot send the job completion notification.

However, the checking of the job status on the execution server is performed at fixed intervals by the schedule server, therefore the schedule server is able to recognize that a job has ended. For this reason, it may take a while from the end of the job on the execution server until the schedule server recognizes this.

Action method

In the node name definition file of the execution server, define the logical IP address of a schedule server that the execution server can use for communication.

Use the following to define the node name definition file:

- V11.0L10/11.0 or later

In the **Cluster settings** tab of the **Define Operating Information** window, define the schedule server node name in **Nodes** of **Server settings**.

- V5.0L30/5.2 to V10.0L21/10.1

Select **Define node names of the cluster system** in the **Options** tab of the **Define Operating Information** window, and define the node name of the schedule server in the cluster configuration in **Node Name 1**: and **Node Name 2**:

5.4.21 The Job That Handles Microsoft Office Products (such as Excel or Access) Does Not Operate Normally [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Has the job that handles Microsoft Office products such as Excel or Access been executed on the server, and not the client?

Cause

If the job that handles Excel or Access has the following states, it may have been affected by the behavioral specification for the Microsoft Office products:

- It does not end.
- It ends normally, but the result is unintended.
- It ends abnormally, and the result is unintended.

Microsoft does not recommend Office server-side automation, nor does it provide support. Refer to Microsoft Knowledge Base Article 257757 for details.

Action method

Use the Task Link client application startup command to execute the job. Refer to the *Reference Guide* for information on Task Link.



This case has been reported in jobs in which Excel and Access have been started as follows:

- Using the DCOM (distributed COM) mechanism.
- Using the VBScript CreateObject.

5.5 The Job Execution Control Behavior is Abnormal

5.5.1 The Content Defined in Define Operating Information is not Reflected

Applicable versions and levels

- Windows versions: V5.0L10 to V10.0L21

Solaris versions: 5.0 to 10.1Linux versions: 5.2, V10.0L10HP-UX versions: 5.1 to 10.0

AIX versions: 5.1 to 10.0DS versions: V20L10

Action

Points to check

In the **Set Startup Mode of Job Execution Control** dialog box that is displayed after the operating information definition is saved, was **OK** clicked after selecting **Enable the saved operating information definitions from the next startup.**

Cause

Even if the operating information definition was changed, if **the Enable the saved operating information definitions from the next startup.** is not selected in the dialog box that is displayed after the operating information definition is saved and the Job Execution Control service/daemon is restarted, that definition content is not reflected.

Action method

If the operating information definition was changed, take one of the following actions to reflect that definition content:

Save the operating information definition, select **Enable the saved operating information definitions from the next startup.**, and then restart the Job Execution Control service/daemon.

- Execute the mistop -c command to stop the Job Execution Control operation, and then resume the operation using the mistart command. (The UNIX version mistop and mistart commands are under /usr/lib/mies.)



Problems that occur when the information set in Operation information does not take effect are as follows:

- Default Queue was changed, however the setting does not take effect.
- The directory in which the job execution history information is saved, or the retention period, does not take effect.
- Even though the settings have been configured so that the job is executed with job owner rights, the job is executed with Job Execution Control service startup account rights. [Windows versions]
- Even though **Disable simultaneous execution of jobs with an identical name** has been disabled, jobs with the same name cannot be executed simultaneously.

Refer to description in the Online Help for information on the items that can be set in Operation information.

- The Operating control tab of the Define Operating Information window
- The Logging tab of the Define Operating Information window
- The Options tab of the Define Operating Information window
- The Print format tab of the Define Operating Information window

5.5.2 The CPU Usage Time of mjsini.exe Increases [Windows versions]

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there an application for which the CPU usage time is increasing?

Cause

If the application that was started as the job is in an infinite loop, the CPU usage time of the misini.exe process (Systemwalker Operation Manager process) may increase proportionately.

Action method

Investigate if the job that caused the CPU usage time to increase can be canceled.

Check if the application that was started as the job is in an infinite loop.

5.5.3 The "/etc/security/limits.conf" Value is not Reflected in the Systemwalker Operation Manager Job [UNIX versions]

Applicable versions and levels

- Linux versions: 5.2, V10.0L10 or later

Action

Cause

In Linux versions, through processing called PAM authentication that is performed when the user logs in, the value set in /etc/security/limits.conf is reflected.

The operating system default value settings apply immediately after the operating system starts, and the operating system default value settings are also inherited by the Systemwalker Operation Manager daemon that is started in line with the operating system startup. In this state, the /etc/security/limits.conf value will not be reflected in the Systemwalker Operation Manager job.

Note that, in this state, if a user for whom the "ulimit" internal command of the shell is specified in the profile, such as .profile or .login, of the login shell, the following message may be output as the execution result of the job:

/etc/profile: line xxx: ulimit: open files: cannot modify limit: Operation not permitted.

Note: xxx shows the line number of /etc/profile.

Action method

Take action using one of the following methods:

- To enable the /etc/security/limits.conf value for a user application that is executed as a job, use one of the following methods to execute the job:
 - 1. Specify "root" as the project owner, or in the **Effective user name** field in the **Detail information** tab of the **Add/Change Job** window.
 - 2. Register the following type of shell script content in the **Command** field in the **Standard information** tab of the **Add/Change Job** window:

```
#!/bin/sh
su - <user name> <script file name>
```

Note: $<\!user$ name>: Specify the user that will execute the user application.

<script file name>: Specify the user application.

- When the effective user of all jobs is the administrator (root), after starting the operating system, log in to the Linux server and then restart the Systemwalker Operation Manager daemon to enable the /etc/security/limits.conf value.

5.5.4 A Job List File (job name.ljob number) is Created Unwillingly

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has **Standard output file** or the qsub command -o option been specified in the **Detail information** tab of the **Add/ Change - Job** window?

Cause

If **Standard output file** or the qsub command -o option has been specified in the **Detail information** tab of the **Add/ Change - Job** window, a job list file (job name.ljob number) is created in the same path as the standard output file.

If the job meets one of the following conditions, a job list file (job nameljob number) will be created:

- The job is a network job
- JCL was used to specify a network job in the joblst operand of the jobstart control statement

Delete as required.

5.5.5 The Job Cannot be Canceled

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

If a process that was executed has been canceled, are the process that was started from the process that was executed, and the processing, also canceled?

Cause

In Systemwalker Operation Manager, the processes that are started from the process that made the start request are monitored. For this reason, if the processing issues a request to other processes, such as resident processes, the processing cannot be canceled from Systemwalker Operation Manager.

Action method

If a process that was executed is canceled, use processing in which the process that was started from the process that was executed cancels the processing.

5.5.6 Nothing is Displayed in the View Queue Status/Operate Window if Queue is Selected in the Job Selection Window [UNIX versions]

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 10.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

Has the Systemwalker Operation Manager client been connected to the standby node in the cluster configuration?

Cause

If **Queue** is selected in the **Job Selection** window, the spool directory for Job Execution Control is referenced and queue information is retrieved. In a cluster configuration, the spool directory is on a shared disk and therefore cannot be

referenced from the standby node. Nothing is displayed in the **View Queue Status/Operate** window because the spool directory cannot be referenced.

Action method

In a cluster configuration, ensure that the Systemwalker Operation Manager client specifies a logical IP address when connecting.

5.6 An Error Message is Notified from Job Execution Control

5.6.1 Error Message "MpMjes: WARNING: 10113: mjsnetsv : TCP port number does not exist." is Output [UNIX versions]

Error message

MpMjes: WARNING: 10113: mjsnetsv: TCP port number does not exist.

Applicable versions and levels

- Solaris versions: 5.2 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 10.0 or later

- AIX versions: 10.0 or later

Action

Cause

This message is output if the network job monitoring TCP port numbers for each subsystem are not in the services file.

Action method

This message is output as a warning message if a network job is submitted from one server of multiple subsystem operations to another server of multiple subsystem operations only when the Job Execution Control daemon starts. Ignore this message for operations in which a network job is not submitted.

For operations in which a network job is submitted, check the TCP port number that was defined in the services file.

5.6.2 "MpMjes: ERROR: 10091 [UNIX versions] or 1011 [Windows versions]: The continuous execution modes of each server are not unified." is Output

Error message

MpMjes: ERROR: 10091: The continuous execution modes of each server are not unified. MpMjes: ERROR: 1011: The continuous execution modes of each server are not unified.

Applicable versions and levels

- Windows versions: V10.0L10 or later

- Solaris versions: 10.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 10.0 or laterAIX versions: 10.0 or later

Action

Points to check

Have the continuous execution modes on the schedule server (request source) and the execution server (request destination) been unified?

Cause

This message is output on the schedule server when a network job is submitted and the continuous execution modes have not been unified on the schedule server and the execution server.

Action method

Unify the continuous execution modes on the schedule server and the execution server. Refer to "jmmode Continuous Execution Mode Switching Command" in the *Reference Guide* for information on how to switch the continuous execution mode.

5.6.3 When Job or Queue was Selected in the Job Selection Window, or, the qstat Command is Executed, "Unable to get queue information." is Output [Windows versions]

Error message

Unable to get queue information.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Check all applicable actions below to resolve the issue.

Action 1

Points to check

Is there an application that accesses the files in the Job Execution Control spool directory?

Cause

When Job Execution Control tried to access the queue information file, there is a possibility that another application was accessing the queue information file.

Action method

Check if there is an application that accesses the files in the Job Execution Control spool directory. Take action so that the files in the Job Execution Control spool directory are not accessed while Job Execution Control is running.

Backup software or antivirus software are possible examples of applications that access the files in the Job Execution Control spool directory.



Refer to the following manuals for information on the notes on using backup software or antivirus software:

- V10.0L10 or later
 - "Cautions when Using Back-up Products [Windows version]" in the User's Guide
 - "Cautions when Using Virus Detection Products [Windows version]" in the User's Guide

Action 2

Points to check

Has **Job/Queue** of the **Job Selection** window been selected in the following states? Alternatively, has the qstat command been executed?

- While the "SystemWalker MpMjes" service is starting, or immediately afterwards
- While the Job Execution Control operation is being started/stopped using the mjstart/mjstop commands, or immediately afterwards

Cause

Job/Queue of the **Job Selection** window may have been selected, or the qstat command may have been executed while Job Execution Control was referencing the queue information internally.

Action method

Select **Job/Queue** of the **Job Selection** window, or execute the qstat command, after the startup of the "SystemWalker MpMjes" service is complete, or the Job Execution Control operation start/stop processing is complete.

5.6.4 When Job or Queue was Selected in the Job Selection Window, Error Message:MJS876E is Output [UNIX versions]

Error message

MIS876E FILE TRANSFER ERROR OCCURRED, CODE (FFFFFF6B)

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- DS versions: V20L10

- AIX versions: 5.1 or later

Action

Points to check

Have the execution rights of the user that logs in to Systemwalker Operation Manager been added to the rights for the directories shown below, and the upper directories?

- Solaris versions and Linux versions
 - /var/opt/FJSVJMCMN
- HP-UX versions

/opt/FHPJMCMN

- AIX versions
 - /usr/FAIX|MCMN
- DS versions
 - /var/opt/uxpJMCMN

Cause

When the job or queue information is transmitted to the client, processing may not be possible because the directory/ file access rights on the server are insufficient.

