

IBM® Tivoli® Workload Scheduler



# Readme File for Fix Pack 01 PTF U816801

*Version 8.4.0*



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*Version 8.4.0*

**Note**

Before using this information and the product it supports, read the information in Chapter 3, "Notices," on page 29.

This edition applies to Fix Pack 1 (PTF U816801) for version 8, release 4, modification level 0 of IBM Tivoli Workload Scheduler.

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# Chapter 1. IBM® Tivoli® Workload Scheduler Readme File for Fix Pack 01 for Version 8.4.0

**Date** March 28, 2008

**Fix Pack**  
8.4.0-TIV-TWS-FP0001

**PTF Number**  
U816801

**Product**  
IBM® Tivoli® Workload Scheduler Version 8.4.0

**General Description**  
IBM Tivoli Workload Scheduler Fix Pack 01 for Version 8.4.0

This readme file provides important information about fix pack 1 (PTF U816801) for IBM Tivoli Workload Scheduler version 8.4.0.

This readme file is the most current information for the fix pack and takes precedence over all other documentation for Tivoli Workload Scheduler version 8.4.0 Fix Pack 1.

It is divided into the following sections:

- “About this fix pack”
- “Fix pack structure” on page 12
- “Installing the fix pack” on page 17
- “Documentation updates” on page 24

***Review this section thoroughly before installing or using this Fix Pack.***

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## About this fix pack

This section contains information specific for this fix pack including what has been modified or introduced, what has been fixed, product versions or components to which the fix pack applies and compatibility issues, if any.

### **Product versions and components to which the fix pack applies**

This fix pack can only be applied on top of Tivoli Workload Scheduler 8.4.0.

This section includes the following subsections:

- “New features introduced with this fix pack” on page 2
- “Problems fixed” on page 2
- “Known limitations and workarounds” on page 5
- “Internationalization notes” on page 10

## New features introduced with this fix pack

The following features have been added with this fix pack:

### Integration with Tivoli Change and Configuration Management Database

The aim of the integration is to generate information that could be imported within the Tivoli Change and Configuration Management Database and to be presented to the end user on the Tivoli Dynamic Workload Console.

**Note:** The level of Tivoli Change and Configuration Management Database that supports the integration are Version 1, Release 1, Modification 1 or later, and Version 7, Release 1, Modification 0 with the interim fix for APAR IZ12719. If you need follow these steps to get the interim fix:

1. Access the IBM Software Support web site at <http://www.ibm.com/software/support>
2. Click **Products A to Z**.
3. Click **C** and then select in the list **Tivoli Change and Configuration Management Database**.
4. Search for the maintenance package that contains APAR IZ12719 and follow the instructions for download and install it.
5. If that maintenance package does not exist yet than you can call IBM Help at 800-426-7378 and open a PMR under component ID 5724R58IA.
6. Ask to have the hotfix for APAR IZ12719

### Event persistence

The capability for the Event Driven Workload Automation feature to persist the status of the received events when a planned server shutdown is run. When the user stops the server, all the events received up to that time will be automatically stored. When the server is restarted, the events processing will continue in a fully restored environment before the shutdown happened.

### Prerequisite checking scripts

A new set of script whose aim is to verify, before running a fresh install, that all the system prerequisites for DB2® and Oracle are satisfied for every supported platform. The end user can run these scripts before starting the installation.

### Metronome Script available in VB Script

The **metronome** script available is now available also in VB Script, so that it can be run on Windows® operating systems without asking the user install a Perl interpreter in their environment to run the script.

### Tivoli Workload Scheduler Integration Workbench

A new Eclipse feature and a set of source code samples are provided to help customers, IBM Services and business partners to develop their own Tivoli Workload Scheduler Event Driven Workload Automation Events and Actions plug-ins and applications using Tivoli Workload Scheduler API and Web Services.

## Problems fixed

This section lists all APARs and internal defects solved by this fix pack. For additional information about documentation APARs and internal defects refer to subsection Documentation Updates.



## List of APARs fixed:

### Code APARs:

- **IY96454:** DATABASE LISTS - ALL JOB DEFINITIONS: LAST RUNTIME IS NOT BEING FILLED IN.
- **porting-IY99785:** JOBMON CRASH WHEN RUNNING JOB WITH DOCOMMAND "4095" LENGTH.
- **IZ00999:** JOB STREAMS THAT ARE FOR IGNORED WORKSTATIONS ARE INCORRECTLY ADDED TO THE PLAN.
- **IZ01804:** FOLLOWS DEPENDENCY REMOVED WHEN DOING A CONMAN "SBS".
- **IZ01849:** RUNCYCLE WITH (AT<sup>®</sup>) AND/OR (UNTIL) ARE NOT SCHEDULED CORRECTLY IN SYMPHONY BY JNEXTPLAN.
- **IZ02719:** THE RCCONDSUC KEYWORD FOR THE CENTRALIZED SCRIPTS LEADS TO ERROR MESSAGES AWSBDW057E AND AWSBDW005E.
- **porting-IZ02785:** JOBMON CORRUPTS MAILBOX.MSG FILE ON HANDLING XA JOBS.
- **IZ03261:** EVENT 155 IN EVENT.LOG DOES NOT MATCH WITH FMT FILE.
- **IZ03267:** TWS TRUNCATES \$LOGNAME TO 8 CHARACTERS NO MATTER HOW LONG \$LOGNAME IS.
- **IZ03330:** ON PA\_RISC ARCHITECTURE MACHINES WHEN BROWSING JOB STDLIST FILE ONLY THE FIRST 2000 LINES ARE RETURNED TO THE JSC.
- **porting-IZ03693:** A LATE JOB EVENT IS NOT GENERATED IF A DEADLINE TIME OCCURS WHILE AN EXTENDED AGENT JOB IS IN "WAIT" STATUS.
- **IZ04183:** THE MASTER IS NOT RECOGNIZED AS MASTER ON "STATUS OF ALL WORKSTATIONS", IF THE MASTER DOMAIN NAME IS NOT MASTERDM.
- **IZ04437:** "CONMAN SC" ON MASTER SHOWS "FTI J" WITHOUT "W" FOR FTA, ALTHOUGH "WRITER" IS RUNNING ON MASTER.
- **IZ04808:** MAESTRO.RLS TRIES TO RUN FRAMEWORK TASKS WHICH DO NOT EXIST.
- **IZ05172:** UNTIL KEYWORD WITH +DAYS NEVER RUNS.
- **IZ05403:** CONMAN NOT WORKING TWS 8.3 WITH GROUP SETTING IN SECURITY FILE.
- **IZ05957:** CONMAN SHOWCPU COMMAND SHOULD ORDER WORKSTATIONS ALPHABETICALLY.
- **IZ06257:** UNISON\_SCHED\_ID OF CARRYFORWARDED JOBSTREAM HOLDS THE ORIGINAL VALUE, IF ENLEGACYID=YES.
- **IZ06575:** RCCONDSUC/TWSRCMAP INFORMATION MISSING FROM 8.3 FP03 RECOVERY JOBS.
- **IZ07038:** ACCESS CHECK FOR SCRIPTS DEFINED WITHOUT FULL QUALIFIED PATH.
- **IZ08155:** JSC ALLOWS TO PERFORM NOT ALLOWED ACTIONS ON THE CURRENT DISTRIBUTED PLAN IN E2E ENVIRONMENT.
- **IZ08936:** IF A JOB HAS "RECOVERY RERUN", SUBMITTING A JOB STREAM LOGS TO AWSBHT023E. TO TWSMERGE.LOG.
- **IZ08937:** TWS 8.3 REP7 -S NOT WORKING.

