IBM Tivoli Workload Scheduler

Product Information Update (June 2002)

Version 8.1

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ISO 9001 Certification

This product was developed using an ISO 9001 certified quality system.

Certification has been awarded by Bureau Veritas Quality International (BVQI) (Certification No. BVQI - 92086 / A).

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Contents

Product Information Update

This document applies to fixpacks U483828 (for IBM® Tivoli® Workload Scheduler on distributed platforms, including the Plus Module and the connector) and U483829 (for the IBM Tivoli Job Scheduling Console and the connector for IBM Tivoli Workload Scheduler for z/OS™). It describes changes to IBM Tivoli Workload Scheduler, Version 8.1, that have taken place since the general availability of the product and the release of previous fixpacks.

Fixpacks U483828 and U483829 supersede all previously released fixpacks. They therefore include the APARs and internal defects fixed with fixpacks U481302, U481303, U482258, and U482288. For a list of problems solved with the previous fixpacks, refer to their documentation: files README.U481302, README.U481303, and README.U482258 included with fixpack U483828; files README.U481303 and README.U482288 included with fixpack U483829.

The following information is described:
- Fixed IBM Tivoli Workload Scheduler, Version 8.1, problems. This includes fixed problems also for:
  - the IBM Tivoli Workload Scheduler Plus module
  - the IBM Tivoli Workload Scheduler Connector
- Fixed Tivoli Job Scheduling Console, Feature Level 1.2, problems. This includes fixed problems also for the connector for IBM Tivoli Workload Scheduler for z/OS, Version 8.1
- The procedures for applying the fixpacks.
- Known defects and limitations

Fixed Problems for IBM Tivoli Workload Scheduler Version 8.1

The problems that were resolved with this fixpack are listed by:
- APARs that were reported for Version 8.1
- APARs that were reported for Versions 6.1 and 7.0
- Internal defects

APARs Reported for Version 8.1

The following APARs are fixed:
- IY31645. CANCEL JOB command from JSC must not be allowed in an endtoend
- IY31184. COMPOSER comments greater then 127 characters cause the error of SCHEDULR parser error and currupts the DB
- IY31181. BM check file entries in LOCALOPTS are being doubled when the checking for file is done
- IY31137. SCHEDULR abends when 127th character in schedule
- IY30857. AWS11250006I unable to open output file received when using the
- IY29572. Error when invoking the MORESTDL and JOBSTDL scripts-AWS2234000
- IY29459. DATECALC show the system-date when it is launched by TWS
- IY29284. COMPILER errors FOLLOWS DEPENDENCIES when the job used for FOLLOWS is prefix of another job

- IY29117. JSC - ADHOC PROMPT generates OSERV message on answer

APARs Reported for Versions 6.1 and 7.0

The following APARs are fixed:
- IY31594. JOBMON abending on WINNT FTA's
- IY31528. JSC - "CALL UNISON" message appears when view dependencies
- IY31434. FULL status FTA jobs do not get RD records properly if OPENS is checked on master on master CPU in the same domain
- IY30162. DR. WATSON error during high job load causes system crash and requires reboot on FTA
- IY29877. TWS processes creating NT handles leaks while running scripts utilizing mapped drives in a NOVELL user administration env
- IY29842. Submitted job info lost during STAGEMAN step of JNEXTDAY on MDM
- IY29249. Job events may go lost when switching to the backup master
- IY28374. MAGENT dies when CONMAN KILL used on job in USERJOBS sched on FTA
- IY27514. Incorrect "switched" message at the end of STARTUP command output
- IY27512. XAGENT jobs stuck in ABEND+ OR SUCC+ state if CARRYFORWARD
- IY20201. Cannot change password within JSC schedular controller information do not show up in STDLIST
- IY16098. LOGMAN write negative numbers for jobs running on XAS

Internal Defects

The following defects are fixed:
- 140909. TWSPlus: TWSPlus fixpack2 fails on Solaris and Win2000
- 140818. TBSM Integration: used CP command instead of COPY command into
- 140684. TBSM Integration: modified the design so that the number of
- 140575. TBSM Integration: memory leaks problems
- 140350. E2E limitation not performed in TWSConnector
- 138479. Dependency on FULL status WS from job different domain higer in domain hierarchy is not resolved. Job stays in READY
- 137651. EBCDIC Euro codepages doesn't work
- 137569. TWS for z/OS APAR PQ60253
- 136036. OPENS dependency mechanism redesign
- 135344. It's not possible carryforwarding two jobs in USERJOBS with same name
- 135188. TWS Connector fails submit jobstreams on Linux
- 134434. 8.1-TWS-0002 (build 20020305) composer error on NT