Action method

Append execution rights to the directories shown in "Points to check" and the upper directories (example: in Solaris versions and Linux versions, append the execution rights to /var/opt and /var).

5.6.5 When the qistat Command is Executed, "System error occurred. function: FindFirstFile() code: -1" is Output, or, when the qstat Command is Executed, "Unable to get system information." is Output [UNIX versions]

Error message

- qjstat command

System error occurred. function: FindFirstFile() code: -1

- qstat command

Unable to get system information.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

AIX versions: 5.1 or laterDS versions: V20L10

Action

Points to check

Is there a symbolic link to the Job Execution Control spool directory (*1)?

```
*1: /var/spool/mjes
  (If the subsystem is n: /var/spool/mjes/mjesn)
```

Cause

If there is no symbolic link to the Job Execution Control spool directory, the qistat command and qstat command cannot obtain the information correctly.

Set the symbolic link to the Job Execution Control spool directory for an existing directory. Refer to "Moving Resources to the Shared Disk" in the *Cluster Setup Guide* for information on how to set symbolic links.

Note that, on cluster environment standby nodes, shared disks cannot be referenced, therefore, although this problem occurs, there is no need to take action because it does not affect the operation.

5.6.6 When the qistat Command is Executed, "System error occurred. function: readjobinfo()" is Output, or, when the qstat Command is Executed, "Unable to get queue information." or "Unable to get job information." is Output [UNIX versions]

Error message

- qjstat command

System error occurred. function: readjobinfo()

- qstat command

Unable to get queue information.

Unable to get job information.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Is there a file that was created by the user immediately in the queuename directory (*1) that is in the Job Execution Control spool directory?

```
*1: /var/spool/mjes/mjespool/queuename
  queuename: queue name
  (If the subsystem is n: /var/spool/mjes/mjespool/queuename)
```

Cause

If there is a file that was created by the user immediately under the queuename directory that is under the Job Execution Control spool directory, the qistat command and qstat command cannot obtain the information correctly.

Action method

Delete the file that was created by the user, or change the location of the file under the Job Execution Control spool directory to another location.

5.6.7 "Failure in receiving parameter information file." is Displayed in the Client

Error message

Failure in receiving parameter information file.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

Possible causes are as follows:

- The network was disconnected temporarily during communication between the Systemwalker Operation Manager server and client
- The port number (service name: jmnet) to be used by Job Execution Control is being used by another application
- The port number (service name: jmnet) to be used by Job Execution Control cannot pass through the firewall
- The port number (default: 9352/tcp) to be used by Job Execution Control is being used by software such as Networker.

Action method

Perform the following tasks according to the cause:

- If there is a problem in the network, review the network.
- Take action so that port number is not duplicated with another application.
- Change the firewall settings.
- Refer to "Error message 6" in "2.1.3 Systemwalker Operation Manager Error Messages are Displayed in an Environment in Which Networker, etc., Coexist".

5.6.8 When the Job Execution Control Daemon Starts, the Error Message "MpMjes: ERROR: 10063: mjsdaemon: The environment of the subsystem number does not exist." is Output [UNIX versions]

Error message

MpMjesn:ERROR: 10063: mjsdaemon: The environment of the sub-system number does not exist.

n: Subsystem number

Applicable versions and levels

- Solaris versions: 5.2 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 10.0 or later

- AIX versions: 10.0 or later

Action

Points to check

Does one of the following apply?

- You tried to start the Job Execution Control daemon of subsystem n (*1), even though subsystem n has not been created.
- You installed a cluster system, and tried to perform a state transition and start the daemon when the link to the spool directory of subsystem n (*1) was broken.
- You tried to start the daemon when the spool directory of subsystem n was deleted.
- *1: The spool directory of subsystem n is as follows:

/var/opt/FJSVMJS/var/spool/mjes/mjesn

Action method

If the subsystem has not been created, create it. If the location of the spool directory of subsystem n is changed to another location after creating the subsystem, create a symbolic link.

Example) When the link destination is /disk1/mjes1

ln -s /disk1/mjes1 /var/spool/mjes/mjes1

5.6.9 "MpMjes: mjsrjob : job information file read error." is Output [UNIX versions]

Error message

MpMjes: mjsrjob : job information file read error.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

One of the following jobs may have been executed by Job Execution Control:

- Job Execution Control qsub command
- Shell script that calls the Job Execution Control gsub command

If the job shown in "Cause" was executed by Job Execution Control, the Systemwalker Operation Manager behavior cannot be guaranteed. In this case, do not execute the job.

5.6.10 Error Message "MpMjes: F3CUB_LOG_PIPE write system error occurred." is Output [UNIX versions]

Error message

MpMjes: ERROR: 10093: F3CUB_LOG_PIPE write error occurred. error code=<error code>

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Has the log file (job execution history information file) under /var/spool/mjes/hist been generated as a zero-byte file, even though the job is still running?

Cause

This message is output if the job execution history information cannot be output when the system load is heavy. It is not possible to write to the job execution history information file, therefore, the file size will be 0 bytes.

Action method

If the job execution history information is required, restart the Job Execution Control daemon when the job is not running.

5.6.11 If Job is Selected in the Job Selection Window, a Message is Output and Information in the View Job Status/Operate Window Cannot be Referenced [UNIX versions]

Error message

Failure in acquiring job folder information for the following reasons.

Unable to read registry.

Applicable versions and levels

- Solaris versions: 5.0 or later

- Linux versions: V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 10.0 or laterAIX versions: V13.2.0 or later

Action

Points to check

Has the Systemwalker Operation Manager client been connected to the standby node in the cluster configuration?

Cause

If **Job** is selected in the **Job Selection** window, the spool directory for Job Execution Control is referenced and job folder information is retrieved. In a cluster configuration, the spool directory is on a shared disk and therefore cannot be referenced from the standby node. As a result, job folder information fails to be retrieved if **Job** is selected, and an error message is output.

Action method

In a cluster configuration, ensure that the Systemwalker Operation Manager client specifies a logical IP address when connecting.

Chapter 6 Troubleshooting Services/Applications

6.1 Problems during Service/Application Execution

6.1.1 An Error Message is Displayed even though the Service/Application Starts Normally [Windows Versions]

Error message

Fails executing Service(%1)

%1: Service name

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Check the service status.

- Windows NT(R):

Select Control Panel >> Services, and check the service status in the Services window.

- Windows(R) 2000, or Windows Server 2003 STD, Windows Server 2003 DTC, Windows Server 2003 EE or later: Select **Control Panel** >> **Administrative Tools** >> **Services**, and check the service status in the **Services** window.

Cause

The service start process may be slow if there is a high load on the system, such as when many services are started at once. In cases such as this, the system may deem that the service failed to start, and a message may be output.

Action method

No action is required if the service starts normally, even if this message is output.



Checking the service status

Systemwalker Operation Manager provides the service status confirmation command (chksrv) for checking the status of services.

Refer to the following manual for details.

- Refer to "chksrv Service Status Confirmation Command" in the Reference Guide.

Chapter 7 Troubleshooting Event Monitoring and Action Control [Windows Versions]

7.1 The Action Execution is Abnormal

7.1.1 The Action is not Executed (General)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Check the event monitoring conditions definition.

Action method

- The event may match conditions specified in lines other than the ones that were assumed in the event monitoring conditions. Ensure that there are no invalid characters (for example, uppercase, lowercase, fullwidth, halfwidth, number of spaces) in the lines with condition that are assumed to match.
- If multiple event definitions of a similar type have been defined, the event may match the conditions specified in lines above the assumed ones. Check if the event matches the conditions specified in lines above the assumed ones.



Handling of events for which the event type is "None"

In messages output to the Windows event log, the event type is stored, and depending on the event type, an error type and importance is set and appended. Events for which the event type is "None" are processed as events with error type "Error", and importance "Very important".

Action 2

Points to check

Was log file monitoring performed? If so, did the message output to the log file use a line feed as the separator?

Action method

Log file monitoring processes each line (up to the line feed) as one message. If multiple messages are output consecutively without being separated by a line feed, they will be processed as one message, therefore they may match a definition line that is not intended by the user. If multiple messages are output to the log file on the application side that outputs the message, configure the settings so that they are separated by a line feed in the output.

Action 3

Points to check

Check the action environment settings.

Action method

Check if the following type of event has occurred in the event log:

- Source: MpAosfB

- Event ID: 3000 - 3207

- Type: Error

Refer to the Online Help for information on the message ID, and then perform the action method.

Action 4

Points to check

Has the same message been output more than once?

Cause

If the same message is output more than once within 60 seconds, all occurrences except for the first one will be discarded. If these types of messages were suppressed, the automatic action defined for the messages discarded will not be executed.

Action method

Set the output interval for the same message to 60 seconds or more.

Action 5

Points to check

- Was log file monitoring performed?
- Was monitoring performed according to the log file monitoring mechanism?

Action method

If there is a problem with the method used to output the message to the log file because of the monitoring mechanism, change it.



Log file monitoring mechanism

If log file monitoring is performed, the file is checked for size changes every 30 seconds. If the size of the log file loaded is different from its current size, then it is loaded again.

If the size has increased since it was loaded, then it is loaded again, and each line added (up to the line feed) is treated as a new message.

If the file size has decreased since the previous time, the log file is cleared, judged to have been output again, and each line until the line feed is processed as one message.

- Examples of correct monitoring

Example 1) In the following example, the file size has increased, therefore message6 will be processed as a new message.

| Before addition | After addition |
|-----------------|----------------|
| message1 | message1 |
| message2 | message2 |
| message3 | message3 |
| message4 | message4 |
| message5 | message5 |
| | message6 (new) |

Example 2) In the following example, the file size has decreased, therefore the log file size is cleared and judged to have been output again, and message6 to message9 are then processed as new messages.

| Before addition | After addition |
|-----------------|----------------|
| message1 | message6 (new) |
| message2 | message7 (new) |
| message3 | message8 (new) |
| message4 | message9 (new) |
| message5 | |

- Examples in which the log file cannot be monitored correctly

Example 1) In the following example, the file size does not change, therefore message2 will not be processed as a new message.

| Before addition | After addition |
|-----------------|----------------|
| message1 | message2 |

Example 2) In the following example, the file size has increased, therefore only 001 will be processed as a new message, not MESSAGE1001.

| Before addition | After addition |
|-----------------|----------------|
| message1 | MESSAGE1 |
| | 001 (new) |

Example 3) In the following example, the new message will be processed from B, not messageAB, and monitored from the middle of the string.

| Before addition | After being overwritten |
|-----------------|-------------------------|
| message1 | messageAB |



Only files in text format can be monitored. Files containing binary data cannot be monitored.

After the monitoring target file is deleted from the definition and added to the log file monitoring settings again, it will be assumed that a new file has been defined, and all file content will be processed.

If a large log file is added as a monitoring target, monitoring will start from the start of the file, therefore it will take a while until completion. For this reason, a large amount of messages may be output.

Each line added to the log file will be processed as one message. However, the line length, including additional information, should not exceed 2047 bytes. The structure of the message that is converted is as follows:

label:INFO:message

label: Label specified in the Monitored Log File Setup window
message: Message output to the log file

If the following strings are specified for the label, it may not be possible to correctly compare the log file with the event monitoring conditions definition:

- INFO, Information
- WARNING, Warning

- ERROR, Error
- HALT, Stop



The message output datetime is the datetime at which Systemwalker Operation Manager loaded the message from the log file.