- **IZ09083:** TERMINOLOGY FOR "EXCLUSIVE RUN CYCLE" ON JAPANESE JSC IS WRONG.
- **IZ09666:** JOB PRIORITIES ARE WRONGLY CALCULATED.
- **IZ10009:** WAS GOES DOWN WHEN A JOB IS SUBMITTED WITH THE ALIAS.
- **IZ10297:** ADHOC SUBMIT JOB STREAM CONTAINING UNTIL DEPENDENCY AFTER MIDNIGHT +1 DAY IS INCORRECTLY ADDED TO UNTIL TIME.
- **IZ10349:** WRONG DATE IN "LAST START TIME" AND "SCHEDULED START" IS SET BY JNEXTPLAN.
- **IZ10685:** LOGGEDMESSAGEWRITTEN EVENT DOES NOT MATCH MBCS CHARACTERS
- **IZ10896:** JSC - ZERO VALUES ON DEPENDENCIES COLUMNS FOR JOB/JOB STREAMS IN THE PLAN.
- **IZ10997:** CONMAN SBS WITH ALIAS RETURNS AWSJPL528E.
- **IZ10998:** CONMAN SBS FAILED WITH AWSJPL506E.
- **IZ11553:** R3BATCH DOES NOT CAPTURE CONMAN ERROR DURING JOB SUBMISSION.
- **IZ11637:** JNEXTPLAN WITH -FROM -FOR DOES NOT WORK.
- **IZ12125:** JOBSTREAMS LOSES THE FOLLOWS DEPENDENCY IN THE CASE OF CROSS PLAN DEPENDENCY.
- **IZ12255:** UNIXRSH XAGENT JOB FAILS ON DBCS ENVIRONMENT.
- **IZ12256:** MAILMAN WRITING EVENTS TO MONBOX.MSG WHEN MONMAN IS STOPPED.
- **IZ12322:** JOB\_STREAM\_DEPS\_V CONTAINS NO JOB NAMES FOR DEP\_JOB\_NAME.
- **IZ12504:** SCHEDULE NOT FOUND ERROR WHEN SAP R/3 XA INTERCEPTION COLLECTOR ATTEMPTS TO PUT INTERCEPTION JOB INTO A NON EXISTENT JOB STREAM.
- **IZ12845:** AWSJPL528E ERROR OCCURS ON "CONMAN SBS" WITH ALIAS, IF IT IS PERFORMED BETWEEN MAKEPLAN AND SWITCHPLAN
- **IZ13008:** COMPOSER ADD/REPLACE MEMORY LEAK.
- **IZ13027:** TWS 8.3 FIXPACK INSTALLATION OVERWRITES THE MAESTROHOME JOBMANRC.
- **IZ13145:** CONMAN SHOWCPUS GETMON
- **IZ13668:** RCONDSUCC CONDITION DEFINED ON A RECOVERY JOB IS IGNORED IF JOB IS ADHOC SUBMITTED USING THE JSC.
- **IZ13672:** SCHEDULED TIME SHOWS THE NEXT DAY.
- **IZ13822:** A SCHEDULE WITH A VALIDFROM DATE IS NEVER SUBMITTED.
- **IZ13934:** EVENT 101 120 121 122 IN EVENT.LOG DOES NOT MATCH WITH FMT FILE.

To apply this fix you must substitute the `maestro.fmt` file on the machine where your Tivoli Enterprise Console® adapter is installed with the one provided in this fix pack. These are the steps to follow:

1. Copy the `TEC\TecAdapter\maestro.fmt` file from the Fix pack 1 to the `tecadhome` directory on the system where the Tivoli Enterprise Console adapter is installed.

2. Generate the CDS file. For example, on Windows use the following command:

```
set tecadhome=C:/Tivoli/Nontmeadapter win_gencds
%tecadhome%\etc\ja\tecad_win.fmt >
%tecadhome%\etc\tecad_win.cds
```

3. Start the logfile adapter

- **IZ14618:** SCHEDULE SELECTED TO RUN FOR CURRENT DATE HAS SCHEDULE START OF NEXT DA.Y
- **IZ14657:** IZ14657:REP7 -F NOT WORKING.
- **IZ14746:** AFTER FINAL UNISON\_SCHED\_ID OF SCHEDULES MATCHES THE CARRIED FORWARD FINAL'S SCHED\_ID.
- **IZ15414:** CONMAN SUBMIT WITH ;FOLLOWS DOES NOT BEHAVE AS EXPECTED.
- **IZ15985:** SUBMITTING STREAM WITH EXT. DEPENDENCIES AND ALIAS RESULTS IN SYMPHONY ERROR.
- **IZ16002:** MULTIPLE USERS BROWING JOBLOG AT SAME TIME, CAUSE WAS HANG.
- **pIZ07038:** IZ07038: access check for scripts defined without full qualifier

Documentation APARs:

- **IZ10959:** EVERY JOBS BELONGING TO A CANCEL JOBSTREAM.
- **IZ11421:** NECESSARY TO DOCUMENT ABOUT EXPLANATION OF "[P]" FLAG IN "CONMAN SS" OUTPUT.
- **IZ15598:** IF YOU SUBMIT THE JOB/JOB STREAM FROM A WORKSTATION OTHER THAN THE MASTER DOMAIN MANAGER DOCUMENTATION NEEDS CLARIFICATION.
- **IZ17386:** THE MANUAL DOES NOT EXPLAIN A BEHAVIOR OF JOBS IF THE JOB STREAM HAS A PRIORITY OF HI.

