







**Note**

Before using this information and the product it supports, read the information in "Notices" on page 45.

This edition applies to Version 3, Release 1 of IBM Tivoli Business Systems Manager and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Chapter 1. About Fix Pack 3

3.1.0-TIV-BSM-FP0003, also known as Fix Pack 3, fixes problems reported for Tivoli® Business Systems Manager 3.1. This Fix Pack must be applied on Tivoli Business Systems Manager 3.1 that has Fix Pack 2 (3.1.0-TIV-BSM-FP0002) or higher, already installed on all the servers and clients.

**ATTENTION:** Fix Pack 3 is not cumulative, and it prereqs TBSM 3.1, Fix Pack 2.

---

### What's in Fix Pack 3?

#### Additional support for prerequisites

The following additional supported versions of prerequisites that have previously been listed for Tivoli Business Systems Manager 3.1:

- IBM WebSphere® Application Server 6.1.0.11
- Microsoft® SQL Server 2005, Service Pack 2

**Important:**

- Do not upgrade to Microsoft SQL Server 2005 until after you apply TBSM 3.1, Fix Pack 3. This upgrade can only be applied on top of Fix Pack 3 for TBSM 3.1.
  - For TBSM 3.1, the only supported path to Microsoft SQL Server 2005 is an upgrade from Microsoft SQL Server 2000. (A fresh install of Microsoft SQL Server 2005 is not supported.)
- MKS Toolkit 9.1 for System Administrators
  - Support for HP OpenView 7
  - Windows Server 2003, Service Pack 2

#### APARs included in Fix Pack 3

For APARs that are included in this Fix Pack, see “APARs included in 3.1.0-TIV-BSM-FP0003,” on page 31.

#### Interim fixes included in Fix Pack 3

Fix Pack 3 includes the following interim fixes:

3.1.0.2-TIV-BSM-IF0011

3.1.0.2-TIV-BSM-IF0012

3.1.0.2-TIV-BSM-IF0013

3.1.0.2-TIV-BSM-IF0014

3.1.0.2-TIV-BSM-IF0015

#### LA Fixes included in Fix Pack 3

All LA Fixes shipped on top of Fix Pack 2 are included in Fix Pack 3





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## Chapter 2. Installation and configuration

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### Prerequisite

TBSM v3.1 Fix Pack 3 has the following prerequisite:

- Tivoli Business Systems Manager 3.1, with Fix Pack 2 or higher.

---

### Corequisite

TBSM v3.1 Fix Pack 3 has the following corequisite:

- Strongly recommended: IBM WebSphere Application Server 6.1.0.11

---

### Hardware and software requirements

Refer to the IBM® Tivoli Business Systems Manager v3.1 Installation and Configuration Guide for the hardware and software requirements for installing Tivoli Business Systems Manager.

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### Backing up databases

Back up all databases before applying the Tivoli Business Systems Manager v3.1 Fix Pack 3. It is critical to have valid database backups taken prior to applying Fix Pack 3, as you might need them in the event you want to reinstall the entire Fix Pack. The following 12 databases should be backed up before applying this Fix Pack:

- ASIRuleSvc
- Meta
- msdb
- Object
- ObjectEvents
- ObjectQueues
- Resource Object Data Manager (RODM)
- RODMLoad
- WebServer
- OPCLoad
- History
- Adapter

Ensure that these backups exist and the backups were completed during the same time frame. Typically, backups should be handled using a database maintenance plan. Save the backups until Fix Pack 3 has been successfully tested.

We recommend that you back up the databases again (into a new backup file) after successful Fix Pack installation. In the event that you have a hard failure of your system, taking this extra precaution saves you the time required to re-apply the Fix Pack.

If you are applying the Tivoli Business Systems Manager Warehouse Pack, ensure that backups of all IBM Tivoli Data Warehouse databases are available before installing this Fix Pack.

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## Fix Pack 3 contents

- This readme file in two formats:
  - 3.1.0-TIV-BSM-FP0003.readme.pdf
  - 3.1.0-TIV-BSM-FP0003.readme (text file)
- 3.1.0-TIV-BSM-FP0003.tar

---

## Before Installing the Fix Pack

**Note:** You should know that if you uninstall the Fix Pack you will be removing the entire product, (either the server component code or the client component code), not just the Fix Pack code.

- This Fix Pack could require up to 5 Gb of free space on your SQL Server installation drive. Ensure that the free space is available before applying this Fix Pack.
- Before applying the Fix Pack, make sure no shell scripts are running in the background.
- Stop the following services and executables on all Tivoli Business Systems Manager servers and clients:
  - All Tivoli Business Systems Manager services
  - SQLServerAgent (SQL server agent)
  - MSSQLServer (SQL server)
  - IIS Admin Service and World Wide Web Publishing Service (if present)
  - All IntelligentMonitor adapters and their daemons

Do not apply the console component of this Fix Pack without first applying the base component.

This is not a cumulative Fix Pack. It must be applied on a Tivoli Business Systems Manager v3.1, with Fix Pack 2 or higher.

## Special Considerations

- This Fix Pack will create a new SQL job, Delete old OPC daily plans, which will be disabled by default. If you are interested in using this SQL job, you must manually enable it from the SQL Enterprise Manager. It also has the @daystokeep parameter in the SQL job step set to 60 days by default, which means any daily plan which is older than 60 days will be deleted, along with all its corresponding data. You may want to change the @daystokeep parameter to a much larger number the first time the job is run (e.g. 365), as it may take a long time to perform the initial cleanup if you have a large OPCLoad database.
- For the fix for APAR OA21742, the cleanup of the additional tables will occur with the running of the "Delete Old ObjectEvent Records" and "Delete Old Closed Notes" SQL jobs.

If the cleanup of the ObjectStateHist table causes a performance impact when the "Delete Old Closed Notes" job is run, change the job step to run:

```
EXEC asisp_deleteOldNotes @trunc = 1
```

- For the fix for APAR OA22602, the capability will only be available after it has been manually enabled by entering the following command from SQL Query Analyzer on the database server, and restarting the Console Server:

```
INSERT INTO SystemConfiguration VALUES
('Feature', 'WCDisplayURLHyperlinksInDescription', 1, 'INT')
```

This capability can be disabled at any time by running the following command, and restarting the Console Server:

```
UPDATE SystemConfiguration SET propertyvalue = 0
WHERE groupname = 'Feature'
AND propertyname = 'WCDisplayURLHyperlinksInDescription'
```

- For the fix for APAR OA15386, by default, the new Date Received column does NOT appear in the Event Viewer.

To enable display of the Date Received column, set the configuration table property by using the SQL Server Query Analyser to connect to the TBSM Object database. Once connected, enter the following command:

```
EXEC _SetSystemConfiguration @groupname='_GetEventViewerEvents',
                             @propertyname='DisplayDBServerCTime',
                             @propertyvalue=1,
                             @propertydatatype='INT'
```

To disable display of Date Received column, set the configuration table property by using the SQL Server Query Analyzer to connect to the TBSM Object database. Once connected, enter the following command:

```
EXEC _SetSystemConfiguration @groupname='_GetEventViewerEvents',
                             @propertyname='DisplayDBServerCTime',
                             @propertyvalue=0,
                             @propertydatatype='INT'
```

After you change the configuration table property value, you must restart the Console Server and any connected consoles for the change to take effect.

## For your information

### Notes:

1. Changes on the Object, Meta, RODM, and WebServer databases do not show up on the History server until after the first backup has taken place after the install.
2. To apply this Fix Pack in a failover environment
  - a. Stop SQLServerAgent on both primary and secondary servers, and ensure that it is stopped.
  - b. Run the following script on the primary database server and history server to gracefully abort the log shipping process :

```
sh fo_logship.ksh -A
```

Running this script stops the log shipping and brings the secondary databases out of read-only mode.

If the database remains in the read-only mode, run the following stored procedure from the SQL Query Analyzer on the secondary (non-active) database server and the history server:

```
EXEC msdb..asisp_recover_databases
```

Configuration for Failover environment is located at "Special configuration instructions for failover environment that uses SQL 2000" on page 11.

---

## Extracting the Fix Pack

To expand file 3.1.0-TIV-BSM-FP0003.tar:

1. Copy the file 3.1.0-TIV-BSM-FP0003.tar to your system.
2. Unpack the file with the following command:

```
tar -xvf 3.1.0-TIV-BSM-FP0003.tar
```

This creates a directory called /3100TIVBSMF0003 that includes the following files:

- TIV\_BSM\_3.1.0\_FP0003\_base.tar
- TIV\_BSM\_3.1.0\_FP0003\_consoles.tar
- TIV\_BSM\_3.1.0\_FP0003\_consolesSPB.tar
- TIV\_BSM\_3.1.0\_FP0003\_IMfOpenView.tar
- TIV\_BSM\_3.1.0\_FP0003\_itecEventEnablement.tar
- TIV\_BSM\_3.1.0\_FP0003\_TDW\_fix.tar
- TIV\_BSM\_3.1.0\_FP0003\_XMLToolkit.tar

---

## Installing the Fix Pack

**Note:** In the following steps

- <fix pack> refers to the directory where this Fix Pack resides after you extract it from the tar file.
- <TivoliManager> refers to the directory where Tivoli Business Systems Manager is installed.

**Important:** If the database upgrade step fails for any reason during the Fix Pack installation, do not rerun the install or do the upgrade manually. Collect the install logs and contact IBM Service. The install logs can be found in these 2 locations:

- The system temp directory. Enter `cd %TEMP%` to get to the system temp directory. Send the install log from the system temp directory.
- The <TivoliManager>/sql directory. From this directory type the following 2 commands to package up the logs:
  1. `tar -cvf fp3_install_logs.tar *.log`
  2. `gzip -c fp3_install_logs.tar < fp3_install_logs.tar.gz`

### On the Tivoli Business Systems Manager Database Server:

1. Unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_base.tar
```

2. Change to the <baseServices> directory.
3. If you are running log shipping, stop it by issuing the following command from the <TivoliManager>\bin directory.