.....

If a line containing only a line feed is output to the log file and monitored, the message will be handled as a blank message (a message consisting of label + "INFO" only).

Perform the following procedure without stopping the operation to reset the monitoring target log file:

- 1. Reset the monitoring target log (clear file content, and delete the file).
- 2. Make the log a zero length file.
- 3. Wait 30 seconds or more, until Systemwalker Operation Manager recognizes that the log is a zero length file.
- 4. Resume output to the log.

Because of the above processing, the file will be monitored from the start, so no messages will be missed.

Action 6

Points to check

Was the action condition time set?

Do the event issuer time and the time on the server that executes the action match?

Cause

The event issuer time and the time on the server that executes the action do not match.

Action method

Ensure that the event issuer time and the time on the server that executes the action match.

Action 7

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3016: Action execution server is not started.

Points to check

Were the following ports that are used to execute the action freed?

- JMACT1 9369/tcp
- JMACT2 9370/tcp
- JMACT3 6961/tcp

Cause

The action could not be executed because the ports required to execute it were not freed.

Free the ports required to execute the action.

7.1.2 The Action is not Executed (Application Execution)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Are there privileges to execute the application?

Action method

In Windows versions, applications are executed using a local system account. Specify an application that can be executed with these execution privileges.

Action 2

Points to check

Are the path settings correct?

Action method

- If the full path has been specified for the application, check if that path exists.
- If the full path has not been specified for the application, check if the path in which that application exists has been set in the PATH system environment variable.
- Check if the specified path contains invalid characters (for example, uppercase, lowercase, fullwidth, halfwidth).
- If the execution file name extension (for example .EXE) is omitted from the definition, the program will start with ".EXE" added to the file name. To start an application with an extension other than ".EXE", specify the extension in the definition.

Action 3

Points to check

Does the application have an executable format?

Action method

- To start Windows versions batch files (.bat), define as follows:
 - Execution file name: cmd.exe
 - Arguments: /C batchFile parameters
 - Working directory: Any

Action 4

Points to check

Has the runtime environment of the application been specified?

The application is started in the same operating environment as Systemwalker, for example by the startup user or by an environment variable. If the application to be started requires a special environment variable (library path, for example), create a batch file to start the target application, and set the required environment variable in this program.

Action 5

Check if the error message below was output. If that is the case, refer to actions 1 to 3, and then perform the appropriate procedure.

Error message

MpAosfB: ERROR: 7011: Error occurred in system function. Calling source: f3crheap.exe System function name: CreateProcess Reason: xxxxx

Action 6

Points to check

Was the message output to the standard output or standard error output by the application to be started?

Action method

If the message was output by the application to the standard output or standard error output, enter the definition in the batch file so that the application output is redirected to another file, and set that batch file in the action definition as the execution file name for starting the application.

Action 7

Points to check

Does the definition redirect to another file the messages output by the application to be started? If that is the case, is the execution file for starting the application in the action definition correct?

Action method

Enter the definition in the batch file so that the application output is redirected to another file, and set that batch file in the action definition as the execution file name for starting the application.

Alternatively, define as follows:

- Execution file name: cmd.exe
- Arguments: /C applicationFullName > outFile

Action 8

Points to check

Was an application on the network drive started?

Cause

The "System walker MpA osf B" service is started using a local system account, therefore a network drive cannot be used.

The "Systemwalker MpAosfB" service starts processes that execute applications.

Action method

Start an application on the local drive.

7.1.3 The Action is not Executed (Pager Notification/Short Mail)

If the dial tone cannot be detected (because the modem settings are invalid, for example), an error message will be output.

Applicable versions and levels

Pager Notification

- Windows versions: V5.0L10 - V13.2.0

Short Mail

- Windows versions: V13.3.0 or later

Error message

MpAosfB: ERROR: 4109: Cannot detect dial tone from telephone line. Control number: xxxxx Host name: xxxxx

Action 1

If the modem is connected to an extension line, when the pager notification/short mail is dialed, the modem may not be able to detect the dial tone because of the extension switch specification. In this case, set the dial command without waiting for the dial tone to be detected in the "modem initialization AT command". Refer to the installation guide of the modem you are using for information on the commands. (Example: AT&fX3)

Action 2

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3110: There is no response from the telephone line.

Action method

On the **COM Port** tab of the **Action Environment Setup** dialog box, check the content specified for **COM Port Number**, and then specify an appropriate value.

7.1.4 The Action is not Executed (Pop-up)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Was an IP address specified as the destination?

Action method

An IP address cannot be specified as the destination. Specify a user name, computer name, or domain name.

Action 2

Points to check

From the command prompt, use the NET SEND command to check if a pop-up message is displayed at the destination.

The Microsoft Messenger Service function is used to display pop-up messages. Pop-up messages of the Action Execution function are not notified to machines that cannot be notified using the NET SEND command.

If the Messenger Service is not running, then it must be started.

Action 3

Points to check

Was a computer connected via a WAN connection specified as the destination?

Action method

If the computer is connected via a WAN, a timeout may occur in the host name search, and the pop-up message may not be displayed. Do not specify a computer connected to using a WAN connection.

Action 4

Points to check

Is it possible to communicate with the destination?

Action method

Ensure that it is possible to communicate with the destination, and then execute the pop-up message action.

If the pop-up message is not notified after confirming this, execute the Windows(R) "NET SEND" command and then confirm that an environment that can notify pop-up messages has been prepared.



In the following cases, note that the action will end normally even though there is no pop-up message notification:

- A computer that has not been started up yet or with an unregistered name was specified as the destination.
- Communication was abnormal (for example, the LAN cable was not connected).

7.1.5 The Action is not Executed (Mail)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3052: Failed to connect to SMTP server. Server name: xxxxx Reason: No such file or directory

Points to check

Check the following:

- Is the host name or IP address specified in SMTP Server Name correct?
- Is the hosts file defined in the system correct?

Execute the ping command for the host name or IP address specified in **SMTP Server Name** on the **Mail** tab of the **Action Environment Setup** dialog box to check if communication is possible. If that is not the case, specify a valid host name or IP address in **SMTP Server Name**.

Additionally, if the SMTP sever name has been specified in the hosts file defined in the system, ensure that IP address is correct.

Action 2

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3053 Error occurred in communication process of SMTP server. Server name: xxxx Reason: 451 access currently denied

Points to check

Does the SMTP server being used require POP authentication?

Action method

The send mail action does not support POP authentication (POP before SMTP). Use an SMTP server that does not require POP authentication.

Action 3

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3053: Error occurred in communication process of SMTP server. Server name: xxxx Reason: 501 unacceptable mail address

Points to check

Is the address format of Sender's Mail Address allowed by the SMTP server?

Action method

Emails cannot be sent if the address format specified in the **Sender's Mail Address** field on the **Mail** tab of the **Action Environment Setup** dialog box does not match the address formats allowed by the SMTP server.

The format and content allowed in the **Sender's Mail Address** field vary according to the degree of security implemented on the SMTP server. Contact the SMTP server administrator for information on allowed formats.



Ensure that the address is specified using the format "@domain". If the domain name (@ and thereafter) is omitted, providers that perform preventive measures against spam will refuse the email, and therefore it will not reach the intended recipient.

Action 4

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3053: Error occurred in communication process of SMTP server.

Server name: xxxx Reason: 553 sorry, that domain isn't in my list of allowed rcpthosts (#5.7.1)

Points to check

Does the SMTP server being used require POP authentication?

Cause

The above error message may be output when authentication is not performed on an SMTP server that requires POP authentication.

Action method

POP authentication is not supported. Specify an SMTP server that does not require POP authentication.

Action 5

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3058: SMTP server returned an error. Server name: XXXXX Reason: 550 5.7.1 <xxxx@xxxx.xxx> ... Relaying denied. IP name lookup

failed [XXX.XXX.XXX.XXX]

Points to check

Check the following:

- Is the address specified as the email recipient allowed by the SMTP server?
- Does the SMTP server being used require POP authentication?

Action method

The email sent from the SMTP server was refused. Contact the SMTP server administrator for information on the cause.

Additionally, the send mail action does not support POP authentication (POP before SMTP). Use an SMTP server that does not require POP authentication.

Action 6

Check if the error message below was output.

Error message

MpAosfB: ERROR: 3058: SMTP server returned an error. Server name: xxxx Cause: 550 5.7.1 <xxxx@xxx.xxx>... Relaying denied: Use POP before SMTP or SMTP-AUTH

Points to check

Was an SMTP server that requires POP or SMTP authentication specified?

Action method

POP and SMTP authentication are not supported. Specify an SMTP server that does not require POP or SMTP authentication.

Action 7

Points to check

Was a dialup connection used?

Action

Dialup connections are not supported.

Action 8

Points to check

Does the address specified in Sender's Mail Address exist?

Action method

Specify an existing address in Sender's Mail Address.



If a general provider server is specified as the SMTP server, email from non-existing addresses may be discarded by the provider as a preventive measure against spam.

Action 9

Points to check

Was an error email notified to the address specified in Sender's Mail Address?

Action method

If an error has occurred on the route used to send emails or the email was refused, information about it will be notified to the address specified in **Sender's Mail Address**. Take action according to the email.

Action 10

Points to check

Is the email address defined as the recipient correct?

Action method

Set the correct email recipient by checking once more for differences in uppercase/lowercase, and running a spellcheck.

Action 11

Points to check

Does the recipient have an external email address?

Action method

When sending email outside the corporate network, ensure that the address specified in **Sender's Mail Address** has outgoing transmission privilege.

Action 12

Points to check

Is the SMTP server running?

Check if the SMTP server is running. If it is not running, then start it and send the email again.

Action 13

Points to check

Is there a firewall between the email sender and the SMTP server?

Action method

Set a firewall so that communication is possible using the "smtp" and "smtp _ mpaosfb" (If the Systemwalker Operation Manager is V17.0.0 or later) port numbers defined in the services file.

Alternatively, specify an SMTP server for which a firewall has not been set.

Action 14

Points to check

Have SMTP Server Name and Sender's Mail Address been set correctly?

Action method

On the Mail tab of the Action Environment Setup dialog box, specify a valid value for SMTP Server Name and Sender's Mail Address.

7.1.6 The Action is not Executed (Audio Notification)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Check if the error message below was output.

Error message

MpAosfB: ERROR: 4011: The specified file does not exist. File: xxxxx

Points to check

Was the WAV file name spelled correctly? Additionally, was the full name specified?

Action method

Specify the correct full name of the WAV file.

Action 2

Points to check

In V10.0L10 or later, has the text-to-speech engine been installed?

Action method

Install the product in which the text-to-speech engine for Microsoft Speech API(SAPI) has been implemented.

Action 3

Points to check

Have required devices such as the audio board and speakers been connected correctly?

Action method

Ensure that the required devices are connected correctly.

Action 4

Check if the error message below was output.

Error message

MpAosfB: ERROR: 4205: No valid voice synthesizer engine is installed.

Cause

The text-to-speech engine is supported only in SAPI4.0.

Points to check

In V10.0L10 or later, are you using the SAPI4.0 text-to-speech engine?

Action method

Install the SAPI4.0 text-to-speech engine.

