

IBM Tivoli Enterprise Console Version 3.9.0 Fix Pack 3 Readme

Date: May 10, 2005

Name: 3.9.0-TEC-FP03

Component: IBM® Tivoli Enterprise Console® Version 3.9.0

PTF Number: U802057

Before using this information and the product it supports, read the information in the "Notices" section, at the end of this document.

First Edition (April 2005)

This edition applies to version 3, release 9 of IBM Tivoli Enterprise Console (product number 5698-TEC).

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About this fix pack

This section provides general information about this fix pack. Read this entire document before you install this fix pack.

Note: This Readme document is provided in Adobe Acrobat format only.

WARNING: Installing this fix pack on an event server disables access to ALL consoles that have not been upgraded to 3.9.0-TEC-FP03. See the **Fix Pack Notes** section in this readme for more information.

Fix pack contents

The 3.9.0-TEC-FP03 fix pack contents are shipped in the 3.9.0-TEC-FP03.tar file. The file provides the following:

- This Readme file
- An image report for this fix pack
- The CD-ROM image of this fix pack

Tar files

In addition to the complete 3.9.0-TEC-FP03.tar tar file, the fix pack download directory includes the Components subdirectory that contains tar files of the different components of the fix pack. You can use these tar files to download only the parts of the fix pack you want, to save download time and disk space. The files included in the Components subdirectory tar files are the same files included in 3.9.0-TEC-FP03.tar file, with the exception of the readme files, which are only available in the top-level directory and the complete tar file.

The Components subdirectory includes the following:

Component	Directory	File name	Size (MB)
TMF install images	TME®	3.9.0-TEC-FP03-TME.tar	170
Installation Assistant	INSTALLASSISTANT	3.9.0-TEC-FP03-INSTALLASSISTANT.tar	270
NLS Language Pack	NLS	3.9.0-TEC-FP03-NLS.tar	15
Non-TME files (console and adapters)	NON_TME	3.9.0-TEC-FP03-NON_TME-AIX4-R1.tar	73
		3.9.0-TEC-FP03-NON_TME-AS400.tar	11
		3.9.0-TEC-FP03-NON_TME-EIF.tar	45
		3.9.0-TEC-FP03-NON_TME-HPUX.tar	138
		3.9.0-TEC-FP03-NON_TME-LINUX-IX86.tar	77
		3.9.0-TEC-FP03-NON_TME-LINUX-S390.tar	29
		3.9.0-TEC-FP03-NON_TME-LINUX-PPC.tar	8
		3.9.0-TEC-FP03-NON_TME-MIPS-IRIX5.tar	6.7
		3.9.0-TEC-FP03-NON_TME-OSF-AXP.tar	7.9
		3.9.0-TEC-FP03-NON_TME-RELIANT-UNIX.tar	7.4
		3.9.0-TEC-FP03-NON_TME-SOLARIS2.tar	105
		3.9.0-TEC-FP03-NON_TME-SOLARIS2-IX86.tar	6.2
		3.9.0-TEC-FP03-NON_TME-UW2-IX86.tar	6.4
		3.9.0-TEC-FP03-NON_TME-WC.tar	10
		3.9.0-TEC-FP03-NON_TME-W32-IX86.tar	96

Patches superseded by this fix pack

The following patches are superseded by this fix pack:

- 3.9.0-TEC-FP01
- 3.9.0-TEC-FP02
- 3.9.0-TEC-0021LA
- 3.9.0-TEC-0022LA
- 3.9.0-TEC-0023LA
- 3.9.0-TEC-0024LA
- 3.9.0-TEC-0025LA
- 3.9.0-TEC-0026LA
- 3.9.0-TEC-0027LA
- 3.9.0-TEC-0028LA
- 3.9.0-TEC-0029LA
- 3.9.0-TEC-0030LA
- 3.9.0-TEC-0031LA
- 3.9.0-TEC-0032LA
- 3.9.0-TEC-0033LA
- 3.9.0-TEC-0034LA
- 3.9.0-TEC-0035LA

Supported operating systems

The section lists the operating systems that are supported by this fix pack for the IBM Tivoli Enterprise Console product.

Note: Mainstream support for the Microsoft® Windows® 2000 product is scheduled to end on June 30, 2005. After this date, IBM Tivoli Enterprise Console will no longer be supported on the Windows 2000 platform. Please consult the Microsoft Support web site for the latest information regarding the end of support dates for the Windows 2000 operating systems.

Platform	Component		
	Server/Gateway	Endpoint adapters	UI server/console
AIX® 5.1 (32 and 64 bit)	X	X	X
AIX 5.1.0.c (32 and 64 bit)	X	X	X
AIX 5.2 (32 and 64 bit)	X	X	X
AIX 5.3 (32 bit, 64 bit and PPC64)	X	X	X
Solaris 8 (32 and 64 bit)	X	X	X
Solaris 9 (32 and 64 bit)	X	X	X
HP-UX 11i (32 and 64 bit)	X	X	X
HP-UX 11i V2 (32 and 64 bit)	X	X	X
HP-UX 11i V2 (IA64)		X	
Windows 2000 Pro SP1, SP2, SP3, SP4 (32 bit)		X	Console only
Windows 2000 Server (32 bit)	X	X	X
Windows 2000 Advanced Server (32 bit)	X	X	X
Windows XP Pro, SP1 & SP2 (32 bit)		X	Console only
Windows Server 2003 (32 bit)	X	X	X
Windows Server 2003 (IA64)		X ⁴	
Red Hat Advanced Server 2.1 (IA32)	X	X	X
Red Hat Advanced Server 2.1 (IA64)		X	
Red Hat Advanced Server 3.0 (IA32)	X	X	X
Red Hat Advanced Server 3.0 (IA64)		X	
Red Hat Advanced Server 3.0 iSeries & pSeries (PPC32 and PPC64)		X	
Red Hat Advanced Server 3.0 zSeries (31 & 64 bit)	X ³	X	UI server only
SUSE SLES 8 (United Linux 1) for IA32	X	X	X
SUSE SLES 8 (United Linux 1) for IA64		X	
SUSE SLES 8 (United Linux 1) for iSeries & pSeries (PPC32 and PPC64)		X	
SUSE SLES 8 (United Linux 1) for zSeries (31 bit)	X	X	UI server only
SUSE SLES 9 for IA32	X	X	X
SUSE SLES 9 for zSeries (31 and 64 bit)	X ³	X	UI server only
SUSE SLES 9 for iSeries and pSeries (PPC32 and PPC64)		X	
OS/400® 5.2 (32 & 64 bit)		X	
Novell Netware 6.0, 6.5		X	
Compaq Tru64 5.1b		X	
Siemens Reliant UNIX® 5.4.5		X	
SGI Irix 6.5.x		X	
SCO UnixWare 7.1.1, 7.1.3		X	
Solaris ix86 8, 9 (32 bit)		X	
Turbo Linux for Intel 7.0		X	

Table 1

Table 1 Notes

- Superscripts
 1. Solaris refers to the Solaris Operating Environment and is hereafter referred to as Solaris.
 2. This platform support table is based on information available at the time of this fix pack release. This table reflects those operating systems that have reached end of life, as indicated by the operating system vendor. Refer to the online support from IBM for current support information.
 3. You must upgrade Tivoli Enterprise Console JRE to 3.9.0-TEC-FP03 before any other Tivoli Enterprise Console components are installed on the zSeries machine. For instructions on installing Server for zSeries on Red Hat Enterprise Linux 3 and SUSE Linux Enterprise Server 9, see **Installation Instructions**.
 4. The non-TME Windows adapter utilizes an installation script for the Windows Server 2003 64-bit edition for the Itanium architecture, instead of an InstallShield-based installation. See the **Installation Instructions** for details.
- Processor architectures:
 - IA32 = Intel Architecture 32-bit
 - IA64 = Intel Architecture 64-bit Itanium
 - EM64T = Intel Extended Memory 64 Technology
 - AMD64 = AMD Opteron 64-bit
- Notes regarding the Open View and SNMP adapters:
 - The SNMP adapter supports SNMP v1 traps.
 - The HPOV adapter supports OpenView Network Node Manager Version 6

Supported databases

This section lists the databases that are supported by this fix pack.

RDBMS Vendor	Version
IBM DB2®	8.1 (FP4), 8.2 (FP1)
Oracle	9i, 9i v2, 10g
Sybase	12.0, 12.5
Microsoft SQL Server	7.0, 2000
Informix®	9.4

Table 2

Table 2 Notes

- IBM DB2 Version 8.1 Fix Pack 7 (also called DB2 Version 8.2) is NOT recommended for use with IBM Tivoli Enterprise Console. IBM DB2 Version 8.2 Fix Pack 1 should be used instead.
- Please consult the Known Problems and Limitations section for information regarding the use of Informix Version 9.4, due to a known RIM limitation.

New in this fix pack

The section provides information about changes that have been made to the Tivoli Enterprise Console product.

- The Tivoli Enterprise Console user interface (UI) server design has been improved to prevent an incorrect version of the event console, both Java and Web, from making a connection and corrupting the event database. See **Fix Pack Notes** below.
- The Enterprise Console UI server has been updated to prevent the connection between an event console and the UI server from being closed by a network firewall. This feature will only work if the UI server is installed on a TMF 4.x Managed Node. See **Fix Pack Notes** below.
- A new BAROC file, `ibm_director.baroc`, has been included with the default rule base. This file defines the event classes that are sent by the IBM Director Server and Agent, and is disabled by default. To use this file, you must use the **wrb -imprbclass** command. The `director.baroc` file, which defines the event classes for the Tivoli IT Director Server, remains in the default rule base as before and is also disabled by default. Contact IBM Director Level 2 support for any issues regarding these files.
- The event server binary files have been built using improved optimization for the Linux-S/390 platform.
- The SNMP adapter now handles multi-line traps correctly.
- A new user preference is available in the Web version of the event console, allowing the user to set their local time zone. See **Documentation Updates** below.