```
sh fo_logship.ksh -A
```
4. Run the setup.exe file from the <baseServices> directory.
5. From the window that is displayed, select a language.
6. Click Next on the Welcome window.

7. Read the software license agreement. If you accept the terms of the agreement, click the button to indicate that you accept the terms and then click Next.
8. After you read the list of services that will be stopped, click Next.
9. You are asked if files that are being updated should be backed up first. **Yes** is the default and it is selected. If you **do not** want the files to be backed up, click the check box to remove the selection. Click Next.
10. Click the box that represents the type of installation, either distributed or distributed and z/OS<sup>®</sup>.
11. A window is displayed while the Microsoft SQL Server service is started. You can choose to upgrade databases automatically, as a part of the installation. If you choose not to upgrade the databases, the databases can be upgraded manually after the installation by going to the <TivoliManager>/sql directory and running

```
sh applyupgrade.ksh 3102tivbsmfp0003.upg
[ [-S<DBserver>] [-E | [[-U<DBuser>] [-P<DBpassword>]]] ]
```

**Database parameters** are as follows:

**-S<DBserver>**

Server where database resides. Default=[\${tbsm\_server}]

**-E** Use trusted connection

**-U<DBuser>**

Database username. Default=[\${tbsm\_userid}]

Otherwise, trusted connection used.

**-P<DBpassword>**

Database password. Default=[\${tbsm\_password}]

If you choose to manually update the database, make sure the MSSQLServer service is running before running the database upgrade script from the command prompt.

Click Next.

12. A summary is displayed. The Tivoli Business Systems Manager installation directory is listed, as is each component that will be updated on this server. Click Next to continue with the installation.
13. Status is displayed. The percentage completion bar is updated as files are installed.  
When the installation has finished, a summary is presented, indicating the state of the installation. Click Finish to exit the installation wizard.
14. Reboot the machine before starting any services and running Tivoli Business Systems Manager.  
If the upgrade is applied after the installation, instead of by the installer, ensure the SQL agent is not running and all of the Tivoli Business Systems Manager services have been stopped, including the History server.
15. After the system has rebooted, ensure all Tivoli Business Systems Manager services on the Tivoli Business Systems Manager Database Server have been restarted.

## On the Tivoli Business Systems Manager History Server:

1. If it is not currently running, start MS SQL Server service.
2. Unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_base.tar
```

3. Change to the <baseServices> directory.
4. Run the setup.exe file from the <baseServices> directory.
5. From the window that is displayed, select a language and click OK.
6. Click Next on the Welcome window.
7. Read the software license agreement. If you accept the terms of the agreement, click the button to indicate that you accept the terms and then click Next.
8. This panel lists the services that will be stopped. Click Next.
9. You are asked if files that are being updated should be backed up first. **Yes** is the default and it is selected. If you **do not** want the files to be backed up, click the check box to remove the selection. Click Next.
10. A window is displayed while the Microsoft SQL Server service is started. You can choose to upgrade databases automatically, as a part of the installation. If you choose not to upgrade the databases and you are at 3.1 plus Fix Pack 2 level, the databases can be upgraded manually after the installation by going to the <TivoliManager>/sql directory and running

```
sh applyupgrade.ksh 3102tivbsmhistfp0003.upg -S <HistoryServerName> -U  
<SQLServerUserName> -P <SQLServerPassword>
```

Click Next.

11. A summary is displayed. The Tivoli Business Systems Manager installation directory is listed, as is each component that will be upgraded on this server. Click Next to continue with the installation.
12. Status is displayed. The percentage completion bar is updated as files are installed.  
  
When the installation has finished, a summary is presented, indicating the state of the installation. Click Finish to exit the installation wizard.
13. Reboot the machine before starting any services and running Tivoli Business Systems Manager.
14. After the system has rebooted, ensure all Tivoli Business Systems Manager services on the Tivoli Business Systems Manager Database Server have been restarted.

## On each of the other Tivoli Business Systems Manager non-database servers:

1. Unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_base.tar
```

2. Run the setup.exe file from the <baseServices> directory.
3. From the window that is displayed, select a language.
4. Click Next in the Welcome window.
5. Read the software license agreement. If you accept the terms of the agreement, click the button to indicate that you accept the terms and then click Next.
6. This panel lists the services that will be stopped. Click Next.
7. You are asked if files that are being updated should be backed up first. **Yes** is the default and it is selected. If you **do not** want the files to be backed up, click the check box to remove the selection. Click Next.
8. For the **Console server**, supply the WebSphere Server userid and password. Click Next.

9. If you have already upgraded to WAS 6, you will see a screen prompting for the WebSphere 6.x profile. The name of the profile is **tbsm31**. Click Next.
10. A summary is displayed. The Tivoli Business Systems Manager installation directory is listed, as is each component that will be upgraded on this server. Click Next.
11. When the installation is complete, a summary is presented, indicating the state of the installation. Click Finish to exit the installation wizard.
12. Reboot the machine before starting any services and running Tivoli Business Systems Manager.
13. After the system has rebooted, restart all Tivoli Business Systems Manager services on the Tivoli Business Systems Manager Server.

**Note:** If an error occurs installing the Console Server component, and you need to run the update manually (for example, if the WebSphere ID or password was entered incorrectly), do not rerun the Fix Pack installer. Instead, run the following command from the <TivoliManager>\Console Server, to update the console server:

```
"<WebSphere install dir>\AppServer\bin\wsadmin.bat"
-f update.jacl -conntype SOAP -user <UserID> -password <UserPswd>
```

If you are upgrading to WAS 6.1.0.11, go to Chapter 3, "Tivoli Business Systems Manager support for WebSphere Application Server v6," on page 13.

## On each Tivoli Business Systems Manager client install:

1. Stop the console.
2. Unpack the file with the following command:
 

```
tar -xvf TIV_BSM_3.1.0_FP0003_consoles.tar
```
3. The console is supported on a number of operating systems. Change to the directory representing the appropriate operating system. Run the setup file from the consoleInstall\<platform> directory.
4. From the window that is displayed, select a language.
5. Click Next in the Welcome window.
6. Read the software license agreement. If you accept the terms of the agreement, click the radio button to indicate that you accept the terms and then click Next.
7. You are asked if files that are being updated should be backed up first. **Yes** is the default and it is selected. If you **do not** want the files to be backed up, click the check box to remove the selection. Click Next.
8. A summary is displayed. The Tivoli Business Systems Manager installation directory is listed. Click Next to continue with the installation.
9. You are asked if you want the console to be started once the installation is complete **Yes** is the default and it is selected. If you **do not** want the console to be started once the installation is complete, click the check box to remove the selection. Click Next.
10. When the installation is complete, a summary is presented, indicating the state of the installation. Click Finish to exit the installation wizard.

---

## Silent console installation

1. Run the setup.exe from the <fix pack> directory as follows:

```
setup -options-template outputFileName.scr
```

2. Edit outputFileName.scr to change any installation settings.
3. To install:

```
setup -options outputFileName.scr -silent
```

To uninstall the entire client, not just the Fix Pack code:

```
_uninst\uninstall -silent
```

**IMPORTANT:** \_uninst\uninstall -silent uninstalls the entire client component code not just the Fix Pack code.

---

## Console Software Package Blocks (SPB) installation:

Using software package blocks (SPBs), the fix pack for the console can be distributed to endpoints in a Tivoli Managed Environment. Tivoli Business Systems Manager 3.1 needs to be installed on the endpoints before the fix pack can be distributed.

1. Enter `tar -xvf TIV_BSM_3.1.0_FP0003_consolesSPB.tar` to extract the SPBs.
2. See *Appendix D. Distributing the Console in a Tivoli Managed Environment* in the *Tivoli Business Systems Manager 3.1 Installation and Configuration Guide* for SPB installation instructions.

**Note:** The fix pack install program does not allow you to change the installation directories or server name, so there are no default variables to change when you install SPBs.

The fix pack install program automatically locates the original installation directory on the endpoint.

To remove the console using software distribution, remove the original Tivoli Business Systems Manager 3.1 SPB. See *Appendix D. Distributing the Console in a Tivoli Managed Environment* in the *Tivoli Business Systems Manager 3.1 Installation and Configuration Guide* for instructions. You should not remove the fix pack's SPB.

---

## Tivoli Enterprise Console Event enablement component:

1. Unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_itecEventEnablement.tar
```
2. Use the following information to install patch from the Tivoli desktop:
  - a. You must have the *install\_product* and *super authorization* roles to successfully install this patch.
  - b. You should not have a running RIM\_MS\_SQL\_prog on your RIM host when you apply this patch.
  - c. Select **Install -> Install Patch** from the Desktop menu to display the **Install Patch** dialog.
  - d. Click the **Select Media** button to display the **File Browser** dialog.



- e. Enter the path to the directory containing the patch, <fixpack>/itecEventEnablement/fp3, in the **Path Name** field.
- f. Click the **Set Media & Close** button to return to the **Install Patch** dialog.
- g. The patch install list now contains the component name:  
3.1.0-Tivoli\_BSM\_Event\_Enablement-FP0003
- h. Select the patch by clicking on it.
- i. Select the clients to install this patch on.
- j. Click **Install** to install the patch.

---

## XML Toolkit:

If you previously installed the XML Toolkit as a separate component, then complete these instructions to upgrade that function. Do not follow these instructions if you are using the toolkit version that is automatically installed on the database server.

1. Unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_XMLToolkit.tar
```

The XML Toolkit is supported on a number of operating systems. Change to the directory representing the proper operating system.

2. Run the setup file from the XMLtoolkit\<platform>directory.
3. From the panel that is displayed, select a language.
4. Click **Next** on the Welcome panel.
5. Read the software license agreement. If you accept the terms of the agreement, click the button to indicate that you accept the terms and then click **Next**.
6. If you plan to use CCMDB discovery library books and want this capability to be configured during installation of Fix pack 3, click the appropriate selection and then click **Next**.
7. If you plan to use the CCMDB reader for discovery, enter the location for discovery library books.
8. When asked if files that are being updated should be backed up first, click the box if you would want the files to be backed up. Click **Next**.
9. Summary information is displayed. Click **Next** to finish the installation.
10. When the installation is complete, a summary is presented, indicating the state of the installation. Click **Finish** to exit the installation wizard.

---

## Special configuration instructions for failover environment that uses SQL 2000

**IMPORTANT:** If you are going to migrate to SQL 2005 immediately after applying this Fix Pack, do not follow these instructions; instead see Chapter 4, "Upgrading to SQL Server 2005 Enterprise Edition," on page 25.

1. Apply the upgrade to the primary and secondary servers as previously described in "Installing the Fix Pack" on page 6.
2. Reconfiguration of failover is required before re-starting the failover environment. Run the configuration script fo\_config with -G option to regenerate the configuration template.

```
sh fo_config -G > fo.cfg
```

3. Modify the fo.cfg to fit your environment before running the configuration script:

```
sh fo_config -f fo.cfg
```

4. Start SQLServerAgent on both primary and secondary servers, and ensure that it is started.
5. From a Command Prompt on the primary database server, enter this command to reinitialize Log Shipping in the proper direction:

```
sh fo_logship.ksh
```

For additional information, see “Tivoli Business Systems Manager Failover” on page 28.

---

## Tivoli Business Systems Manager Warehouse Enablement Pack 3.2.0.9 updates

To expand file TIV\_BSM\_3.1.0\_FP0003\_TDW\_fix.tar:

1. Copy the file TIV\_BSM\_3.1.0\_FP0003\_TDW\_fix.tar to your system.
2. Unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_TDW_fix.tar
```

3. When installing this Fix Pack on the Tivoli Data Warehouse control server, follow the procedure from the *Installing and Configuring Tivoli Data Warehouse version 1.2 Guide*. This procedure is documented in Chapter 8, Installing and upgrading warehouse packs. The required configuration file (twl\_install\_props.cfg) is located in the \tedw\_apps\gtm directory.