Fixed Problems for IBM Tivoli Job Scheduling Console, Feature Level 1.2

The problems that were resolved with this fixpack are listed by:
- APARs
- Internal defects

APARs

The following APARs are fixed:
- IY28773. Using JSC, 'EQQM991E ERROR DURING MCP UPDATE' when deleting an application with only one operation
- IY29112. The function COPY AND PASTE doesn't work in the job stream editor
- IY29460. Output of time line view is shifted by REFRESH
- IY29576. JSC submit job streams with a wrong time
- IY29672. Cannot save job with deadline time past midnight
- IY29916. Timeline view job stream windows flickers by property menu
- IY30359. New job definition icon not visible in new jobstream
- IY30418. SAP R/3 batch job can't killed by JSC
- IY31412. Special characters not allowed in some JSC fields
- IY31413. Refresh of list too long after 'stop' command
- IY31546. Zoom on job stream editor panel

Internal Defects

The following defects are fixed:
- 8513. Wrong OPC version reported by OPC Conector 1.2
- 8805. OPC Connector gives an error when Cat.Manag. option set to yes
- 8806. Trying to install the TWS for z/OS Connector, is showed a wrong name
- 8863. Error message when deleting a job stream instance in the plan
- 8894. 'Browse the JobLog' for a job instance

Applying the Fixpack for IBM Tivoli Workload Scheduler

The following sections explain how to install fixpack U483828 on IBM Tivoli Workload Scheduler, on the Plus Module, and on the connector for IBM Tivoli Workload Scheduler.

This fixpack must be installed on version 8.1 of the product (General Availability version with or without fixpacks U481302/U481303/U482258). It replaces all the files in your present installations.

Note: Always verify that you have a viable backup before replacing any software.

Installation Considerations

The best way to install the patch should be to do it at the same time on all agents. In case of transitory resolution problems, these can be resolved by applying the patch on the agents that do not follow the latest version of the resolution algorithms. We acknowledge that a complete simultaneous upgrade is a difficult condition to ask for; for this reason, a more progressive upgrading procedure is described below. Not all the upgrade schemes are compatible with the correct operation of Tivoli Workload Scheduler. This section describes the best choices to move to the latest patch. Regarding the changes in the Opens dependency polling, the responsibility has been transferred at a lower level (FTA rather than domain manager). This implies that the patch is to be installed preferably bottom-up.

The change in addressing of the Fy record implies that agents bearing files or hosting other agents with files (included XAs) have to be updated after any non-full status FTA that depends on those files, and before any domain manager

with such non-full status FTAs that depends on those files in its domain. During transition, some errors may appear about unknown 'Id' messages. These messages do not bear any operational content; they circulate for informational purposes. Be aware that these messages could fill the stdlists more quickly than expected. In conclusion, a safe path for migration is outlined below:

1. Patch the FTAs that are non- domain managers, non-full status, and that depend on files stored on other FTAs.
2. Patch the FTAs that are non-domain managers that have the files other jobs depend from, or that host the XAs that have the files that other jobs depend on.
3. Patch the domain managers.

Applying the Fixpack on UNIX®

The fixpack is applicable on the following UNIX operating systems:
- IBM AIX®
- HP-UX
- Solaris Operating Environment
- Linux for Intel
- Linux for OS/390®
- SGI Irix
- Compaq Tru64
- IBM Sequent® Dynix

The CD contains a directory for each platform with a TAR file that is specific for each operating system.

Follow these steps to apply the fixpack:

1. Download the operating system-specific tar file to the *TWS home* directory and untar it with the following command:

   ```
   tar xvf maestro.tar
   ```

   This will create the following files:
   - customize
   - maestro.tar.z
2. You may have to set the **execute** bit on the **customize** script. Use this command:

   ```
   chmod 755 customize
   ```
3. Unlink the host on which you are installing the patch from the IBM Tivoli Workload Scheduler network and shutdown IBM Tivoli Workload Scheduler. Use the following commands:

   ```
   conman "unlink @; noask"
   conman "shut; wait"
   ```
4. Run the **customize** script with the **-update** option. Use the following command:

   ```
   customize -update -uname <tws_user>
   ```

Applying the Fixpack on Windows®

While installing the fixpack, you are recommended to keep Services snap-in and all other handles to the Tivoli Workload Scheduler services closed (see Microsoft® Windows bug Q287516 for more information).