Fix pack notes

Read the following notes before installing the fix pack. You should also read the **Documentation Updates** section for information about changes that have been made to the documentation.

- IBM Tivoli Enterprise Console Warehouse Enablement Pack fixes will now be shipped as a separate downloadable fix pack. The first of these fix packs is 1.3.0-TEC_WEP-FP01. Please contact IBM Support for more information.
- (175577) The Tivoli Enterprise Console user interface (UI) server design has been improved to prevent an incorrect version of the event console, both Java and Web, from making a connection and corrupting the event database. A new configuration file, \$BINDIR/TME/TEC/.ui_server_config file, has been created which includes a new parameter named `tec_ui_server_version_checking_enabled`. (See the addendum to the *Command and Task Reference* in the **Documentation Updates** below.) Table 3, below, illustrates which versions of the console and UI server are compatible.

Important: For this improvement to take effect and work correctly, both the UI server and console components must be upgraded to Fix Pack 3, and then restarted. This update is enabled by default. When the UI server is installed on a managed node, the `tec_ui_server` process must be stopped manually (if it is active) after the upgrade is complete. This can be done by terminating the process, or restarting the `oserv` process.

WARNING: While maintaining a mixed-version environment of consoles, event servers, and/or UI servers is **never** supported, attempting to connect a version 3.8 (RTM-FP04) console to a version 3.9 UI server with the version checking feature disabled or not installed can result in corruption of the event database.

		ITEC UI Server Version						
		3.7.x	3.8	3.8 (FP05+)		3.9	3.9 (FP03+)	
				Enabled	Disabled		Enabled	Disabled
ITEC Console Version	3.6.x	Corruption!	Corruption!	No Access	No Access	Corruption!	No Access	No Access
	3.7.x	Access	Corruption!	No Access	Corruption!	Corruption!	No Access	Corruption!
	3.8 (RTM-FP04)	Corruption!	Access	No Access	Access	Corruption!	No Access	Corruption!
	3.8 (FP05+)	No Access	No Access	Access	Access	No Access	Error Msg	Error Msg
	3.9 (RTM-FP02)	Corruption!	Corruption!	No Access	Corruption!	Access	No Access	Access
	3.9 (FP03+)	No Access	No Access	Error Msg	Corruption!	Error Msg	Access	Access

Table 3: Event console and UI server compatibility matrix.

Table 3 Notes

- The *Enabled* and *Disabled* headings indicate whether or not the version checking functionality is enabled.
 - The *Corruption* field indicates that it is possible to connect the console to the specified UI server. However, corruption of the event database can occur.
 - The *No Access* field indicates that only a blank console will be displayed. It is not possible to generate a pop-up error message because this functionality was not included in previous versions of the console.
 - The *Error Msg* field indicates that a pop-up error message box will be displayed informing the operator of an incompatible console version.
 - The *Access* field indicates that the console version is compatible with the UI server.
 - 3.8.0-TEC-FP05 is not available at the time this document is published. Please consult the IBM Support Web site for availability information.
 - If the Web console version does not match the UI server version, an ECOWSO001E error and `com.tivoli.tec.ui_server.UIServer` exception will be generated in the WebSphere Application Server SystemOut.log file.
- (175328) Some network environments implement firewall rules that close idle connections after a specified length of time. In some cases, this idle timeout period is short enough to close the connection between the event console (Java and Web) and the UI server. To prevent this, a new configuration parameter, `tec_ui_server_conn_keepalive_interval`, has been implemented to maintain an active connection. This parameter, which is located in the \$BINDIR/TME/TEC/.ui_server_config file, specifies a sleep interval used by a keep-alive thread in the UI server. This feature only works on UI servers installed on TME 4.x Managed Nodes. See the addendum to the *Command and Task Reference* in the **Documentation Updates** below.
 - (IY61709) When the Tivoli Enterprise Console product is upgraded to version 3.9 in an environment where IBM Tivoli Monitoring for Application mySAP.com is currently installed, the dependencies for `acpep-postemsg` are removed but not restored. To restore the `acpep-postemsg` dependencies, you must run the `$BINDIR/./generic_unix/TME/ABH/sh/sap_dependency.sh` script in a sourced Tivoli environment on the Tivoli server.

- (IY64008) The use of control characters, Ctrl-A through Ctrl-E, within a rule attribute now generates an error message when the rule base is compiled and no longer ends with a segmentation fault
- Due to updates in IBM DB2 Version 8.2, a C compiler is no longer needed to install the stored procedures.
Note: This only applies to IBM Tivoli Enterprise Console Version 3.9 event servers configured to use IBM DB2 Version 8.2.

Installation and configuration

This section provides installation information for the 3.9.0-TEC-FP03 fix pack for the IBM Tivoli Enterprise Console Version 3.9.0 product.

Prerequisites

IBM Tivoli Enterprise Console Version 3.9.0

IBM Tivoli Management Framework Version 3.7.1, 4.1, or 4.1.1

Note: IBM Tivoli Management Framework Version 4.1, or 4.1.1 must be installed in order to install the server components of this fix pack on a supported Linux platform.

IBM Tivoli NetView Version 7.1.2, 7.1.3, or 7.1.4 to use the IBM Tivoli NetView product functions that are provided with the Tivoli Enterprise Console product.

IBM WebSphere® Application Server Version 5.0.1 or 5.0.2 for installation of the Web version of the event console.

Note: For information about installing the WebSphere Application Server, refer to the *IBM WebSphere Application Server Getting Started* manual

For information about the WebSphere Application Server prerequisites and supported operating systems, refer to the system requirements document, which is located at the following URL:

<http://www-306.ibm.com/software/webservers/appserv/doc/latest/prereq.html>

The Web version of the event console requires one of the following Web browsers:

Microsoft Internet Explorer 6.0 or later

Netscape 6.x beginning with 6.2. (Netscape 7.x is not supported)

The following table lists the recommended patches for each version of the Tivoli Management Framework product and the specific installation scenarios.

IBM Tivoli Management Framework Version	Patches
3.7.1	3.7.1-TMF -125, 3.7.1-TMF-126, 3.7.1-LCF-0018
4.1	4.1-TMF-0049,4.1-TMF-0060, 4.1.1-LCF-0004
4.1.1	4.1.1-TMF-10, 4.1.1-TMF-0011 4.1.1-LCF-0004

Installation Scenarios	Patches
To utilize single port bulk data transfer, BDT	3.7.1-TMF-0097
Installing with Software Installation Services, SIS, version 3.7.1	3.7.1-SIS-0005
Installing with Software Installation Services, SIS, version 4.1	4.1-SISCLNT-0002, 4.1-SISDEPOT-0002

Table 4

Installation instructions

This section provides information about installing this fix pack.

1. Extract the fix pack.

Use the following command on a UNIX system to extract the contents into a temporary directory. For the purpose of this example, assume that the \$PATCH variable points to this temporary directory.

```
cd $PATCH
tar -xvf 3.9.0-TEC-FP03.tar
```

Use the following command on a Windows operating system to extract the contents into a temporary directory. For the purpose of this example, assume that the %PATCH% variable points to this directory, and X is the drive letter where %PATCH% is found.

```
%SystemRoot%\system32\drivers\etc\Tivoli\setup_env.cmd
X:
```

```
> cd %PATCH%
> tar -xvf 3.9.0-TEC-FP03.tar
```

Note: If you extract the TAR image on a Windows system, the executable file for the TAR utility is in the Tivoli bin/w32-ix86/tools/ installation directory.

2. The following instructions are for using the Software Installation Service (SIS). If you do not use SIS, go to step 3. SIS can install Tivoli software products on most hardware platforms that are supported by the Tivoli software. However, there are some hardware platforms on which SIS cannot run. Refer to the *IBM Tivoli Enterprise Installation Guide* for the list of platforms on which SIS can run. Refer to the Prerequisites section of this document for information about SIS patches. You must have the install_product and super authorization roles to install this fix pack.

- a) From the Tivoli desktop pull-down menu, click **Desktop** → **Install** → **Software Installation Service**.
- b) From the Get Installation Password window, type the installation password.
- c) In the window that contains the Tivoli logo, click **Install**.
- d) From the Install Spreadsheet window, click **Select Product**.
- e) From the Select Product window, click **Import Product**.
- f) Use the file browser to locate the media for 3.9.0-TEC-FP03, and double-click the PATCHES.LST file.
- g) From the Import Product window, select 3.9.0-TEC-FP03, and then click **Import**.
- h) From the Global Progress window, click **OK** after the file is imported.
- i) From the Select Product window, select 3.9.0-TEC-FP03 and click **OK**.
- j) From the Install Spreadsheet window, click **Select Machine**.
- k) Select the machines on which to install the 3.9.0-TEC-FP03 fix pack, and click **OK**.
- l) From the Install Spreadsheet window, select the appropriate cells.

NOTE: An X is displayed in the cells for the machines on which the 3.9.0-TEC-FP03 fix pack will be installed. Click **Install**.