---

## OpenView adapter

To expand file TIV\_BSM\_3.1.0\_FP0003\_IMfOpenView.tar, unpack the file with the following command:

```
tar -xvf TIV_BSM_3.1.0_FP0003_IMfOpenView.tar
```

### OpenView Server:

1. Copy the Intelligent Monitor for OpenView install image from the <fix pack> \IMfOpenView directory to the OpenView server.
2. Install the Intelligent Monitor for OpenView. Refer to the Tivoli Business Systems Manager Installation and Configuration guide for instructions on how to install the Intelligent Monitor for OpenView.
3. Configuration information is available in the file

```
IMfOpenView_readme*.htm
```

This file is located in the /usr/OV/doc directory on the HP OpenView server.

---

## Chapter 3. Tivoli Business Systems Manager support for WebSphere Application Server v6

This chapter provides information about the IBM Tivoli® Business Systems Manager (TBSM) 3.1 product, support for running the TBSM Console Server application on IBM WebSphere Application Server, Version 6.

Become familiar with the information in this chapter before you install this support.

---

### Introduction

TBSM 3.1 included and automatically installed IBM WebSphere Application Server, Version 5.

TBSM 3.1 Fix Pack 3 provides support for running the TBSM Console Server application in a WebSphere Application Server Version 6 environment.

This chapter includes:

- Instructions to migrate the TBSM Console Server from WebSphere Application Server Version 5 to version 6.
- Upgraded scripts to allow TBSM Failover to correctly failover in a WebSphere Application Server v6 environment.
- Enhancements to the TBSM Health Monitor, so that it can locate and monitor WebSphere Application Server v6.

### Terminology used in this chapter

- v5** WebSphere Application Server Version 5. This version was included with and automatically installed by the TBSM 3.1 installation program.
- v6** WebSphere Application Server Version 6.1.0.11

### Default installation directory for v5 and v6

The default installation directory for WebSphere Application Server is not the same for v6 as it was for v5.

In v5 the default installation directory was:

`c:\Program Files\WebSphere\AppServer`

In v6 the default installation directory is:

`c:\Program Files\IBM\WebSphere\AppServer`

In the instructions that follow, be sure to note and use the correct directories when running commands for v5 or v6.

---

### Prerequisites

#### IBM Tivoli Business Systems Manager

- TBSM 3.1, with Fix Pack 2 or higher must be installed and fully configured.

- The TBSM Console Server application must already be successfully running on WebSphere Application Server, Version 5.0.

**Important:** Because of the configuration processing that occurs during the TBSM 3.1 installation process, we do not provide instructions for, nor support a *'bare-bones'* installation of the TBSM Console Server application on WebSphere Application Server v6. You must have an already-operational TBSM 3.1 installation running on v5, and follow the migration instructions in this chapter to upgrade it to a v6 installation.

## IBM WebSphere Application Server, Version 6

This Fix Pack does not include v6 - you will need to obtain and install a supported version of v6 before installing and configuring this support for v6. See "Compatibility" for the list of supported v6 versions.

---

### Compatibility

Fix Pack 3 support for WebSphere Application Server is compatible with the following version of WebSphere Application Server.

- IBM WebSphere Application Server, Version 6.1.0.11 (on Windows only)

**Note:** No other WebSphere product type is supported. For example, neither Network Deployment nor Community Edition is supported.

---

### WebSphere Application Server Installation and Migration

WebSphere Application Server v6 must be installed on the same machine as the current v5-based TBSM Console Server.

To get to IBM WebSphere Application Server, Version 6.1.0.11, do the following:

#### 1. Install WebSphere Application Server 6.1

Ensure that the previous version of WebSphere is not running before installing WebSphere v6. The following information can assist in determining how to respond to certain options on specific panels of the v6 installation.

##### Sample Applications

The sample applications are not required by TBSM. It is okay to deselect this option.

##### Installation Directory

Keep the default installation directory (c:\Program Files\IBM\WebSphere\AppServer).

**Note:** The TBSM 3.1 installation program automatically installed v5 in the following directory:

c:\Program Files\WebSphere\AppServer

In v6, the default installation directory has changed to

c:\Program Files\IBM\WebSphere\AppServer

This allows the two versions of WebSphere Application Server to coexist on the same machine.

**Important:** Do not attempt to install v6 into the same directory in which v5 was installed. You may not receive an error message during the installation process; however, the new v6 might not migrate correctly.

## Disable Administrative Security

**Important::** Be sure to deselect the *Enable administrative security* checkbox on the Enable Administrative Security panel during the installation.

Depending on your v5 configuration, administrative security might be automatically re-enabled after the v5 to v6 migration process is completed. If you want, you can use the WebSphere Administrative Console and re-enable administrative security after the v5 to v6 migration process is complete.

## Node and Host names

If you perform a custom installation, you might be prompted for a Node Name and Host Name. You should accept the default values. Do not use `tbsm31` as the Node name.

The installation will create a temporary default profile with these default node and host name. Instructions in the following sections explain how to create a new `tbsm31` profile and delete the temporary default profile.

## 2. Install WebSphere Application Server 6.1 Fix pack 11

You can download the fix pack and get installation instructions from the WebSphere support site located at:

<http://www-1.ibm.com/support/docview.wss?rs=180&uid=swg24016159>

---

## Create the `tbsm31` profile

After the v6. installation is complete, you need to create a new profile for TBSM 3.1. This profile will be named *tbsm31* and will contain all of the configuration information and files required to run the TBSM Console Server application.

**Note:** The v6 installation process creates a default profile (named “AppSrv01” ). This default profile should be deleted after the v5 to v6 migration is completed. See “Delete the v6 default profile” on page 18, for instructions on deleting this default profile.

To create the `tbsm31` profile:

### v6

1. Start the Profile Management tool:  
Start->All Programs->IBM WebSphere->Application Server v6->Profile Management tool.
2. Welcome  
Click **Next**.
3. Environment Selection:
  - Select **Application server**.
  - Click **Next**.
4. Profile Creation options:
  - Select **Advanced profile creation**.

- Click **Next**.
5. Optional Application Deployment:
    - Select **Deploy the administrative console**.
    - Optionally, select **Deploy the default application** (this is not required by TBSM)
    - Click **Next**.
  6. Profile Name and Location:
    - Profile name: **tbsm31**
    - Profile directory:  
**c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31**
    - Select **Make this profile the default**.
    - Click **Next**.
  7. Node and host names:  
Node name: **tbsm31**  
Host name: keep the default (the hostname of the current machine)
    - Click **Next**.
  8. Administrative Security:
    - Deselect **Enable administrative security**.
    - Click **Next**.
  9. Port values assignment:
    - Accept the default port assignments.
    - Click **Next**.
  10. Windows Service Definition:
    - Select **Run the Application Server process as a Windows service**.
    - If you use LDAP, select *Log on as a local system account*.
    - If you use LocalOS, select *Log on as a specified user account* and enter the desired user name and password.
    - Startup type: select **Automatic**.
    - Click **Next**.
  11. Web Server Definition:
    - Keep **Create a Web server definition** unselected.
    - Click **Next**.
  12. Profile Creation summary:
    - Review the information in the summary.
    - Click **Create**.

It could take a few minutes for the profile to be created.

- Once complete: On the panel that states, *Profile creation complete*, click **Finish**.

---

## Run the Migration wizard

The Migration wizard that is included in WebSphere Application Server, will migrate all required files and configuration options from the v5 installation to the new v6 installation.

We recommend using the Migration Wizard to perform the migration from v5 to v6. However, you could use the v6-provided command line tools instead. For details on running those commands, see “Command line alternatives to the v6 Migration wizard” on page 23.

1. Run the Migration wizard by selecting Migration wizard from the First steps application, or by opening a Command Prompt and running:  
c:\Program Files\IBM\WebSphere\AppServer\bin\migration.bat
2. Click **Next** after reading information on the Welcome panel.
3. Detected versions of WebSphere Application Server:

**Note:** The existing v5 installation might not be detected by the Migration wizard. If this is the case, you need to manually provide the path to the v5 installation by doing the following:

- a. Select *Specify the installation location if your existing product is not listed*.
  - b. In the *Installation root directory of the previous version* field, enter the location of the v5 server: C:\Program Files\WebSphere\AppServer
  - c. Click **Next**.
4. Source profile selection:
    - a. Source Profile: select **defaultInstance**
    - b. Click **Next**.
  5. Target profile selection:
    - a. Target Profile: select **tbsm31**.
    - b. Deselect **Back up the target profile before migrating the source**.
    - c. Click **Next**.
  6. Migration backup directory:
    - a. Backup directory: Enter the name of a directory on a drive with at least 100MB available space. For example: c:\TBSMProfileBackup.
    - b. Click **Next**.
  7. Application migration settings:
    - a. Select **Migrate and install the applications** (this is the default).
    - b. Click **Next**.
  8. Application migration settings:
    - a. Select **Install the applications in the default directory of the target version**.
    - b. Click **Next**.
  9. Port value assignment:
    - a. Select **Use port values assigned to previous (source) installation**.
    - b. Click **Next**.
  10. Additional migration options:
    - a. Select **Migrate to support script compatibility**.
    - b. Click **Next**.
  11. Migration summary:
    - a. Review the settings.
    - b. Click **Next**.

The migration will take several minutes.

The process is divided into two steps.

1. After the first step, review the output and click **Next**.
2. The second step could display some deprecation warnings. These may be safely ignored. Any errors that appear in the output can be viewed by opening the log files in the following directory:

`c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\logs`

or here

`c:\TBSMProfileBackup\logs`

where `c:\TBSMProfileBackup` is the profile backup directory you specified in the Migration backup directory step of the Migration wizard.

3. After the migration completes, click **Next**.
4. On the Migration Status panel, click **Finish**.

---

## Post Migration Steps

After migration is successful, you should have two new v6 profiles:

- The default profile that was created during installation
- The new `tbsm31` profile

You should also have three separate *IBM WebSphere Application Server... services* in the Windows Services view:

- One v5 entry
- Two v6 entries

The steps in this section describe how to clean up the unused services and profiles.

### Remove the v5 Service

Remove the v5 service to eliminate conflicts between the v5 and v6 services.

Run the following commands to remove the v5 service.

```
c:\Program Files\WebSphere\AppServer\bin\WASService.exe -stop server1
```

```
c:\Program Files\WebSphere\AppServer\bin\WASService.exe -remove server1
```

**Note:** If you installed v5 using the TBSM 3.1 installation program and accepted the default location, `c:\Program Files\WebSphere\AppServer` was the installation directory for v5.

