

IBM Tivoli Workload Scheduler



# Readme File for Fix Pack 01

*Version 8.5.1*



IBM Tivoli Workload Scheduler



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*Version 8.5.1*

**Note**

Before using this information and the product it supports, read the information in Chapter 3, "Notices," on page 33.

This edition applies to Fix Pack 1 for version 8, release 5, modification level 1 of IBM Tivoli Workload Scheduler.

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# Chapter 1. IBM Tivoli Workload Scheduler Readme File for Fix Pack 01 for Version 8.5.1

**Date** 28 May 2010

**Fix Pack**  
8.5.1-TIV-TWS-FP0001

**Product**  
IBM® Tivoli® Workload Scheduler Version 8.5.1

**General Description**  
IBM Tivoli Workload Scheduler Fix Pack 01 for Version 8.5.1

This readme file provides important information about Fix Pack 1 (PTF XXXXXX) for IBM Tivoli Workload Scheduler version 8.5.1.

This readme file is the most current information for the fix pack and takes precedence over all other documentation for Tivoli Workload Scheduler version 8.5.1 Fix Pack 1.

It is divided into the following sections:

- “About this fix pack”
- “Fix pack structure” on page 16
- “Installing the fix pack” on page 17
- “Documentation updates” on page 30

*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 8.5.1.

This section includes the following subsections:

- “Features introduced with Fix Pack 01” on page 2
- “Problems fixed” on page 3
- “Known limitations and workarounds” on page 7
- “Internationalization notes” on page 15

## Features introduced with Fix Pack 01

This section lists the features in Tivoli Workload Scheduler version 8.5.1 Fix Pack 01:

### Serviceability has been improved

Starting from Tivoli Workload Scheduler V8.5.1 Fix Pack 1, it is easier to determine and solve the cause of network communication problems between domain managers and workstations. A new netman service, named `chkhlstst`, has been introduced, to verify the health status of the workstation. When the `link` command is issued and a connection has been established, if the domain manager does not receive any reply within the timeout period, this service is automatically invoked by `mailman`. The service verifies that the workstation mailbox can be successfully read, and checks if there are any errors in the mailbox header. Resulting information is logged in the `TWSMERGE.log` file on the domain manager.

### Scheduling specific job types

You can define and schedule dynamic jobs to perform database, file transfer, Java, and Web Services operations. You can customize the sample files provided with the product to match the requirements of your environment.

### Configuring traces without stopping and restarting the agent

Trace files are enabled by default for the Tivoli Workload Scheduler agent. You can use the `enableTrace`, `disableTrace`, `showTrace`, `changeTrace` commands to configure traces without stopping and restarting the agent, except for the following platforms:

- AIX
- HP IA-64
- HP-UX

### Monitoring the health of your Tivoli Workload Scheduler environment

You can use event-driven workload automation (EDWA) to monitor the health and status of your Tivoli Workload Scheduler environment. You can also start a predefined set of actions when one or more specific events take place. You can monitor the size of message queues, the disk space used by Tivoli Workload Scheduler, and the status of Tivoli Workload Scheduler processes.

### Running the resource command also from Tivoli Workload Scheduler agents

You can create and manage resources and groups of resources and computers from Tivoli Workload Scheduler agents in addition to the master domain manager. For this purpose, an additional instance of the `CLIconfig.properties` file is installed with the fix pack on every agent. If you intend to run the resource command from an agent, you must configure certain keywords of `CLIconfig.properties` locally.

### Improvements in the integration with IBM Tivoli Monitoring using a script data provider

The integration between Tivoli Workload Scheduler and IBM Tivoli Monitoring using a script data provider adds monitoring for two additional processes:

- `appserverman`
- Websphere Application Server

and for additional message files:

- `Appserverbox.msg`



- C1box.msg

## 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:

- **IZ25976:** REPTR TRUNCATES FOLLOWS JOB STREAM NAME.
- **IZ31273:** "WITHIN AN ABSOLUTE INTERVAL" DEPENDENCY IS LOST OVER JNEXTPLAN IF ENLEGACYSTARTOFDAYEVALUATION IS SET TO YES.
- **IZ52128:** EHCI ERROR LOG MESSAGE ON UNCONFIGURE.
- **IZ52139:** TWS 85 RUNCYCLES WITH WORKDAYS DID NOT WORK PROPERLY.
- **IZ52178:** SCHEDULE IS NOT PLANNED CORRECTLY AFTER DELETING THE SAME JOB STREAM NAME WITH "VALIDFROM" OPTION.
- **IZ55767:** "CONMAN SBS" FAILS WITH AWSJPL006E ON COCURRENT SUBMISSION.
- **IZ56270:** CHANGE THE MIN VALUE OF MAXLEN FROM 14 DAYS TO 8 DAYS.
- **IZ60209:** DEPLOYMENT OF EVENT DRIVEN RULES FAIL WHEN WORKSTATION NAME IS LESS THAN 3 CHARACTERS LONG.
- **IZ60853:** JOB STREAM CANCEL PEND DEPENDENCIES NOT RELEASED.
- **IZ62730:** TWS EVENTS DUPLICATION.
- **IZ63856:** ENLISTSECCK NOT ENFORCED ON ALTERNATE PLANS THROUGH TDWC OR JSC.
- **IZ63868:** ATTEMPTING TO DELETE DUPLICATE OPENS DEPENDENCIES FROM JSC CAUSES APPLICATION SERVER JAVA TO CORE DUMP.
- **IZ64003:** CENTRALIZED SCRIPTS IN END TO END ENVIRONMENT START AND FAIL EVEN IF AUTOMATIC SUBMISSION SET TO NO.
- **IZ64479:** FTA STATUS DOES NOT BECOME INITTED ON BDM, IF FTA IS NOT ABLE TOLINK TO BDM BY THE FIRST AUTOLINK ATTEMPT.
- **IZ64725:** FINAL JOBS ABEND IF MDM IS INSTALLED TO THE DIRECTORY OTHER THAN C-DRIVE ON WINDOWS 2008.
- **IZ64931:** JOBSTATUSCHANGED EVENT RULE IS NOT TRIGGERED FOR FAILED JOB.
- **IZ65453:** TWSMERGE LOG AND /STDLIST/<DIRECTORY> OWNED BY ROOT INSTEAD OF TWSUSER.
- **IZ65928:** TWS DB2 INSTALL FAILS IF USER HAS ) SIGN IN PASSWORD.
- **IZ66027:** DEPENDENCY ADDED IS WRITTEN IN TWSMERGE.LOG REPEATEDLY.
- **IZ66322:** JOBMON.EXE START FAIL MSG IF TWSUSER CANNOT OPEN FILE IN TEMP.
- **IZ66678:** JOBS DURING DST WINDOW ARE DELAYED RUNNING.