From the Installation Algorithm window, select the install algorithm you want to use and click **OK**. SIS performs the installations you requested from the Install Spreadsheet window.

Go to step 4 to complete the installation.

3. Perform the following procedure to install the fix pack using the standard Tivoli installation method.

Note: The install_product and super authorization roles are required to install this fix pack.

- a) From the Tivoli Desktop menu bar, click **Desktop** → **Install** → **Install Patch** to display the Install Patch window.
- b) From the Install Patch window, click **Select Media** to display the File Browser window.
- c) From the File Browser window, type the path to the directory containing the fix pack, \$PATCH, in the **Path Name** field.
- d) Click **Set Media & Close** to return to the Install Patch window.
- e) From the Install Patch window, click the name of the fix pack to select it.
- f) Select the clients to install the fix pack on. Fix packs typically need to be installed on the Tivoli server and on each Tivoli client.
- g) Click **Install**.

4. Update your existing rule bases with a new TEC_TEMPLATES/templates.wic file:

- a) Source the Tivoli environment:

On a UNIX system: from the command line, run the /etc/Tivoli/setup_env.sh script

On a Windows system: from the command line, run the following script and command to start a bash shell:

```
%SystemRoot%\WINNT\system32\drivers\etc\Tivoli\setup_env.cmd
bash
```

- b) Run the following command to upgrade an existing rule base:

```
/etc/Tivoli/bin/perl $BINDIR/TME/TEC/upg_templates.pl rule_base_dir 1
```

where rule_base_dir is the directory that contains the rule base to be upgraded.

- c) Run the following command to apply the new templates.wic file to the target of the rule base:

```
wrb -comprules rulebase_name
```

- d) Run the following command to load the new templates.wic file for the currently loaded rule base:

```
wrb -loadrb rule_base_name
```

5. To upgrade the Web console, navigate to the NON_TME/GENERIC/WC directory of the fix pack and perform the following steps:

- a) Copy the tecrimds.jar file to the AppServer/TEC directory of the WebSphere Application Server installation, overwriting the existing file.
- b) Copy the TecConsoleEar.ear file to the AppServer/config/cells/hostname/applications directory of the WebSphere Application Server installation, overwriting the existing file.
- c) Use the winrar utility to extract the tecra.rar file to the AppServer/InstalledConnectors/tecra.rar directory of the WebSphere Application Server installation, overwriting the existing files and folders.

6. The fix pack installation is complete. Restart WebSphere Application Server, the event server, the UI server, and all consoles.

Server installation instructions for zSeries on Red Hat Enterprise Linux 3 and SUSE Linux Enterprise Server 9

To support Red Hat Enterprise Linux 3 and SUSE Linux Enterprise Server 9 on zSeries, you must follow these instructions or you will have failures when installing the Server and UI server portions of Tivoli Enterprise Console:

1. Create zSeries node using TMF 411 with 411-TMF-0001
Note that 411-TMF-0001 is not a regular patch but instead updates your TMF 411 GA image so that you can create a zSeries Managed Node. You do not need to perform the "Additional Installation Instructions" noted in the 411-TMF-0001README because they will be done by the Tivoli Enterprise Console install.
2. Install Tivoli Enterprise Console JRE 3.9 GA only.
Note: If you use the Installation wizard or SIS, install just the JRE product. Do not select any of the other Tivoli Enterprise Console products for installation. For more information, please consult the IBM Tivoli Enterprise Console 3.9 Installation Guide or the TMF Enterprise Installation Guide.
3. Upgrade Tivoli Enterprise Console JRE to 3.9.0-TEC-FP03
This must be upgraded **before** any other Tivoli Enterprise Console components are installed on the zSeries machine. Only install Tivoli Enterprise Console JRE at this time.
4. Restart oserv on the zSeries machine
5. Re-source your environment (setup_env.sh or setup_env.csh) on the zSeries machine
6. Install Tivoli Enterprise Console Server and applications from the 3.9 GA image
7. Upgrade Tivoli Enterprise Console applications to 3.9.0-TEC-FP03

Localization pack information

Localization pack updates included with the 3.9.0-TEC-FP03 fix pack contain separate install images for TME-based components and the non-TME Java console in the following directories:

- <390TECFP03_DIR>/NLS/TME
- <390TECFP03_DIR>/NLS/NON_TME

Localization pack installation in a Tivoli Management Environment

The updated localization pack for TME-based components must be installed as a patch, not as a product. This requires that the original Tivoli Enterprise Console, Version 3.9 localization pack for the language that you want to update is already installed. Install it using the same TME instructions used above for other TME components. Install only the language packs you need.

Localization pack installation for the non-Tivoli Management Environment Java Console

The lp_setup.jar file contains the InstallShield MultiPlatform installation program. All NLS class and help files are installed into the **nls** subdirectory. Use the following procedure to install the localization pack into the same location as the non-TME console:

1. Change to the installation file directory: <390TECFP03_DIR>/NLS/NON_TME/Setup
2. Issue the following command:
<TECConsole_installdir>/jre/bin/java -jar lp_setup.jar
This uses Java 1.3.1, which is installed with the Java console.
3. Select your non-Tivoli Management Environment console directory and click **Next**.
4. Select the languages you want to install and click **Next**.
5. Confirm the installation information and click **Next**.
6. Click **Finished**.

Installing the non-TME adapter for Windows Server 2003 64-bit edition

1. Unzip the file, NONTMEWIN.zip in the directory where you want the adapter installed. Remember to preserve directories if using an unzip utility which has that as an option (it's the default from windows Explorer).
2. From the install directory run ntmsetup.cmd without any arguments and you'll see:

```
ntmsetup <ServerLocation> <Port> [<id>]
```

Installs adapter as a Windows service and configures event server and port, where:

<ServerLocation> is required and specifies the host_name or IP_address of the event server or gateway.

<Port> is required and specifies the listening port number of the event server or gateway. Specify 0 to use portmapper if supported at the TEC server.

<id> is the optional adapter identifier

Example:

To install an adapter which sends events to the event server located at hostname mytec.abc.com, which has portmapper running as adapter ID "mytec", issue the following:

```
ntmesetup mytec.abc.com 0 mytec
```

3. To remove an adapter, use the script as follows:

```
ntmesetup remove <id>
```

Removes adapter as NT service, where:

<id> is required if an adapter ID was specified during install.

Note: The remove option will remove the service, but an InstallShield error will be generated. This error can be ignored, however the adapter files must be removed manually.

APAR fixes included with this fix pack

This section provides a description and the resolution of the APAR fixes that are provide by the 3.9.0-TEC-FP03 fix pack.

The readme documents from the previous fix packs, 3.9.0-TEC-FP01 and 3.9.0-TEC-FP02, are available to download from the IBM Support web site. Visit <http://www.ibm.com/support> and select the "Downloads and Drivers" link.

APAR: IY54436

Symptom: When two operators are using the Java version of the event console to modify event group filters at the same time, only the second filter is saved.

Resolution: The data is now protected so that multiple changes can be made at the same time.

APAR: IY56192

Symptom: Need documentation regarding the use of regular expression statements when defining filters for an adapter.

Resolution: See the **Documentation Updates** section below.

APAR: IY56782

Symptom: When the oserv shuts down, the console continues running and seems to perform work, although it is not connected to the event server.

Resolution: When the oserv shuts down, a dialog box is displayed from which you can either shutdown the console or disable it.

APAR: IY56816

Symptom: The Java and Web versions of the event console format slots differently when events are passed to CGI scripts or tasks.

Resolution: Format differences have been resolved. The date_reception, cause_date_reception, and last_modified_time slots are printed out as numeric values. The severity slot is printed in string format instead of numeric value (such as, HARMLESS instead of 20). The cause_date_reception slot is always fully spelled out instead of using the cause_date_receptn abbreviation. New lines are properly printed. Trailing spaces are still printed differently and that problem will be fixed with APAR IY70219.

APAR: IY57076

Symptom: Opening the Configuration View in the Java version of the event console can take a long time when many operators are defined.

Resolution: Performance has been improved when opening this view.

APAR: IY57527

Symptom: The Netware adapter does not work with Netware 6.5.

Resolution: The Netware adapter now works with Netware 6.5

APAR: IY57986

Symptom: Need to document parameters in the .tec_config file.

Resolution: See **Documentation Updates** for a description of the parameters.

APAR: IY58134

Symptom: The Windows adapter has delays when sending large amounts of events from a LogSources file.

Resolution: No delay occurs when there are pending events to send, due to improved handling of the adapter threads.

APAR: IY58245

Symptom: The wdbmaint.sh utility fails against Oracle databases with the following error: Specified index does not exist.

Resolution: When an event server is upgraded from version 3.8 (pre-FP02) to version 3.9 and the event database is configured to use an Oracle database server, you must run the **\$BINDIR/TME/TEC/sql/ora_idx_upgrade.sh** command to use the wdbmaint.sh utility:

This command updates the database with three missing indexes (introduced in 3.8.0-TEC-FP02) that are required to reorganize the database using the wdbmaint.sh utility.

APAR: IY58277

Symptom: The UNIX Logfile Adapter shuts down after running the **kill -HUP** command when the LogSources file points to a non-existent directory.

Resolution: After running the **kill -HUP** command, the adapter does not shut down.

APAR: IY58303

Symptom: The non-TME logfile adapter parses differently on the 3.8.0-TEC-FP01 fix pack than it does on the 3.9.0-TEC-FP01 fix pack.