#### List of defects fixed:

This list contains the defects that fixed some of the limitations reported in the Tivoli Workload Scheduler Version 8.4.0 Release Notes®:

- **22485:** Writer does not download the Symphony.
- **22826:** Wrong error message in sbf
- **36588:** TZ not enabled: wrong Schedtime from FTA CLI.
- **38077:** Venezuela : Dst Changes on 9 december 2007
- **38216:** Argentina DST changes 2007 -2008.tzdata2007K
- **38887:** Tec Events displayed in wrong way because of "+++" in event.log changes for events: 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 204 151 152 153 154 155 156 157 158 159 160 161 162 202 203

## Known limitations and workarounds

The following are software limitations and workarounds that affect Tivoli Workload Scheduler version 8.4.0 Fix Pack 1, they include the known limitations listed in the Release Notes for version 8.4.0, if not fixed by this fix pack:

#### For installation:

- Tivoli Workload Scheduler version 8.4.0 installation fails on Windows if the installation path contains parenthesis. (37101)

- On Windows 2003 64bit Fault-Tolerant Agent the distributed connector the "Configure the Tivoli Workload Scheduler property files" installation step fails because the command run by the system is not enclosed in double quotes. (38305)
- If you start the launchpad from the CDROOT directory, the CD drive is locked (Tivoli Workload Scheduler installation path. (37122))

**Workaround:** To avoid locking the CD drive start the launchpad in the background as follows:

```
./1launchpad.sh&
```

If the CD drive is locked and during the installation you are asked to insert a new CD to continue with the installation, simply close the launchpad to unlock the drive and proceed with the interactive installation.

- No password validation is performed in the interactive InstallShield wizard on UNIX<sup>®</sup> and Linux<sup>®</sup> platforms at data input. If you have made an error in the password, it will only be discovered when the installation wizard attempts to use the password during the performance of an installation step.

**Workaround:** To resume the installation, locate every step that includes the indicated password (an appendix of *Tivoli Workload Scheduler: Administration and Troubleshooting* helps you do this) and change it to the correct value. Then resume the wizard at the first step that failed. Otherwise, rerun the installation, using the correct value for the password.

- During the interactive installation, UNIX users are required to supply the *TWS\_user* password, even though the user already exists on UNIX. (20512)
- Two installations cannot coexist on the same workstation if they have the same *TWS\_user* name

**Workaround:** Install two instances of a Tivoli Workload Scheduler with different *TWS\_user* names.

- After uninstalling an instance of Tivoli Workload Scheduler on Windows, the reinstall fails if you use the same path. (39190)

You have uninstalled Tivoli Workload Scheduler on Windows, but if you try and reinstall the instance in the same path, the reinstall fails because the SSM agent, which is part of Tivoli Workload Scheduler, has locked some of its libraries, even though it has been stopped.

When the SSM agent is stopped as part of the uninstall, a child process could remain active, locking the SSM agent libraries. When you try and reinstall in the same location, the installation of the SSM agent fails, while trying to overwrite the libraries, because they are locked.

**Workaround:** The simplest workaround is to reinstall on another path. Alternatively, either use an unlocking utility to unlock the files or reboot the system. Then reinstall in the required path.

- INSTALLING TWS ON WINDOWS 2003 64BIT DOMAIN CONTROLLER CAUSES "APPLICATION ERROR ..." RUNNING MAKESEC.EXE (IZ17655.1)

**Workaround:** Follow these steps when installing:

1. Install Tivoli Workload Scheduler version 8.4.0.
2. Access the Tivoli Workload Scheduler version 8.4.0 Fix Pack 1 CD.
3. Move to directory windows\cli and launch **swd\_env.cmd**.

#### 4. Install Fix Pack 1 by launching:

```
wdinstsp -f -uy -D tws_user="TWSUser"  
-D install_dir="c:\win32app\TWS\TWSUser"  
-D ft_agent="true" -D master="false" -D bkm_agent="false"  
-D execActionTools="false" -D domain="my_domain"  
-D dbc="false"  
-n "FP_TWS_WINDOWS_TWSUser.8.4.0.01"  
"C:\840fp1\WINDOWS\FP_TWS_WINDOWS.SPB"
```

and then:

```
wdinstsp -f -uy -D install_dir="c:\win32app\TWS\TWSUser"  
-D tws_user="TWSUser" -D ALL_LANG="true"  
-n "TWS_LP_TWSUser.8.4.0.01"  
"C:\840fp1\Tivoli_TWS_LP.SPB"
```

where:

*TWSUser*

Is the user who runs the installation.

*my\_domain*

Is the domain of the installation.

5. Return to the Tivoli Workload Scheduler version 8.4.0 installation and run **resume**.
6. Put on ready steps 2.3.4.5 (configure, start, commit, remove).
7. Run all.

#### At runtime:

- planman showinfo displays inconsistent times. (IZ05400)

The plan time displayed by the planman showinfo command might be incongruent with the time set in the operating system of the workstation. For example, the time zone set for the workstation is GMT+2 but planman showinfo displays plan times according to the GMT+1 time zone.

This situation arises when the WebSphere® Application Server Java™ virtual machine does not recognize the time zone set on the operating system.

**Workaround:** Set the time zone defined in the server.xml file equal to the time zone defined for the workstation in the Tivoli Workload Scheduler database. Proceed as follows:

1. Stop WebSphere Application Server.
2. Create a backup copy of this file:  
appserver/profiles/twsprofile/config/cells/DefaultNode/  
nodes/DefaultNode/servers/server1
3. Open server1.xml with an editor.
4. Find the **genericJvmArguments** string and add:  
genericJvmArguments="-Duser.timezone=time zone"

where time zone is the time zone defined for the workstation in the Tivoli Workload Scheduler database.

5. Restart WebSphere Application Server.
- Websphere Application Server limitations in a pure IPv6 environment when using the Job Scheduling Console or the Tivoli Dynamic Workload Console. (35681)

When you install Tivoli Workload Scheduler , the following WebSphere Application Server variables are initialized as follows to allow communication in a mixed IPv4-IPv6 environment:

```
java.net.preferIPv6Addresses=false  
java.net.preferIPv4Stack=false
```

If your configuration requires the use of a pure IPv6 environment or you have specific firewall configuration settings that block IPv4 packets, the connection between the Tivoli Workload Scheduler master domain manager and the Dynamic Workload console or the Job Scheduling Console fails.