To apply the fixpack on Windows NT® and on Windows 2000 follow these steps:

1. Download the directory named I386NT from the fixpack CD onto your system.
2. Unlink the host on which you are installing the patch from the IBM Tivoli Workload Scheduler network and shutdown IBM Tivoli Workload Scheduler. Use the following commands:

   ```
   conman "unlink @; noask"
   conman "stop; wait"
   Shutdown
   ```

3. Run the Setup.exe program that is located in I386NT to install the patch and follow the instructions on the screen. When the prompt for the user name appears, type the name of the *TWS user* for which you are installing the fixpack.

Applying the Fixpack to the Plus Module

To successfully apply fixpack U483828 to the Plus Module, you must have the **install_product** and **super** authorization roles.

Follow these steps:
1. Using the Tivoli Desktop, select the **Install** -> **Install Patch...** option from the **Desktop** menu to display the Install Patch dialog.
2. Press the **Select Media...** button to display the File Browser dialog.
3. Enter the path to the directory containing the patch in the **Path Name:** field.
4. Press the **Set Media & Close** button to return to the Install Patch dialog.
5. The patch install list now contains the name of the patch. Select the patch by clicking on it.
6. Select the clients to install this patch on.
7. Press the **Install** button to install the patch.

Applying the Fixpack to the Connector for IBM Tivoli Workload Scheduler

It is required that both the IBM Tivoli Workload Scheduler master workstation and the connector be at the same level. Therefore, when you install this fixpack on the connector, make sure that you also install the fixpack for the IBM Tivoli Workload Scheduler engine on the master workstation.

To install this fixpack, you must have the General Availability version of the connector for IBM Tivoli Workload Scheduler 8.1, with or without the previous fixpack. You must also have Job Scheduling Services Version 1.2.

To install the fixpack, follow these steps on the workstation that runs the connector:
1. Insert the CD of fixpack U483828.
2. Open the Tivoli Desktop and go to **Install->Install Patch...**.
3. Select the following installation path in the file browser of **Select Media**: *<drive>*: TWSCONNECTOR->U1_TWS.image.
4. Follow the instructions listed in the *Tivoli Job Scheduling Console User's Guide*, SH19-4552-00, to complete installation.

Applying the Fixpack for IBM Tivoli Job Scheduling Console

The following sections explain how to install fixpack U483829 to the IBM Tivoli Job Scheduling Console and to the connector for IBM Tivoli Workload Scheduler for z/OS.

Note: Always verify that you have a viable backup before replacing any software.

Applying the Fixpack to the IBM Tivoli Job Scheduling Console

To install fixpack U483829, follow these steps:

1. On your workstation, uninstall the IBM Tivoli Job Scheduling Console without removing the **dat** directory since it contains your user preferences.
2. If you find a directory named *JSC Installation dir/bin*, remove it.
3. On the CD of fixpack U483829, find the JSC directory and go to the subfolder corresponding to the platform on which you are installing. This can be on of the following:
   - UNIX. This folder contains the following subfolders:
     - LINUX. With the installation file for Linux.
     - SOLARIS. With the installation file for the Solaris Operating Environment.
     - OTHERS. With the installation files for HP-UX and AIX.
   - WINDOWS with the installation file for Windows NT and Windows 2000.
4. Run the installation file following the instructions listed in the *Tivoli Job Scheduling Console User's Guide*, SH19-4552-00. Choose the same destination directory as for the previous version.

Applying the Fixpack to the Connector for Tivoli Workload Scheduler for z/OS

To install the fixpack, follow these steps on the workstation that runs the connector:

1. Only if you are installing on Linux: manually remove the previous installation (read the section on known defects and limitations).
2. Insert the CD of fixpack U483829.
3. Open the Tivoli Desktop and go to **Install->Install Patch....**
4. Select the following installation path in the file browser of **Select Media**:
   - *<drive>*: CONNECT->U_OPC_L.image, if you are installing (upgrade) on Linux.
   - *<drive>*: CONNECT->OPCLinux.image, if you are installing (fresh install) on Linux.
   - *<drive>*: CONNECT->U_OPC.image, if you are installing (upgrade) on the other platforms.
5. Follow the instructions listed in the *Tivoli Job Scheduling Console User's Guide*, SH19-4552-00, to complete installation.