Resolution: The product documentation has been updated to reflect the reason for the different behavior. See **Documentation Updates**.

APAR: IY58867

Symptom: The UNIX Logfile Adapter shuts down on HPUX 11 after running the **kill -HUP** command.

Resolution: After running the **kill -HUP** command, the adapter does not shut down.

APAR: IY58868

Symptom: When running a task from the Java or Web version of the event console, the task timeout cannot be configured.

Resolution: When running a task from the console, a field is now available to specify the timeout period.

APAR: IY58910

Symptom: The SNMP Adapter loses events during a burst of traps.

Resolution: Trap bursts are handled better, due to improved handling of the receive buffer. Because of the nature of UDP, packet delivery is not guaranteed and packet loss is still possible under extreme conditions.

APAR: IY58937

Symptom: The tec_rule process stops with a SIGSEGV error when a rule calls the link_effect_to_cause/2 predicate for a cause event that is no longer in the rules cache.

Resolution: The tec_rule process continues to run when a rule calls the link_effect_to_cause/2 predicate for a cause event that is no longer in the rules cache. Existing rule bases must be updated with a new TEC_TEMPLATES/templates.wic file. To do this, run the following command as described in the **Installation Instructions**:

```
/etc/Tivoli/bin/perl $BINDIR/TME/TEC/upg_templates.pl <rule base path> 1
```

APAR: IY59229

Symptom: The tec_dispatch process stops when modifying an event in a non-C locale.

Resolution: The tec_dispatch process no longer stops in this situation.

APAR: IY59230

Symptom: When a task that is run from the Java version of the event console fails due to a Tivoli Management Framework error, the console does not display the reason for the failure.

Resolution: The Java version of the event console provides a descriptive error message.

APAR: IY59625

Symptom: Running the **wsighup** command against a running Windows Adapter service fails with the following error: The service <servicename> is not correctly running.

Resolution: The **wsighup** command now works as expected.

APAR: IY59743

Symptom: The re_create and re_*_match predicates fail on Linux systems.

Resolution: These predicates now work on Linux systems.

APAR: IY59907

Symptom: Shutting down the Logfile Adapter updates the syslog.conf file even when the -s option is specified.

Resolution: Shutting down the Logfile Adapter no longer updates the syslog.conf file when the -s option is specified.

APAR: IY59911

Symptom: There is no documentation for the SNMP Adapter PRINTF, SUBSTR, IPNAME, IPADDR, and FQNAME CDS file keywords.

Resolution: An update to the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide* is provided that describes the keywords and includes examples. See the **Documentation Updates** section below.

APAR: IY59925

Symptom: Automated tasks in the Java version of the event console do not run on endpoints when the Tivoli Enterprise Console Version 3.9 Language Pack is installed and the locale of the console is not the English language.

Resolution: Automated tasks now run under these conditions.

APAR: IY60354

Symptom: The Adapter Configuration Facility and the tec_gateway profile do not honor SPBDT settings on Linux managed nodes.

Resolution: The Adapter Configuration Facility and the tec_gateway profile now follow SPBDT settings.

APAR: IY60459

Symptom: When a rule in the state correlation engine modifies and then forwards an event, the event is not removed from the persistence store.

Resolution: The event is now removed from the persistence store.

APAR: IY60461

Symptom: The state correlation engine enters suspend mode before the maximum file size for the persistence files has been reached.

Resolution: With persistence enabled, the state correlation engine only enters suspend mode when the maximum file size has been reached.

APAR: IY60587

Symptom: The tec_gateway distribution to a Windows managed node fails when the (Windows) Administrator account does not exist.

Resolution: If the Administrator account on a Windows managed node has been renamed, you must properly set the USER of the profile before distributing a tec_gateway adapter configuration profile. The USER field is set under the General tab in the profile entry.

You can set this to the name of the new Administrator account, or you can set it to BuiltinNTAdministrator to automatically determine your Administrator account name.

You can also use a widmap entry, such as \$root_user. This allows you to control the user for all profiles from the widmap interface and use the same profile for distribution to Windows and UNIX nodes. NOTE: After changing the root_user widmap entry for Windows, you must restart your Tivoli Desktop on Windows to create or distribute profiles properly.

If USER is left as 0, it defaults to Administrator on Windows nodes.

APAR: IY60870

Symptom: The drop_duplicate action always fails in simple rules that are created using the graphical rule builder.

Resolution: The drop_duplicate rule works now.

APAR: IY60945

Symptom: With full tracing enabled on the Web version of the event console, the user's password is displayed in plain text.

Resolution: The password is no longer displayed in the trace output.

APAR: IY61472

Symptom: The Logfile Adapter processes old LogSources files as new files, resending all of its events.

Resolution: Events are no longer resent.

APAR: IY61623

Symptom: When the exec_program predicate starts a program with watch_status='YES', a RIM_VAL_FAILURE error occurs when the programs completion results are greater than 3467 bytes in length.

Resolution: The RIM_VAL_FAILURE error no longer occurs when completion results of a program are greater than 3467 bytes in length because the results are truncated.

APAR: IY61687

Symptom: The Logfile and SNMP adapters on Solaris multi-NIC machines might bind to the wrong network interface.

Resolution: The adapters automatically bind to the interface (determined by the operating system) that can reach the event server.

APAR: IY61709

Symptom: Upgrading to the Tivoli Enterprise Console Version 3.9 product in an environment with the IBM Tivoli Monitoring Application for mySAP.com removes the acep-postmsg dep-sets, but does not restore them.

Resolution: See the **Fix Pack Notes** section for complete resolution details.

APAR: IY61762

Symptom: A constraint for an automated task constraint cannot be edited in the Java version of the event console if the attribute is Class and the operator is IN or NOT IN.

Resolution: All constraints can be edited now.

APAR: IY62178

Symptom: There is no documentation for the Event Integration Facility toolkit support for z/OS® that was shipped starting with the 3.9.0-TEC-FP01 fix pack.

Resolution: z/OS-specific documentation is provided, including supported z/OS releases. See the **Documentation Updates** section.

APAR: IY62200

Symptom: ENUMERATION with a leading zero compiled without error but causes startup of the event server to fail.

Resolution: Integer data types specified in the ENUMERATION are correctly filtered when preceded by a zero prior to compile time, preventing them from being interpreted as an octal. This enables the event server to start successfully.

APAR: IY62261

Symptom: Clicking on an empty summary chart when running the 3.9 Java version of the event console on HP-UX causes the Java process for the console to stop.

Resolution: This problem is a result of a problem in the HotSpot Java Virtual Machine. A hotspot_compiler file is now created when the console is initialized to prevent the HotSpot Java Virtual Machine from stopping the console process.

APAR: IY62283

Symptom: After importing console definitions from a file, the user of the 3.9 Java version of the event console can continue to use the Configuration view without first restarting the console. This can cause database corruption in the console definitions.

Resolution: A message box is displayed, which instructs the user to restart the console for the changes to take effect. In addition, the configuration view and the import menu are disabled until the console is restarted.

APAR: IY62405

Symptom: The event server startup and the **wtdumper** command runs slowly due to oserv method calls.

Resolution: The number of internal method calls has been reduced to improve performance.

APAR: IY63086

Symptom: When using the Java version of the event console, the operator defines an automated task and assigns some hosts for the task to run on, but the hosts are no longer displayed in the **Current Hosts** list when the task is reopened for editing.

Resolution: The list of host are displayed correctly in the **Current Hosts** list when an automated task is reopened for editing. If a host is no longer a valid Tivoli host, the host name is not displayed.

APAR: IY63136

Symptom: The Logfile Adapter can sometimes process old LogSource files as new files, resending all its events to the event server.

Resolution: The adapter correctly processes LogSource files, preventing old events from being resent.

APAR: IY63368

Symptom: The **wsetemsg** command fails with an ECO:0001:1444 error when it is used to modify an event whose event handle or server handle is greater than 1 digit in length.

Resolution: The **wsetemsg** command correctly updates the specified event, and the error does not occur.

APAR: IY63407

Symptom: Tivoli Enterprise Console Version 3.8 adapters are not removed after upgrading to a Tivoli Enterprise Console Version 3.9 adapter.

Resolution: An update to the IBM Tivoli Enterprise Console Version 3.9 Adapters Guide is provided that explains the procedure for upgrading or removing a previously installed adapter. See the **Documentation Updates** section.

APAR: IY63455

Symptom: When the message attribute value of an event is updated from a short string (less than 255 characters) to a long string (greater than 254 characters), the updated value is truncated to 254 characters. Conversely, when the message attribute value of an event is updated from a long string to a short string, the long message string is not properly cleared from the long_msg field of the event repository table in the event database.

Resolution: The message attribute value of an event is now updated successfully from a short string to a long string, or vice versa, without any truncation or residual values.

APAR: IY63547

Symptom: When using the Java version of the event console, the operator is unable to open the event viewer for an empty event group from the summary chart. When the label of the empty event group is clicked, the event viewer for the next closest non-empty event group is displayed.

Resolution: The event viewer for the empty event group is now displayed.

APAR: IY63581

Symptom: Format matching of %s* followed by %n does not work correctly after applying the 3.9.0-TEC-FP02 fix pack. This problem occurs when %s* tries to match 0 or 1 string immediately followed by a %n or a new line.

Resolution: Format matching correctly matches %s* when followed by %n or a new line.

APAR: IY63643

Symptom: A simple rule that contains a watch_status argument that is enclosed in single quotes fails to compile.