**Workaround:** To establish a connection in this specific environment , you must initialize the variable as follows:

```
java.net.preferIPv6Addresses=true
```

by editing the server.xml file in the following path:

```
$TWS_HOME/appserver/profiles/twsprofile/config/cells/DefaultNode/  
nodes/DefaultNode/servers/server
```

If, instead, you want to use IPv4 communication exclusively, set:

```
java.net.preferIPv4Stack=true
```

- If you use the Microsoft® Remote Desktop Connection to operate Tivoli Workload Scheduler, you must use it always with the **/console** parameter, otherwise Tivoli Workload Scheduler gives inconsistent results. (37869)
- Websphere Application Server Limitations for LDAP users.

When you share the same LDAP user registry between Tivoli Dynamic Workload Console version 8.4 and a Tivoli Workload Scheduler engine, or between two engines, if you do not want use the Single Sign-On (SSO) method, you must use different notations when specifying the LDAP host name (for example the short host name and the fully qualified host name, or the IP address and the host name, and so on). Otherwise, if you use the same notation, the SSO is automatically enabled.

- Different behavior of UNIX and Windows operating systems at springtime daylight savings. (94279)

For example:

#### **Windows**

The command: conman submit job at=02xx is set to 01xx.

#### **HP-UX**

The command: conman submit job at=02xx is set to 03xx.

**Workaround:** Avoid creating jobs that have a start time in the "lost" hour and are due to run on the night of the daylight savings change (a Saturday night in spring).

- Using NetView®, a spurious error might be given for each command issued. (159849)

Using NetView, the following error might be written to the stdlist every time you issue a command using the command-line interface.

```
AWSBDC001E Error in map_set_links_status,  
calling OVwSetStatusOnObjects, >  
for, error: Object not on map
```

The issued command in each case is not impacted by the message or the circumstances that caused it.

**Workaround:** None. Ignore the message - it has no impact on the functioning of the product.

- Integration with Tivoli Monitoring: Support for limited number of events.

Due to a limitation found in the Tivoli Universal Agent component of Tivoli Monitoring version 6.1.05, only the following Tivoli Workload Scheduler events can be processed by Tivoli Monitoring:

- Job events:

Table 1. Job events

Event Number	Event Class
101	TWS_Job_Abend
102	TWS_Job_Failed
103	TWS_Job_Launched
104	TWS_Job_Done
105	TWS_Job_Suspended
106	TWS_Job_Submitted
107	TWS_Job_Cancel
108	TWS_Job_Ready
109	TWS_Job_Hold
110	TWS_Job_Restart

- Job stream events

Table 2. Job stream events

Event Number	Event Class
151	TWS_Schedule_Abend
152	TWS_Schedule_Stuck
153	TWS_Schedule_Started
154	TWS_Schedule_Done
155	TWS_Schedule_Susp
156	TWS_Schedule_Submit
157	TWS_Schedule_Cancel
158	TWS_Schedule_Ready
159	TWS_Schedule_Hold
160	TWS_Schedule_Extern

**Note:** Defect 42393.1 was opened to Tivoli Monitoring will address the limitation.

- File monitor provider events: older event configurations may stay active on workstations after rule redeployment. (34103)  
If you deployed rules containing event types from the FileMonitor event provider, and then you redeploy rules that no longer include these file monitoring events, you might find that, notwithstanding the new configurations, the local monitoring agents still forward the file

monitoring events to the event processor. The event processor rightly ignores these events, accordingly with the new configuration specifications deployed on the server; however, a certain amount of CPU time and bandwidth are needlessly misused.

The status of the local monitoring configuration on the agent will be corrected when one of the following occurs:

- The **planman deploy -scratch** command is issued.
  - The event processing server is restarted.
  - Another rule containing an event condition involving the FileMonitor provider is deployed to the agents.
- Event rule management: Deploy flag is not maintained in renewed symphony. (36924)

The deploy flag (D) indicates that a workstation is using an up-to-date package monitoring configuration and can be displayed by running the **conman showcpus** command. Testing has revealed that the flag is lost from the symphony file when the file is renewed after a **JnextPlan** or **ResetPlan** command. Although the event monitoring configuration deployed to the agents is the latest one, and event management works properly, an incorrect monitoring agent status is shown on the workstations.

- Slow performance when deploying a large amount of rules. (37011)

The rule deployment process (run either automatically or with the **planman** deploy command) was found to perform somewhat slowly when you deploy high numbers of new and changed rules (2000 and more).

To deploy large numbers of rules collectively in an acceptable time limit, use **planman** deploy with the **-scratch** option.

- TWS engine CPU at 100% (37105)

When you run from the Tivoli Dynamic Workload Console a Production Plan report on a master domain manager installed on a Windows operating system, you might experience an heavy load on the CPU of the master domain manager with 100% load. In fact, running a Production Plan report is an high intensive CPU operation because it requires intensive I/O operation and CPU usage. This means that during this processing time frame, you might notice a performance slow down on the system but nevertheless the system continues to process operations.

## Internationalization notes

The following are software limitations and workarounds that affect the international versions of Tivoli Workload Scheduler version 8.4.0 Fix Pack 1, they include the known limitations listed in the Release Notes for version 8.4.0, if not fixed by this fix pack:

- The **twsClusterAdm.exe** program produces garbled messages in a Japanese environment (IZ08648)

If you have implemented the support for the Microsoft Cluster Service On Windows 2003 Server in a Japanese environment, the messages produced by the **twsClusterAdm.exe** program are garbled.

This is because the messages are being written in UTF-8 and not the local code page.

**Workaround:** Set the TISDIR environment variable to the *TWSHOME* directory.



- The InstallShield wizard installation fails if DBCS characters are used in the `-is:tempdir` path. (36979)

If you are installing using the `-is:tempdir` option and you specify DBCS characters in the path, the installation fails.

**Workaround:** Do not specify DBCS characters when using this option.

- In the output of the composer list and display commands the list and report headers are in English. (22301, 22621, 22654)

This has been done to avoid a misalignment of the column headers in DBCS versions that was making it difficult to understand the information.

- In the output of the product reports, the report headers are in English.

This has been done to avoid a misalignment of the column headers in DBCS versions that was making it difficult to understand the information.

- Data input is shorter in DBCS languages. (IY82553, 93843)

All information is stored and passed between modules as UTF8, and some characters occupy more than one byte in UTF8. For DBCS languages, each character is three bytes long. Western European national characters are two bytes long. Other Western European characters are one byte long.