If you installed v5 to a different directory, replace `c:\Program Files\WebSphere\AppServer` in the examples with the appropriate directory.

### Verification Steps

1. Open the Windows Services by selecting Start->All Programs->Administrative Tools->Services.
2. Verify that the **IBM WebSphere Application Server V5 - server1** service no longer appears in the list of services. If the Services view was open when you issued the remove command, refresh the view by selecting Action->Refresh.

### Delete the v6 default profile

The v6 installation process creates a default profile named *AppSrv01*. To avoid confusion and potential problems in the future (for example, accidentally starting the wrong server), you should delete the default profile.



Run the following commands to remove the default profile:

1. Stop the server1 server:

```
cd c:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01\bin
stopServer.bat server1 -username <username> -password <password>
```

**Note:** The -username and -password parameters might not be required, depending on your configuration.

2. Delete the profile:

```
cd c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin
manageprofiles.bat -delete -profileName AppSrv01
```

### Verification Steps:

1. Open the Windows Services view by selecting Start->All Programs->Administrative Tools->Services
2. Verify that the only WebSphere Application Server service remaining in the list is **IBM WebSphere Application Server V6.1 - tbsm31**. For example:

Status	Service Name	Display Name
running	IBM WAS61Service - tbsm31	IBM WebSphere Application Server V6.1 - tbsm31

### Troubleshooting:

Even once the default profile is successfully deleted, the Profiles->default menu items might still appear in the Start->All Programs menu. You can safely delete these menu items.

If you encounter problems deleting the default profile, see the information in the InfoCenter for instructions on how to manually remove it:

[http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/tpro\\_removeprofile.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/tpro_removeprofile.html)

### Reboot

Reboot the system. The v6 service will automatically start.

### Configure Security Settings

A few additional security settings must be configured in v6 before running the TBSM Console Server application.

1. Open the WebSphere Administrative Console:  
Start->All Programs->IBM WebSphere->Application Server v6->Profiles->tbsm31->Administrative console
2. Set the Primary Administrative User Name
  - a. Expand the **Security** section in the tasks list, and select **Secure administration, applications, and infrastructure**.
  - b. In the **User account repository** section of the Secure administration, applications, and infrastructure panel, click the **Configure** button.
  - c. The **Secure administration, applications, and infrastructure** page opens. Enter the userid that is used for WebSphere server administration in the **Primary administrative user name** field.
  - d. Click **Apply**.

- e. On the **Messages confirmation** dialog, click **Save** to apply the change to the master configuration.
3. Disable Java2 Security
  - a. Expand the **Security** section in the tasks list, then select **Secure administration, applications, and infrastructure**.
  - b. In the Java 2 security section of the Secure administration, applications, and infrastructure panel, make sure **Use Java 2 security to restrict application access to local resources** is **not** selected.
  - c. Click **Apply**.
  - d. Click **Save** on the Messages confirmation panel.
4. Logout from the WebSphere Administrative Console.
5. Stop and restart the v6 Server.

---

## Health Monitor support

In the following instructions:

<TBSM\_DIR>

refers to the directory in which TBSM is installed (by default the directory is c:\Program Files\Tivoli\tbsm).

<FIXPACK3\_DIR>

refers to the temporary directory into which the Fix Pack is extracted.

## Installing this support on the Health Monitor

### On the Health Monitor server machine

Invoke the following script to update the WebSphere Application Server service name that Health Monitor should monitor:

```
cd <TBSM_DIR>\bin
sh updatewasservicenameforhmon.ksh -s "IBMWAS61Service - tbsm31"
```

The [-s was\_service\_name] is optional. If provided, the Health Monitor will be configured with the specified service name. If not provided, the WebSphere Application Server service name will be searched for in the following order:

1. IBMWAS61Service - tbsm31
2. IBMWAS5Service - server1

After updating the registry items, the Health Monitor service will be restarted to retrieve the updated information.

The following error messages may occur when running updatewasservicenameforhmon.ksh:

GTMHM0006E: Display name not found for service: %1

A service name parameter was specified for which there is no corresponding service display name.

The service name provided is invalid. The user should verify he input a valid service name for the -s option.

GTMHM0007E: Health Monitor configuration failed to update key: %1

The registry could not be updated. This is a system problem.

GTMHM0008I: %1 already configured to Health Monitor as a service. The WAS service name is already configured. No changes were made to Health Monitor.

---

## Finished migration

The migration of the TBSM Console Server application from v5 to v6 is complete. No further configuration of TBSM or WebSphere Application Server is necessary. Now it's okay to start the TBSM Services and logon to the Java Consoles, Web Consoles and Executive Dashboards.

---

## Post Installation information

### Failover

The upgraded failover scripts provide support for the v6 service names, which were changed between v5 and v6. These scripts are compatible with both v5 and v6 installations.

None of the commands, parameters, or instructions for using these scripts have changed, as a result of Fix Pack 3.

For further information, see "Chapter 6, The Failover Process" in the IBM Tivoli Business Systems Manager 3.1 Administrator's Guide.

### Health Monitor

After running the `updatewasservicenameforhmon.ksh` command to update the WebSphere Application Server service name (using the procedure described in "On the Health Monitor server machine" on page 20), the Health Monitor will automatically be restarted and will operate as before.

None of the commands, parameters, or instructions for using the Health Monitor have changed.

For further information, see 'Using the Health Monitor' in Chapter 4 of the IBM Tivoli Business Systems Manager 3.1 Administrator's Guide.

## Starting and Stopping WebSphere Application Server

The following information can be helpful if you use the command line to start and stop the v6 server.

**Important:** The location of the batch files used to manage the WebSphere Application Server (for example, `startServer.bat` and `stopServer.bat`) has changed from the location that was used in v5.

In v5, these batch files were located in: `c:\Program Files\WebSphere\AppServer\bin`.

In v6, these batch files are located under the `profiles\tbsm31` directory: `c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin`

The batch files underneath the profiles directory establish the environment and then invoke batch files by the same name in the `c:\Program Files\IBM\WebSphere\AppServer\bin` directory.

This location change can cause problems if you are not careful. For example, there is a startServer.bat file located here:

```
c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin\startServer.bat
```

and one located here:

```
c:\Program Files\IBM\WebSphere\AppServer\bin\startServer.bat
```

**When invoking the v6 command line scripts, you must invoke the ones in the profiles\tbsm31\bin directory and not the ones in the AppServer\bin directory.**

The menu items found in the Windows Start menu invoke the correct batch files in the profiles\tbsm31\bin directory, so you can use those menu items to manage the server, instead of using the command line.

For example using *Start->All Programs->IBM WebSphere->Application Server V6->Profiles->tbsm31->Start the server* invokes the startServer.bat file in the correct directory.

### **To start the v6 server:**

1. Start->All Programs->IBM WebSphere->Application Server V6->Profiles->tbsm31->Start the server

or

```
c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin\startServer.bat server1
```

You may need to provide -username and -password arguments, depending on your configuration. For example:

```
c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin\startServer.bat server1 -username <username> -password <password>
```

### **Verification Steps:**

1. Open the Windows Services view by selecting: Start->All Programs->Administrative Tools->Services
2. Verify that the IBM WebSphere Application Server v6 service is running.
3. Start the TBSM Java Console and logon to the TBSM Console Server.

---

## **Problem determination**

### **Log Files**

#### **Migration Log Files**

Migration Log Files can be found here:

```
c:\TBSMProfileBackup\logs\WASPreMigrationSummary.log  
c:\TBSMProfileBackup\logs\WASPostMigrationSummary.log
```

where c:\TBSMProfileBackup is the profile backup directory you specified in Step 6 of "Run the Migration wizard" on page 16.

Additional migration information can be found here:

```
c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\logs
```

## TBSM Console Server Log Files

WebSphere Application Server v6 moved the application log files underneath the individual profile directories. The TBSM Console Server application log files are now located here: `c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\logs\TBSMServer1.log`

## Known Problems and Workarounds

### Service does not stop if userid in soap.client.props file

#### Problem

In some instances, the service will not start or stop if you have specified the userid in the soap.client.props file.

#### Workaround

Use the command line startServer.bat and stopServer.bat commands and provide the userid and password using the -username and -password arguments on the command line.

---

## Command line alternatives to the v6 Migration wizard

The v6 Migration wizard (described in “Run the Migration wizard” on page 16) is the recommended tool for migrating from v5 to v6. However, if you prefer to do the migration manually, v6 provides the WASPreUpgrade and WASPostUpgrade commands.

These commands should be run on the TBSM Console Server machine.

**Important:** Ensure you call the versions of these commands that are located in the profiles\tbsm31\bin directory.

## WASPreUpgrade

This command backs up all of the v5 files and configuration. The syntax of WASPreUpgrade is:

```
WASPreUpgrade.bat backupDirectory
                  currentWebSphereDirectory
                  [-traceString trace_spec [-traceFile file_name ]]
```

For TBSM, invoke it as follows:

```
cd 'c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin'
WASPreUpgrade.bat c:\TBSMProfileBackup c:\PROGRA~1\WebSphere\AppServer
```

If you receive an error

This command may take several minutes to complete. When finished, you should see the following message:

```
MIGR0420I: The first step of migration completed successfully.
```

For further information on this command, see:

[http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/rmig\\_WASPreUpgrade.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/rmig_WASPreUpgrade.html)

## WASPostUpgrade

This command reads the backup created by the WASPreUpgrade command and migrates the files and configuration to v6. It must be invoked after successful completion of the WASPreUpgrade command. The syntax of WASPostUpgrade is:

```
WASPostUpgrade.bat backupDirectory
                    [-oldProfile profile_name]
                    [-profileName profile_name]
                    [-scriptCompatibility true | false]
                    [-portBlock port_starting_number]
                    [-backupConfig true | false]
                    [-replacePorts true | false]
                    [-includeApps true | false | script]
                    [-keepAppDirectory true | false]
                    [-appInstallDirectory user_specified_directory]
                    [-traceString trace_spec [-traceFile file_name]]
```

For TBSM, invoke it as follows:

```
cd "c:\Program Files\IBM\WebSphere\AppServer\profiles\tbsm31\bin"
```

```
WASPostUpgrade.bat c:\TBSMProfileBackup -profileName tbsm31 -replacePorts true
```

This command may take several minutes to complete. When finished, you should see the following message:

MIGR0271W: Migration completed successfully, with one or more warnings.

The warnings may be safely ignored.

For further information on this command, see:

[http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/rmig\\_WASPostUpgrade.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/rmig_WASPostUpgrade.html)

---

## Chapter 4. Upgrading to SQL Server 2005 Enterprise Edition

**Note:** If you are running on Windows 2000, do NOT use Terminal Services to remotely access the machine where the upgrade will be done. You can use VNC (Virtual Network Computing) to remotely access the machine.