Resolution: A simple rule that contains a watch_status argument that is enclosed in single quotes compiles successfully. In addition, a task completion event is generated when the watch_status argument is set to YES.

APAR: IY63716

Symptom: The **wsetemsg** command fails when using Single Port BDT.

Resolution: The **wsetemsg** command functions correctly when Single Port BDT is used.

APAR: IY63859

Symptom: If a user of the Java version of the event console defines an automated task, one of whose event filters uses an operator other than Equal To, the user can no longer log in to the Web version of the event console.

Resolution: The user can now log into the Web version of the event console after defining an automated task where the event filter uses an operator other than Equal To.

APAR: IY63863

Symptom: The usage statement for the **postzmsg** command includes the *-p port* option, but this option is not documented, and it is not defined in the code.

Resolution: Because the *-p port* option is not valid for the **postzmsg** command, the usage statement has been updated and no longer displays this option.

APAR: IY63871

Symptom: Using the **wsetemsg** command to set the value of a custom slot can return the following error, specifically when running the command from within a script from a rule:

Error::ECO:0001:0272 No matching classes found

Resolution: The **wsetemsg** command updates the specified event correctly, and the error does not occur.

APAR: IY64008

Symptom: The **tec_dispatch** process can end with a segmentation fault (SIGSEGV) when a rule modifies an attribute value with a control character in the range of Ctrl-A through Ctrl-E.

Resolution: The control characters Ctrl-A through Ctrl-E are not valid to use within a rule attribute. The rule base now fails to compile, and it generates an error message that indicates the control character, rather than ending with a segmentation fault.

APAR: IY64197

Symptom: The **wstartmaint.sh** script sets an incorrect start time, one day ahead, when the UTC date is a day behind the local date.

Resolution: The **wstartmaint.sh** script correctly adjusts the start time when the UTC date is a day behind the local date.

APAR: IY64202

Symptom: When using a non-TME, connection-less configuration, empty events force connections and cache checks.

Resolution: Empty events are now discarded, preventing unnecessary connections and polling of the cache.

APAR: IY64209

Symptom: The **tec_rule** process ends with a SIGSEGV 211 error when processing an event timer with an ID of zero.

Resolution: Event timer IDs are now checked, and an ID of zero is not processed.

APAR: IY64449

Symptom: The **wconsole** command incorrectly displays the error message "The RDBMS cannot be reached" the event database is corrupt because of using incompatible versions of the event console in the same environment.

Resolution: An error message is now displayed that indicates the incompatible version of the event console.

APAR: IY64670

Symptom: The documentation for version 3.9 can mislead customers and make it seem that WebSphere Application Server runs on the operating systems listed in the Supported Platforms table.

Resolution: See the **Prerequisites** section under the **Installation and Configuration** section above for information about the supported platforms for WebSphere Application Server.

APAR: IY64774

Symptom: Secondary and subsequent distributions of an adapter configuration profile can delete the first line after the adapter entry in /etc/rc.shutdown file on the AIX operating system.

Resolution: The /etc/rc.shutdown file is updated correctly following a secondary and subsequent distribution of an adapter configuration profile.

APAR: IY64909

Symptom: When using the Web version of the event console to run a task using the 'Run on the host that is named in the event' option, and the hostname is an endpoint hostname, the task fails to run on the endpoint. The Web version of the event console displays a return code of 0.

Resolution: The Web version of the event console now compares the hostname listed in the event with the list of available managed nodes and endpoints. If the hostname matches, the task runs as expected. If the hostname cannot be found, an error message is displayed that indicates that the specified hostname is not valid.

APAR: IY65092

Symptom: The example of the is_clearing_event predicate is not correct in the *IBM Tivoli Enterprise Console Version 3.9 Rules Developer's Guide*.

Resolution: An update to the *IBM Tivoli Enterprise Console Version 3.9 Rule Developer's Guide* now describes the correct usage. See the **Documentation Updates** section.

APAR: IY65212

Symptom: An event is not parsed correctly on reception when it contains an integer value that does not follow the accepted integer, octal, or hexadecimal BNF notation.

Resolution: An update to the *IBM Tivoli Enterprise Console Version 3.9 Rule Developer's Guide* now describes the accepted BNF notation for integer values. See the **Documentation Updates** section.

APAR: IY65221

Symptom: When editing roles for event groups in the Java version of the event console Configuration GUI, if the user selects multiple event groups from the Assign Event Groups panel and changes the roles, only the roles for the first selected event group are updated. The roles for the remaining event groups remain unchanged.

Resolution: The console has been updated to allow multiple event groups to be updated.

APAR: IY65280

Symptom: After a send timeout occurs on an adapter, the adapter resends the event. If the event is currently queued in a gateway, the event is resent by the adapter after the queue is cleared, and the queued event is processed. This results in the same event being processed twice.

Resolution: The adapters no longer experience a timeout on the upcall, and duplicate events are no longer sent.

APAR: IY65448

Symptom: Version 3.9 of the Java version of the event console with Fix Pack 2 or 3.9.0-TEC-0024LA applied only lists the first 100 operators even when more than 100 operators are defined.

Resolution: The console now displays all operators, even when more than 100 have been defined.

APAR: IY65472

Symptom: The **wteexport** command ends with a java.lang.OutOfMemory error on UNIX when exporting the entire configuration of a large-scale customer environment.

Resolution: The **wteexport** command has been modified to minimize memory consumption and now completes successfully.

APAR: IY65478

Symptom: When you use the **wrmadmin** command to restart an Event Integration Facility component (such as, eif_receiver or an incident sender) multiple times, the command seems to hang. The msgHRM.log file contains a message similar to the following:

```
<Message Id="HRMAG0092E" Severity="ERROR">
<Time Millis="1092856694986"> 2004.08.18 15:18:14.986-05:00</Time>
<Component></Component>
<LogText><![CDATA[HRMAG0092E Caught exception java.lang.OutOfMemoryError.]]></LogText>
<Source FileName="com.tivoli.RiskManager.Agent.rmaThreadGroup" Method="public void
uncaughtException(Thread,Throwable)"/>
<TranslationInfo Type="JAVA" Catalog="rmagent_msg"
MsgKey="HRMAG0092E"><Param><![CDATA[java.lang.OutOfMemoryError]]></Param></TranslationInfo>
<Principal></Principal>
</Message>
```

Resolution: The **wrmadmin** command runs correctly, and the component starts successfully.

APAR: IY65515

Symptom: When running several **wsendresp** commands consecutively to send different pop-up messages to an Administrator's desktop, some messages might be lost, and duplicates of another message might be displayed.

Resolution: The correct number of pop-up message boxes is displayed, each containing the correct message.

APAR: IY65520

Symptom: The **wconsole -crtoperator** command fails with the error "ECO2071E - X is not a valid TME administrator" under the following conditions:

1. The total number of Tivoli administrators is greater than 1000.
2. The total number of Tivoli administrators is not evenly divisible by 100.
3. If you list all the Tivoli administrators in ascending order by creation time, X is a Tivoli administrator that is displayed after the last number evenly divisible by 100 on the list. For example, if there are 1150 total Tivoli administrators, the **wconsole** command displays the error message if you try to create an operator for any Tivoli administrator beyond 1100 on the list. If, on the other hand, you had exactly 1100 Tivoli administrators, the error message is not displayed if you tried to create an operator for any of the administrators.

Resolution: The new operator is now created successfully, and the error does not occur.

APAR: IY65534

Symptom: When creating a trouble ticket that is modified to use the **wsendresp** command from an event in the Java version of the event console, the **wsendresp** command that is sent from the trouble ticket program pops up messages for event viewers that are closed in addition to the currently open event viewers. Only event viewers that are currently open should receive pop-up messages.

Resolution: The pop-up messages are now sent to open event viewers only.

APAR: IY65539

Symptom: When there are many new incoming events there is a noticeable time delay in extracting events from Log Sources for PollInterval values which are greater than the minimum of 1 second.

Resolution: The LogSources events are processed in a more efficient and timely manner.

APAR: IY65557

Symptom: A warning is generated when installing an adapter on SUSE Linux, if a `-pre` file (such as, `/etc/init.d/tecad_logfile-pre`) exists in the `/etc/init.d` directory and a new adapter is installed.

Resolution: If an existing `-pre` file exists on the SUSE system during the installation of an adapter, the `-pre` file is removed, and the adapter is installed successfully.

APAR: IY65620

Symptom: Version 3.9 of the Java version of the event console with Fix Pack 2 or 3.9.0-TEC-0024LA applied returns the following error message: `operator_name` is not a valid TEC operator. This happens when running the **wconsole -lsooperator** command for a valid operator whose corresponding Tivoli administrator name is past the 100th item in the list of Tivoli administrators. Also, if the **wconsole -lconsole -a** command is run for a console to which this operator is assigned, the name of the operator is not displayed in the list of operators assigned to the console.

Resolution: The **wconsole** command has been updated to handle scenarios where more than 100 administrators are defined.

APAR: IY65628

Symptom: Version 3.8 of the Java version of the event console overwrites the Console Preferences saved by version 3.9 of the Java version of the event console and resets them to the defaults.

Resolution: An update to the *IBM Tivoli Enterprise Console Version 3.9 User's Guide* has been provided that explains the loss of configuration data that can occur when version 3.7.1 or 3.8 event consoles are used in a version 3.9 environment. See the **Documentation Updates** section.

APAR: IY65953

Symptom: Documentation is missing for the `bo_instance_of` predicate.