- On Windows operating systems, you cannot create a calendar with a name containing Japanese characters using the **makecal** command. (123653)

**Workaround:** Enclose the calendar name in double quotes.

- On Windows operating systems, the Tivoli Workload Scheduler joblog is created with incorrect characters (IY81171)

You are working in a non-English language environment and you have correctly set the LANG and TWS\_TISDIR environment variables. However, the Tivoli Workload Scheduler joblog is created with incorrect characters in the body of the log (the headers and footers of the log are correct).

**Workaround:** The problem is caused by the codepage in use. Windows editors and applications use codepage 1252 which is correct for writing text files. However, the DOS shell uses the default codepage 850. This can cause some problems while displaying particular characters.

To resolve this problem for Tivoli Workload Scheduler jobs, add the following line to the beginning of the file `jobmanrc.cmd` on the workstation:

```
chcp 1252
```

For further details about the `jobmanrc.cmd` file, see the section on customizing job processing on a workstation in the *Tivoli Workload Scheduler: Reference Manual*.

It is possible to resolve this problem for all applications on the workstation, by using **regedit** to set the DOS codepage globally in the following registry keyword:

```
HKEY_LOCAL_MACHINE/system/current Control set/  
Control/Nls/Codepage/OEMCP =1252
```

You will need to reboot the workstation to implement the change.

**Note:** Microsoft warns you to take particular precautions when changing registry entries. Ensure you follow all instructions in Microsoft documentation when performing this activity.

- If the command line interface install path contains national characters, you need to open and save on that system the `twc_env.cmd` file before using it to set up the environment. (38891)

This limitation applies only Windows operating systems.

- Cannot link FTA if 'cpuname' contains DBCS chars on Simplified Chinese Windows Server 2003 (38880)
- tws\_env.cmd script does not work on Remote CLI on Simplified Chinese Windows Server 2003 (38867)

## Fix pack structure

This section describes the structure of the images contained in this fix pack.

It is divided into the following topics:

- “Fix pack structure in the installation CDs”
- “Fix pack files available via FTP on Passport Advantage” on page 16

### Fix pack structure in the installation CDs

Table 3 lists the CDs contained in this fix packs and the operating systems they relate to:

Table 3. List of fix pack CDs

CD	Operating System
CD_1	AIX®
CD_2	HP-UX on PA-RISC
CD_3	Solaris SPARC
CD_4	Windows
CD_5	Linux on x86
CD_6	Linux on POWER™
CD_7	Linux on System z9™™ and zSeries®®
CD_8	Solaris x64
CD_9	HP-UX on Itanium®
CD_10	Linux on x86-64
CD_11	Windows x64

The structure of the image contained in the CD for UNIX operating systems is the following:

```
+---UNIX_Operating_System
|
|   +---ACTIONTOOLS
|   |
|   |   +---CLI
|   |   |
|   |   |   +---bin
|   |   |   +---lib
|   |   |   +---msg_cat
|   |   |   +---C
|   |   +---WCONVCAT
|   |   +---bin
|   |   +---catalog
|   |   |
|   |   |   +---C
|   |   |   +---de
|   |   |   +---es
|   |   |   +---fr
|   |   |   +---jt
|   |   |   +---ja
|   |   |   +---ko
|   |   |   +---pt_BR
|   |   |   +---zh_CN
|   |   |   +---zh_TW
|   |
|   +---...
```

```

+---codeset
+---tws_tools
| +---oracle
+---SETUP.bin
+---twspatch
+---FP_TWS_UNIX_Operating_System.SPB
+---API
+---doc
+---Javadoc
+---com
+---ibm
+---tws
+---conn
+---engine
| +---class-use
+---exception
| +---class-use
+---model
| +---class-use
+---plan
| +---class-use
+---util
| +---class-use
+---event
+---class-use
+---plugin
| +---action
| | +---class-use
| +---class-use
| +---listener
| | +---class-use
+---type
| +---utility
| | +---class-use
+---util
| +---class-use
+---msg
| +---class-use
+---objects
+---class-use
+---filter
| +---class-use
+---log
| +---class-use
| +---types
| | +---class-use
| +---validator
| | +---class-use
+---model
+---class-use
+---rules
| +---class-use
| +---types
| | +---class-use
+---types
| +---class-use
+---validator
| +---class-use
+---plan
+---class-use
+---types
| +---class-use
+---utils
| +---class-use
+---rules
| +---class-use
| +---filter

```

```

+---class-use
+---types
+---class-use
+---validator
+---class-use
+---types
+---class-use
+---validator
+---class-use
+---runcycles
+---exceptions
+---class-use
+---types
+---class-use
+---util
+---collections
+---class-use
+---exception
+---class-use
+---patterns
+---class-use
+---zconn
+---engine
+---class-use
+---model
+---class-use
+---plan
+---class-use
+---resources
+---Wsd1
+---License
+---RESPONSEFILES
+---TWS4ITM

```

The structure of the image contained in the CD for Windows operating systems is the following:

```

+---API
+---doc
+---Javadoc
+---com
+---ibm
+---tws
+---conn
+---engine
+---class-use
+---exception
+---class-use
+---model
+---class-use
+---plan
+---class-use
+---util
+---class-use
+---event
+---class-use
+---plugin
+---action
+---class-use
+---class-use
+---listener
+---class-use
+---type
+---utility
+---class-use
+---util
+---class-use

```

```

+---msg
|
+---class-use
+---objects
|
+---class-use
+---filter
|
+---class-use
+---log
|
+---class-use
+---types
|
+---class-use
+---validator
|
+---class-use
+---model
|
+---class-use
+---rules
|
+---class-use
+---types
|
+---class-use
+---types
|
+---class-use
+---validator
|
+---class-use
+---plan
|
+---class-use
+---types
|
+---class-use
+---utils
|
+---class-use
+---rules
|
+---class-use
+---filter
|
+---class-use
+---types
|
+---class-use
+---validator
|
+---class-use
+---types
|
+---class-use
+---validator
|
+---class-use
+---runcycles
|
+---exceptions
|
+---class-use
+---types
|
+---class-use
+---util
|
+---collections
|
+---class-use
+---exception
|
+---class-use
+---patterns
|
+---class-use
+---zconn
|
+---engine
|
+---class-use
+---model
|
+---class-use
+---plan
|
+---class-use
+---resources
+---Wsd1
+---License
+---RESPONSEFILES
+---TWS4ITM
+---Windows_Operating_System
+---ACTIONTOOLS
+---CLI