- **IZ67125:** FORECAST PLAN CANNOT BE GENERATED BECAUSE OF JAVA NULLPOINTER EXCEPTION.
- **IZ67125:** FORECAST PLAN CANNOT BE GENERATED BECAUSE OF JAVA NULLPOINTER EXCEPTION.
- **IZ67385:** FILE MONITORING EVENT IS INCORRECTLY SHOWING FILE AS BEING UPDATED, EVEN WHEN IT'S NOT.
- **IZ67552:** LOGMAN RETURNS EXIT CODE 0 EVEN IF IT FAILS TO REMOVE OLD LTP.
- **IZ67993:** MODIFICATION OF A CALENDAR DATA IS NOT REFLECTED TO THE PLAN.
- **IZ68159:** AUDIT HEADER USER FIELD IS NOT CLEAR.
- **IZ68546:** ALLOW SCHEDULE IN ADDING STATE TO CARRY FORWARD.
- **IZ69965:** R11XTR WITH -M OPTION SHOWS THE INCORRECT DATE.
- **IZ69966:** VENT TYPE OF "JOBSTREAMCOMPLETED" IS NOT TRIGGERED.
- **IZ69984:** DB2 DEADLOCK WHEN EDITING JOB STREAMS AND CREATING A PLAN. AWSJDB803E REASON CODE "2".
- **IZ70293:** COMPOSER DISPLAY/CREATE/EXTRACT RETURNS FEW SCHEDULES.
- **IZ70415:** ADHOC SUBMISSIONS WITH PROMPTS HAVE THE SAME PROMPT NUMBER.
- **IZ70630:** AT THE END OF DAILY PLAN MANY FTAS DO NOT LINK.
- **IZ70640:** SSM AGENT LOGS ARE CREATED WITH WRITE PERMISSIONS FOR "OTHERS" REGARDLESS OF THE UMASK SETTING FOR ROOT ON AIX SYSTEMS.
- **IZ70730:** BATCHMAN CORE OR STAGEMAN ERROR IF ACCESSING BAD FOLLOWS RECORD.
- **IZ71230:** JOB STREAM CANCEL NOT LOGGED IN PLAN AUDIT.
- **IZ71924:** JNEXTPLAN NOT DELETING OBSOLETE/COMPLETED JSI FROM PREPRODUCTIONPLAN.
- **IZ72154:** UNIXLOCL METHOD DOESN'T PERFORM CHECK OF FILE EXISTENCE IF OPERABLE PROGRAM OR BATCH FILE.
- **IZ72156:** STAGEMAN COMPLETE SYMPHONY CREATION ALSO IF WRONG RECORD INTO SYMNEW IS FOUND.
- **IZ72810:** TWS - MANY SSMAGENT.BIN PROCESSES, ONE STARTED EVERY 5 MINUTES.
- **IZ72911:** JOBINFO RSTRT\_RETCODE COMMAND IN A RECOVERY JOB DOES NOT RETURN CORRECT VALUE IF PARENT JOB IS RERUN & ABENDS W/DIFFERENT CODE.
- **IZ73054:** TWSMERGE LOG NOT SWITCHED CORRECTLY.
- **IZ73256:** JOB STREAM ID IS DISPLAYED AS JOBSTREAMNAME IN MESSAGE TEXT ON OPERATOR MESSAGE FOR FAILED JOB WITH NO SCRIPT.
- **IZ73339:** RELEASE COMMAND FROM JSC/TDWC DID NOT SET THE PRIORITY BACK TO THE ORIGINAL ONE.
- **IZ74028:** EVENTS BEING TRIGGERED MULTIPLE TIMES.
- **IZ74287:** ON TWS 8.5.1 AWSBIN109EMESSAGE IS SHOWN WHEN FROM JSC/TDWC A DEPENDENCY IS ADDED TO A JOB STREAM IN THE PLAN.

- **IZ74474:** TRIGGERED ACTION IS NOT LISTED IN MONITOR TRIGGERED ACTIONS.
- **IZ74475:** JOB ITERATIONS ARE SKIPPED IF MESSAGE THAT UNTIL HAS EXPIRED IS DISPLAYED AT SAME TIME.
- **IZ75151:** TSM XA JOBS THAT ABEND ARE MARKED AS SUCCESSFUL IN TWS.
- **IZ75620:** MAILMAN PROBLEM CAUSED BY USERJOBS MANAGEMENT.
- **IZ76066:** REPORTS CORE DUMP ON SOLARIS DURING MAKEPLAN.

**List of defects fixed:**

This list contains the defects that fixed some of the limitations reported in the Tivoli Workload Scheduler Version 8.5.1 Release Notes:

- **40616:** Job Stream cancel operation with API is not logged in plan audit.
- **50632:** Missing checks setting a TWS queue size.
- **52411:** twspatch: fixpack not installed even if successful linux ppc.
- **52484:** event with var not solved, submit parms overwritten as-is.
- **52511:** TWS-ITM:twaserver pid is different in TWSApplicationServer.sh.
- **52546:** TWS-ITM: "TWSHost.sh" and "TWSSpaceFree.sh" has errors on LINUX.
- **52550:** Missing check creating a file monitor event rule.
- **52751:** TDWB\_CLI:The message should be clear if Server Ports are wrong.
- **52933:** Incorrect behavior creating an event rule with EVERY filter.
- **52958:** Job not submitted due to incorrect check in login name.
- **53098:** Agents are not able to connect to the server: error code 404.
- **53184:** Integration TWS-ITM: missing scripts.
- **53189:** EDWA submit job action fails when a parameter is included.
- **53226:** file system monitor on win not working when multiple monitors.
- **53243:** if two rules monitor processes the first one is no more trigger.
- **53253:** Error submitting a job using ws executor on Win.
- **53278:** J2EE z/OS: jobs remain in started after a restart of the.
- **53279:** JOBLOG for J2EE job.
- **53281:** TEP - Errors in metafile with UA 6.2.1.
- **53285:** J2EE z/OS: Job completed with error.
- **53289:** CSITransactionRolledbackExc submitting after a wrong del.
- **53290:** WINDOWS:tdwb\_user and tdwb\_pwd missing in CLIconfig.prop.
- **53325:** Add Plan View counters.
- **53337:** RemoteCli.zip for fixpack.
- **53341:** Get job output fails the day of the daylight saving time.
- **53362:** submission a job with file system full.
- **53413:** PV: unclear msg if Symphony exists but contains 0 job st.
- **53453:** jobstdl does not work with short format.
- **53463:** getjobOutput on archived files does not work.
- **53505:** Plan View: error in query JobStream from plan object.
- **53545:** TDWB is not running anymore after applying fixpack.