Resolution: A description of the `bo_instance_of` predicate is provided. See **Documentation Updates**.

APAR: IY66044

Symptom: The `tec_gwr` files were not included in the 3.9.0-TEC-FP02 package.

Resolution: The fix pack packaging files have been modified to include the `tec_gwr` adapter files.

APAR: IY66169

Symptom: When the **wdbmaint.sh** script is run against Oracle, the database fails with error ORA-12154 or ORA-01005.

Resolution: The **wdbmaint.sh** script has been corrected to use the database server ID instead of the database ID, and the database failure does not occur.

APAR: IY66655

Symptom: The line immediately above the adapter entry in the `rc.shutdown` file is deleted.

Resolution: When an adapter is added or removed, the rc.shutdown file is modified so that only the corresponding line is modified.

APAR: IY67845

Symptom: The SCE URL that is generated was incorrect causing the default distribution of the tec_gateway_sce profile to yield an installation that does not send events.

Resolution: The SCE URL has been corrected.

APAR: IY68683

Symptom: The log file adapter can end abnormally when the log file being monitored is deleted.

Resolution: The Log file adapter no longer ends abnormally under this circumstance.

APAR: IY69388

Symptom: When the tec_baroc trace level is set to trace2, the event server ends abnormally immediately after starting.

Resolution: The tracing code has been updated to prevent the event server from ending abnormally when the trace level is set to trace2.

APAR: IY69454

Symptom: The tec_rule process on Linux ends abnormally with a SIGEGV error when using the re_match predicate

Resolution: The re_match predicate does not cause the tec_rule process to end abnormally, and matches regular expressions properly.

Defect: 172515

Symptom: On the AIX operating system, the **wrb** command runs slower on version 3.9 than previous versions.

Resolution: On the AIX operating system, the **wrb** command has been improved to run faster on version 3.9.

Defect: 175323

Symptom: The **tec_install.sh** script does not run on the SUSE Linux Enterprise Linux (SLES) Version 9 operating system for the 64-bit zSeries platform.

Resolution: The **tec_install.sh** script now starts the Install Assistant on the 64-bit SLES 9 platform.

Defect: 176256

Symptom: The non-TME rule engine function has been deprecated and is not supported.

Resolution: An error message is now printed indicating this is no longer supported when the non-TME rule engine launched.

Known problems and limitations

Problem: The **postzmsg** command cannot be used on the HP-UX platform unless event buffering is disabled.

Workaround: To disable event buffering, set the following configuration parameter: `BufferEvents=NO`

Problem: When processing a large LogSources file, the HP logfile adapter can lock up and stop sending events.

Solution: This problem is caused by resource issues on the machine and can be alleviated by increasing the **nfile** parameter via the **SAM** utility.

Problem: DB2 connectivity fails and wrimtest will receive **wrimtest** will receive the DB2 error **SQL1224N**.

NOTE: For performance and reliability, it is recommended that you install the database server on a system separate from the event server.

Solution: Create a loop back node and a database alias on that node. To do this, use the following steps:

```
db2 get dbm cfg | grep SVCENAME
```

This returns an entry similar to: "TCP/IP Service name (SVCENAME) = 50000" (where 50000 is the servicename in this example). Use your value in this command:

```
db2 catalog tcpip node LOOPBACK remote 127.0.0.1 server <servicename>
```

Recatalog the database to point back to itself:

```
db2 catalog db <db_name> as <new_db_name> at node LOOPBACK
```

Refresh the DB2 cache:

```
db2 terminate
```

Change RIM to use the new database name:

wsetrim -d <new_db_name> tec

Use **wrimtest -l tec** to confirm the connection now works.

Problem: Under certain circumstances, the send_email task on the HP-UX operating system generates the following error:

```
"Sending message to tecuser@us.ibm.com ...  
Who are you?: Not a typewriter  
cannot open /no/such/directory/dead.letter: No such file or directory"
```

Solution: This error occurs due to the user ID associated with the user 'nobody'. Verify the UID is a non-negative value. Contact your HP-UX system administrator for more information regarding UID values.

Limitation: Under certain circumstances, compiling a rule set containing the netware.rls rule file can generate the following error:

```
"Translating to prolog" step of the netware.rls ruleset.  
Exception in thread "main" java.lang.StackOverflowError  
at com.oroenc.text.regex.Perl5Matcher._pushState(Perl5Matcher.java)  
at com.oroenc.text.regex.Perl5Matcher._match(Perl5Matcher.java)  
at com.oroenc.text.regex.Perl5Matcher._match(Perl5Matcher.java)  
at com.oroenc.text.regex.Perl5Matcher._match(Perl5Matcher.java) ... ..
```

Note: The specific rule that causes this error is novell_duplicate_minor_events.

Problem: If an event server is configured to use Informix Windows ODBC versions 3.81 or 3.82 (CSDK versions 2.80 or 2.81 respectively) with Informix Dynamic Server (IDS) 9.4.0, the event server will not start.

Workaround: To work around this problem, use the back-level Informix ODBC driver version 3.80, available in the CSDK version 2.70. Using the latest ODBC driver with IDS Version 9.4 will prevent the event server from starting. For more information, and to check for a solution from RIM, please search the IBM Support web site for internal defect 177189.

Problem: After applying 4.1-TMF-0060, it is no longer possible to login to a managed node configured on Red Hat Linux using the Tivoli Desktop. The oserv log will show the following error:

PAM: pam_acct_mgmt failed=User account has expired (13) @rconnect: Login failed fot root from host

Workaround: The workaround for this problem is documented in DCF document ID 1182029, and contains the following information:

```
Add the following line to the /etc/pam.d/oserv file  
account required /lib/security/pam_unix.so
```

Problem: The TMF_SELF variable is no longer used in the console, which can prevent the TroubleTicket.sh script from working correctly if configured to use it.

Solution: Use the following statement to obtain the user ID associated with the current console executing the script:

```
objcall 0.0.0 o_get_principal
```

Limitation: Unexpected results can occur if the time zone user preference is not set in the Web console.

Problem: Event groups cannot filter the "Message" keyword when the event database is installed on Informix version 9.4.

Workaround: To work around this problem, use a different column as the key to identify the data needed from the database. This problem stems from a RIM limitation with this version of Informix. (Searches for the data type 'TEXT' do not work correctly.)

Problem: Issuing the postzmsg command with an invalid argument produces a different usage statement than issuing the command with no arguments at all.

Workaround: The usage statement displayed after issuing the command with an invalid argument shows an outdated usage, including the -p <port> parameter. This parameter is no longer supported, and should be ignored. The correct usage information is as follows:

```
Usage: postzmsg { -S <server> | -f <config_file> } [-r <severity>]  
        [-m <message> ] [<slot_name=value>, ...] <class> <source>
```

Problem: Starting the logfile adapter with the -s option does not put it in the background on the Compaq Tru64 operating system.

Workaround: Start the adapter with '&' at the end of the command to start it in the background.

Limitation: The refresh rate for the event viewer in the Web console is set to a minimum of 5 minutes. This interval cannot be reduced.

Workaround: No workaround is available.

Limitation: The `tecad_logfile.fmt` file supplied for linux-86 does not match every format specified in Red Hat Enterprise Linux versions 2.1 and 3.0. (APAR IY57643)

Problem: When performing Task Execution on an event in the Java version of the event console, any trailing spaces contained in an event slot value are stripped off when the attribute values are passed to the task. (APAR IY70219)

Documentation updates

IBM Tivoli Enterprise Console Version 3.9 Command and Task Reference

- The following information is an addendum to the Configuration Parameters Appendix of the *IBM Tivoli Enterprise Console Version 3.9 Command and Task Reference*.

You can set the following parameters in the `.ui_server_config` file, which is located in the `$BINDIR/TME/TEC` directory.

Parameter	Use	Default Value
<code>tec_ui_server_version_checking_enabled</code>	Specifies whether or not to verify a compatible version of the event console (Java or Web version) when attempting to connect to the UI server. This parameter accepts the values <code>true</code> or <code>false</code> .	TRUE
<code>tec_ui_server_conn_keepalive_interval</code>	Specifies sleep interval, in minutes, used by the UI server keep-alive thread. This thread prevents the unexpected closure of the console to UI server connection when communicating through a firewall. This feature only works on UI servers installed on TMF 4.x Managed Nodes.	Not used by default.

- IY57986 The following information is an addendum to the Configuration Parameters Appendix of the *IBM Tivoli Enterprise Console Version 3.9 Command and Task Reference*.

You can set the following parameters in the `.tec_config` file, which is located in the `$BINDIR/TME/TEC` directory. You can also view the parameters within rules by using the `get_config_param` predicate. The values specified in the `tec_recv_agent_port`, `tec_disp_rule_port`, and `tec_rec_rule_port` parameters should be set greater than 5000 to avoid conflicting with automatically assigned ports.