```

```

| +---bin
| +---lib
| +---msg_cat
| +---C
+---VISTA
+---WCONVCAT
+---bin
+---catalog
| +---C
| +---de
| +---es
| +---fr
| +---it
| +---ja
| +---ko
| +---pt_BR
| +---zh_CN
| +---zh_TW
+---tws_tools
| +---oracle
+---SETUP.exe
+---FP_TWS_Windows_Operating_System.SPB

```

The structure of the image contained in the CD with label TWSSDK is the following:

```

+---TWS-SDK-WINDOWS.zip
+---TWS-SDK-LINUX.TAR

```

## Fix pack files available via FTP on Passport Advantage

This is the structure of the fix pack on Passport Advantage®:

```

+---8.4.0-TIV-TWS-FP0001.README (this file)
|
+---8.4.0-TIV-TWS-FP0001.VSR
|
+---AIX
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---HPUX
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---HPIA64
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---LINUX_I386
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---LINUX_PPC
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---LINUX_S390
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---LINUX_X64
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---SOLARIS
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---SOLARIS_I386
|   8.4.0-TIV-TWS-FP0001.TAR
|
+---WINDOWS
|   8.4.0-TIV-TWS-FP0001.zip
|

```

```
+---WINDOWS_64
|           8.4.0-TIV-TWS-FP0001.zip
+---TWSSDK
|           TWS-SDK-WINDOWS.zip
|           TWS-SDK-LINUX.TAR
```

---

## Installing the fix pack

This section describes how to upgrade the Tivoli Workload Scheduler version 8.4.0 to Fix Pack 1. Fix packs are cumulative, so you can apply them directly to the general availability version of the product.

The section is divided into the following subsections:

- “Installation notes”
- “Interoperability updates” on page 18
- “Disk space requirements” on page 19
- “Fix pack installation steps” on page 19
- “Installation methods” on page 20
- “Installing using the ISMP wizard” on page 21
- “Installing using the ISMP silent installation” on page 21
- “Installing on UNIX - using the twspatch script” on page 22
- “Installing using Software Distribution” on page 22
- “Installation log files” on page 23

### Installation notes

When installing, follow these recommendations:

- Use the same installation method (ISMP, **twspatch**, CM) to install, undo, commit the fix pack.

**Note:** If you want to APPLY the fix pack using **twspatch**, the uninstall of the fix pack must be performed using the command **twspatch -remove**. (38158)

- Do not install from a Samba disk on the Windows platform.
- On HP-UX set the kernel parameter `max_thread_proc` to 128 (at least). By default it is 64, otherwise the installation can fail. A core dump is generated by Java.

After the fix pack installation completes take into account the following information:

- After installing the Fix pack the last line of the `TwShome/version/patch.info` file will contain: 8.4.0-TIV-TWS-FP0001.
- During this fix pack installation the following file:

```
TwShome/appserver/profiles/twsprofile/temp/TWS/EIFListener/eif.temp1
```

is removed and a new one is created when the WebSphere Application Server is restarted.

If you previously modified the property `BuffEvtmaxSize`, after having installed the fix pack you have to set it again in the new file as it is described in the *IBM Tivoli Workload Scheduler Administrator's Guide - Chapter 2 - Managing the event processor*. (38192)

- Only if both conditions are satisfied:
  - the database used by Tivoli Workload Scheduler is DB2.

- the **dbgrant** script had already been run before installing this fix pack

you need to run again the **dbgrant** script after the fix pack installation to grant permissions to users on the updated database views. (38487)

- On systems running on Red Hat Enterprise Linux 3.0 install GLIBC version 2.3.4 to enable the SSM Agent (used in Event-driven workload automation rules with FileMonitor plug-in-related events) to start properly. With the default GLIBC version 2.3.2, the SSM Agent might not start. (38697)

Before running a repair of the fix pack installation make sure that:

- The following processes are inactive:

**On Windows:**

```
netman
monman
ssmagent
tokensrv
writer
batchman
batchup
JOBMAN
JOBMON
scribner
```

**On UNIX:**

```
netman
monman
ssmagent
tokensrv
writer
batchman
batchup
JOBMAN
scribner
```

- The following files are available and not corrupted (40042):

**On Windows under *TWS\_home\bin*:**

```
conman
setown.cmd
setown.exe
oslayer.dll
icudt*.dll
HTTPChannel.dll
HTTPSSLChannel.dll
HTTPTransport.dll
libatrc.dll
msv*.dll
```

**On UNIX under *TWS\_home/bin*:**

```
conman
libatrc.so
libicu*.so
libHTTP*.soinstmecho
mecho
```

## Interoperability updates

In addition to what was specified in the Tivoli Workload Scheduler version 8.4.0 Release Notes, Tivoli Workload Scheduler version 8.4.0 Fix Pack 1 interoperate with:

- Tivoli Workload Scheduler z/OS® connector version 8.3.0 Fix Pack 4
- Tivoli Dynamic Workload Console version 8.4.0 Fix Pack 1
- Tivoli Workload Scheduler Job Scheduling Console version 8.4.0 Fix Pack 1



## Disk space requirements

Before starting the fix pack installation in undoable mode, make sure you have at least 160 MB of free space in the UNIX root filesystem.

Make sure you have at least 400<sup>®</sup> MB of free space inside the local temp directory and at least 400 MB of free space inside the *TW\$user* home directory (the target installation directory) before starting the fix pack installation.

**Note:** On HP and Solaris operating systems the 400 MB required in the temporary directory are divided as follows:

- 250 MB available under */var/tmp*
- 150 MB available under *\$TMPDIR*. If the variable *\$TMPDIR* is not defined, the default directory */tmp*.

## Fix pack installation steps

This is the ordered list of steps run by the installer when doing an APPLY:

1. Stop the embedded version of WebSphere Application Server, version 6.1.
2. Backup the profile for the embedded version of WebSphere Application Server, version 6.1.
3. Install the Tivoli Workload Scheduler modelling and planning server, version 8.4 for master domain manager or backup master domain manager.
4. Install the Tivoli Workload Scheduler connector, version 8.4 for a Connector.
5. Update the profile for the embedded version of WebSphere Application Server, version 6.1.
6. Configure the Tivoli Workload Scheduler property files.
7. Install with rollback Tivoli Workload Scheduler scheduling engine.
8. Install with rollback Tivoli Workload Scheduler scheduling engine National Language Support.
9. Customize the SQL scripts used to configure the Tivoli Workload Scheduler database.
10. Configure the Tivoli Workload Scheduler database.
11. Start the embedded version of WebSphere Application Server, version 6.1.
12. Create uninstaller.
13. Configure the Tivoli Workload Scheduler instance.
14. Start the Tivoli Workload Scheduler instance.
15. Commit the Tivoli Workload Scheduler instance.
16. Install the Tivoli Workload Scheduler command line client.
17. Install the language pack for the Tivoli Workload Scheduler command line client.