Also install the SAPI4.0 text-to-speech engine if you are using Windows Server 2003 STD/Windows Server 2003 DTC/ Windows Server 2003 EE, or Windows(R) XP or later.

7.1.7 An Unintended Action is Executed

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Check the following in the event monitoring conditions definitions:

- Does the message that was output match multiple lines?
- If multiple lines were matched, did matched lines after the first matched one have **Execute and Continue** selected on the tab for the corresponding action in the **Action Definition** dialog box?

Action method

If matched lines after the first matched one have **Execute and Continue** selected on the tab for the corresponding action in the **Action Definition** dialog box, their actions will be executed. Review the event monitoring conditions definition so that actions on multiple definition lines are not executed.

Action 2

Points to check

Was the action condition time set?

Do the event issuer time and the time on the server that executes the action match?

Cause

The event issuer time and the time on the server that executes the action do not match.

Action method

Ensure that the event issuer time and the time on the server that executes the action match.

7.1.8 A Large Number of Actions is Executed

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Check the event monitoring conditions definition.

Action method

- For definitions that match all messages, check if the action has been defined.

In the above case, review the definitions.

- In action definitions that start applications, check if the definition has used the %MSG variable in the parameter.

If the %MSG variable is used in the parameter, the event content is passed to the application. If the application then outputs the event content to the Windows event log, then action execution may loop. Review the monitoring conditions to avoid this problem.

7.1.9 The Audio Notification Action Does not Stop

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Was 0 specified as the repeat count?

Cause

If 0 is specified as the repeat count, the audio notification action will not stop.

Action method

Specify a number other than 0 for the repeat count.

7.1.10 The Pop-up Message is Delayed

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Were many pop-up message recipients defined?

Cause

Pop-up messages are notified to the defined recipients in sequence, one at a time. If many recipients are defined, the notification will be delayed for those at the end of the list.

Action method

Reduce the number of recipients to be notified.

Action 2

Points to check

If multiple notification destinations were specified, is it possible to communicate with all of them?

Action method

Ensure that it is possible to communicate with all notification destinations. Alternatively, remove from the action definition the notification destinations that we cannot communicate with.



If multiple pop-up message notification destinations were specified, they are notified in the sequence specified. If communication with a notification destination is not possible, the communication will take a while to time out, therefore the display of the pop-up message in the next notification destination may be delayed.

•••••

7.1.11 It Takes a While to Execute the Action after the Event has Occurred

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Did events occur consecutively?

Cause

An action such as an audio notification or a pager notification (in V13.3.0 or later, short mail) notification take a while until the execution of the action is complete. If the next event occurs before the action that is executing is complete, the action will accumulate and wait to be executed. For this reason, the action will be executed much later than the occurrence of the event.

Action method

Review the event monitoring conditions definition, and define the conditions so that only actions for required events are executed.

If 0 (unlimited repeats) is specified as the repeat count for the audio notification, or a large value is specified, review the repeat count, for example by changing it to 1.

7.1.12 Strings, such as %HOST, are not Substituted

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there a halfwidth space before the string to be substituted?

Cause

If there is no halfwidth space before the string to be substituted, such as %HOST, it will not be substituted.

Action method

In the definition, enter a halfwidth space before the string to be substituted.

7.1.13 Japanese Characters in the Email Sender Field are Garbled

Applicable versions and levels

- Windows versions: V5.0L10 - V13.0.0

Action

Points to check

Are Subject and Body of the email composed only of alphanumeric characters?

Cause

If Subject and Body do not contain Japanese characters, then "charset" is set to "us-ascii" in the email header.

Action method

Specify Japanese characters in Subject or Body.

7.2 The Behavior of the Action Control Window is Abnormal

7.2.1 Cannot Start the Action Control Window

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is there a large number of actions waiting to be executed?

In the Monitored Event Table window, check if a large number of events that trigger action execution has occurred.

Cause

If there is a large number of actions waiting to be executed, it may take a while to receive a connection from the **Action Control** window.

Action method

Restart Systemwalker Operation Manager, and delete the actions that have accumulated.

7.2.2 Cannot Delete the Email Action that is Executing

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Has a fault occurred in the network?

Cause

The connection to the SMTP server may have been dropped while the email was being sent.

This may cause inconsistencies in the action statuses managed on the server.

Action method

Restart the following Systemwalker Operation Manager services:

- Systemwalker MpAosfB
- Systemwalker MpAosfX

7.3 The Event Monitoring Behavior is Abnormal

7.3.1 "Past event has been retrieved." is Output Frequently

Error message

MpAosfB: INFO: 185: Past event has been retrieved. (ppp,eee,vvv)

Applicable versions and levels

- Windows versions: V5.0L10 - V12.0L10

Action

Points to check

In a cluster operation, is the time in the operation node the same as in the standby node?

Cause

This problem occurs if the time in the operation node is not the same as in the standby node, causing an event with an old time to occur after an event with a new time in the event log.

Action method

Ensure that the operating system time and time zone setting in the operation node is the same as in the standby node.

7.4 The Behavior of the Monitored Event Table Window is Abnormal

7.4.1 Cannot Start the Monitored Event Table Window

Error message 1

MpAosfB: ERROR: 5005: Structure of definition file is abnormal. File name: xxxx

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Is the server under heavy load?

Cause

The server may be under heavy load.

Action method

If the server is under heavy load, establish the cause, reduce the load, and then start the window again.

If the server is not under heavy load, collect all data using the Maintenance Information Collection Tool and contact Fujitsu technical support.

Error message 2

Monitored Event Table already active at XXXXX.

XXXX: Host name

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action 1

Points to check

Was the Monitored Event Table window already started by the host displayed in the XXXX part of the error dialog box?

Action method

Close the Monitored Event Table window.

Action 2

Points to check

Has the client terminal been forcefully disconnected while the **Event Monitoring Conditions Definition** was running? Additionally, has the following message been displayed on the server?

MpAosfB: ERROR: 7008: Failed to receive data according to socket.

Action method

Restart Systemwalker Operation Manager on the server.

7.5 The Behavior of the Monitored Log File Setup Window is Abnormal

7.5.1 Cannot Start the Monitored Log File Setup Window

Error message

Failed to start the process.

\bin\mpopfmon.exe The system cannot find the path specified.(3)

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

Was a server on which only Systemwalker Operation Manager is installed connected to a server on which Systemwalker Operation Manager and Systemwalker Centric Manager coexist?

Cause

In the mixed environment for Systemwalker Ioeration Manager and Syetmwalker Centric Manager (as well as Syetemwalker Event Agent for auto function), it will be run as Systemwalker Centric Manager. For this reason, if the connection destination is a mixed environment, the Systemwalker Centric Manager client is required, and not the Systemwalker Operation Manager client.

Action method

Install Systemwalker Centric Manager on the connection source server.

7.6 An Error Message is Notified from Event Monitoring

7.6.1 "MpAosfB: ERROR: 1052: Failed to write to the event log location file." or "MpAosfB: ERROR: 7011: Error occurred in system function. Calling source: f3crheeg System function name: CopyFile() Reason: xxxx" is Output to the Event Log

Error message

MpAosfB: ERROR: 1052: Failed to write to the event log location file.

MpAosfB: ERROR: 7011: Error occurred in system function. Calling source: f3crheeg

System function name: CopyFile() Reason: xxxx

xxxx: Reason of the failure, which varies according to the Windows version

Applicable versions and levels

Windows versions: V5.0L10 or later

Action

Points to check

Is there an application accessing the files under \mpaosfsv in the Systemwalker installation directory?

Cause

This problem occurs because the file accessed by Event Monitoring to record how many event entries have been loaded from the event log is being used by another application.

For example, this may occur if the Systemwalker installation directory is included as a target of virus check.

Action method

There is no need to take action unless it occurs frequently.

If this message is output frequently, stop the Event Monitoring function service (Systemwalker MpAosfB), delete from \mpaosfsv\base\temp under the Systemwalker installation directory all files starting with "evtstart", and then restart the service.

Additionally, check the access rights to the files and directories to determine if an error has occurred in the disk. Set access rights for the files and directories so that they can be updated.

Chapter 8 Troubleshooting Task Link

8.1 The File Control Behavior is Abnormal

8.1.1 Compression Using the File Compression/Expansion Commands (fprssvr/fprscli) Fails

Error message

- fprssvr

0x2997(0x8): The heap for creating file table is not enough.

- fprscli

0xa997(0x8): The heap for creating file table is not enough.

Applicable versions and levels

- fprssvr

- Windows versions: V5.0L10 or later

- fprscli

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the compression source specified with a wildcard that evaluates to too many files?

Cause

The evaluation may result in too many files to be compressed at the same time.

When multiple files are compressed at the same time, the work area memory for compression is proportional to the number of files, and so is the heap area used. If there is insufficient heap area, the file cannot be compressed.

Action method

Reduce the number of files to be compressed at the same time, by executing the command multiple times. As a rough guide, it is recommended to compress only up to 500 files at the same time.



Refer to the following manuals:

- "FPRSSVR.EXE File Compression/Expansion Command" in the Reference Guide

- "FPRSCLI.EXE File Compression/Expansion Command" in the Reference Guide

8.1.2 Connection to the Shared Directory from the File Transfer Command (FCOPYSVR.EXE)/File Operation Command (FCTRLSVR.EXE) Fails [Windows Versions]

Error message

0x2974 (0x4c3): Failed to connect to the shared directory.

Applicable versions and levels

- Windows versions: V5.0L10 or later

Action

Points to check

- File transfer command (FCOPYSVR.EXE)

Did another application connect to the Windows shared directory specified as the file transfer source (/s) or file transfer destination (/d) using a different user/password to the user/password used in Task Link?

- File operation command (FCTRLSVR.EXE)

Did another application connect to the Windows shared directory specified as the file operation destination (/f) using a different user/password to the user/password used in Task Link?

Cause

The Windows shared directory specified in the Task Link command is already used by the user/password shared by the Task Link command (the Windows directory you are trying to share is already shared using a different user).

Action method

When sharing a directory already shared by another application program, use the same user and password.



Refer to the following manuals:

- "FCOPYSVR.EXE File Transfer Command" in the Reference Guide
- "FCTRLSVR.EXE File Operation Command" in the Reference Guide

8.2 The Application Startup Behavior is Abnormal

8.2.1 When the Client Application Startup is Executed by the execacli Command, "0x13A" is Returned

Applicable versions and levels

- Windows versions: V5.0L10 to V11.0L10

- Solaris versions: 5.0 to 11.0

- Linux versions: 5.2, V10.0L10 to V11.0L10

- HP-UX versions: 5.1 to 11.0

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the application started on the client by the execacli command canceled?W

Cause

The error code "0x13A" is returned when a client application is canceled. Application started on the client may have been canceled.

Action method

Do not cancel applications started on the client using the execacli command.

Refer to the following manual:

- "execacli Application Startup Command" in the Reference Guide



Closing the application window can cause unintended cancelation by the user of an application started on the client.

By specifying the /AM:ICON parameter in the execacli command, the application started on the client will be activated in iconic state, therefore the risk of closing the window by mistake is reduced.

8.2.2 The Application Cannot be Started Using the execacli Application Startup Command

Error message

0xa98a(YYY): Failed to start application.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was the file specified in the /ae parameter not an application (executable file)?