Parameter	Use	Default Value
<code>tec_recv_agent_port</code>	Specifies the port that the <code>tec_reception</code> process should use to receive events that are sent by non-TME adapters. This parameter is required on Windows systems.	The default value 0 specifies that the portmapper is used.
<code>tec_disp_rule_port</code>	Specifies the port used for inter-process communication for the <code>tec_dispatch</code> process.	The default value 0 specifies that the portmapper is used.
<code>tec_recv_rule_port</code>	Specifies the port used for inter-process communication for the <code>tec_rule</code> process.	The default value 0 specifies that the portmapper is used.
<code>tec_recv_timeout</code>	Specifies a timeout, in seconds, for the <code>tec_reception</code> process when reading events from a socket. If the <code>tec_reception</code> process hangs for <code>tec_recv_timeout</code> seconds when reading an event, it ends the connection and continues receiving events so that other agents are not delayed.	The default value is 5 seconds.

tec_tmpfile_dir	Specifies the directory where temporary files can be created and manipulated. These temporary files are used when rules write to a scratch directory.	The default directory is \$DBDIR.
tec_restart_server	Specifies whether the tec_master process automatically restarts other processes when a process either ends or loses communication with the tec_master process. The values for this parameter are YES and NO.	The default value NO specifies that if the tec_master process cannot reach a child process, it performs a shutdown.
tec_rule_cache_size	This parameter is obsolete. This is now specified with the wsetesvr cfg command and viewed with the wlsvr cfg command.	Not applicable.
tec_rule_cache_full_history	This parameter is obsolete. This is now specified with the wsetesvr cfg command and viewed with the wlsvr cfg command.	Not applicable.
tec_rule_cache_non_closed_history	This parameter is obsolete. This is now specified with the wsetesvr cfg command and viewed with the wlsvr cfg command.	Not applicable.
tec_rule_cache_clean_freq	Specifies the frequency for emptying the rule engine event cache. The value is specified in seconds.	The default value is 3600 seconds (one hour).
tec_rule_trace	This parameter is obsolete. This is now specified with the wsetesvr cfg command and viewed with the wlsvr cfg command.	Not applicable.
tec_rule_trace_file	This parameter is obsolete. This is now specified with the wsetesvr cfg command and viewed with the wlsvr cfg command.	Not applicable.
tec_rule_host	Specifies the host where the rule engine runs.	The default is to use the TMF function <code>local_host name()</code> .
tec_rule_use_portmapper	This parameter is used on all platforms except Windows to specify whether to register the port specified by the <code>tec_rcv_agent_port</code> keyword with the portmapper. If the <code>tec_rcv_agent_port</code> parameter is set to 0 or is not specified, the portmapper is used regardless of the <code>tec_rule_use_portmapper</code> keyword. The values for this parameter are yes and no.	
tec_rule_mgmt port	This parameter is obsolete.	Not applicable.
tec_rule mport enable level	This parameter is obsolete.	Not applicable.
tec_rule password	This parameter is obsolete.	Not applicable.
tec_server_handle	Specifies the numeric identifier for the server. If you have multiple Tivoli Enterprise Console servers, use this parameter to assign them unique IDs.	The default value is 1.
event_cache_file	Specifies the file name of the event cache. This is used to cache incoming events when events are received faster than they can be processed.	None
tec_exec task_dbcs	Specifies how slot parameters of type string should be passed to the task engine. If set to true, slot parameters are converted to the local code set before the task is run. If set to false, the parameters are passed as UTF8.	The default value is false.
always_expect_utf8	Indicates whether all incoming events are to be in UTF8 format. The values for this parameter are yes and no.	The default value is no.
tec_benchmark_report_period	Specifies the rate at which processing rates are printed. For more information, see the <i>IBM Tivoli Enterprise Console Rule Developer's Guide</i> .	The default value 0 specifies that reports are not generated.
tec_benchmark_sample_period	Specifies the time window for which event arrival and processing rates are computed. For more information, see the <i>IBM Tivoli Enterprise Console Rule Developer's Guide</i> .	The default value 0 specifies that reports are not generated.

IBM Tivoli Enterprise Console Version 3.9 Adapters Guide

- IY58303 Clarification of %s* behavior in format specifications

The following information is an addendum to the format specifications section of Appendix B of the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide*.

If the component specifier %s* is used in an adapter format file, white space preceding and following the %s* component specifier is considered by the adapters when matching messages. For example, consider the following format specification:

```
FORMAT Test
%s*[x] %s*
END
```

To match a message to this format specification, white space must occur directly after [x] in the log message, and there must be no white space between [x] and the constant immediately preceding it in the message. Until 3.8.0-TEC-FP02, messages that had no white space following [x] were incorrectly matched by the adapters. Messages that had white space between [x] and the constant immediately preceding [x] were also incorrectly matched by the adapters. These behaviors were contrary to the documentation contained in the *IBM Tivoli Enterprise Console Adapters Guide*. The problems were resolved in 3.8.0-TEC-FP02 and the resolution has been carried forward into version 3.9.

Any white space that precedes the first non-white space character in a message is ignored by the adapters.

- IY63407 Upgrading adapters from version 3.8 to 3.9

The following information is an addendum to Chapter 2, Installing Adapters, in the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide*.

When upgrading existing version 3.8 adapters to version 3.9 on a Tivoli endpoint, the version 3.8 adapters can continue to run while the Adapter Configuration Facility is upgraded. After the Adapter Configuration Facility has been upgraded, you can distribute a version 3.9 adapter configuration profile to the endpoints where the version 3.8 adapters are running, which results in the following actions:

1. The version 3.8 adapter is stopped
2. The version 3.9 adapter overwrites the version 3.8 adapter.
3. The version 3.9 adapter is started.

This process is also true for the enhanced adapters.

The migration path described above requires virtually no downtime for the adapters.

However, if you want to remove a version 3.8 adapter (not upgrade it) from an endpoint after the version 3.9 Adapter Configuration Facility has been installed, you must complete the following steps:

1. Edit the existing adapter configuration profile that is currently active on the endpoint.
2. Remove all entries from the profile and save the profile.
3. Distribute the profile to the endpoint. The existing adapter on the endpoint is stopped and removed.

Note that you must use an adapter configuration profile that matches the adapter configuration profile that is currently active on the endpoint for the empty profile distribution to successfully remove the installed adapter. This means that in version 3.9 an existing version 3.8 profile must first be upgraded to the Adapter Configuration Facility version 3.9 level. Simply creating a new, empty adapter configuration profile on version 3.9 and distributing it to the endpoint will *not* remove the version 3.8 adapter.

- IY59911 SNMP Adapter CDS file keywords and usage examples

The following information is an addendum to Chapter 9, SNMP Adapter, of the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide*. This information should be added to the section titled "Class definition statement file".

```
SNMP event example
CLASS Port_Segmenting_CBT
SELECT
1: ATTR(=,$ENTERPRISE), VALUE(PREFIX, "1.3.6.1.4.1.52");
2: $SPECIFIC = 258;
3: ATTR(="boardIndex");
4: ATTR(="portIndex");
```

```

FETCH
  1: IPNAME($AGENT_ADDR);
  2: FQNAME($AGENT_ADDR,$FQ_DOMAIN);
MAP
  hostname = $F1;
  fqhostname = $F2;
  boardIndex = $V3;
  portIndex = $V4;
  sub_origin = PRINTF("board %s, port %s", $V3, $V4);
  status = CLOSED;
END

```

Keywords

IPNAME(ip_addr) - converts a given IP address into an IP name

IPADDR(ip_name) - converts a given IP name into an IP address

FQNAME(ip_name, domain) - converts a given IP name or address and domain name into a fully qualified hostname. The variable `$FQ_DOMAIN` (which is set according to the `FQDomain` keyword in the adapter configuration file) can be used for the domain. The algorithm used to build the fully qualified name is based on the value of the domain parameter:

1. If the **domain** is not "NO", then a check is done to see if the input name is already fully qualified.
2. If the **domain** is "YES", then the fully qualified name is determined by using `gethostbyname()`. If that fails, **nslookup** is used on Windows or **res_search** is used on UNIX and Linux.
3. If the **domain** is any other value, the fully qualified name is created by appending the domain parameter to the `ip_name` parameter.

PRINTF - builds an event attribute using a C-style **printf()** format string. For more information see Appendix C, Class definition file reference.

SUBSTR - extracts a substring out of an attribute value. For more information see Appendix C, Class definition file reference.

- The following information is an addendum to Appendix C, Class definition statement file reference, of the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide*.

Replace the example in the “FETCH statement” section with the following:

```

FETCH
  1: SUBSTR($V2,1,5);

```

This statement uses the value of the variable `$V2`, as assigned from `<select_statement>` number 2, and assigns the substring represented by the first four characters of `$V2` to the variable `$F1`.

Replace the “MAP statement” section with the following:

The MAP statement creates the event attributes and associated values that will be put in the outgoing Tivoli Enterprise Console event. The MAP segment is composed of one or more `<map_statement>` expressions. Each `<map_statement>` has one of the following formats:

```

<slot_name> = <string>;
<slot_name> = <variable>;
<slot_name> = PRINTF(<format_string, <var1>, ..., <varn>);

```

`<slot_name>`

The name of any event attribute. This should be an event attribute that corresponds to an event attribute defined in the adapter’s `.baroc` file on a event server.

`<string>`

Any character string.

PRINTF

Specifies that the value of the event attribute should be created using a C-style `printf()` format string. This format string supports only the `%s` format specifier.

`<var>`

Can contain either a `<string>` or a `<variable>`.

An example of a MAP statement:

```
MAP
origin = $V2;
hostname = $HOSTNAME;
msg = PRINTF("The origin is %s", $V2);
```

In this example, the origin event attribute would be given the value of the SELECT statement variable \$V2. The hostname event attribute would be given the value of the \$HOSTNAME keyword. Assuming the value of the variable \$V2 is 9.17.123.234, the msg event attribute is given the value "The origin is 9.17.123.234" (the double quotes are not included in the value).