Do the upgrade steps that are described in this chapter on the TBSM 3.1 Database Server and on the TBSM 3.1 History Server.

---

### Prerequisites

- TBSM 3.1 at Fix Pack 2 or higher
- SQL Server 2000 Enterprise Edition

---

### How to upgrade to SQL Server 2005

1. Ensure that all TBSM services are stopped.
2. The first panel that opens when installing SQL Server 2005 Enterprise Edition is the End User License Agreement. If you accept the terms of the license agreement, select **I accept the licensing terms and conditions** and click **Next**.
3. The Microsoft SQL Server 2005 Setup panel lists the Microsoft prerequisites. Click **Install** to install these prerequisites. After the prerequisites are installed, click **Next** to continue.
4. When the *Welcome to Microsoft SQL Server Installation Wizard* opens, click **Next**.
5. For *System Configuration Check*, make sure there are no error messages. If you get a warning message about Microsoft Internet Information Services (IIS), you can ignore the warning. Click **Next**.
6. Fill in pertinent information in the *Registration Information* panel. Click **Next**.
7. In the *Components to Install* panel, select **SQL Server Database Services** and **Workstation Components, Books Online & Development Tools**. Click **Next**.
8. In the *Instance name* panel, keep the **Default Instance** selection. Click **Next**.
9. In Existing Components panel, select **SQL Server Database Services 8.xx.xxxx**. Click **Next**.
10. In the *Upgrade Logon Information* panel, select **SQL Server Authentication Mode** and enter the database userid and password. Click **Next**.
11. On the *Service Account* panel, enter the username and password of the domain for the system. Keep the default values for other items on the panel. Click **Next**.
12. Click **Next** in the *Error and Usage Report Setting* panel.
13. Review the information on the *Ready to Install* panel, and then click **Install**.
14. Once the Setup Progress panel completes with no errors, click **Next**.
15. Click **Finish** on the *Completing Microsoft Sequel Server* screen.

### Apply Service Pack 2 for SQL Server 2005

Before proceeding to the next section, download and apply the latest service pack (SP2) for SQL Server 2005 from the Microsoft Web site.

### Reboot the system

Once the installation of Service Pack 2 is complete, reboot the system.

---

## SQL 2005 Post-upgrade Steps

Ensure that the MSSQLSERVER service is running before proceeding to the next section.

### Apply the upgrade file for SQL 2005 on the Database server

Using the applyupgrade.ksh tool, run the upgrade file 3102tivbsmfp0003\_2005.upg that is located in <TBSMInstallDir>/sql directory, and make sure it finishes successfully with no errors.

1. At the command prompt, change the directory to: <TBSMInstallDir>\sql
2. Run the following command on the **Database server**:

```
sh ./ApplyUpgrade 3102tivbsmfp0003_2005.upg
```

### Apply the upgrade file for SQL 2005 on the History server

Using the applyupgrade.ksh tool, run the upgrade file 3102tivbsmfp0003\_2005.upg that is located in <TBSMInstallDir>/sql directory, and make sure it finishes successfully with no errors.

1. At the command prompt, change the directory to: <TBSMInstallDir>\sql
2. Run the following command on the **History server**:

```
sh ./ApplyUpgrade -S <HistoryServerName> -U <database_username> -P  
<database_password> 3102tivbsmfp0003_2005.upg
```

### Upgrade job steps that use tokens in SQL Server 2005

Use of the TBSM product with Microsoft SQL Server 2005 is possible only for users that have separately implemented details offered from the Microsoft Knowledge Base article KB915845, which is offered from the Microsoft support website.

The Microsoft product is licensed to you by its owner and not by IBM. It is your responsibility to determine whether the license terms offered by the product's owner are acceptable to you. YOUR USE OF THE MICROSOFT PRODUCT AND ANY URL'S OR MATERIALS ON THIRD PARTY WEBSITES ("THIRD PARTY MATERIALS") IS "AS IS", WITHOUT WARRANTY FROM IBM OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. TO THE EXTENT PERMITTED BY LAW, IBM DISCLAIMS ALL LIABILITY FOR ANY CLAIMS ARISING OUT OF USE OF THE THIRD PARTY MATERIALS.

#### Upgrade steps:

1. Stop SQL Server Agent (if running).
2. Open SQL Server Management Studio by going to **All programs** -> **Microsoft SQL Server 2005** -> **SQL Server Management Studio**, and then connect to the server.
3. Click **New Query** located in the upper left corner of the screen.
4. Copy the SQL code in the Resolution section of the Microsoft Knowledge Base article KB915845 (<http://support.microsoft.com/kb/915845/>) to the Query window in the SQL Server Management Studio. Execute the SQL code to create the stored procedure called sp\_AddEscapeNoneToJobStepTokens.
5. Run the stored procedure sp\_AddEscapeNoneToJobStepTokens on msdb database by executing the following SQL in a new query window:



```
USE msdb
GO
EXEC sp_AddEscapeNoneToJobStepTokens
GO
```

## 6. Start SQL Server Agent

### Check database integrity

Execute the following SQL to check the database for column values that are not valid or that are out of range:

```
USE Object
GO
DBCC CHECKDB WITH DATA_PURITY
GO
```

**Note:** When executing this step, you might (in some cases) encounter one of the following errors:

- **Msg 2511, Level 16, State 2, Line 1**

Table error: Object ID 991811091, index ID 1, partition ID 346474308370432, alloc unit ID 346474308370432 (type In-row data). Keys out of order on page (1:24563), slots 14 and 15.

The error suggests that there is some allocation problem with [index ID 1] in table [Object ID 991811091]. It can be fixed by running **DBCC DBREINDEX** (that rebuilds the index) command on the mentioned table index.

In the following example, substitute '<TableID>' and '<IndexID>' accordingly. In the error message above, **<TableID> is 991811091** and **<IndexID> is 1**.

```
DECLARE @tblname NVARCHAR(64), @indname NVARCHAR(64)
SELECT @tblname = OBJECT_NAME(<TableID>)
SELECT @indname = name FROM sysindexes WHERE id = <TableID> AND
indid = <IndexID>
DBCC DBREINDEX(@tblname, @indname)
```

Remember to repeat this process for all similar errors, and then re-run **DBCC CHECKDB** to check the validity of the column values.

- **Msg 2508, Level 16, State 3, Line 2 The In-row data RSVD page count for object "dynamic\_object\_create\_path\_detail", index ID 0, partition ID 100889916211200, alloc unit ID 100889916211200 (type In-row data) is incorrect. Run DBCC UPDATEUSAGE. There are 3874 rows in 27 pages for object "dynamic\_object\_create\_path\_detail". CHECKDB found 0 allocation errors and 1 consistency errors in table 'dynamic\_object\_create\_path\_detail' (object ID 1539457950).**

This error can be fixed by running **DBCC UPDATEUSAGE**. For the table in the example above, it would be run as follows:

```
DBCC UPDATEUSAGE ('Object', 'dynamic_object_create_path_detail')
```

Remember to repeat this process for all similar errors, and then re-run **DBCC CHECKDB** to check the validity of the column values.

### Disabling Selected SQL Server 2005 Management Studio Options

Certain SQL Server 2005 Management Studio options must be manually disabled for every Windows account that is used to run queries.

To disable these options, do the following steps:

1. Start the SQL Server 2005 Management Studio. **Click Start -> All Programs -> Microsoft SQL Server 2005 -> SQL Server Management Studio.**

2. From the SQL Server Management Studio window, click **Tools** → **Options**. Expand **Query Execution**, then expand **SQL Server**, and click **Advanced**.
3. Make sure the only check box selected is **SET ARITHABORT**. Clear the **SET CONCAT\_NULL\_YIELDS\_NULL** check box.
4. Click **ANSI**.
5. Clear all check boxes. Click **OK**.
6. Close SQL Server Management Studio.

## Detach and attach databases

**Note:** This section applies to the database server only.

1. Ensure that the SQLSERVERAGENT and TBSM services are stopped before detaching and attaching the databases.
2. To detach the databases, run:  
`detachdatabases.sql`  
 located in <TBSMInstallDir/sql
3. To attach the databases, run:  
`attachdatabases.sql`  
 located in <TBSMInstallDir/sql
4. Start the SQLSERVERAGENT and TBSM services.

## Update statistics

**Note:** This section applies to the database server only.

The statistics of the database should be updated after migration:

- Run the Update Object Stats SQL job.

---

## Tivoli Business Systems Manager Failover

The TBSM 3.1 failover scripts and stored procedures have been modified to handle SQL Server 2005 changes. If you migrate to the SQL Server 2005, a new failover configuration is required even if the server roles are unchanged. During failover configuration, the new stored procedures are loaded into the SQL Server 2005 databases and the existing procedures are updated. Options that are supported in the SQL environment for the failover scripts remain the same.

If you apply Fix Pack 3 to TBSM 3.1 and continue in the SQL 2000 server environment, it is not necessary to re-configure failover. Scripts and stored procedures should continue to work as usual.

Failover script options remain the same, but there are noticeable differences in initializing the log shipping and failover execution. These differences are described in the following tables.

*Table 1. Log shipping job names*

SQL Server 2000	SQL Server 2005
TBSM Log Shipping Transaction Log Backup TBSM Log Shipping Backup/Restore History Purge TBSM Log Shipping History Purge	TBSM Log Shipping LSBackup_<dbname>

Table 1. Log shipping job names (continued)

SQL Server 2000	SQL Server 2005
TBSM Log Shipping Copy Job TBSM Log Shipping Load Job TBSM Log Shipping Out of Sync Check TBSM Log Shipping Backup/Restore History Purge TBSM Log Shipping History Purge	TBSM Log Shipping LSCopy_<primaryServer>_<dbname> TBSM Log Shipping LSRestore_<primaryServer>_<dbname> TBSM Log Shipping LSAAlert_<SecondaryServer>

Table 2. Alert messages

SQL Server 2000	SQL Server 2005
Use Message ID 90051	Use Message ID 14420 for Primary back up Use Message ID 14421 for Secondary copy and restore

Table 3. Log shipping monitoring

SQL Server 2000	SQL Server 2005
log_ship_entity_log log_ship_status	msdb.dbo.log_shipping_monitor_secondary msdb.dbo.log_shipping_monitor_primary msdb..log_shipping_monitor_error_detail msdb..log_shipping_monitor_history_detail

Table 4. Failover script changes

SQL Server 2000	SQL Server 2005
fo_tlfchk.ksh fo_status.ksh fo_cmd_execute.ksh fo_logship.ksh fo_failover.ksh load_fo_env.ksh fo_config.ksh	fo_tlfchk.ksh fo_status.ksh fo_cmd_execute.ksh fo_logship.ksh fo_failover.ksh load_fo_env.ksh fo_config.ksh

Table 5. Stored procedure changes

SQL Server 2000	SQL Server 2005
asisp_enabledisable_job.sql asisp_disable_logship_jobs.sql	asisp_enabledisable_job.sql asisp_disable_logship_jobs.sql

Table 6. New stored procedures

SQL Server 2000	SQL Server 2005
	tbsm_logship_init_db.sql tbsm_logship_init.sql tbsm_logship_cleanup.sql tbsm_logship_cleanup_db.sql

## Considerations for Failover

- Perform detachdatabases.sql and attachdatabases.sql before configuring Failover. You should not issue these SQL commands after log shipping has been initialized.
- The option to abort log shipping aborts log shipping on the database server and the history server. If necessary, use the following SQL command to bring the database out of read-only mode.

```
RESTORE DATABASE <databaseName> WITH RECOVERY
EXEC master.dbo.sp_dboption <databaseName>, 'trunc. log', 'true'
```

- **Undo** files that show up in the Secondary server logshipbackup directory should not be manually deleted. These **Undo** files will be removed automatically after the first log restore.
- Do **Refresh** before you check things in the SQL Server Management Studio. The state of a database object is in constant change. They will not be auto refreshed in your SQL Server Management Studio.
- Check both the SQL error log and the system Event Viewer log for clues.
- The Alert job is running on the Secondary server. If the SQL Server Agent on the Secondary server is not running, the alert message will not be generated even if the two databases are out of synch.
- Windows Messenger service needs to be running for the Alert message to be emitted.
- If the log(trn) file is missing or corrupted, you will see a message similar to the following in the restore job log.