Examples of file extensions that cannot be executed: *.txt, *.wsf

Cause

The application failed to start because the specified file is not executable.

Files with the extension txt or wsf are executed by applications associated with those extensions in Windows.

If the extension is txt, "notepad.exe" will become an application name that can be executed. If the extension is wsf, "WScript.exe" will become an application name that can be executed.

Action method

Specify an application (executable file) in the /ae parameter.

Example:

Opening c:\data\data1.txt of the client "hostname" in Notepad:

#/opt/F|SVsnjss/bin/execacli hostname /ae:c:\\windows\\notepad.exe c:\\data\\data1.txt

In this case, the current directory when the application is executed will be c:\\windows.

8.3 The Client Power Control Behavior is Abnormal

8.3.1 Remotely Powering On the Client Using the poncli Command Fails

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Does the model of the power on target client specified in the poncli command support the Wakeup On LAN feature?
- In case the power on target client specified in the poncli command supports the Wakeup On LAN feature, is it also displayed in the BIOS window?
- Have the network device settings been configured in the power on target client specified in the poncli command, so that the broadcast packet can reach it? (This will be required if you try to power on a client on another subnet.)
 - You can execute the ping command in the command prompt window on the server that executes the commands to check whether the broadcast packet can reach the client. If there is no response, the broadcast packet cannot reach the client.

In the example below, the destination IP address is "10.90.100.100", and the destination subnet mask is "255.255.255.0":

ping 10.90.100.255

Cause

The packet that performs the power on may not have reached the client specified in the poncli command.

Action method

- The function to power on the client remotely can be used only for models that support the Wakeup On LAN feature.

- If the model of the client specified in the poncli command supports the Wakeup on LAN feature, enable it in the BIOS window.
- To power on a client on another subnet, configure the network device settings so that the broadcast packet can reach the client for power on target terminal networks from the server.

Refer to the manual of the network device you are using for information on how to configure the network device settings.



The poncli command sends the submit instruction (the Wakeup on LAN packet) to the network to which the target client belongs, and then returns immediately.

To wait until the system starts up after powering on, specify the /wt parameter.

Refer to the following manual for information on the commands:

- "PONCLI.EXE Power On Command" in the Reference Guide

8.3.2 Remotely Powering Down the Client Using the poffcli Command Fails

Error message

0xB007: The Task Link Engine process startup request was not accepted.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Was the client Task Link engine started?

If so, the client Task Link icon will be displayed in the task tray.

- Does the user logged in to the client have power off privileges?

The method used to check the user rights varies depending on the operating system. The following example is for Windows(R) 2000:

- Windows(R) 2000

Select Control Panel >> Administrative Tools >> Local Security Policy to display the Local Security Policy window. Select Local Policies >> User Rights Assignment, and check the content set in Shut down the system.

- Is the client specified in the parameter of the poffcli command correct?
 - Does the client specified in the parameter of the poffcli command exist?
 - Is the host name of the client specified in the parameter of the poffcli command correct?

- Is the client specified in the parameter of the poffcli command connected to the network?

You can execute the ping command in the command prompt window on the server to check it. If there is a response, the client is connected to the network.

Cause

- The client Task Link engine was not started.

If the client Task Link engine was not started, the client Task Link function cannot be used.

- The user logged in to the client does not have power off privileges.
- The host name of the client specified in the parameter of the poffcli command cannot be resolved.

Action method

If the client Task Link engine was not started

The following methods can be used to start the client Task Link engine:

- Registration of the client Task Link in the startup program.

Register the client Task Link in the startup program on the client. Refer to the following manual for details:

- "Definition for Task Link with Clients" in the Installation Guide
- Manual startup by the user logged in to the client.

Select Start>> Systemwalker Operation Manager >> Client Task Link.

If the user that logged in to the client does not have power off privileges

Select Control Panel >> Administrative Tools >> Local Security Policy to display the Local Security Policy window. Select Local Policies >> User Rights Assignment, and add the user logged in to Shut down the system.

If the client specified in the parameter of the poffcli command is incorrect

- If the client specified in the parameter of the poffcli command does not exist, specify an existing client.
- If the host name of the client specified in the parameter of the poffcli command is incorrect, specify a correct host name.
- If the connection on the network of the client specified in the parameter of the poffcli command cannot be confirmed (the ping command does not run normally):
 - Check the network cable connection.
 - Define the host name and IP address in the hosts file.



Adding the host name and IP address to the hosts file

The method varies depending on the operating system, so use the appropriate one. The following example is for Windows(R) 2000.

[Windows(R) 2000]

Edit the hosts file in systemDirectory\system32\drivers\etc.

Add the host name and IP address to the hosts file from the line following the one on which "127.0.0.1 localhost" is written, in the following format:

ipAddress hostName (domainName)

8.3.3 After Remotely Powering Down the Client, "Active Desktop Repair" Starts when the Client Starts

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was Active Desktop enabled?

Cause

If the /ef (forced power off) parameter was specified in the poffcli command and the client is then powered down remotely, applications running on the operating system of the client will be canceled. Note that Active Desktop is enabled, that operating system application would have been running when Cancel was performed, and will cause the Automatic Repair function to run during startup.

Action method

If you do not want Automatic Repair to run when the client is powered on remotely, disable Active Desktop before executing the poffcli command to power off the client.

The methods used to disable Active Desktop are shown below.

The method varies depending on the operating system, so use the appropriate one. The following example is for Windows(R) 2000.

[Windows(R) 2000]

- 1. Select Control Panel >> Folder Options.
- 2. In Active Desktop of the General tab, select Use Windows classic desktop.

8.3.4 The poffcli Command Ends Normally, but the Client Machine does not Shut Down

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

Was another application running on the client during the shutdown?

Cause

Another application was running on the client during the shutdown, therefore the shutdown processing may have been canceled

If another application is running during the shutdown, a confirmation message is displayed prompting whether to close it immediately, or check the program status. If no action is taken for this message, the shutdown processing is canceled by the operating system.

Action method

Close applications that are running, and then perform the shutdown.

To forcefully shut down the client, specify /ef in the parameter of the poffcli command. However, if /ef is specified in the parameter, the data of running applications will not be saved.



The poffcli command ends normally when the shutdown request to the operating system is complete. For this reason, even if the poffcli command ends normally, the client may not actually be shut down.

8.4 The Client Task Link Engine Behavior is Abnormal

8.4.1 An Error Occurs when the Client Task Link Engine is Started

Error message

The following messages are displayed in the message box:

0xA818: Failed to bind the socket for control path establishment during the initialization of communication controller.

0xA818:Failed to bind the socket for connection service establishment during the initialization of communication controller.

0xA81A: Failed to bind the socket for Objects connection during the initialization of communication controller.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Points to check

- Is there another application using port number 2681 (tcp/udp) or 2685 (tcp)?
- Were multiple client Task Links registered in the startup program?

Cause

Port number 2681 (tcp/udp) or 2685 (tcp) is used in client Task Link engine communication. For this reason, if it is used by another application, the port number will be duplicated and an error will occur.

Action method

- Change the port number of the application that is using port number 2681 (tcp/udp) or 2685 (tcp).
- Ensure that only one client Task Link is registered in the startup program.

8.5 The Task Link Command Behavior is Abnormal

8.5.1 The Client Task Link Command Registered in the Job Net keeps Running

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 5.1 or later

- AIX versions: 5.1 or later

- DS versions: V20L10

Action

Cause

A network fault may have occurred while the Task Link command was executing.

Action method

Cancel the job that is executing.

In V10.0L20/10.1 or later, the job can also be ended by setting a cut-off execution time for the job in the job properties.

8.5.2 "0xb007(0x410e): The Task Link Engine process startup request was not accepted." is Displayed

Error message

0xb007(0x410e): The Task Link Engine process startup request was not accepted.

Applicable versions and levels

- Windows versions: V5.0L10 or later

- Solaris versions: 5.0 or later

- Linux versions: 5.2, V10.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 5.1 or laterAIX versions: 5.1 or later

- DS versions: V20L10

Action 1

Points to check

Has the client Task Link engine started in the client specified in the first parameter of the client Task Link command?

Cause

The client Task Link engine has not started in the client.

Action method

Start the client Task Link engine in the Systemwalker Operation Manager client, by selecting **Start** >> **Systemwalker Operation Manager** and selecting **Client Task Link**.

Note that, by configuring the settings described in "Definition for Task Link with Clients" of the *Installation Guide*, the client Task Link engine (cnscleng.exe) can be made to start automatically when the Windows login is performed.

Action 2

Points to check

Can the host name specified in the first parameter of the client Task Link command be resolved correctly to the IP address?

Whether the host name could be resolved to the IP address or not can be confirmed by specifying the host name in the ping command.

Example: ping hostname

In the example above, hostname is the host name specified in the parameter of the client Task Link command.

Cause

The host name cannot be resolved to the IP address.

Action method

Perform one of the following procedures:

- Configure the network settings in the parameter of the Task Link command so that the host name specified can be resolved.
- Specify the IP address in the parameter of the Task Link command.

8.6 The Task Link Service (Systemwalker MpNjsosv) Behavior is Abnormal

8.6.1 10307: Failed to receive the request of server search in the thread of server search. is Displayed [Windows Versions]

Error message

10307: Failed to receive the request of server search in the thread of server search.

Applicable versions and levels

- Windows versions: V5.0L10 to V12.0L11

Action

Points to check

Is there another application using port number 2686 (udp), which is used by Task Link services?

Cause

Another application is using port number 2686 (udp), which is used by Task Link services.

Action method

This message does not indicate that there was an impact on Task Link service operations. Even if the received data is unknown, no action is required, because it will be discarded and operations will continue normally.

Chapter 9

Troubleshooting Schedule Distribution/ Master Schedule Management Functions

9.1 Creation of Schedule Information Fails

Applicable versions and levels

- Windows versions: V13.1.0 or later

- Solaris versions: 11.0 or later

- Linux versions: V12.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: V13.0.0 or later

- AIX versions: V13.2.0 or later

Action

Points to check

Is there already a project with the same name as the project (project name + mmdd) for the schedule information that failed to be created?

Cause

If the number of the times that schedule information is created in a year is less than the number of generations that store schedule information as specified in the **Master Schedule Management Environment Setup** dialog box, there may be schedule by dates projects with the same date and month but different years.

Alternatively, there is a manually created schedule by dates project with the same name.

Action method

Manually delete old schedule by dates projects with the same name.

If there are schedule by dates projects with the same date and month but in different years, reduce the number of generations specified in the **Master Schedule Management Environment Setup** dialog box so that the old schedule by dates project is deleted automatically.

If you ensure that the schedule information created in a year exceeds the number of generations that store schedule information as specified in the **Master Schedule Management Environment Setup** dialog box, any schedule by dates project with the same name will automatically be deleted. You can increase the schedule information to be created by registering, in the project, job nets to be started on different startup days.

Refer to the following manual for information on the number of generations that store schedule information:

- "Storing Schedule Information" in the Systemwalker Operation Manager User's Guide - Master Schedule Management or the Systemwalker Operation Manager User's Guide - Schedule Distribution.