- 53570: Error launching a file Transfer executor job with FTP pr.
- 53572: Missing checks submitting corrupted file transfer jsdl.
- 53573: Missing code messages after submission of executor jobsl.
- 53581: IZ70293 COMPOSER DISPLAY/CREATE/EXTRACT RETURNS FEW SCHE.
- 53587: agentType="LWA" is missing in the silent installation.
- 53594: Cache of Properties ini file did not work fine.
- 53602: wrong disk space check for REMCLI on FP1.
- 53610: Incorrect behavior submitting a ws executor job.
- 53612: Missing checks submitting a ws wrong jsdl.
- 53613: Incorrect implementation of DataBaseJobExecutor.
- 53617: Cannot configure the TEP integration.
- 53623: Check space on file system (SW distribution).
- 53624: Incorrect codes formats after job executors submission.
- 53625: fixItImSign.bat does not handle path with spaces on Wind.
- 53629: Missing message codes for web services jsdl executor
- 53630: Failure launching a java executor job without parameters.
- 53632: Missing check after submission of jsdl with empty dbms.
- 53633: Job hang after file transfer job execution on win64 bit.
- 53643: JobManager unexpected shut down after ITA agent process.
- 53650: Variables not resolved after invalid job submission.
- 53651: Incorrect message after db job submission.
- 53654: wrong detection of circular dependencies
- 53656: Missing code after submission of ws invalid jsdl
- 53658: Error submitting a webService job using https protocol on Sun.
- 53668: swdis size is increased applying FP on LWA agent with J
- 53673: Missing cause failure after ft job submission.
- 53680: Incorrect standard output retrieving a job output from c
- 53690: Localopts does not updated with the new key
- 53691: Corrections for WSGeneric.jsdl.
- 53693: Sample jsdl provided in tws 851 is not working.
- 53698: Error submitting a job using ws executor.
- 53701: Error installing agent zCentric on Windows machine
- 53703: Java job hang specifying blanck spaces in JVMOptions key
- 53705: Windows: wconvcat.exe encountered a problem
- 53711: JnextPlan and bridged job in EXEC: symphony corruption P
- 53712: JnextPlan while xatemplate job in EXEC carried forward i
- 53717: Incorrect protocol name for file transfer jobs
- 53725: Incorrect job status after invalid ft job submission
- 53726: Missing cause failure after ft job submission
- 53729: Missing check submitting an invalid java job
- 53732: j2ee job hang after agent restart
- 53733: Incorrect standard output retrieving a job output from cli
- 53737: Error message for job having jobtype Webserv on z-Centri
- 53740: Error submitting a webService job using https protocol o

- 53743: Exception submitting an executor job without correct per
- 53746: Agent core dump on HP after JVMOptions set
- 53748: Variables not resolved after invalid job submission
- 53751: Incorrect message after db job submission
- 53755: TDWC\_CLI doesn't work on UNIX agents
- 53758: Cannot configure the TEP integration
- 53761: TDWB\_CLI: trim could be used for ITDWB Server Ports
- 53763: Failure launching a java executor job without parameters
- 53764: TDWB\_CLI:The message should be clear if Server Ports are
- 53766: Some files locked during uninstall of MDM
- 53767: the MDM uninstall doesn't stop the TWS instance
- 53768: Error submitting java jobs after agent restart
- 53775: Messages are corrupted in the catalog
- 53782: submission a job with file system full
- 53795: overwrite plugins on TDWB servers
- 53796: TWS Cluster resource fails to start with Symphony
- 53799: Batchman-old remove batchman pids, broking the ITM integ
- 53807: J2EE z/OS: jobs remain in started after a restart of the agent.
- 53819: non blocking awk error when using wastools
- 53824: Unable to perform a job cancel operation on Win 64 bit machine
- 53845: UPG MDM fails since WAS doesn't restart
- 53846: JSDL editor does not contain a field fon interactive jobs
- 53847: Error submitting a job using ws executor on Windows
- 53857: Unable to submit job with ipv6 enabled
- 53858: usability : underline the difference between TWS and TWA user
- 53824: Unable to perform a job cancel operation on Win 64 bit machine
- 53861: backupconfig wastool not working on AIX
- 53903: usability : explain that MDM install an embedded agent also
- 53907: Plan connector doesn't detect circcular reference
- 53910: wrong start time and end time for submission of j2ee job
- 53942: Interactive flag not handled for broker type job
- 53944: cluster fta instance is not able to start automatically on w2k8
- 53956: tws\_inst\_pull\_info.cmd: TWS version discovery not working at fi
- 53966: TDWB cli commands work only in the bin dir

## Known limitations and workarounds

The following are software limitations and workarounds that affect Tivoli Workload Scheduler version 8.5.1 Fix Pack 1:

### During installation:

**In the interactive InstallShield wizard on UNIX® and Linux® platforms, any passwords that you enter are not validated at data input**

No password validation is performed in the interactive InstallShield wizard on UNIX and Linux platforms at data input. If you make an error in the password, it is only discovered when the installation wizard attempts to use the password during the performance of an installation step.

**Workaround:** Rerun the installation, using the correct value for the password.

**On Red Hat Enterprise Linux V5.0 the automount feature does not work**

On Red Hat Enterprise Linux V5.0, after inserting the DVD and double-clicking the desktop icon, the following message is displayed:

```
./setup.sh: /bin/sh: bad interpreter: Permission denied
```

This is because the automount feature mounts the DVD with the option `-noexec`, which is not compatible with how Tivoli Workload Scheduler uses the DVD.

**Workaround:** To solve the issue, *umount* the DVD, and manually remount it, using the following command:

```
mount /dev/scd0 /media
```

**In a remote silent installation on Windows 64 platforms, the installation fails (52485)**

During a remote silent installation on Windows 64 platforms, the installation fails because of a defect in the InstallShield. On Windows 64 platforms, it is not possible to perform a remote Tivoli Workload Scheduler silent installation using a scheduling product.

**Workaround:** Use the graphic desktop to install Tivoli Workload Scheduler in silent mode.

**In a remote Command Line Interface installation of Tivoli Workload Automation V8.5.1 on HP Itanium platforms, no Java Runtime Environment is found (53784, 53904)**

During a remote Command Line Interface installation of Tivoli Workload Automation V8.5.1 on HP Itanium platforms, followed by a remote Command Line Interface installation of Tivoli Workload Automation V8.5.1 Fix Pack 1, the following error is shown:

```
No Java Runtime Environment (JRE) was found on this system.
```

**Workaround:** To solve the problem, delete the content of directory `/tmp`.

**After fix pack installation a directory `_ssm` is created on Windows 2003 (43402)**

After applying successfully the Tivoli Workload Scheduler 8.5.1 Fix Pack 1, a directory `_ssm` is created under the `<TWS_home>` directory on Windows 2003.

The Tivoli Workload Scheduler 8.5.1 Fix Pack 1 installation was unable to remove the old copy of ssm agent, before copying the new one, for one of the following reasons:

- Some ssm binaries are locked by a non-Tivoli Workload Scheduler application
- The ssm agent Windows service was not started by the monman process, and therefore it was not stopped by monman during the fix pack installation, before patching the ssm agent

A warning message is logged in the fix pack installation log for this problem.



The directory <TWS\_home>\\_ssm contains the new version of the ssm agent installed with Tivoli Workload Scheduler 8.5.1 Fix Pack 1. To correctly install it, unlock the ssm binaries in the <TWS\_home>\ssm directory (stopping manually the ssm agent Windows service or killing the applications that lock the binaries), and remove the content of the <TWS\_home>\ssm directory, replacing it with the content of the <TWS\_home>\\_ssm directory.

When you have replaced the content of the <TWS\_home>\ssm with the content of <TWS\_home>\\_ssm, you can remove the directory <TWS\_home>\\_ssm.

**Workaround:** To avoid the problem before applying the Tivoli Workload Scheduler 8.5.1 Fix Pack 1, do the following:

- Check that the ssm binaries are not locked by non-Tivoli Workload Scheduler applications.
- Start and stop the ssm agent using exclusively the monman start and stop commands. Do not use the Windows Services console to start or stop the ssm agent service manually.