#### Message

```
2007-08-20 10:40:09.62 *** Error: The file 'D:\logshipbackup\Object\Object_20070820134510.trn'
is too recent to apply to the secondary database 'Object'.(Microsoft.SqlServer.Management.LogShipping) ***
```

```
2007-08-20 10:40:09.62 *** Error: The log in this backup set begins at LSN 23372000000004200001,
which is too recent to apply to the database. An earlier log backup that includes
LSN 23368000000006900001 can be restored.
```

```
RESTORE LOG is terminating abnormally.(.Net SqlClient Data Provider) ***
```

```
2007-08-20 10:40:09.70 Searching for an older log backup file. Secondary Database: 'Object'
```

- You can either run the fo\_tlfchk.ksh script to attempt to recover the file, or manually examine and compare the logshipbackup directories on the primary and the secondary servers and manually copy the missing or corrupted file. If the copying attempt fails, then you should reinitialize the log shipping.
- The disconnect\_user option is enabled while setting up the restore job on the secondary server. Connecting to the database in the SQL Server Management Studio does not prevent the restore job from completing successfully.
- You will get an error messages if you try to access the database while the restore job is running. When you try the operation again at a later time, the issue should be resolved.

---

## Appendix. APARs included in 3.1.0-TIV-BSM-FP0003

Fix Pack 3 includes fixes for the following APARs:

### OA15196

THE COMMAND BACKUPALLDATABASES DOES NOT BACKUP THE DATABASES

The msdb database is a system related database. TBSM does not require msdb to be backed up/restored when BackupAllDatabases/RestoreAllDatabases commands are run. You can ignore the fact that the msdb backup is not created and also ignore the message stating that the msdb could not be restored at restore time.

TBSM maintains a *default job* copy of the TBSM added jobs within tables in the Object database. Initially those tables have only those jobs added by TBSM and not the jobs that the user might have added or changed by using the SQL Server Enterprise Manager. The default job list is updated automatically with the latest information that is contained in the msdb database if a customer detaches the database using the detachdatabases procedure. The new *default job* list will be used the next time the Object database is loaded into the system and the msdb is re-populated. This means that if you do not maintain a proper backup of the msdb database, TBSM will restore (at a minimum) a *default job* list that will allow it to run.

If you want to ensure that all of the information contained within the msdb database is restored, make sure you have a valid backup copy and that you restore the backup copy using the methods outlined by Microsoft for such databases. The TBSM software restores the minimum default level, which could be that of initial install (plus TBSM added jobs).

### OA15386

DATE COLUMN IN EVENTVIEWER NEEDS TO SHOW TIMEZONES INFORMATION

The fix for this APAR causes the database server event creation time to display in the event viewer.

### OA16190

GTM\_C10\_S020\_PROCESS\_RESOURCES\_STAGING FAILING

The GTM\_c10\_s020\_Process\_Resources\_Staging step fails with the message:

```
= Unaltered SQL Stmt : "UPDATE GTM.stg_UPDATEattr SET twh_comp_id=
(SELECT r.comp_id FROM GTM.resourcer
WHERE r.cid = twh_cid AND r.id = twh_id)"
CDWEX8087E A general SQL error occurred: SQL_ERROR: 'ExecDirect'
2006.04.12 12:12:17.762 sqlState = 21000,
nativeErr = -811, errorMsg = [IBM][CLI Driver][DB2/NT] SQL0811N
The result of a scalar fullselect,
SELECT INTO statement, or VALUES INTO statement is more than one row.
SQLSTATE=21000.I h
```

### OA16261

STEP GTM\_M10\_S030\_LOAD\_EVENT\_STAGING FAILING WITH ERROR

The GTM\_m10\_s030\_Load\_Event\_Staging step of the ETL processed failed with a duplicate key insert error.

**OA16400, OA16400.1**

HEALTHMONITOR AND CL\_HEALTHMONITOR DO NOT ALERT IF THERE ARE MANY TRSTATE=2 IN CL\_STAGE TABLE.

HealthMonitor and CL\_HealthMonitor do not alert the user if there are many trState=2 records queued up in the CL\_stage table.

Added a new column called *Received Pending* in the HealthMonitor that alerts the user if the trState=2 records queue up beyond a certain limit.

**OA16493**

OPTIMIZE PERFORMANCE OF ASISP\_UPDATEOBJPATHCACHE JOB

The process to update the ObjPathCache was changed so that resource path changes are processed once, and not re-evaluated later in the same step.

**OA16545**

THE FLAG FOR MESSAGE AOF571I\_SOFTDOWN CONTAINS INCORRECT FLAG

The flag for the message **AOF571I\_SOFTDOWN** contains *AutomationStarted on* instead of *AutomationME off*. This needs to be updated via the MESSAGE\_DESCRIPTION sqi.

**OA16585**

ERROR MESSAGE RECORDBATCHCURRENTSTATECHANGE TOO MANY ARGUMENTS SPECIFIED

**OA16685**

GTM\_C10\_S060\_PROCESS\_REPORT\_RESOURCES\_STAGING FAILS

Number of failures during ETL step execution

**OA16721**

GTM\_M10\_S030\_LOAD\_EVENT\_STAGING ENDING IN ERROR BECAUSE OF DUPLICATE VALUES IN A CDW TABLE

**OA16736**

ERROR "GTMCI0005E EXCEPTION DATA: NO SUITABLE DRIVER"

Execution of the defineplacementrule.ksh script is failing with the following resulting errors:

- GTMDC0010E Error accessing the TBSM database.
- GTMCI0005E Exception data: No suitable driver
- GTMCI0002I Command processing completed.

The command being executed is: sh defineplacementrule -S abc -U tbsm -P xyz display -A

**OA16853**

DIST TBSM NOT HANDLING HSM CONSOLE MESSAGES CORRECTLY. ERROR = 'UNHANDLED EVENT HAS EXPIRED'

**OA16939**

IMPROVE PERFORMANCE OF CLEANING UP OLD EXCEPTIONS

This fix addresses performance related issues around the clean up of SQL tables holding event, exception, message, and alert state history data that is no longer needed for system operation.

The jobs in this fix are already steps within scheduled jobs that were created in Tivoli Business Systems Manager Version 3.1. As long as the

cleanup jobs are already running enabled, your installation will immediately begin using these new clean up procedures.

To help with the Cleanup Event Viewer Tables job, an option was added that truncates the table rather than deleting anything older than a specific number of minutes. When deleting on minutes, a delete is done on the table and this can be slow if the table is large.

A new truncation option is enabled by modifying the job step to, "EXEC asisp\_cleanupEvtViewResultSets @trunc=1" and to change the schedule to run the job every couple of hours, rather than every 15 minutes.

The default is to continue to execute the job as it is done today.

**OA16976**

WHEN A LOB IS CREATED USING THE IS NULL PATTERN AND THE ABS

**OA17004**

UNABLE TO EXTRACT THE DATE FROM THE EXPORT FILE USING IMPORTLOBFROMXML

**OA17067**

TBSM DLA SUPPORT

**OA17109**

PROBLEM TICKET CREATION FAILS FOR TEC EV WITH EXT ATTRIBUTE

**OA17165**

The Staged Event Loader halted because it lost connection with the SQL Server database.

**OA17298**

DUPLICATE CHEV EVENTS SHOWING IN THE REPORTING SYSTEM AND IN TWH\_MART WHEN SHORTCUTS EXIST

**OA17340**

ERROR IN THE ETL PROCESS THAT CAUSES SOME PATHS NOT TO BE INSERTED INTO THE GTM.D\_COMP\_PATH TABLE

**OA17346**

TBSM INTERFACE WITH OMEGAMON 3.5 INCORRECT

**OA17613**

STATUS EVENTS NOT SENT TO TEC FROM TBSM

**OA17871**

DCR 239: TBSM 3.1 ON WAS 6.X

Adding support for TBSM 3.1 Fix Pack 2 to run on WAS 6.x.

**OA17898**

COLUMN INSTRID MISSING FROM THE CL\_IDCACHE TABLE AFTER INSTALLING FIXPACK 2

**OA17913**

MESSAGE GTM7911D DOES NOT UPDATE STATUS OF TBSM OMEGAMON CONNECTION.

**OA18037**

ACK EVENTS FROM TEC TO TBSM DO NOT GET CORRECTLY PROCESSED

**OA18072**  
TEC EVENTS NOT FORWARDED TO TBSM FOLLOWING NEW .RUL  
FILE LOADED

**OA18094**  
MSSQL OBJECTS EXPORTED FROM TADDM NOT MAPPED IN TBSM

**OA18104**  
STATUS, VIA EVENTS PROPAGATING IN UI INCORRECTLY

**OA18170**  
NULLS VALUES RECEIVED INTO THE GEM\_APMGENERICMSG  
TABLE

**OA18221**  
DATA NOT PROPERLY BEING DELETED FROM THE 'EVENT' TABLE  
CAUSING THE OBJECT DATABASE TO KEEP GROWING

**OA18234**  
TBSM CONSOLE NOT ACCESSIBLE, SQL ERRORS IN ERRORLOG

**OA18248**  
MODULE GTMEDITB USING VARIABLE FIELD2 IN LOGIC AND  
DATATYPE

**OA18290**  
ABS DISCOVERY PROCESS JOB PERFORMANCE TOO SLOW DURING  
FLOOD OF NEW RESOURCES

The fix is to add a new column to the Pattern configuration and allow the customer to identify Patterns that should not be included in the ABS evaluation when resources are discovered with that Pattern. This solves this problem because the NODEs will be marked as "no evaluation" and avoid the performance problem. There is no effect on processing of other resources or patterns. The ABS configuration header will be upgraded to 1.4 to include the new column. The new column name is PatternUsage in the Pattern section. It follows the Operand2 column.