9.2 A Schedule by Dates Project that has Exceeded the Number of Stored Generations of Schedule Information is Not Deleted

Applicable versions and levels

- Windows versions: V13.1.0 or later

- Solaris versions: 11.0 or later

- Linux versions: V12.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: V13.0.0 or later

- AIX versions: V13.2.0 or later

Action

Points to check

Did you create the schedule by dates project using the Systemwalker Operation Manager client or jobschsetproject command?

Cause

Schedule by dates projects created manually are not targets of the Schedule Distribution/Master Schedule Management functions, therefore, if no schedule by dates project was automatically created on the same day, the schedule by dates project is not deleted even if the number of stored generations of schedule information is exceeded.

Action method

If a project that was created manually is no longer needed, delete it manually.

9.3 Because of Manual Startup, the Job Net that should have Completed is Scheduled and then Restarted

Applicable versions and levels

- Windows versions: V13.1.0 or later

- Solaris versions: 11.0 or later

- Linux versions: V12.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: V13.0.0 or later

- AIX versions: V13.2.0 or later

Action

Points to check

Did you perform a start operation for an unapplied job net?

Cause

An unapplied job net that is waiting for the completion of a job net of the previous day is scheduled for when the job net of the previous day completes.

Action method

Perform the disable operation after the unapplied job net for which the start operation was performed completes its startup.

To change the execution status from "Disabled" to "Completed" of a job net after the scheduled start time has elapsed, perform the enable operation at the scheduled start time or later.

9.4 A Message Event is Not Generated by the jobschmsgeventex Command

9.4.1 A Message Event is Not Generated

Applicable versions and levels

- Windows versions: V13.1.0 or later

- Solaris versions: 11.0 or later

- Linux versions: V12.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: V13.0.0 or later

- AIX versions: V13.2.0 or later

Action

Points to check

Did you use double quotation marks (") in the message event name?

Action method

Double quotation marks (") are recognized as normal characters (not as symbols used for enclosing words) when prefixed by the number of backslashes (\) shown below. This number varies according to the operating system.

- Windows versions

Prefix the double quotation marks (") of the message event name with five backslashes (\).

[Example] \\\\"message event string\\\\"

- UNIX versions

Prefix the double quotation marks (") of the message event name with one backslash (\).

[Example] \"message event string\"

Appendix A Maintenance Information Collection Tool

Maintenance Information Collection Tool is a function that collects information required to troubleshoot problems of Systemwalker.

If a cause cannot be determined when a problem occurs with Systemwalker Operation Manager, send information that has been collected by Maintenance Information Collection Tool to a Fujitsu system engineer.

The content described here is for V11.0L10/11.0 or later.

If you are using V10.0L20/V10.0L21/10.1, refer to the following manuals:

- "Controlling the generation of maintenance information" in the Installation Guide
- "Collecting the Maintenance Information" in the Installation Guide
- "Maintenance Commands" in the Reference Guide

A.1 Usage Method

A.1.1 Windows Versions

The content described here is for the following:

- Windows versions: V11.0L10 or later

Generation management settings

Generation management can be performed for the maintenance information. The default value is 3 generations - to change it, execute the following command:

Windows NT(R)/Windows(R) 2000/Windows(R) XP/Windows Server 2003 STD/Windows Server 2003 DTC/Windows Server 2003 EE or later:

<Systemwalker Operation Manager installation directory>
\mpwalker.jm\mpcmtool\swcolinf\swcolinf.exe /w <number of generations>

Windows(R) 98/Windows(R) Me:

<Systemwalker Operation Manager installation directory>
\mpcmtool\swcolinf\swcolinf.exe /w <number of generations>

Refer to "Setup of Generation Management" in the *Installation Guide* for information on the settings. Refer to "swcolinf Maintenance Information Collection Command" in the *Reference Guide* for information on the command.

How to collect the maintenance information

The following describes the procedure for operating Maintenance Information Collection Tool:

1. In case of environments other than Server Core environment, select **Start** >> **Systemwalker Operation Manager** >> **Collect Maintenance Information**.

In Server Core environments, execute the following command from the command prompt:

[Executing the command in an installation environment]

<Systemwalker Operation Manager installation directory>\mpwalker.jm\mpcmtool \swcolinf\swcolinf.exe

[Executing the command from the product media]

- V13.3.1 or earlier

<drive>\tool\swcolinf\swcolinf.exe

- V13.8.0 or later

[Windows x86 versions]

<drive>\MAIN\tool\swcolinf\swcolinf.exe

[Windows x64]

<drive>\Client\tool\swcolinf\swcolinf.exe

[UNIX versions (client)]

<drive>\Client\tool\swcolinf\swcolinf.exe

Refer to "swcolinf Maintenance Information Collection Command" in the *Reference Guide* for information on the commands.

The Maintenance Information Collection dialog box is displayed.

- 2. Specify the following items, and then click **Execute**.
 - Product: Select "Systemwalker Operation Manager".
 - Storage location of information: Specify the location where collected information is saved.

A dialog box to confirm whether you want to execute the command is displayed.



To select functions for which maintenance information is collected:

To select a function for which you want to collect data, click the **Select Function** button in the **Maintenance Information Collection** dialog box. In the **Maintenance Information Collection - Select Function** dialog box, select the function.

Nevertheless, it is recommended to collect the data of all functions in order to determine the cause accurately.

3. Click OK.

The Maintenance Information Collection - Execution message box is displayed.

4. The **Maintenance Information Collection - Result** message box is displayed when the data collection is completed.

Check the contents, and then click OK.



If the data was not collected

Data that could not be collected, and the storage directory, are displayed per function. In this case, collect the maintenance information again.

If any data could still not be collected, even after reexecuting, copy this data to the storage directory. Refer to "A.2 If the Maintenance Information Could not be Collected" for details.



- Use the following calculation as a reference of the time taken to collect maintenance information:
 - CPU: Intel(R) Pentium(R)III Processor 600 MHz
 - Memory: 512 MB
 - Time spent: 6 min. 15 sec.
- Refer to "swcolinf Maintenance Information Collection Command" in the *Reference Guide* to collect the maintenance information using the silent command.

Checking the collection status of the maintenance information[V13.3.1 or earlier]

The following describes the procedure for checking the status of the Maintenance Information Collection Tool:

In case of environments other than Server Core environment, select Start >> Systemwalker Operation Manager
 >> Collect Maintenance Information.

In Server Core environments, execute the following command from the command prompt:

[Executing the command in an installation environment]

<Systemwalker Operation Manager installation directory>\mpwalker.jm\mpcmtool \swcolinf\swcolinf.exe

[Executing the command from the product media]

<drive>\tool\swcolinf\swcolinf.exe

Refer to "swcolinf Maintenance Information Collection Command" in the *Reference Guide* for information on the commands.

The Maintenance Information Collection dialog box is displayed.

2. Select the Information/Recompress tab.

The collection status of the maintenance information can be checked.

How to recompress the maintenance information[V13.3.1 or earlier]

If the size of the file collected using the Maintenance Information Collection Tool is too big to send, for example, select the required information from the collected information, and then recompress it.

The procedures to recompress the information are shown below.

Environments other than Server Core

1. Select Start >> Systemwalker Operation Manager >> Collect Maintenance Information.

The Maintenance Information Collection dialog box is displayed.

2. Select the Information/Recompress tab.

A list of collected maintenance information is displayed.

3. From the list, select the information to be recompressed, and then click **Detail**.

The Maintenance Information Collection - Recompress dialog box is displayed.

- 4. Specify the following items, and then click Execute.
 - Location to store recompressed file: Specify the location to save the recompressed files.
 - Directory structure: Select the folders to be recompressed.
 - Files: Select the files (required for investigations) to be recompressed.

Server Core environments

 In Windows that has a GUI of Windows(R) XP/Windows Vista/Windows Server 2003 etc. that was moved when the decompression was performed, files are compressed using the Windows Zip compression utility or another compression tool.

How to decompress the information

Environments other than Server Core

1. Select Start >> Systemwalker Operation Manager >> Collect Maintenance Information.

The Maintenance Information Collection dialog box is displayed.

- 2. Select the **Decompress** tab.
- 3. Add the compressed files to be decompressed.
 - Add: Adds compressed files to the list.
 - Delete: Deletes the specified files from the list.
- 4. In Location of decompress, specify the directory to store the decompressed files in.
- 5. Click Decompress.

The files will be decompressed.

6. Click Close.

Server Core environments

- 1. Move the collected data in <location of decompress>\OperationManager\<generation number> folder to Windows that has a GUI of Windows(R) XP/Windows Vista/Windows Server 2003 etc.
- 2. Change the extension of the moved data (self-extracting format compressed file) from "ex_" to "exe".
- 3. Execute the file for which the extension was changed to decompress it.

Cautions

- Terminal Server (Systemwalker Operation Manager V13.2.0 or earlier)

In Windows NT(R) Terminal Server, or Windows(R) 2000 Server or later, when the remote desktop (Terminal Services) is used, switch the system mode to INSTALL mode, and then collect the data. Refer to "Tasks Prior to Installation" in the *Installation Guide* for information on how to switch to INSTALL mode.

However, if the Terminal Server mode is remote administration mode, there is no need to change the system mode.

- Cluster systems

In cluster system operations, collect the data both on the operation node and on the standby node. Additionally, a shared disk must be mounted before collecting the data.

A.1.2 UNIX Versions

The content described here is for the following:

- Solaris versions: 11.0 or later

- Linux versions: V12.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Generation management settings

Generation management can be performed for the maintenance information. The default value is 3 generations - to change it, execute the following command:

```
/opt/FJSVftlo/swcolinf/swcolinf -w <number of generations>
```

Refer to "Setup of Generation Management" in the *Installation Guide* for information on the settings. Refer to "swcolinf Maintenance Information Collection Command (for Server)" and "swcolinf Maintenance Information Collection Command" in the *Reference Guide* for information on the command.

How to collect the maintenance information

The following describes the procedure for collecting the maintenance information.

Refer to the Reference Guide for information on the command.

```
/opt/FJSVftlo/swcolinf/swcolinf [-i <name>] -o <output path> [-c <comment>]
```

The collection status and storage directory are displayed.

```
# ./swcolinf -i server -o /export/home
Collecting TRACE information...
Collecting FJSVJOBSC information...
Collecting FJSVMJS information...
Collecting FJSVJmcal information...
Collecting FJSVJmcMN information...
Systemwalker Operation Manager information has been collected successfully.
Storage location: /export/home/OperationManager/0002
#
```



If the data was not collected

Data that could not be collected, and the storage directory, are displayed per function. In this case, collect the maintenance information again.

If any data could still not be collected, even after reexecuting, copy this data to the storage directory. Refer to "A.2 If the Maintenance Information Could not be Collected" for details.



- Use the following calculation as a reference of the time taken to collect maintenance information:
 - CPU: SPARC64(TM) GP 400 MHz x 2
 - Memory: 2048 MB
 - Time spent: 6 min. 15 sec.

Checking the collection status of the maintenance information[V13.3.1 or earlier]

The following describes the procedure for checking the status of the Maintenance Information Collection Tool.

```
Refer to the Reference Guide for information on the command.
```

/opt/FJSVftlo/swcolinf/swcolinf -l <output path>

<output path>

Specify the directory that contains the collected information.