#### At run time:

##### Interoperability problem on Linux platforms

On Linux platforms there are connectivity problems between Tivoli Dynamic Workload Console version 8.5 or version 8.5.1 and older Tivoli Workload Scheduler versions configured with the Custom user registry. The connection does not work because of a missing variable in the configuration of the embedded WebSphere Application Server on Tivoli Workload Scheduler. If you run Tivoli Workload scheduler version 8.4 (where Custom user registry is the default configuration value on Linux), or if you use PAM authentication, you must expect to experience such connectivity problems with Tivoli Dynamic Workload Console version 8.5.

To check if the Tivoli Workload Scheduler version 8.4 engine on the Linux system is configured based on the Custom user registry, do the following on the master domain manager of the Tivoli Workload Scheduler version 8.4 engine:

1. Run the showSecurityProperties.sh script from <TWS\_home>/wastools and check if the value of the activeUserRegistry property is *Custom*. Also, take note of the value of LocalOSServerREALM.
2. If the value of activeUserRegistry is not *Custom*, there are no connectivity problems and you need do nothing. If the value is *Custom*, then you need to apply the following workaround on Tivoli Workload Scheduler:

- a. Edit the

```
<TWS_home>/appserver/profiles/twsprofile/config/cells/  
DefaultNode/security.xml
```

file as follows:

- 1) Find the activeUserRegistry key. The value is like CustomUserRegistry\_<series of numbers>
- 2) Search the userRegistries section of the file, where the value of xmi:id is the same as the value of the activeUserRegistry key.

- 3) In the same section, after the LocalOSSserverPassword variable declaration, add the following string:  
`realm=LocalOSServerREALM` where *LocalOSServerREALM* value is the value you took note of in step 1.
- b. Save the file.
- c. Run `stopWas.sh` and then `startWas.sh` from `<TWS_home>/wastools` to restart the embedded WebSphere Application Server (44551).

**File eif.templ is recreated when migrating from version 8.4 or 8.5 General Availability to version 8.5.1**

When Tivoli Workload Scheduler version 8.4.0 (the General Availability version without the addition of any fix pack) is migrated to version 8.5, before the embedded WebSphere Application Server is restarted, the file

```
<TWS_home>/appserver/profiles/twsprofile/temp/TWS/EIFListener/eif.templ
```

is removed and replaced with a new one.

This means that, if you had changed the value of property `BuffEvtmaxSize` in this file, your changes are lost. If this happens, you must set the value of this property again in the new version of the file. The section *Managing the event processor* in the *IBM Tivoli Workload Scheduler: Administration Guide* documents how to do this. (38971)

Note that the new copy of the file is created in the new path, which is:

```
<TWA_home>/eWas/profiles/twaprofile/temp/TWS/EIFListener/eif.templ
```

**Deploying large numbers of event rules**

The rule deployment process, run either automatically or with the `planman deploy` command, performs slowly when you deploy high numbers, 2000 and more, of new and changed rules.

**Workaround:** If you need to deploy large numbers of event rules, do either of the following to improve performance:

- **Use `planman deploy` with the `-scratch` option:** To deploy large numbers of rules collectively in an acceptable time limit, use `planman deploy` with the `-scratch` option (37011).
- **Increase the Java heap size of the application server:** Increase the Java heap size of the application server, as described in the *Scalability* section of the *Performance* chapter in the *Administration Guide*. It is difficult to decide when to increase the heap size, but consider a deployment of several thousands of rules as being at risk from an out of memory failure.

**"Absolute" keyword required to resolve time zones correctly with `enLegacyStartOfDayEvaluation` set**

If the master domain manager of your network runs with the `enLegacyStartOfDayEvaluation` and `enTimeZone` options set to *yes* to convert the `startOfDay` time set on the master domain manager to the local time zone set on each workstation across the network,



and you submit a job or job stream with the **at** keyword, you must also add the **absolute** keyword to make sure that the submission times are resolved correctly.

The **absolute** keyword specifies that the start date is based on the calendar day rather than on the production day. (41192)

#### **Deploy (D) flag not set after ResetPlan command used**

The deploy (D) flag is not set on workstations after the **ResetPlan** command is used. This is not a problem that affects the processing of events but just the visualization of the flag that indicates that the event configuration file has been received at the workstation.

**Workaround:** You can choose to do nothing, because the situation will be normalized the next time that the event processor sends an event configuration file to the workstation. Alternatively, if you want to take a positive action to resolve the problem, do the following:

1. Create a dummy event rule that applies only to the affected workstations
2. Perform a planman deploy to send the configuration file
3. Monitor the receipt of the file on the agent
4. When it is received, delete the dummy rule at the event processor. (36924 / 37851)

#### **Some data is not migrated when you migrate database from DB2® to Oracle, or vice versa**

Neither of the two migration procedures migrate the following information from the source database:

- The pre-production plan.
- The history of job runs and job statistics.
- The state of running event rule instances. This means that any complex event rules, where part of the rule was satisfied prior to the database migration, are generated after the migration as new rules. Even if the subsequent conditions of the event rule are satisfied, the record that the first part of the rule was satisfied is no longer available, so the rule is never completely satisfied. (38017)

#### **Event *LogMessageWritten* is not triggered correctly**

You are monitoring a log file for a specific log message, using the *LogMessageWritten* event. The message is written to the file but the event is not triggered.

**Cause:** The SSM agent monitors the log file. It sends an event when a new message is written to the log file that matches the string in the event rule. However, there is a limitation. It cannot detect the very latest message to be written to the file, but only messages prior to the latest. Thus, when message line "n" is written containing the string that the event rule is configured to search for, the agent does not detect that a message has been written, because the message is the last one in the file. When any other message line is written, whether or not it contains the monitored string, the agent is now able to read the message line containing the string it is monitoring, and sends an event for it.

**Workaround:** There is no workaround to resolve this problem. However, note that in a typical log file, messages are being written

by one or other processes frequently, perhaps every few seconds, and the writing of a subsequent message line will trigger the event in question. If you have log files where few messages are written, you might want to attempt to write a dummy blank message after every "real" message, to ensure that the "real" message is never the last in the file for any length of time. (33723)

**Microsoft® Remote Desktop Connection must be used with the "/console" option**

If you use the Microsoft Remote Desktop Connection to run Tivoli Workload Scheduler, you must use it always with the "/console" parameter, otherwise Tivoli Workload Scheduler gives inconsistent results.

**The planman showinfo command displays inconsistent times (IZ05400)**

The plan time displayed by the planman showinfo command might be different from 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 to the time zone defined for the workstation in the Tivoli Workload Scheduler database. Proceed as follows:

1. Create a backup copy of this file: appserver/profiles/twspfile/config/cells/DefaultNode/nodes/DefaultNode/servers/server1
2. Open server1.xml with an editor.
3. 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.

4. Stop WebSphere Application Server.
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 and 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 Tivoli Dynamic Workload console or the Job Scheduling Console fails.