This is the ordered list of steps run by the installer when doing an UNDO:

1. Stop the Tivoli Workload Scheduler instance.
2. Stop the embedded version of WebSphere Application Server, version 6.1.
3. Undo Tivoli Workload Scheduler scheduling engine National Language Support.
4. Undo Tivoli Workload Scheduler scheduling engine.
5. Restore the profile for the embedded version of WebSphere Application Server, version 6.1 for Conn.

6. Restore the profile for the embedded version of WebSphere Application Server, version 6.1 for master domain manager or backup master domain manager.
7. Start the Tivoli Workload Scheduler instance.
8. Start the embedded version of WebSphere Application Server, version 6.1.

## Installation methods

When you use the graphical installation or the command line installation you can perform one of the following actions:

- Apply the Fix Pack in "undoable" mode
  - This action allows you to go back using the roll back action to the previous fix pack.
- Roll back an undoable Fix Pack
  - This action allows you to roll back to the previous level
- Commit an undoable Fix Pack
  - This action does not allow you to roll back the Fix Pack
- Repair an already committed Fix Pack.
  - This action allows you to restore an existing Tivoli Workload Scheduler instance to the current committed level when a problem arises with a binary.

Depending on the Fix Pack installation state, you can perform the action as shown below:

Initial state	Action	Final State	Final State GA Pack
-	apply	IU	ICH
IU	commit	IC	-
IU	roll back	-	IC
IC	repair	IC	-

where:

- IU = installed undoable
- IC = installed and committed
- ICH = Installed, committed and hidden

If you have a Tivoli Workload Scheduler Fix Pack installed in "undoable mode" (IU state) on your machine and you are applying a more recent Tivoli Workload Scheduler Fix Pack on it, all the changes that you have made when installing the previous Tivoli Workload Scheduler Fix Pack will be committed before applying the newer ones. Therefore, if you undo the Fix Pack you last installed, you will restore the previous Fix Pack changes. These changes are permanent.

The fix pack installation is recorded in the TWSRegistry.dat file adding the following lines:

```
/Tivoli/Workload_Scheduler/ tws_user_DN_FixpackName=
FP_TWS_$(SWD-OS-NAME)_$(tws_user).8.4.0.$(patch_id)
```

where:

- \$(SWD-OS-NAME) depends on the platform where you are installing.
- \$(tws\_user) is the Tivoli Workload Scheduler instance owner.
- \$(patch\_id) is the Fix Pack number.

## Installing using the ISMP wizard

Follow these steps to install the fix pack using the wizard:

1. Unlink the host on which you are installing the patch from the IBM Tivoli Workload Scheduler network and shut down IBM Tivoli Workload Scheduler. Use the following commands:

```
conman "unlink @; noask"  
conman "stopmon;wait"  
conman "stop @; wait"  
conman "shut;wait"
```

If you had jobs scheduled on the computer, make sure they have completed; otherwise some processes, such as jobmon or joblnch, could still be active.

2. Choose one of the following:
  - Insert the CD that is related to your operating system;
  - Download the specific TAR or ZIP file for the operating system and unpack it. If you are installing on a UNIX operating system run the following command:

```
chmod -R 755 <imagesDir>
```

3. Depending on the type of operating system run:

**On Windows:**

```
SETUP.exe
```

**On UNIX:**

```
./SETUP.bin
```

to start the wizard and follow the instructions provided on the screen.

4. The installation starts.
5. Click **Finish** to complete the installation.

## Installing using the ISMP silent installation

An alternative way to use the graphical installation is the silent installation. The silent installation requires the customization of a response file. A sample response file is available on all CDs, in the ResponseFiles directory.

Run the following command from the path where the SETUP file is located to start the installation in silent mode:

• **On Windows:**

```
setup.exe -options patchInstall.txt -silent
```

• **On UNIX:**

```
./setup.bin -options patchInstall.txt -silent
```

where patchInstall.txt is the full path name of the response file you customized with your environment settings.

Table 4 lists the keywords you can set the -W actionPanel.selectedAction parameter to custom the response file to your needs:

Table 4. Parameters

KEYWORD	SCENARIO
APPLY	Install an undoable Fix Pack
ROLLBACK	Roll Back an undoable Fix Pack
COMMIT	Commit an undoable Fix Pack

Table 4. Parameters (continued)

APPLY_AND_COMMIT	Repair an installed and committed Fix Pack <b>Notes:</b> 1. This action is available only when you install a fix pack. It is not available on General Availability (GA) versions. 2. This action is available only from the installation wizard. It is not available via response file.
------------------	--

## Installing on UNIX - using the twspatch script

On all UNIX platforms you can use the **twspatch** script file to install the fix pack on Fault-Tolerant Agents (FTA). The synopsis of **twspatch** is:

```
./twspatch -{install | undo | commit | repair} -uname TWS_user
```

To install, follow these steps:

1. Unlink the host on which you are installing the patch from the IBM Tivoli Workload Scheduler network and shut down IBM Tivoli Workload Scheduler. Use the following commands:

```
conman "unlink @; noask"
conman "stopmon;wait"
conman "stop @; wait"
conman "shut;wait"
```

If you had jobs scheduled on the computer, make sure they have completed; otherwise some processes, such as jobmon or joblnch could still be active.

2. Choose one of the following:
  - Insert the CD that is related to your operating system
  - Download the specific tar file for your operating system
3. Untar it on your system.
4. Run **twspatch**.

## Installing using Software Distribution

To install the fix pack using software distribution use the following command:

```
• wdinstsp -f -uy -D execActionTools=false
  -D tws_user=<TWS_USER>
  -D install_dir=<TWS_HOME> <CPU_TYPE_DEF>
  -n <INST_PKG_NAME> <SPB_FILE_NAME>
```

where:

```
<CPU_TYPE_DEF> = -D st_agent=<true or false>
                 -D ft_agent=<true or false>
                 -D master=<true or false>
                 -D bkm_agent=<true or false>
```

```
<INST_PKG_NAME> = FP_TWS_<INST_INTERP>_<TWS_USER>.8.4.0.<PATCH_NUMBER>
```

```
<INST_INTERP> = AIX | HPIA64 | HPUX | LINUX_I386 | LINUX_S390 |
                LINUX_PPC | LINUX_X86_64 | SOLARIS_I386 |
                SOLARIS | WINDOW_X86_64 | WINDOWS
```

```
<PATCH_NUMBER> = fixpack level (e.g. 01)
```

```
<SPB_FILE_NAME> = spb file name with the complete path
```

## Error occurs when applying Tivoli Workload Scheduler 8.3.0 fix pack via ITCM - APAR IY94997:

The following problems may occur when applying a Tivoli Workload Scheduler 8.3.0 Fix pack via ITCM

- The installation process will fail during **twstopAction.exe**. if the Tivoli Workload Scheduler is stopped before installation, and **winstsp** is launched in a non-transactional way.
- If Tivoli Workload Scheduler is not stopped before installation, and **winstsp** is launched in a non-transactional way, the installation fails as the Msvcirt.dll library is locked (by **batchup.exe**)

As a workaround install the fix pack in one of the following ways: transactional and not transactional mode (**winstsp** command).