The default behavior is to function as today. The user is responsible to set the flag **NOLOB** in the PatternUsage to indicate *no evaluation*. This gives the user the flexibility to have different Patterns for a class. For example, some users could have a Pattern for NODE with name LIKE "%test%" that does not result in a Business System, and a Pattern for NODE with name LIKE "%production%" that does result in a Business System. The user would specify **NOLOB** in the Pattern for NODE with name LIKE "%test%".

The user can use the NOLOB filter on any intermediate pattern in the CriteriaToPattern set. For example, if there is a CriteriaToPattern that relates G02R to NTSR to NLOC, there is no need to process the NTSR. All the objects have to exist before the CriteriaToPattern will be satisfied. In this example, the G02R object must exist (which is a leaf node) before the pattern evaluations are complete.

**OA18323**  
EVENTS CLOSED IN TBSM, NOT REFLECTED IN TEC

**OA18429**  
MAKE ATRULEUTILITY.KSH SCRIPT WORK WITH THE NOTE\_OWNER

The default behavior is to allow the note\_owner to be a label.



To require the note\_owner be an existing TBSM console operator, execute the following from the SQL Server Query Analyzer:

```
exec _SetSystemConfiguration NULL, NULL, 'REQUEST_AUTOTICKET',  
'REQUEST_NOTEOWNER_ALLOW_LABEL', 'FALSE', 'CHAR'
```

**OA18437**

SHIFT REPORT DOES NOT END AT THE 'BEGINNING DATE/TIME' AS SUPPOSED

The Shift Turnover report does not end at the Beginning Date/Time values specified in the Reporting System.

**OA18550**

AE OTHER FIX COMPLETION UNKNOWN COMMAND TYPE "SQL" ON STEP 19108

**OA18556**

AE OTHER FIX COMPLETION FAILURE ON CALL TO CL\_CACHEGENERICPARENTS BECAUSE THE INSTRID COLUMN IS MISSING

**OA18650**

OBSOLETE EXCEPTIONS AND MESSAGES REMAIN IN THE DATABASE

**OA18652**

ABSTEST RUNNING MORE THAN 16 HOURS WITH TEMPDB GROWING TO 75 GB LEADING TO PROPAGATION NOT OCCURRING ON THE JAVA CONSOLE

**OA18672**

DETAILS SEARCH PATTERN AND TEC EVENT SEARCH PATTERN FIELDS STANDARD SQL AND WILDCARD CHARACTERS (% AND \*) NOT WORKING FINE

**OA18675**

AE OA18674 FIX COMPLETION BATCH MANAGEMENT SUMMARY VIEW NOT AVAILABLE ANYMORE AFTER FIXPACK 2 INSTALLATION

**OA18802**

RODM REGISTRATION DOES NOT WORK AFTER FIX PACK 2

**OA18822**

THE DELETION OF BUSINESS SYSTEMS USING XML IS NOT WORKING CORRECTLY

**OA18843**

NETVIEW EVENTS VIA TEC TO TBSM RECEIVE PRIMARY KEY VIOLATION

**OA18874**

OLD EVENTS ARE NOT CORRECTLY CLEARED IF HISTORY SERVER IS NOT CONFIGURED

**OA18917**

EE CORES WHILE PROCESSING EVENTS

**OA18932**

CHANGE FILE PERMISSIONS FOR THE TBSM FILES LOCATED IN THE /TDS/EVENTSERVICE/CONFIG AND /TDS/EVENTSERVICE/DB SUBDIRS

**OA19098**

ABSTEST.KSH SCRIPT REPORTS TO ENQUEUE AN INCORRECT NUMBER OF BUSINESS OBJECTS

**OA19122**

PATTERNUSAGE VALUES INCSCO/NOLOB NOT RESULTING IN THE LOADED CONFIGURATION OUTPUT

**OA19183**

NETVIEW ADAPTER & COMMON LISTENER OUT OF SYNC

Error messages will show up in the CommonListener logs that indicate a problem. Possibilities include messages like:

ERROR: Unable to get registration records: null

or

ERROR: Unregistered SID:

**OA19249**

ERROR: 'INVALID OBJECT NAME 'EVCONTAINER\_S' WITHIN TBSMSERVER .LOG

An error shows up in the ConsoleServer log when an Admin logs into the Java Console and opens the Executive Dashboard list for the first time.

**OA19329**

EXTENDED ATTRIBUTES ARE LOST WHEN A DUPLICATE EVENT OF AN EXISTING ONE IS UPDATED WITH -E PARAMETER

When sending events with the extended length TEC slot attributes and an update is sent to the same event to update some of the slots, the extended length attribute disappears from the console.

**OA19492**

EIF SENDER DO NOT ENCLOSE IN QUOTES THE VALUE OF SLOT PROBE

Status event changes sent from TBSM to TEC fail with parsing errors when the probe name contains a space character.

**OA19681**

SUPPORT FOR HP OPENVIEW V7

**OA19805**

NON-EXPIRED 'NAME' ATTRIBUTE IN THE TWG.COMPATTR TABLE

After applying 3.1.0.2-TIV-BSM-LA0185, the GTM\_m10\_s010\_Load\_Resources\_Staging step fails with the following error message:

CDWEX8087E A general SQL error occurred:

SQL\_ERROR: 'ExecDirect'

**OA19911**

HIERARCHICAL RESOURCE REPORTS

The Business System Resource Tree report displays the resources in random order. The display should resemble the LOB tree display.

**OA19918**

STAGEDEEVT TABLE NOT CLEARED

The StagedEEVT table is not cleared down after events are processed.

### OA19932

INVALID COLUMN NAME 'EXTENDED\_ATTR

Certain reports do not work for customers who have single server reporting system/database server setups (i.e. no history server).

### OA19955

EVENTS COMING FROM TEC ARE NOT CLOSED IF PREVIOUSLY SENT EVENTS OPEN AND ACK ARRIVED

Two issues:

1. Sending a CLOSE event after an ACK event does not close the ownership note for customers who have it setup to clear alerts on ownership.
2. If an OPEN and ACK for the same event on the same resource are processed in the same SEL batch, in the event viewer the event is taken ownership of but the count is 2 when it should only be 1 (the ownership event should not be counted).

### OA20015

TBSM 3.1 DISPLAY AND EVALUATE TEC EVENT DATE SLOT

#### **Additional Documentation :**

By default, the '*Enhanced Event Timestamp Support*' function is not enabled. The 2 primary functions for the timestamp are optionally controlled through the following TBSM database table *SystemConfiguration* settings:

#### **EVALUATE\_ORIGINATION\_DATE**

Users have the option of transforming the string form of the localized event origination timestamps through a user defined database stored procedure: `al_processEventTimestamp_custom.sql`. The localized timestamps from the various monitors could be transformed to an epoch time that is consumable by TBSM and can be used to represent the event as its Date attribute, in place of the event reception time. See the comments and samples in `al_processEventTimestamp_custom.sql` for information on how to customize the transformation of event origination timestamps.

By default, the customer defined database stored procedure, `al_processEventTimestamp_custom.sql`, used for transforming localized event origination timestamps, will not be called so that customers not intending to use this function will not be impacted. A database system configuration property will need to be updated in order for the procedure for transforming localized timestamps to be called. Property `EVALUATE_ORIGINATION_DATE` in TBSM database table `SystemConfiguration` must be set to '1' to enable the function.

Customers will need to become familiar with the different formats of the localized timestamp in events that are being forwarded to TBSM from the various agents and monitors. It is possible the format of an event's timestamp may be different from operating system to operating system and from machine to machine.

**Note:** Before setting property `EVALUATE_ORIGINATION_DATE` in TBSM database table `SystemConfiguration` to '1', customers should carefully consider whether custom code for adjusting event timestamps, in `al_processEventTimestamp_custom.sql`, is required to

accommodate time zone offsets and/or seasonal time changes. Without adjusting event timestamps for time zone offsets, an event's date attribute will reflect a GMT time, since the string form of localized event origination timestamp is not relative to any particular time zone and does not contain time zone offset information.

#### **DISPLAY\_ORIGINATION\_DATE**

By default, the new *Origination date* field will not be displayed on the **Event Details** dialog to avoid operator confusion between the existing *Date* field and the new *Origination date* field. The property `DISPLAY_ORIGINATION_DATE` in the TBSM database table *SystemConfiguration* must be set to **1** to enable displaying the new *Origination date* field. Using the transformation function is not required to simply display the raw string form of the localized event origination timestamp.

#### **OA20110**

##### **UNABLE TO LAUNCH OPERATIONAL TASK FROM BUSINESS SYSTEM**

When the customer tries to launch an operational task, which is a URL, from a LOB resource in the 'Resources in Maintenance' View, where the URL contains the INSTANCEID of the resource, the INSTANCEID does not get substituted with the actual value in the first attempt of the launch but it gets substituted in the second attempt.

#### **OA20235**

Failover scripts fail after FP2

After FP2, failover scripts fail in the following environment, with 3 different ids in play:

1. User logged into the system to run the failover scripts is a Windows Admin (no SQL authority)
2. The MSSQLServer and SQLServerAgent services run under an id that is a Windows and SQL Admin
3. The SQL "sa" user is different than the above two ids, and the SQL jobs run under this id

Also, the SQL jobs may not run after a failover has been completed, even though they are 'enabled.'

#### **OA20368**

##### **TBSM DOES NOT APPEAR TO ESCAPE THE # CHARACTER WHEN EXPANDING ATTRIBUTE VARIABLES FOR URL LAUNCH**

While using launch in context via the URL, if the customer passes an attribute in the launch URL which contains the character '#', TBSM truncates the # character and all the information after the #.

#### **OA20372**

##### **IHSTDMAI SHOULD NOT CRASH**

The Event Enablement service terminates when data from a port scanning tool is received.

#### **OA20389**

##### **VIEW KCP:KCP\_NAVIGATOR\_1000 APPEARING IN TBSM BUSINESS VIEWS**

Business View discovery for TEP Feed, discovers KCP:Navigator view and creates a Business System for this view.

**OA20501**

SOME EVENTS ARE NOT SENT TO THE TBSM HISTORY DATABASE AND SO DO NOT SHOW UP ON THE REPORTS

Some events which are in the event table in the database on the Primary database server do not show up in the eventhist table on the History server.