**Workaround:** To establish a connection in this specific environment, 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
```

### **Different behavior of UNIX and Windows operating systems at springtime daylight savings (94279)**

During the springtime daylight savings time change (01:59:59-03:00:00), different operating systems behave differently. 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).

### **The writer process on a fault-tolerant agent does not download the Symphony file (22485)**

If you delete the Symphony file on a fault-tolerant agent, writer automatically downloads it when it next links to the master domain manager. However, this does not happen if you launch conman before the file has downloaded.

**Workaround:** Delete the *mailbox.msg* file and writer downloads the Symphony file.

### **File monitor provider events: older event configurations might 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, despite the new configurations, the local monitoring agents still forward the file monitoring events to the event processor. The event processor correctly 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 is 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 file (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. 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 correctly, an incorrect monitoring agent status is shown on the workstations.

#### **Tivoli Dynamic Workload Broker server is not started when the database is down (52307)**

If the database is not running, the Tivoli Dynamic Workload Broker Server is not started.

**Workaround:** When the database is started, you must manually start the Tivoli Dynamic Workload Broker server. See the *Administration Guide* for instructions about how to start the Tivoli Dynamic Workload Broker server.

#### **Event rule management: Submit docommand within event rule (49697)**

Defining an event rule with the submit docommand (SBD) action, containing character '\', for example:

```
<action actionProvider="TWSAction" actionType="sbd"
responseType="onDetection">
<parameter name="JobUseUniqueAlias">
<value>>truevalue>>true>
</parameter>
<parameter name="JobWorkstationName">
<value>MyWorkstationvalue>MyWorkstation>
</parameter>
<parameter name="JobTask">
<value>"dir c:\"</value>
</parameter>
<parameter name="JobType">
<value>Command</value>
</parameter>
<parameter name="JobLogin">
<value>TwsUser</value>
</parameter>
</action>
```

when the event arrives, the action is not triggered because the submit action is incorrect. The problem is caused by the '\' character in the action definition.

#### **Messages in the TWSMERGE.log file in English are corrupt (51518)**

Messages that appear in the TWSMERGE.log file in English are corrupt.

**Workaround:** On Windows platforms, you must set the TWS\_TISDIR environment variable at system level and then restart the workstation.

#### **Certificates for SSL communication defined at Job Brokering Definition Console startup cannot be modified (52753 / 51957)**

In the Job Brokering Definition Console, the certificates for SSL communication defined at the Job Brokering Definition Console startup are used during the entire session and cannot be modified until the Job Brokering Definition Console is restarted.

If you want to set the SSL parameters on the dynamic workload broker component connection, you must include your own certificates in the keystore and truststore that appear on the SSL section. Alternatively, you can change the keystore and truststore that appear on the SSL section with your own certificates and restart the Job Brokering Definition Console to save the updates.

**WebSphere Application Server cannot be stopped on AIX (53173)**

Because the appserverman is down, WebSphere Application Server cannot be stopped on AIX using the conman stopappserver command.

**Workaround:** Use wastools with the -direct parameter to stop the WebSphere Application Server or, if you want to stop the WebSphere Application Server using conman stopappserver, you must do it BEFORE you run the conman shut command.

**SSL V3 Renegotiation vulnerability exposure (53251)**

There is a vulnerability exposure if you are using an SSL/TLS client that connects to a server whose certificate contains a DSA or ECDSA key. This does not affect users with an SSL/TLS client that connects to a server whose certificate uses an RSA key. Verification of client certificates of servers for any key type is not affected.

**Return code mapping for Tivoli Workload Scheduler jobs that are migrated to broker is ignored (51582)**

Return code mapping for Tivoli Workload Scheduler jobs that are migrated to broker using the JSDL template is ignored. Any script or command issued with a nonzero return code is considered abended.

**Workaround:** Do not use return code mapping for static jobs that are migrated to dynamic job using the JSDL template.

**Runtime libraries required on AIX 5.3 (53700)**

To ensure the correct operation of Tivoli Workload Scheduler on your AIX 5.3 system, make sure you run x1C.aix50.rte.6.0.0.3 or later (9.0.0.1 or later if using version 9 runtime). If you run Technical Level 5, bos.rte.libc:5.3.0.53 or greater is required.

**On HP-IA64 platforms with agent, password encryption not usable**

On HP-IA64 platforms with agent, if you enable the password encryption for Job Executor submissions, changing the parameter *EnablePasswordEncryption* to true in the file *<installation-path>/TDWB/config/JobDispatcherConfig.properties*, the submission fails. Note that this limitation does not impact the overall security because all data is secured by the SSL connection.

**Workaround:** Leave the default value of *false* for the parameter *EnablePasswordEncryption*.

## Internationalization notes

This section describes software limitations, problems, and workarounds that affect the globalized versions of Tivoli Workload Scheduler version 8.5.1 Fix Pack 1; they include the known limitations listed in the Release Notes for version 8.5.1, if not fixed by this fix pack:

- 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: User's Guide and Reference*.  
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 must reboot the workstation to implement the change.
- **Note:** Microsoft® warns you to take particular precautions when changing registry entries. Ensure that you follow all instructions in Microsoft documentation when performing this activity.
- License files in some languages are not installed (53271).  
The following license files are not installed in their respective languages: `Greek.txt`, `Lithuanian.txt`, `Russian.txt`, `Slovak.txt`.  
**Workaround:** These license files are not installed but can be retrieved from the DVD media.

---

## Fix pack structure

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

### Fix pack files available via FTP on Passport Advantage

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

```

+---8.5.1-TIV-TWS-FP0001.README (this file)
|
+---8.5.1-TIV-TWS-FP0001.VSR
|
+---AIX
|     8.5.1-TIV-TWS-FP0001.TAR
+---HPUX
|     8.5.1-TIV-TWS-FP0001.TAR
+---HPIA64
|     8.5.1-TIV-TWS-FP0001.TAR
+---LINUX_I386
|     8.5.1-TIV-TWS-FP0001.TAR
+---LINUX_PPC
|     8.5.1-TIV-TWS-FP0001.TAR
+---LINUX_S390
|     8.5.1-TIV-TWS-FP0001.TAR
+---LINUX_X64
|     8.5.1-TIV-TWS-FP0001.TAR
+---SOLARIS
|     8.5.1-TIV-TWS-FP0001.TAR
+---SOLARIS_I386
|     8.5.1-TIV-TWS-FP0001.TAR
+---WINDOWS
|     8.5.1-TIV-TWS-FP0001.zip
+---WINDOWS_64
|     8.5.1-TIV-TWS-FP0001.zip

```

---

## Installing the fix pack

This section describes how to upgrade Tivoli Workload Scheduler version 8.5.1 to Fix Pack 01. 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:

- “Solving Tivoli Workload Scheduler V8.5.1 problems” on page 18
- “Installation notes” on page 19
- “Disk space requirements” on page 21
- “Applying the fix pack” on page 22
- “Installation actions” on page 23
- “Installing using the ISMP wizard” on page 25
- “Installing using the ISMP silent installation” on page 26
- “Installing on UNIX using the twspatch script” on page 26
- “Installing using software distribution” on page 27
- “Updating your local options file” on page 28
- “Configuring properties for the dynamic workload broker command line” on page 29
- “Rolling back the fix pack installation” on page 29
- “Uninstalling the entire Tivoli Workload Scheduler instance” on page 29



- "Installation log files" on page 29

## Solving Tivoli Workload Scheduler V8.5.1 problems

When installing, follow these recommendations:

- The installation of Tivoli Workload Scheduler fails if the DB2 user password includes special characters. There are two ways to solve this problem:

**Workaround 1:** To correctly install Tivoli Workload Scheduler using the current DB2 password with the special "UNIX shell" characters, open the installation script `<TWS CD>/twtools/_createdb_root.sh` and put single quotes ' around the seventh input parameter \$7 as follows:

```
...
su - $DB2_ADMINISTRATOR -c "cd $TWS_TEMPDIR/scripts &&
./dbsetup.sh $1
$2 $3 $4 $5 $6 '$7' $8 $9"
...
...
su - $DB2_ADMINISTRATOR -c "cd $TWS_TEMPDIR/scripts &&
./dbmigrate.sh $1_DB $6 '$7'"
...
```

Run again the silent installation.

**Workaround 2:** Replace the failing General Availability script with the fixed one that comes with the fix pack; to do this proceed as follows:

- Download the fix pack and uncompress it.
- Copy all the files under the directory *GA\_fixes* and paste them under the General Availability setup directory *TWS\<PLATFORM>*, replacing the old files (making a back-up copy in advance).
- Proceed with normal installation. (53282)
- Installing on Windows 2008 64 bit fails when a domain account is used. There are two ways to solve this problem:

**Workaround 1:** Before running the installation, check that the TWSUser is already created in the domain. Also, Tivoli Workload Scheduler users must have the following user rights, which can be granted locally. Domain level policies always override local policies, so it might be required to grant these rights from the domain:

- Act as part of the operating system
- Allow logon locally
- Impersonate a client after authentication right
- Log on:
  - Locally
  - As batch job
  - As service
- Replace process level token

The TWSUser must be a member of the domain administrative groups in the domain controller. The workaround can be applied for both silent and wizard Tivoli Workload Scheduler V8.5 installation.

For a silent installation, you must add and customize the following options in addition to the default response file for fault-tolerant agent installation.

For wizard installation, provide the options as command line parameters to the SETUP.exe executable (one line):



```

-W setTWSUser.twsValidatedUser="<twsuser>"
-W setTWSUser.twsValidatedPassword="<twsPassword>"
-W setTWSUser.twsValidatedDomain="<domain>"
-W setTWSUser.domainUser="true"
-W setTWSUser.errMsg="NONE"
-W setTWSUser.wasValidatedPassword=""
-W setTWSUser.wasValidatedUser=""
-W setTWSUser.userToCreate="false"
-W userOSChecksWinSequence.active="false"
-W setTWSUser.active="false"

```

where <twsuser> is the username, without the domain specification of the TWSuser, <twsPassword> is the password of the TWSuser, and <domain> is the domain of the TWSuser. For silent installation the other default response file options must be customized as expected (for example, the value of userWinCfgPanel.inputUserName option has the format "<domain>\<twsuser>"). Note also that for master domain manager installation, in addition to the above, you must customize two other options as follows:

```

-W setTWSUser.wasValidatedPassword="<was_user>"
-W setTWSUser.wasValidatedPassword="<wasPassword>"

```

These can be the same as *twsValidatedUser* and *twsValidatedPassword* (also here provide the user without domain).

**Workaround 2:** Replace the failing General Availability binary file with the fixed one that comes with the fix pack; to do this proceed as follows:

- Download the fix pack and uncompress it.
- Copy the binary file <WINDOWS\_PLATFORM>\ACTIONTOOLS\REGUTIL.dll and paste it under the General Availability directory TWS\<WINDOWS\_PLATFORM>\ACTIONTOOLS, replacing the old file (making a back-up copy in advance).
- Proceed with normal installation. (52018)

## Installation notes

When installing, follow these recommendations:

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

**Note:** If you want to APPLY the fix pack using **twspatch**, to roll back to the previous level use the command **twspatch -undo**; to uninstall the entire Tivoli Workload Scheduler instance use the command **twspatch -remove**, but note that this action is not intended to remove the applied fix pack without uninstalling the instance (51112).

- On AIX V5.3 platforms the installation of Fix Pack 1 for master domain manager, backup master, and Connector needs at least this AIX level supported as a minimum: 5.3: 5300-07 (APAR IZ07976, 53542)
- Do not install from a Samba disk on the Windows platform.
- On HP-UX, set the kernel parameter *max\_thread\_proc* to, at least, 128 otherwise the installation can fail. By default it is 64. A core dump is generated by Java™.
- If you get an error message indicating insufficient space for the installation wizard temporary data in the default /tmp directory, you can launch the installation wizard with the **-is** flag and set an alternative temporary directory. For example, SETUP.sh [-is:tempdir <temporary\_directory>]. For additional information about disk and space requirements for the installation, refer to *Planning and Installation Guide*, Chapter 2, "Prerequisite information", on page 19.
- Only for the following platforms:

- HP-UX
- HP Itanium

installing Tivoli Workload Scheduler V8.5.1 Fix Pack 1, which also updates the GSKit libraries, creates a copy of the directories that contain the GSKit libraries, so the following directories are created:

- /usr/Tivoli/TWS/GSKit/7d.bkp/
- /usr/Tivoli/TWS/GSKit32/7d.bkp/
- /usr/Tivoli/TWS/GSKitHPUX/7d.bkp/

This is done to let possible further Tivoli Workload Scheduler instances installed on the same system, to keep on working with the old GSKit libraries.

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

- After installing the fix pack the last line of the `TWS_home/version/patch.info` file contains: 8.5.1-TIV-TWS-FP0001.
- During this fix pack installation the following file is removed and a new one is created when the WebSphere® Application Server is restarted:

`TWS_home/appserver/profiles/twsprofile/temp/TWS/EIFLlistener/eif.temp1`

If you previously modified the property `BuffEvtmaxSize`, after having installed the fix pack you must set it again in the new file as described in the *IBM Tivoli Workload Scheduler Administration Guide*, Chapter 8, *Administrative tasks*, section *Managing the event processor*. (38192)

- Final jobsabend if Master Domain Manager is installed in a directory other than C: drive on Windows systems.

**Workaround:** To solve this problem, merge the content of these files:

```
<tws_homw>\ResetPlan.cmd
<tws_homw>\JnextPlan.cmd
<tws_homw>\MakePlan.cmd
<tws_homw>\SwitchPlan.cmd
<tws_homw>\CreatePostReports.cmd
<tws_homw>\UpdateStats.cmd
```

with those under `<tws_home>\config` because they are not replaced by fix pack installation because they can be customized. (53435)

- There is a mismatch for some Tivoli Workload Scheduler environment variables.

#### UNISONHOME

On Windows operating systems it does not exist or is blank.

On UNIX operating systems it is the value of the UNISONHOME variable set in the user environment. If not specified, its value is set to the user's home directory.

This variable should have on both platforms the value of the path where the Tivoli Workload Scheduler instance is installed.

#### HOME

This variable is not documented, but on Windows operating systems it is the path where the Tivoli Workload Scheduler instance is installed.

On UNIX platforms it is the user's home directory. (53442)

- Only if the following conditions are satisfied:
  - The database used by Tivoli Workload Scheduler is DB2®.
  - The **dbgrant** script was already run before installing this fix pack

must you 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 correctly. With the default GLIBC version 2.3.2, the ssm Agent might not start. (38697)

## Disk space requirements

Before starting the fix pack installation, make sure your system has the following requirements:

*Table 1. Disk space requirements for Master Domain Manager and Backup Master*

Operating System	Installation directory	Software distribution installation directory	Temporary directory
AIX®	700 MB	300 MB	300 MB
HP-UX	800 MB	300 MB	300 MB
Solaris	580 MB	300 MB	300 MB
Microsoft Windows	620 MB	300 MB	300 MB
Linux	730 MB	300 MB	300 MB

*Table 2. Disk space requirements for Tivoli Workload Scheduler agent and Java Extension*

Operating System	Installation directory	Software distribution installation directory	Temporary directory
AIX	20 MB	300 MB	40 MB
HP-UX	20 MB	300 MB	40 MB
Solaris	20 MB	300 MB	40 MB
Microsoft Windows	20 MB	300 MB	20 MB
Linux	20 MB	300 MB	40 MB

*Table 3. Disk space requirements for Tivoli Workload Scheduler agent*

Operating System	Installation directory	Software distribution installation directory	Temporary directory
AIX	20 MB	80 MB	40 MB
HP-UX	20 MB	80 MB	40 MB
Solaris	20 MB	80 MB	40 MB
Microsoft Windows	20 MB	80 MB	20 MB
Linux	20 MB	80 MB	40 MB

Table 4. Disk space requirements for z-centric agent

Operating System	Installation directory	Software distribution installation directory	Temporary directory
AIX	20 MB	20 MB	40 MB
HP-UX	20 MB	20 MB	40 MB
Solaris	20 MB	20 MB	40 MB
Microsoft Windows	20 MB	20 MB	20 MB
Linux	20 MB	20 MB	40 MB

## Applying the fix pack

The installer runs these actions when you do an APPLY:

1. Stops the embedded version of WebSphere Application Server.
2. Stops the Tivoli Workload Scheduler agent.
3. Stops the Tivoli Workload Scheduler instance.
4. Backs up the profile for the embedded version of WebSphere Application Server UPDI version 7.0.0.3.
5. Updates the embedded version of IBM WebSphere Application Server IFPM04482.
6. Installs the Tivoli Workload Scheduler modelling and planning server, version 8.5.1
7. Installs with Rollback FP\_LWA\_WINDOWS.SPB.
8. Installs with Rollback the Tivoli Workload Scheduler scheduling engine.
9. Installs with Rollback FP\_Eclipse\_WINDOWS.SPB.
10. Installs with Rollback FP\_TDWB\_Win.SPB.
11. Sets the ownership of the Tivoli Workload Scheduler files.
12. Expands the keywords.
13. Starts the embedded version of WebSphere Application Server.
14. Creates the uninstaller.
15. Configures the Tivoli Workload Scheduler instance.
16. Starts the Tivoli Workload Scheduler instance.
17. Starts the Tivoli Workload Scheduler agent.
18. Completes and cleans the Tivoli Workload Scheduler instance.
19. Updates the Tivoli Workload Automation registry.

The installer runs these steps when you do an UNDO:

1. Stops the embedded version of WebSphere Application Server.
2. Stops the Tivoli Workload Scheduler agent.
3. Stops the Tivoli Workload Scheduler instance.
4. Rolls back FP\_LWA\_WINDOWS.SPB.
5. Rolls back the Tivoli Workload Scheduler scheduling engine.
6. Rolls back FP\_Eclipse\_WINDOWS.SPB.
7. Rolls back FP\_TDWB\_Win.SPB.
8. Sets the ownership of the Tivoli Workload Scheduler files.

9. Expands the keywords.
10. Restores the profile for the embedded version of WebSphere Application Server.
11. Starts the embedded version of WebSphere Application Server.
12. Starts the Tivoli Workload Scheduler instance.
13. Starts the Tivoli Workload Scheduler agent.
14. Completes and cleans the Tivoli Workload Scheduler instance.
15. Updates the Tivoli Workload Automation registry.

## Installation actions

When you install the fix pack you can perform one of the following actions:

**Apply** Use this action to install the fix pack without making it permanent. If you apply the fix pack in "undoable" mode you can use the rollback action to return to the previous fix pack.

### Commit

Use this action to make the fix pack permanent. If you commit the fix pack you cannot roll it back.

### Roll back

Use this action to roll back to the previous level.

### Repair

Use this action (only after **Commit** action) to restore an existing Tivoli Workload Scheduler instance to the current committed level when a problem arises with binary files.

Depending on the fix pack installation state, you can perform the action as shown in the table.

*Table 5. Fix pack installation state*

Initial state	Action	Final State	Final State General Availability 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 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 restore the previous fix pack changes. These changes are permanent.

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

```
/Tivoli/Workload_Scheduler/ tws_user_DN_FixpackName=
FP_TWS_$(SWD-OS-NAME)_$(tws_user).8.5.1.$(patch_id)
```

where:

**\$(SWD-OS-NAME)**

depends on the operating system where you are installing.

**\$(tws\_user)**

is the Tivoli Workload Scheduler instance owner.

**\$(patch\_id)**

is the fix pack number.

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

- The processes in Table 6 are inactive:

*Table 6. Inactive processes*

Windows	UNIX
netman	netman
monman	monman
ssmagent	ssmagent
tokensrv	tokensrv
writer	writer
batchman	batchman
batchup	batchup
JOBMAN	JOBMAN
JOBMON	
scribner	scribner
agent	agent
JobManager	JobManager

- The files in Table 7 are available under *TWS\_home/bin* and are not corrupted (40042):

*Table 7. Files available under TWS\_home/bin*

Windows	UNIX
conman	conman
composer (on the master)	composer (on the master)
setown.cmd	libatrc.so
setown.exe	libicu*.so
oslayer.dll	libHTTP*.soinstmecho
icudt*.dll	mecho
HTTPChannel.dll	composer
HTTPSSLChannel.dll	
HTTPTransport.dll	
libatrc.dll	
msv*.dll	
agent	agent

Table 7. Files available under `TWS_home/bin` (continued)

Windows	UNIX
JobManager	JobManager

## Installing using the ISMP wizard

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

1. Unlink the host on which you are installing the fix pack from the Tivoli Workload Scheduler network and shut down Tivoli Workload Scheduler. Run the following commands depending on your configuration:

- If you have installed only the z-centric agent:

**On Windows:**

```
ShutdownLwa.cmd
```

**On UNIX®:**

```
ShutDownLwa
```

- If you have any other configuration:

**On Windows:**

```
conman "unlink @; noask"
conman "stop; wait"
conman "stopmon;wait"
ShutdownLwa.cmd
```

**On UNIX:**

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

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

2. Perform one of the following actions:
  - Insert the DVD for 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, to start the wizard, run the following command:

**On Windows:**

```
SETUP.exe
```

**On UNIX:**

```
./SETUP.bin
```

The installation starts.

4. Follow the instructions provided on the screen.
5. Click **Finish** to complete the installation.

## Installing using the ISMP silent installation

An alternative way to install is the silent installation. Silent installation requires the customization of a response file. A sample response file is available on all DVDs, 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 \home\TWS85FP1\patchInstall.txt -silent
```

- **On UNIX:**

```
./SETUP.bin -options /home/TWS85FP1/patchInstall.txt -silent
```

where /home/TWS85FP1/patchInstall.txt is the full path name of the response file that you customized with your environment settings.

Table 8 lists the keywords that you can set in the -W actionPanel.selectedAction parameter to customize the response file for your needs:

Table 8. Parameters

KEYWORD	SCENARIO
APPLY	Install an undoable fix pack
ROLLBACK	Roll back an undoable fix pack
COMMIT	Commit an undoable fix pack
APPLY_AND_COMMIT	Repair an installed and committed fix pack.  Use this action (only after you performed the Commit action) to restore an existing Tivoli Workload Scheduler instance to the current committed level when a problem arises with binary files <b>Note:</b> This action is available only when you install a fix pack. It is not available on General Availability (GA) versions.