- Install in transactional mode, adding the '-ty' parameter
- Install the non-transactional mode (default mode) as follows:
  - Stop the Tivoli Workload Scheduler instance manually
  - Install the fix pack by adding the following command to the installation parameters:

```
'-D execTwsStopAction="false"  
-D execTwsStartUpAction="false"'
```

## Installation log files

The following are the installation log files where you can see the details about the status of the fix pack installation for the master domain manager, backup master domain manager, Fault-Tolerant Agent and connector:

- Trace file for ISMP installer

### On Windows:

```
%TEMP%/tws84fixpack/twsiimp.log
```

### On UNIX:

```
$TMPDIR/tws84fixpack/twsiimp.log
```

- Log file for ISMP installer

### On Windows:

```
%TEMP%/tws84fixpack/summary.log
```

### On UNIX:

```
$TMPDIR/tws84fixpack/summary.log
```

- Log file for Tivoli Workload Scheduler installer.

### On Windows:

```
%TEMP%/tws84fixpack/twsinst_<INST_INTERP>_<TWSuser>^8.4.0.01.log
```

### On UNIX:

```
$TMPDIR/tws84fixpack/twsinst_<INST_INTERP>_<TWSuser>^8.4.0.01.log
```

- Log file for CM installation.

### On Windows:

```
%TEMP%/FP_TWS_<INST_INTERP>_<TWSuser>^8.4.0.01.log
```

### On UNIX:

```
$TMPDIR/FP_TWS_<INST_INTERP>_<TWSuser>^8.4.0.01.log
```

For information on INST\_INTERP refer to “Installing using Software Distribution” on page 22.

If the variable \$TMPDIR is not set on the UNIX system then the default /tmp is assumed.

---

## Documentation updates

The following documentation has been refreshed with this fix pack:

### **Tivoli Workload Scheduler: Planning and installation guide**

- All configuration and customization documentation has been moved to the Administration part of the *Administration and Troubleshooting guide* (except where the activity is only ever performed immediately after installation, and never subsequently changed). This is because configuration and customization are activities that you perform during the life of the product as well as just after installation. This includes:
  - General configuring and customizing
  - Global options
  - Localopts
  - Useropts
  - Configuring SSL
  - Security file and authorizations, including **makesec** and **dumpsec** commands
  - Configuring connection parameters (command-line client connection)
- The information about integrating Tivoli Workload Scheduler with other products has been moved to a separate publication.

### **Tivoli Workload Scheduler: Reference guide**

All documentation related to administrative matters has been moved to the Administration part of the *Administration and Troubleshooting guide*. This includes:

- Global options and **optman**
- Tivoli Workload Scheduler console messages and prompts
- Security file and authorizations, including **makesec** and **dumpsec** commands
- Enabling time zones
- Miscellaneous administrative commands: **evtsize**, **StartUp**, **version**

### **Tivoli Workload Scheduler: Administrator and Troubleshooting guide**

This publication has been reorganized, and now includes the above-mentioned administration information taken from the *Planning and Installation Guide* and the *Reference Guide*.

### **Integrating With Other Products**

This is a new publication, containing both the material that was previously documented in the *Reference Guide*, and some descriptions of additional integrations possible with Tivoli Workload Scheduler.

**Note:** Changed or added text with respect to the previous version is marked in the left margin by the number of the fix pack. For example, 1 to refer to Fix Pack 1.

These are the fixes for the documentation APARs and internal defects that are made available in the refreshed product documentation:

**IBM Tivoli Workload Scheduler version 8.4 Reference Guide (Revised March 2008) SC32-1274-07**

**IZ10959**

Chapter 8. Managing objects in the plan - conman: in the

**Comments** section of the description of the **cancel sched** command, the following information was added:

"If the cancelled job stream contains jobs defined with the **every** option, only the last instance of such jobs is listed as canceled in a **showjobs** display."

**IZ11421**

In the output of commands **show jobs sj** and **show schedule ss**, it has been specified that pending predecessor are marked with [P] in the **Dependencies** columns.

**IZ15598**

The following topic was changed from:

If you submit the [job] job stream from a workstation other than the master domain manager you must be connect as a user that is:

- defined in the user registry used by WebSphere Application Server for authentication
- authorized to perform submit commands in security file stored on the master domain manager.

The submit schedule command uses the credentials set in the useropts file belonging to the TWS\_user who installed that workstation.

to:If you submit the [job] job stream from a workstation other than the master domain manager you must be:

- connecting as a user that has appropriate rights in the master's Security file;
- a user on an FTA where both users have been set up according to what is stated in Chapter 4, Setting up command-line authentication and user authorizations, Section: Setting up options for using the command-line user interface.

**IZ17386:**

In the description of the **conman limit cpu** command the content the following note:

**Note:** If you set **lc** to zero, no jobs, other than **hi** and **go** priority jobs contained in a job stream in **READY** state, are launched on the workstation.

was modified as follows:

**Note:** For a job stream in the **READY** state, only jobs with **hi** and **go** priority values can be launched on the workstation.  
For a job stream with a **hi** priority value, all jobs with a priority value other than 0 can be launched on the workstation.





---

## Chapter 2. Contacting IBM Software Support

Before contacting IBM Software Support with a problem, refer to the IBM Software Support site by accessing the following Web address:

<http://www.ibm.com/software/support>

To access Tivoli support, click the Tivoli support link at the bottom right of the page.

If you want to contact IBM Software Support, see the *IBM Software Support Guide* at the following Web site:

<http://techsupport.services.ibm.com/guides/handbook.html>

The guide provides information about how to contact IBM Software Support, depending on the severity of your problem, and the following information:

- Registration and eligibility.
- Telephone numbers, depending on the country in which you are located.
- Information you must have before contacting IBM Software Support.



---

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