**OA20623**

PERFORMANCE TO MANAGE SINGLETONS EVENTS IN STAGEDEXCP TABLE SHOULD BE IMPROVED

The Staged Event Loader runs slowly, on occasion. This coincides with a large number of up/down singleton events having been received by TBSM.

Processing of up/down singletons are a problem for the Staged Event Loader, because `asisp_processStagedEXCPs` only processes one of these at a time per resource, per iteration. Therefore it can take a large number of calls to `asisp_processStagedEXCPs` to process all events. This is outlined in the document *Protect TBSM against overflow of events coming from unstable resources* from the support web site.

The fix here does not reduce the number of iterations required by `asisp_processStagedEXCPs`. But it improves the performance of each iteration. Thus the overall process will be quicker. It is still important to follow the instructions on the document *Protect TBSM against overflow of events coming from unstable resources*.

**OA20632**

REPORTS NOT VIEWABLE IN .TXT FORMAT

When the customer logs into the reporting system by using the URL and launches a report using the various formats, all the reports, except for the text report, get displayed in the right hand frame of the browser window.

**OA20684**

THE MAKEMVSCOMPONENTS ON WINDOWS OS, IN CHINESE LANGUAGE, DOESN'T WORK

When Chinese Windows OS is installed, the `MakeMVSComponents.ksh` script does not generate the `MVSIPSender` service.

The `-r` (remove) option deletes the services and associated registry entries.

It has been observed on a Chinese OS that the `reg delete` command, run by the script, displays 'ERROR' in English, even though the command is successful. An example of this is below. This can be ignored as the command is successful.

```
Deleting registry entry for [ASIMVSIPOSListenerSvc-0M06]...
\sChinese2003\HKEY_LOCAL_MACHINE\SOFTWARE\Accessible Software,
Inc.\Access1\1.0\Components\ASIMVSIPOSListenerSvc\Instances\0M06
xxxxxxx ERROR: xxxxxxxx
```

**OA20709**

AN UPDATE FOR THE EVENTS JOB FAILING. THE UPDATE INDICATES EVENT THOUGH THE JOB SHOWS FAILED, IT WAS ACTUALLY SUCCESSFUL.

The job `Tep Receive Events`

<soap server> <alias> reports as Failed, when 0 events are returned from ITM.

**OA20786****OPCLOAD DATABASE GROWING**

There is no cleanup mechanism for the tables in the OPCLoad database, and the database has grown very large for the customer over the years.

**OA20950****REPORT DISPLAYS THE LOB THAT THE REPORT WAS RUN OFF OF TWICE WHEN YOU CHOOSE TO INCLUDE THE CHILDREN IN THE REPORT**

The customer is seeing a resource in the Business System Availability report that should not be included in the report. Not only that, the resource shows up with the path of one of the other resources included in the report.

**OA20951****EXCEPTIONS WITH UNKNOWN ALERTSTATE/PRIORITIES ARE NEVER REMOVED**

Exceptions with an AlertState of 0 (Unknown) and a Priority of 0 (Unknown) are never cleared from the database by the Delete Old Exceptions job.

**OA21208****WORKSPACES CASE DIFFERENCE BETWEEN \_LONG\_NAME AND \_DATA COLUMN IN CLOB\_C TABLE CAN CAUSE UNEXPECTED RESULTS**

Changes to a workspace name or user name cannot be saved.

**OA21375****TBSM 3.1 SUPPORT FOR WINDOWS SERVER 2003 SERVICE PACK 2**

SQL table files generated are not formatted correctly after the installation of SP2 for Windows Server 2003.

**OA21742****SOME TABLES NOT BEING MAINTAINED BY CLEANUP JOBS**

Some tables in the Object database are not being maintained - DeletedNote\_C, ObjectStateHist, Acc1MsgInstance\_C and Acc1MsgInstance\_A. These tables can grow large over time.

**OA21811****APAR CREATION REGARDING RE-WRITE OF THE TBSM SAMPLE RULES FOR THE TEC SERVER****OA21821****IF0012 FOR EE CAUSES EE TO HANG WHEN SENDING EVENTS TO TBSM****OA22288****MAINTENANCE VIEW RESOURCES WEREN'T CLEANUP DURING PHYSICAL DELETION**

If a resource is deleted when in Maintenance mode, it does not get cleaned up from the MaintTrueState table, which causes it to continue being displayed in a Managed Resources view.

**OA22305****GTM\_C10\_S060\_PROCESS\_REPORT\_RESOURCES\_STAGING FAILS**

GTM\_c10\_s060\_Process\_Report\_Resources\_Staging fails with the following error:

```
Unaltered SQL Stmt : "update gtm.stg_new_comp as nc set
nc.stg_tcomp_id = ( select t.comp_id from twg.comp t where
t.comp_corr_val = nc.STG_TCOMPC_VAL) where nc.stg_tcomp_id is null"
CDWEX8087E A general SQL error occurred: SQL_ERROR:
'ExecDirect' 2007.07.17 00:21:35.706
sqlState = 21000, nativeErr = -811, errorMsg = [IBM]
CLI Driver][DB2/6000] SQL0811N
```

#### OA22410

GTM\_M10\_S020\_PROCESS\_RESOURCES\_STAGING FAILS

GTM\_c10\_s020\_Process\_Resources\_Staging fails with an error, which in part is as follows:

```
Unaltered SQL Stmt : "insert into gtm.d_lob_link select
stg_src_tcomp_id, stg_dst_comp_id, 'gtm_lb', stg_reln_stdtd,
SQL0530N
```

#### OA22418

SQL JOBS, SCHEDULES, ETC WERE NOT REPLICATED IN THE SECONDARY

#### OA22455

COMMON LISTENER ERROR: VIOLATION OF PRIMARY KEY CONSTRAINT 'PK\_STAGEDDEEVT\_\_29833E99

#### OA22478

JOB 'ABS DISCOVERY' RUNNING FOR A LONG TIME

#### OA22602

URL IN THE MESSAGE SLOT OF A TBSM EVENT VIA TEC

Capability to launch URLs that appear in the description column of the Web Console Event View.

In order to enable this function, you must update the TBSM Database and the TBSM Console Server. This fix will only be available after it has been manually enabled by the Customer entering the following command into Query Analyzer: insert into SystemConfiguration values ('Feature', 'WCDisplayURLHyperlinksInDescription', 1, 'INT') This fix can, at any time, be disabled by running the following command, and restarting the Console Server insert into SystemConfiguration values ('Feature', 'WCDisplayURLHyperlinksInDescription', 0, 'INT') TBSM Console Server Update the ITBSMConsoleServer application in WebSphere. Follow the steps below to do this on the Tivoli Business Systems Manager Console Server: <LA> refers to the directory where this Limited Availability fix resides after you have extracted it from the tar file. <TivoliManager> refers to the full path of the Tivoli Business Systems Manager installation on the server. <was\_path> refers to the full path of where the WebSphere is installed. NOTE The Console Server will be unavailable during the duration of the update.jacl script. 1. Copy the gtmuiserver.ear file from this Limited Availability fix to the <TivoliManager>\ConsoleServer directory. 2. At the command prompt, change the directory to: <TivoliManager>\ConsoleServer 3. Run the following command: <was\_user>\bin\wsadmin -f update.jacl -conntype SOAP -user <was\_user> -password <was\_pw> Example: C:\Program Files\Tivoli\tbsm\ConsoleServer> "C:\Program Files\WebSphere\AppServer\bin\wsadmin" -f update.jacl -conntype SOAP -user administrator -password pwd

**OA22619**

EVENTS NOT PROCESSED - ASISP\_PROCESSTAGEDTEPOUT

**OA22630**

UNABLE TO CLOSE CERTAIN SA390 ALERTS WITHIN TBSM

**OA22660**

WHEN CHANGING SOAP PASSWORD, GET ERROR 'COULD NOT FIND STORED PROCEDURE 'TEP\_SETUP\_ADD\_HDR''

Error Description: The query the customer can use to change the soap uid/pwd is: EXEC tep\_setup @action='PASSWORD', @soap\_server = 'crprchiisby', @soap\_alias = 'DEV', @soap\_uid='op53029', @soap\_pw='NEWPASSWORD' Obviously, NEWPASSWORD should be changed to the password they want to set. When running the above to change the password, you get the following error -- Could not find stored procedure 'tep\_setup\_add\_hdr'. Changed soap\_pw for soap\_uid op53029, soap\_server crprchiisby, soap\_alias DEV. Local Fix: The tep\_set\_up proc is calling the wrong procedure to update the password. As a workaround, the customer can run the following for this soap server to update the password: EXEC tep\_setup\_add\_soap\_hdr @verbose=2, @soap\_server = 'crprchiisby', @soap\_alias = 'DEV', @soap\_uid='op53029', @soap\_pw='NEWPASSWORD' We confirmed this workaround worked for customer.

**OA22847**

STRUCTURE OF BUSINESS SYSTEM TREE REPORT DOES NOT MATCH STRUCTURE OF BSV

The order of LOBS on the Business System Tree Report is incorrect if the LOB tree contains shortcuts.

Also the shortnodeid was removed by a previous APAR as it is incorrect. It is repopulated by this APAR now that the correct order has been re-established.

The stored procedure uses the resourcepath from the ObjPathCache table to sort the LOBs. However, for shortcut LOBs the resourcepath in the ObjPathCache is the resourcepath of the original LOB, not the shortcut.

For example, if LOB AAA exists under LOB 'LA Business Systems' and a shortcut to AAA exists in 'NY Business Systems' then the resourcepath of the shortcut in ObjPathCache is 'LA Business Systems\AAA'.

shortnodeid can now be re-generated by this APAR using the order of resourcepath.

**OA23089**

SCRIPT UPDATEWASSERVICENAMEFORHMON.KSH DOES NOT WORK

The updatewasservicenameforhmon.ksh script does not work if the Health Monitor service is on a separate system than the WAS service (which is common in a multi-server TBSM environment). This was a script shipped with the WAS 6 LAFix.



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## Contacting Customer Support

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## Describe the problem and gather background information

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- Do you have logs, traces, and messages that are related to the problem symptoms? IBM Software Support is likely to ask for this information.
- Can the problem be re-created? If so, what steps led to the failure?
- Have any changes been made to the system? (For example, hardware, operating system, networking software, and so on.)
- Are you currently using a workaround for this problem? If so, please be prepared to explain it when you report the problem.

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## Submit the problem to IBM Software Support

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- **By phone:** For the phone number to call in your country, go to the contacts page of the IBM Software Support Handbook on the Web ([techsupport.services.ibm.com/guides/contacts.html](http://techsupport.services.ibm.com/guides/contacts.html)) and click the name of your geographic region.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Software Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Software Support provides a workaround for you to implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM product support Web pages daily, so that other users who experience the same problem can benefit from the same resolutions.

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