## 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 (FTAs). 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 fix pack from the Tivoli Workload Scheduler network and shut down Tivoli Workload Scheduler. Run the following commands depending on your configuration:

- If you have installed only the z-centric agent:

```
ShutDownLwa
```

- If you have any other configuration:

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



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

2. Choose one of the following:
  - Insert the DVD for 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 run the following commands depending on your configuration:

- If you have installed only the z-centric agent:

```
wdinstsp -f -uy -D execActionTools=false
-D tws_user=<TWS_USER>
-D install_dir=<TWS_HOME>
-n <INST_PKG_NAME_LWA> <SPB_FILE_NAME_LWA>
```

- If you have installed the z-centric agent and the Java Extension:

```
wdinstsp -f -uy -D execActionTools=false
-D tws_user=<TWS_USER>
-D install_dir=<TWS_HOME>
-n <INST_PKG_NAME_LWA> <SPB_FILE_NAME_LWA>
```

followed by this command:

```
wdinstsp -f -uy -D tws_user=<TWS_USER>
-D install_dir=<TWS_HOME>
-n <INST_PKG_NAME_JAVA> <SPB_FILE_NAME_JAVA>
```

- If you have installed only the fault-tolerant agent:

```
wdinstsp -f -uy -D execActionTools=false
-D tws_user=<TWS_USER>
-D install_dir=<TWS_HOME>
-n <INST_PKG_NAME_LWA> <SPB_FILE_NAME_LWA>
```

followed by this 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>
```

- If you have installed the fault-tolerant agent: and the Java Extension:

```
wdinstsp -f -uy -D execActionTools=false
-D tws_user=<TWS_USER>
-D install_dir=<TWS_HOME>
-n <INST_PKG_NAME_LWA> <SPB_FILE_NAME_LWA>
```

followed by this 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>
```

and followed by this command:

```
wdinstsp -f -uy -D tws_user=<TWS_USER>
-D install_dir=<TWS_HOME>
-n <INST_PKG_NAME_JAVA> <SPB_FILE_NAME_JAVA>
```

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>.8.5.1.<PATCH_NUMBER>

<INST_PKG_NAME_LWA> = FP_LWA_<INST_INTERP>_<TWS_USER>.8.5.1.<PATCH_NUMBER>

<INST_PKG_NAME_JAVA> = FP_Eclipse_<INST_INTERP>_<TWS_USER>.8.5.1.<PATCH_NUMBER>

<INST_INTERP> = AIX | HP_IA64 | HP_UX | 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 path>FP_TWS_<INST_INTERP>.SPB

<SPB_FILE_NAME_LWA> = <spb file path>FP_LWA_<INST_INTERP>.SPB

<SPB_FILE_NAME_JAVA> = <spb file path>FP_Eclipse_<INST_INTERP>.SPB

```

### Error occurs when applying Tivoli Workload Scheduler V8.5.1 fix pack using ITCM - APAR IY94997:

The following problems might occur when applying a Tivoli Workload Scheduler V8.5.1 fix pack using ITCM:

- The installation process fails 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 because the **Msvcirt.dll** library is locked (by **batchup.exe**)

As a workaround, install the fix pack in one of the following ways: transactional and non-transactional mode (**winstsp** command).

- Install in transactional mode, adding the '-ty' parameter
- Install in 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"'
```

## Updating your local options file

After completing the installation, check the **localopts** file located in path **TWA\_home/config** (**TWA\_home\config**). This version of **localopts** is installed for reference purposes and includes keywords added with the fix pack.

This fix pack adds the **bm check deadline** keyword that is necessary in your running **localopts** files if you want to change the default value. The keyword was previously not present in the **localopts** file.

Copy the line containing this keyword into your running **localopts** files.

## Configuring properties for the dynamic workload broker command line

This step is required only if you run the dynamic workload broker command line on a Windows system.

The version of the `CLIconfig.properties` file installed with version 8.5.1 on Windows workstations omits the following keywords:

```
tdwb_user  
tdwb_pwd
```

These keywords are necessary to run commands on the dynamic workload broker command line (not if you use the Tivoli Dynamic Workload Console).

This fix pack installs an additional, not-running, instance of `CLIconfig.properties` with the correct keywords in:

```
TWA_home\TDWB\config\config
```

You must copy the `tdwb_user` and `tdwb_pwd` keywords from the `CLIconfig.properties` located in `TWA_home\TDWB\config\config` into the `CLIconfig.properties` located in `TWA_home\TDWB\config`, which is the running instance.

## Rolling back the fix pack installation

You can roll back the installation only if you installed it in undoable mode.

To roll back the installation using ISMP, perform the following steps:

1. Launch the installation setup for your operating system.
2. Select the instance that you want to remove.
3. Select the **UNDO** option.
4. Click **Finish**.

To roll back the installation using the `twspatch` command from the `TWS_home` directory, use the `-undo` option.

See also the section “Installation notes” on page 19.

## Uninstalling the entire Tivoli Workload Scheduler instance

If you installed using the `twspatch` command, to uninstall the entire Tivoli Workload Scheduler instance, use the `twspatch -remove` command from the `TWS_home` directory.

If you installed using ISMP, to uninstall see the *Planning and Installation* guide.

## Installation log files

The following are the installation log files in which 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%\tw851fixpack\tw851ismpl.log
```

**On UNIX:**

`$TMPDIR/tws851fixpack/twsismp.log`

- Log file for ISMP installer

**On Windows:**

`%TEMP%\tws851fixpack\summary.log`

**On UNIX:**

`$TMPDIR/tws851fixpack/summary.log`

- Log file for Tivoli Workload Scheduler installer.

**On Windows:**

`%TEMP%\tws851fixpack\  
twspatch_<INST_INTERP>_<TWSuser>^8.5.1.0n.log`

**On UNIX:**

`$TMPDIR/tws851fixpack/  
twspatch_<INST_INTERP>_<TWSuser>^8.5.1.0n.log`

where *n* is the fix pack number. For this fix pack the number is 1.

- Log file for Configuration Manager installation.

**On Windows:**

`%TEMP%\FP_TWS_<INST_INTERP>_<TWSuser>^8.5.1.0n.log`

**On UNIX:**

`$TMPDIR/FP_TWS_<INST_INTERP>_<TWSuser>^8.5.1.0n.log`

where *n* is the fix pack number. For this fix pack the number is 1.

For information about INST\_INTERP, see “Installing using software distribution” on page 27.

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

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## Documentation updates

The documentation of Tivoli Workload Scheduler has been refreshed with this fix pack, and is available online at the IBM Tivoli Workload Scheduler Information Centre:

[http://publib.boulder.ibm.com/infocenter/tivihelp/v3r1/index.jsp?topic=/com.ibm.tivoli.itws.doc\\_8.5.1.1](http://publib.boulder.ibm.com/infocenter/tivihelp/v3r1/index.jsp?topic=/com.ibm.tivoli.itws.doc_8.5.1.1)

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## 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 Handbook* 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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Program Number: 5698-WSH

Printed in USA