Known Defects and Limitations for IBM Tivoli Workload Scheduler

The following are known defects for the IBM Tivoli Workload Scheduler Plus Module and for the IBM Tivoli Workload Scheduler Connector:

- IBM Tivoli Workload Scheduler Plus Module=> Installation on Windows2000 encounters the following "soft error":

```
Distributing machine independent Generic Binaries --> <host name>
  ..
Something went wrong:
Media Packet:  "E:/rome/TWS_Suite/810_20020606/TWS_CD/TWSPLUS/FILE1.PKT"
<host name>:FAILED (soft error)
mkdir: <TME-Installation-dir>/bin/generic_unix/TME/PLUS/TWS/: File exists
 Completed (with errors)
```

The installation process continues and completes successfully in spite of this
message. This problem is documented by internal defect 141578.

- IBM Tivoli Workload Scheduler Connector=> Fresh installation of the connector
  on a managed node will fail if that managed node is attached to a Tivoli server
  that runs the IBM Tivoli Workload Scheduler Connector, Version 8.1 and fixpack
  1 (U481302/U481303) or fixpack 2 (U482258). This is caused by an incorrect
  revision level of the General Availability version of the IBM Tivoli Workload
  Scheduler Connector, Version 8.1 (Defect 134562).

  Use the following workaround to install the connector on the managed node:

  1. Copy the image files of the General Availability version of the connector on
     the manage node.
  2. Edit the file named TWS_CONN.ind to change the revision level from 0.03.00
     to one of the following:
     – 8.01.01 if the Tivoli server runs the IBM Tivoli Workload Scheduler
       Connector, Version 8.1, and fixpack 1
     – 8.01.02 if the Tivoli server runs the IBM Tivoli Workload Scheduler
       Connector, Version 8.1, and fixpack 2
  3. Proceed to installing the connector.

Known Defects and Limitations for IBM Tivoli Job Scheduling Console

The following is a known defect for the IBM Tivoli Workload Scheduler for z/OS
connector (on Linux only): The **wuninst** command does not work unless you
perform a fresh installation of the fixpack. To remove the installed General
Availability version (Version 1.2), you must open a Tivoli shell with the setup_env
command and manually remove the instance. Follow these steps:

1. Run the following command:
   ```
   wlookup -ar ProductInfo
   ```

   This will display all your installed products and their IDs, using the format:
   ```
   OPCConnector 1311330541.1.1066#TMF_Install::ProductInfo#
   ```

   The number may change depending on the TMR.
2. Run the following command:
   ```
   idlcall <Product id> remove
   ```

   Using the previous example, this will be:
   ```
   idlcall 1311330541.1.1066#TMF_Install::ProductInfo# remove
   ```
3. Change to the $DBDIR (or %DBDIR% on Windows) and manually remove the
   directory named OPC.
4. You also must remove any patches you may have installed. Remove them by
   following the first two steps in this list, but use
   ```
   wlookup -ar PatchInfo
   ```

   instead of

```
wlookup -ar ProductInfo
```
5. You can now proceed to install the fixpack (OPCLinux.image stored in the CONNECT directory of the U483829 CD).

The following are known defects for the IBM Tivoli Job Scheduling Console:

- Launch in context does not work if the Job Scheduling Console is not running. As a workaround, you need to run the Job Scheduling Console before running the launch in context.
- To allow the fix for APAR IY31412, we have disabled the character check from the Job Scheduling Console. Therefore, when you type a non-valid character, you will receive an error directly from Tivoli Workload Scheduler for z/OS. This is due to an architectural limitation that we will remove.
- If you first open the job properties window from the Job Stream editor in the database for Tivoli Workload Scheduler for z/OS, and then you open the one in the database for Tivoli Workload Scheduler, you get an error for an unfilled mandatory field.
- When you open the workstation instance properties window for a Tivoli Workload Scheduler for z/OS engine and you click on the APPLY button, you get an error message. This does not happen if you click OK instead of APPLY.
- Double clicking does not work in the Job Scheduling Console on Linux Red Hat 7.1.

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