[Execution example]

An execution example for the collection status of the maintenance information is shown below.

```
*** Systemwalker Operation Manager Information ***

OUTPATH:/temp

FOLDER DATE FUNCTION COMMENT

/temp/OperationManager/0001 2002/05/05 10:10:10 all all

/temp/OperationManager/0002 2002/05/06 10:10:10 event,tool tool:error
```

Cautions

- Cluster systems

In cluster system operations, collect the data both on the operation node and on the standby node. Additionally, a shared disk must be mounted before collecting the data.

A.2 If the Maintenance Information Could not be Collected

This section describes what happens when collection of the maintenance information fails.

A.2.1 Windows Versions

The content described here is for the following:

- Windows versions: V11.0L10 or later

Result if the maintenance information could not be collected

- 1. If the maintenance information could not be collected, a red tick next to the caption **Abended** is displayed in the **The Maintenance Information Collection Execution** message box.
- 2. The result will be displayed in a text area in the **The Maintenance Information Collection result** message box per function that ended abnormally.



The same result will also be stored in the following log file:

<information storage directory>\OperationManager\generation number\swcolinf.log

Action method

Manually copy the file for each function displayed in the **The Maintenance Information Collection - result** message box to the storage directory per function.

A.2.2 UNIX Versions

The content described here is for the following:

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

Result if the maintenance information could not be collected

In Solaris, if collection of the maintenance information fails, the following is displayed:

```
# ./swcolinf -i tool -o /export/home
Collecting TRACE information...
Collecting FJSVftlo information...
Collecting installer information...
Collecting COMMON information...

*** INFORMATION ***
Could not collect the following files due to errors such as out of space
Copy these files manually to an appropriate location for each function.

[FJSVftlo]
/etc/opt/FJSVftlo/trc/etc/f3cvgtad.ini
Storage location: /export/home/OperationManager/0005/FJSVftlo

*The following file also has the above information.
/export/home/OperationManager/0005/swcolinf.log
Systemwalker Operation Manager information has collected successfully
Storage location: /export/home/OperationManager/0005
#
```



The same result will also be stored in the following log file:

```
<information storage directory>/OperationManager/<generation number>/swcolinf.log
```

Action method

Manually copy the file for each function displayed in the output result to the storage directory per function.

- Function names for which the maintenance information could not be collected are enclosed in []. The file will be displayed below it.

```
Example:
[FJSVftlo]
/etc/opt/FJSVftlo/trc/etc/f3cvgtad.ini
```

- The storage directory will be displayed after "Storage location:".

```
Example:
Storage location: /export/home/OperationManager/0005/FJSVftlo
```

Appendix B How to Check the Process Running Status

This section explains how to check the process running status.

The content described here is for V11.0L10/11.0 or later.

If you are using V10.0L20/V10.0L21/10.1, refer to the following manuals:

- "Maintenance Commands" in the Reference Guide

B.1 Checking the Process Running Status

The content described here is for the following:

- Windows versions: V11.0L10 or later

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

- HP-UX versions: 11.0 or later

- AIX versions: 11.0 or later

To check the process running status, execute the following command on the server for which you want to check the process running status:

- [Windows versions]

```
<systemwalker install directory>\mpwalker.jm\bin\mppviewo
```

- [UNIX versions]

```
/opt/systemwalker/bin/mppviewo
```

The following type of execution result is displayed:

The PID and RUNNING-TIME explanations are shown below.

[PID]

Process ID for the process

[RUNNING-TIME]

Accumulated execution time for the process

Example of the execution in Windows versions

The example below shows the execution of the command that displays the process running status on the Operation Management Server. The following example shows that the process "mjsoba.exe" is abnormal.

```
f3crssvr.exe
                                       2332
** Systemwalker MpJmCal **
 f3crhcs1.exe
                                       2456
 f3crhcs2.exe
                                       2458
** Systemwalker MpNjsosv **
 CNSSVENG.EXE
                                       2468
** Systemwalker MpAosfB **
 f3crhesv.exe
                                       2488
 f3crhdsv.exe
                                       2489
 f3crhxsv.exe
                                       2522
** Systemwalker MpAosfP **
 f3crhsv2.exe
                                       2562
** Systemwalker MpAosfX **
 f3crhxsw.exe
                                       2564
** Systemwalker MpMpMjes **
 mjssvc.exe
                                       2568
 mjsoba.exe
                                       2572
** Systemwalker MpMpMjes1 **
 mjssvc.exe
                                       2545
 >>>> ERROR: Process Not Found : mjsoba.exe
** Systemwalker MpMpMjes2 **
 mjssvc.exe
                                       2634
 mjsoba.exe
                                       2642
      :
```

Example of the execution in Solaris versions

The example below shows the execution of the command that displays the process running status on the Operation Management Server. The following example shows that the process "mjsdaemon -sys 1" is abnormal.

| ###################### PROCESS INFORMATION ** Package Name ** | BIGIN#### | *************** |
|---|-----------|-----------------|
| PROCESS-NAME | PID | RUNNING-TIME |
| PROCESS-NAME | PID | KONNING-11ME |
| ** FJSVfwseo ** | | |
| MpFwsec | 2345 | 0:19 |
| | | |
| ** FJSVjmcal ** | | |
| f3crhcs2 | 2241 | 0:18 |
| | | |
| ** FJSVJMCMN ** | | |
| jmnetsv | 2245 | 0:15 |
| mpjmsrv | 2265 | 0:17 |
| ** FJSVJOBSC ** | | |
| [Subsystem0] | | |
| tskmnsrv | 2745 | 0:14 |
| [Subsystem1] | | |
| tskmnsrv | 2749 | 0:12 |
| [Subsystem2] | | |
| tskmnsrv | 2751 | 0:09 |
| | | |
| ** FJSVMJS ** | | |

| [Subsystem0] | | | | |
|--------------------------------|--|---------------------|--|--|
| mjsdaemon -sys 0 | 2821 | 0:21 | | |
| mjsdaemon -sys 0 | 2822 | 0:20 | | |
| mjsdaemon -sys 0 | 2823 | 0:19 | | |
| mjsnetsv 0 | 2825 | 0:18 | | |
| [Subsystem1] | | | | |
| mjsdaemon -sys 1 | 2921 | 0:20 | | |
| mjsdaemon -sys 1 | 2923 | 0:19 | | |
| >>>> ERROR: Process NOT Fou | >>>> ERROR: Process NOT Found : mjsdaemon -sys 1 | | | |
| mjsnetsv 0 | 2925 | 0:17 | | |
| [Subsystem2] | | | | |
| mjsdaemon -sys 2 | 3024 | 0:15 | | |
| mjsdaemon -sys 2 | 3025 | 0:14 | | |
| mjsdaemon -sys 2 | 3026 | 0:14 | | |
| mjsnetsv 0 | 3016 | 0:12 | | |
| : | | | | |
| ########################## PRO | CESS INFORMATION END | ******************* | | |



Running status for process monitoring

To check the running status of the process monitoring function, use the following to check if the service or process has started. Refer to "B.2 Process Names" for information on the service or process names.

- Windows: Windows Task Manager, Windows Services, or some other tool.
- UNIX: The ps command, or some other command.

Additionally, if the process monitoring function coexists with Systemwalker Centric Manager, operation monitoring of the Application Monitoring function can also be used. To enable monitoring of the number of processes, it will be necessary to set a lower limit of 1(mjsdaemon is 1), and no upper limit.

B.2 Process Names

This section lists the Systemwalker Operation Manager process names.

B.2.1 Process Names [Windows Versions]

This section lists the process names in Windows versions V11.0L10 or later.

| Monitored process name | Service name | Function name | Related
process name |
|--|-----------------------------|---|--|
| f3crssvr.exe | Systemwalker ACL
Manager | ACL Manager | - |
| f3crhcs1.exe
f3crhcs2.exe | Systemwalker
MpJmCal | Calendar | f3crhcs1.exe
f3crhcs2.exe
f3crhcs3.exe |
| f3crhsv2.exe | Systemwalker
MpAosfP | Power Control
(Power Control, Service/
Application Execution) | - |
| f3crhxs2.exe (*3)
f3crhxs2_64.exe
(*3, *4)
f3crhxs2_x64.ex
e(*3, *5) | Systemwalker
MpAosfX | Automatic Operation
Support
(Action Execution) | - |

| Monitored process name | Service name | Function name | Related process name |
|---|--------------------------|---|---|
| f3crhesv.exe f3crhdsv.exe f3crhxsw.exe f3crhesv_64.exe (*4) f3crhdsv_64.exe (*4) f3crhxsw_64.exe (*4) f3crhesv_x64.exe (*5) f3crhdsv_x64.exe (*5) f3crhxsw_x64.exe (*5) f3crhxsw_x64.exe (*5) f3crheap.exe f3crheeg.exe f3crheop.exe f3crheog.exe | Systemwalker
MpAosfB | Automatic Operation
Support
(Event Monitoring,
Action Control) | - |
| mpjmsrv.exe
jmnetsv.exe
java.exe (*6) | Systemwalker
MpJmSrv | Systemwalker Operation
Manager infrastructure | mpjmsrv.exe
jmnetsv.exe
omcgisv.exe (*2) |
| httpd.exe (*6) | SystemwalkerMpAHS
O | | - |
| CNSSVENG.exe | Systemwalker
MpNjsosv | Task Link | - |
| mjssvc.exe
mjsoba.exe | Systemwalker
MpMjes | Job Execution Control | mjssvc.exe
mjscnsl.exe
mjsoba.exe
mjnetcln.exe |
| tskmnsrv.exe | Systemwalker
MpJobsch | Jobscheduler | - |
| - (*1) | Systemwalker
MpPmonO | Process monitoring | mppmon.exe
mppmonservice.e
xe |

*1:

A function (service) which monitors the processes in Systemwalker Operation Manager, but which is not monitored itself.

*2:

This is the Web linkage function (V13.3.1 or earlier) process name.

*3:

Excluded from monitoring in Windows Server 2008 and later.

*4:

This is the process name for the Windows for Itanium version.

*5:

This is the process name for the Windows x64 version.

*6:

[In V13.8.0] This is the process name for the Web console function.

[In V17.0.0 or later] This is the process name for the Web console function or Web API function.

B.2.2 Process Names [UNIX Versions]

This section lists the process names for the following version levels:

- Solaris versions: 11.0 or later

- Linux versions: V11.0L10 or later

- Linux for Itanium versions: V12.0L10 or later

HP-UX versions: 11.0 or laterAIX versions: 11.0 or later

| Monitored process name | Function name | Start command | Related process name |
|---|---|---|--|
| MpFwsec | ACL Manager | /opt/systemwalker/bin/rc.mpfwsec start | - |
| f3crhcs2 | Calendar/
Power Control | /bin/sh /opt/FJSVjmcal/bin/S99JMCAL (*1) | - |
| mpjmsrv
jmnetsv
java (*4)
httpd (*4) | Systemwalker Operation Manager infrastructure | /bin/sh /opt/FJSVJMCMN/etc/rc3.d/
start_jmcmn (*1) | mpjmsrv
jmnetsv
omcgisv (*3) |
| mjsdaemon
mjsnetsv | Job Execution
Control | /bin/sh /etc/opt/FJSVMJS/etc/rc3.d/
S99MJS (*1) | mjsdaemon
mjscnsl
mjsnetsv
mjnetcln |
| tskmnsrv | Jobscheduler | /bin/sh /opt/FJSVJOBSC/etc/rc3.d/
start_jobs (*1) | - |
| - (*2) | Process
monitoring | /opt/FJSVftlo/pmon/bin/strmppmon.sh | mppmon -OM |

*1:

A Solaris version start command. The Linux, HP-UX, and AIX version start commands are as follows: [Linux versions]

Systemwalker Operation Manager infrastructure: /bin/sh /opt/F|SV|MCMN/etc/rc3.d/start_jmcmn

Job Execution Control: /bin/sh /etc/opt/FJSVMJS/etc/rc3.d/S99MJS

Jobscheduler: /bin/sh /opt/FJSVJOBSC/etc/rc3.d/start_jobs

Calendar/Power Control: /bin/sh /opt/FJSVjmcal/bin/S99JMCAL

[HP-UX versions]

 $Systemwalker\ Operation\ Manager\ infrastructure:\ /bin/sh\ /opt/FHPJMCMN/bin/start_jmcmn$

Job Execution Control: /bin/sh /opt/FHPMJS/usr/lib/mjes/S99MJS

Jobscheduler: /bin/sh /opt/FHPJOBSCH/bin/start_jobs

Calendar/Power Control: /bin/sh /opt/FHPjmcal/bin/S99JMCAL

[AIX versions]

Systemwalker Operation Manager infrastructure: /bin/sh /usr/FAIX|MCMN/bin/start_jmcmn

Job Execution Control: /bin/sh /opt/FAIXMJS/usr/lib/mjes/S99MJS

Jobscheduler: /bin/sh /usr/FAIXJOBSC/bin/start_jobs

Calendar/Power Control: /bin/sh /opt/FAIXjmcal/bin/S99JMCAL

*2:

A function (daemon) which monitors the processes in Systemwalker Operation Manager, but which is not monitored itself.

*3:

This is the Web Linkage function (V13.3.1 or earlier) process name.

*4:

[In V13.8.0] This is the process name for the Web console function.

[In V17.0.0 or later] This is the process name for the Web console function or Web API function [Linux version].

Appendix C

Conventions Used in This Document and Trademarks

C.1 Abbreviations and Generic Terms Used

- The term "Windows Server 2019" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2022 Standard (x64)
 - Microsoft(R) Windows Server(R) 2022 Datacenter (x64)
- The term "Windows Server 2019" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2019 Standard (x64)
 - Microsoft(R) Windows Server(R) 2019 Datacenter (x64)
- The term "Windows Server 2016" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2016 Standard (x64)
 - Microsoft(R) Windows Server(R) 2016 Datacenter (x64)
- The term "Server Core" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2022 Datacenter Server Core
 - Microsoft(R) Windows Server(R) 2022 Standard Server Core
 - Microsoft(R) Windows Server(R) 2019 Standard Server Core
 - Microsoft(R) Windows Server(R) 2019 Datacenter Server Core
 - Microsoft(R) Windows Server(R) 2016 Standard Server Core
 - Microsoft(R) Windows Server(R) 2016 Datacenter Server Core
 - Microsoft(R) Windows Server(R) 2008 Standard Server Core
 - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) Server Core
 - Microsoft(R) Windows Server(R) 2008 Enterprise Server Core
 - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) Server Core
 - Microsoft(R) Windows Server(R) 2008 Datacenter Server Core
 - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) Server Core
- The term "Windows Server 2008" is used to refer to all of the following products:.
 - Microsoft(R) Windows Server(R) 2008 Standard(x86)/(x64)
 - Microsoft(R) Windows Server(R) 2008 Enterprise(x86)/(x64)
 - Microsoft(R) Windows Server(R) 2008 Datacenter(x86)/(x64)
 - Microsoft(R) Windows Server(R) 2008 Foundation(x64)
 - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM)(x86)/(x64)
 - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM)(x86)/(x64)
 - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM)(x86)/(x64)
 - Microsoft(R) Windows Server(R) 2008 R2 Foundation(x64)
 - Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)
 - Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)

- Microsoft(R) Windows Server(R) 2008 R2 Datacenter(x64)
- The term "Windows Server 2003 STD" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition
 - Microsoft(R) Windows Server(R) 2003 R2, Standard Edition
 - Microsoft(R) Windows Server(R) 2003, Standard x64 Edition
 - Microsoft(R) Windows Server(R) 2003, Standard Edition
- The term "Windows Server 2003 DTC" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2003 R2, Datacenter x64 Edition
 - Microsoft(R) Windows Server(R) 2003 R2, Datacenter Edition
 - Microsoft(R) Windows Server(R) 2003, Datacenter x64 Edition
 - Microsoft(R) Windows Server(R) 2003, Datacenter Edition for Itanium-based Systems
 - Microsoft(R) Windows Server(R) 2003, Datacenter Edition
- The term "Windows Server 2003 EE" is used to refer to all of the following products:
 - Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition
 - Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition
 - Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition
 - Microsoft(R) Windows Server(R) 2003, Enterprise Edition for Itanium-based Systems
 - Microsoft(R) Windows Server(R) 2003, Enterprise Edition
- The term "Windows(R) 2000" is used to refer to all of the following products:
 - Microsoft(R) Windows(R) 2000 Professional
 - Microsoft(R) Windows(R) 2000 Server
 - Microsoft(R) Windows(R) 2000 Advanced Server
 - Microsoft(R) Windows(R) 2000 Datacenter Server
- The term "Windows NT(R)" is used to refer to all of the following products:
 - Microsoft(R) Windows NT(R) Server network operating system Version4.0
 - Microsoft(R) Windows NT(R) Workstation operating system Version4.0
- The term "Windows(R) 10" is used to refer to all of the following products:
 - Windows(R) 10 Home (x64)
 - Windows(R) 10 Pro (x64)
 - Windows(R) 10 Enterprise (x64)
- The term "Windows(R) 8.1" is used to refer to all of the following products:
 - Windows(R) 8.1 (x64)
 - Windows(R) 8.1 Pro (x64)
 - Windows(R) 8.1 Enterprise (x64)
- The term "Windows(R) 7" is used to refer to all of the following products:
 - Windows(R) 7 Home Premium(x86)
 - Windows(R) 7 Professional(x86)
 - Windows(R) 7 Enterprise(x86)

- Windows(R) 7 Ultimate(x86)
- Windows(R) 7 Home Premium(x64)
- Windows(R) 7 Professional(x64)
- Windows(R) 7 Enterprise(x64)
- Windows(R) 7 Ultimate(x64)
- The term "Windows(R) XP" is used to refer to all of the following products:
 - Microsoft(R) Windows(R) XP Professional x64 Edition
 - Microsoft(R) Windows(R) XP Professional
 - Microsoft(R) Windows(R) XP Home Edition
- Microsoft(R) Windows(R) Millennium Edition is abbreviated as "Windows(R) Me".
- Microsoft(R) Windows(R) 98 is abbreviated as "Windows(R) 98".
- Articles specific to the version of Systemwalker Operation Manager that runs on all of the following operating systems are referred to as "Windows Server 2003 STD(x64) version":
 - Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition
 - Microsoft(R) Windows Server(R) 2003, Standard x64 Edition
- Articles specific to the versions of Systemwalker Operation Manager that run on all of the following operating systems are referred to as "Windows Server 2003 DTC(x64) version":
 - Microsoft(R) Windows Server(R) 2003 R2, Datacenter x64 Edition
 - Microsoft(R) Windows Server(R) 2003, Datacenter x64 Edition
- Articles specific to the versions of Systemwalker Operation Manager that run on all of the following operating systems are referred to as "Windows Server 2003 EE (x64) version":
 - Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition
 - Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition
- Articles specific to the versions of Systemwalker Operation Manager that run on the following operating system are referred to as "Windows(R) 2000 Server versions":
 - Microsoft(R) Windows(R) 2000 Server
- Windows Internet Explorer(R) is abbreviated as "Internet Explorer".
- Versions of Systemwalker Operation Manager that run on all of the following operating systems are referred to as "Windows versions of Systemwalker Operation Manager" or simply "Windows versions":
 - Windows
 - Windows that supports Itanium
 - 64-bit versions of Windows, except Itanium
- Articles specific to the version of Systemwalker Operation Manager that runs on 32-bit versions of Windows are referred to as "Windows x86 version".
- Articles specific to the version of Systemwalker Operation Manager that runs on Itanium-compatible versions of Windows are referred to as "Windows for Itanium version".
- Articles specific to the version of Systemwalker Operation Manager that runs on 64-bit versions of Windows, except Itanium, are referred to as "Windows x64 version".
- Server Core, Windows Server 2019, and Windows Server 2016 may be abbreviated as "Windows servers".
- Windows NT(R), Windows(R) 2000, Windows Server 2003 STD, Windows Server 2003 DTC, Windows Server 2003 EE, Windows Server 2008 EE, Windows Server 2008 DTC, Windows Server 2008 STD,

Windows Server 2008 Foundation, Windows Server 2008 R2, Server Core, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019, and Windows Server 2022 may be abbreviated as "Windows servers".

- Oracle Solaris may be referred to as Solaris, Solaris Operating System or Solaris OS.
- Versions of Systemwalker Operation Manager that run on Solaris are referred to as "Solaris versions of Systemwalker Operation Manager" or simply "Solaris versions".
- Articles specific to the version of Systemwalker Operation Manager that runs on 32-bit versions of Solaris are referred to as "Solaris 32-bit version".
- Articles specific to the version of Systemwalker Operation Manager that runs on 64-bit versions of Solaris are referred to as "Solaris 64-bit version".
- Versions of Systemwalker Operation Manager that run on HP-UX are referred to as "HP-UX versions of Systemwalker Operation Manager" or simply "HP-UX versions".
- Versions of Systemwalker Operation Manager that run on AIX are referred to as "AIX versions of Systemwalker Operation Manager" or simply "AIX versions".
- Articles specific to the version of Systemwalker Operation Manager that runs on 64-bit versions of Linux, except Itanium, are referred to as "Linux x64 version" or simply "Linux versions".
- Articles specific to the version of Systemwalker Operation Manager that runs on 32-bit versions of Linux are referred to as "Linux x86 version".
- Articles specific to the version of Systemwalker Operation Manager that runs on Itanium-compatible version of Linux are referred to as "Linux for Itanium version".
- Versions of Systemwalker Operation Manager that run on the following operating systems are referred to as "Linux versions of Systemwalker Operation Manager" or "Linux versions".
 - Linux
 - Linux that supports Itanium
 - Linux that supports 64-bit architecture other than Itanium
- Solaris, HP-UX, AIX, Linux and Linux for Itanium versions of Systemwalker Operation Manager are referred to collectively as "UNIX versions of Systemwalker Operation Manager" or simply "UNIX versions".
- Solaris, HP-UX, AIX and Linux may be referred to as "UNIX servers".
- Systemwalker Operation Manager Standard Edition may be abbreviated as "SE".
- Systemwalker Operation Manager Enterprise Edition may be abbreviated as "EE".
- Standard Edition may be abbreviated as "SE" and Enterprise Edition may be abbreviated as "EE".
- Arcserve(R) Backup for Windows is abbreviated as "Arcserve".
- Microsoft(R)-Mail that is provided as a standard feature with Windows NT(R) is abbreviated as "MS-Mail".

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