The output of the MAP statements is a list of event attribute name/value pairs that are used to generate the outgoing Tivoli Enterprise Console event that is sent to the event server.

Note: The oserv process must be restarted for this change to take effect.

- The following information is a correction to Chapter 1, page 19, of the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide*. Note that HP is not supported for use with the **TransportList=type_name,...** option, as originally documented.

Note: This keyword is supported only for Solaris, AIX, Linux, and Windows adapters. It is not supported for other adapters.

- IY56192 Regular expressions in adapter filters
The following information is an addendum to Chapter 1, Introduction to adapters, of the *IBM Tivoli Enterprise Console Version 3.9 Adapters Guide*. This information should be added to the section titled "Event filtering".

Syntax of Regular Expressions:

A regular expression is zero or more branches, separated by "|". It matches anything that matches one of the branches.

A branch is zero or more pieces, concatenated. It matches a match for the first, followed by a match for the second, etc.

A piece is an atom possibly followed by "*", "+", or "?". An atom followed by "*" matches a sequence of 0 or more matches of the atom. An atom followed by "+" matches a sequence of 1 or more matches of the atom. An atom followed by "?" matches a match of the atom, or the null string.

An atom is a regular expression in parentheses (matching a match for the regular expression), a range (see below), "." (matching any single character), "^" (matching the null string at the beginning of the input string), "\$" (matching the null string at the end of the input string), a "\" followed by a single character (matching that character), or a single character with no other significance (matching that character).

A range is a sequence of characters enclosed in "[]". It normally matches any single character from the sequence. If the sequence begins with "^", it matches any single character not from the rest of the sequence. If two characters in the sequence are separated by "-", this is shorthand for the full list of ASCII characters between them (e.g. "[0-9]" matches any decimal digit). To include a literal "]" in the sequence, make it the first character (following a possible "^"). To include a literal "-", make it the first or last character.

A sample program is provided in the EIFSDK for testing regular expressions. The sample is provided for each operating system in the `<eifsdk>/bin/$INTERP` directory. The sample name is 'regtest'. A sample input file, regtest.data, is also provided.

Note: The regular expression code is a slightly altered version of code originally written by Henry Spencer Copyright (c) 1986 by University of Toronto.

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- IY62178 Event Integration Facility toolkit support for z/OS

The following information is an addendum to Chapter 4, Building an adapter, in the *Tivoli Event Integration Facility Version 3.9 Reference*.

Table 7, Libraries for non-TME adapters developed with the Event Integration Facility C API, should be updated with the following entry:

Libraries	Provided by	Notes
librplib.a Standard z/OS Language Environment libraries	Operating system	For adapters on z/OS

The following section should be added to the end of the chapter 4 with the title “Using the Event Integration Facility on z/OS”:

The following Event Integration Facility toolkit binaries are unique to z/OS. To use them, transfer the binaries to your z/OS USS system in binary. Note that these files support only the non-Tivoli transport mechanism.

EIFSDK/bin/os390/postzmsg
EIFSDK/lib/os390/libteceef.a

You can also transfer the following Java files in binary and used on z/OS. These files are used for both the Java version of the Event Integration Facility and for state correlation with the C version.

EIFSDK/jars/evd.jar
EIFSDK/jars/log.jar
EIFSDK/jars/zce.jar
EIFSDK/jars/xercesImpl-4.2.2.jar
EIFSDK/jars/xml-apis-4.2.2.jar

Note: The EIFSDK directory is found on the IBM Tivoli Enterprise Console TME New Installations CD or in the directory where you placed it.

To use the C version of the Event Integration Facility on z/OS, the appropriate EBCDIC code set files (such as IBM-1047) need to be in the \$TISDIR/codeset directory. This enables UTF-8 conversion to take place. You can transfer these files in binary to a USS directory, such as /etc/Tivoli/codeset. To use the code set, export TISDIR=/etc/Tivoli on your USS system.

- The following information is an addendum to Chapter 5, Filtering events at the source, in the *Tivoli Event Integration Facility Version 3.9 Reference*.

Table 10, Library paths and directories for adapters built with the C API, should be updated with the following entry:

Operating System and Library	Environment Variable	Directories
z/OS: libjvm.so	LIBPATH	<java_path>/bin/classic <java_path>/bin

The following information should be added to the “Activating state machines” section in chapter 5.

To use state-based correlation on z/OS, follow these steps:

1. Convert your xml rules in code page IBM-037 rather than IBM-1047. To convert a file from IBM-1047 to IBM-037, use the following command:

```
iconv -f IBM-1047 -t IBM-037 filename > outfile
```

2. Transfer the tecsce.dtd file in binary to your US system.

3. When using Java 1.3.1, you might need to disable JIT. To do this, use the following command:

```
export JAVA_COMPILER=NONE
```

IBM Tivoli Enterprise Console Version 3.9 User’s Guide

- IY65628 The following information is an addendum to Chapter 7, Using Event Consoles, in the *IBM Tivoli Enterprise Console Version 3.9 User’s Guide*.

Using version 3.7.1 or 3.8 event consoles in a version 3.9 environment is unsupported and will result in loss of configuration information. Although a previous version of the event console seems to function properly, it can overwrite configuration data for all Tivoli Enterprise Console operators even if the operator of the previous version of the event console does not have access to the Configuration screen. For example, if the event console from version 3.9 Fix Pack 1 or later is used to edit the console preferences, any version 3.7.1 event console that is started in the version 3.9 environment will overwrite the console preferences and reset them to the default settings for all operators. Any version 3.8 event console prior to Fix Pack 3 that is started in the version 3.9 environment will also reset the console preferences to the default settings for all operators. This overwrite occurs every time the previous console versions are started in a version 3.9 environment after any operator of the 3.9 version event console has modified the console preferences.

When the event server is upgraded to version 3.9 or any new version 3.9 fix pack level, the event consoles for all operators must be updated to the same level to avoid loss of configuration data.

See the **Fix Pack Notes** above for specific compatibility information.

- The following information is an addendum to Chapter 4, Using the Web version of the event console, of the *IBM Tivoli Enterprise Console Version 3.9 User's Guide*, page 64.

Time zone

Configures the time zone for the Web version of the event console. The default value is set to Detect from Web Browser.

IBM Tivoli Enterprise Console Version 3.9 Rule Developer's Guide

- IY65092 The following information is an addendum to Chapter 5 Correlation Examples of the *IBM Tivoli Enterprise Rule Developer's Guide*, page 228.

In the section that describes the process_clearing event rule, the usage of is_clearing_event should be:

```
rule: 'process_clearing_event': (
  event: _clr_ev of class 'EVENT',
  reception_action: 'clear_all_targets'(
    is_clearing_event(_clr_ev),
  (
    all_clear_targets(_clr_ev, _target, 3600, 0),
    ....
  )
)
```

- IY65212 The following information is an addendum to the Appendix B. BNF Grammar for Baroc files section of the *IBM Tivoli Enterprise Rule Developer's Guide*.

In the section describing Terminals, the description for integer should be changed to:

```
INTEGER:
<DECIMAL_LITERAL>(["+","-"])?["1"-"9"](["0"-"9"]*)+>
|<HEX_LITERAL>(["+","-"])?["0"-"x","X"](["0"-"9"](["0"-"9"]*"a"-"f","A"-"F"))+>
|<OCTAL_LITERAL>(["+","-"])?["0"-"7"]*
```

- IY65953 The following information is an addendum to Appendix A. of the *IBM Tivoli Enterprise Rule Developer's Guide, Alphabetic listing of rule language predicates*.

bo_instance_of
Backtracking predicate, which returns pointer to event with class.

Synopsis

```
bo_instance_of(classname, _evtptr)
--OR--
bo_instance_of(classname, evtptr, attribute_value_pairs )
```

Description

Succeeds once for each event that satisfies the specified classname and additional attribute conditions if they are specified.

Arguments

classname

The name of event class. Needs to be ground.

_evtptr

The returned pointer to event. The argument must be free.

attribute_value_pairs

A list of *attribute = value* pairs that must be met by an event. Attribute must be ground. The attribute value can be free or ground.

Example

The following example determines whether duplicate events exist that have the same class name and hostname as the event under analysis.

```
rule: drop_dups: (
  event: _event of _class _class
    where [ hostname: _hostname ],
  reception_action: (
    bo_instance_of(_class, _evt, [ hostname = _hostname ]),
    bo_get_slotval(_evt, status, _status),
    _status \== 'CLOSED',
    set_event_status(_evt, 'CLOSED'),
    bo_set_slotval(_evt, 'administrator', 'Rules Engine'),
    re_mark_as_modified(_evt, _)
  )
).
```

See Also

None.

Files added or replaced with this fix pack

```
bin/$INTERP/TME/TEC/tec_server
bin/$INTERP/TME/TEC/tec_dispatch
bin/$INTERP/TME/TEC/tec_reception
bin/$INTERP/TME/TEC/tec_rule
bin/$INTERP/TME/TEC/tec_rule_data
bin/$INTERP/TME/TEC/tec_task
bin/$INTERP/TME/TEC/tec_compile_rules
bin/$INTERP/TME/TEC/tec_compile_rules_data
bin/$INTERP/TME/TEC/tec_config
bin/$INTERP/TME/TEC/tec_db_calls
bin/$INTERP/TME/TEC/tec_server_gui
bin/$INTERP/TME/TEC/tec_gateway
bin/$INTERP/TME/TEC/builder_data
bin/linux-ix86/TME/TEC/jre.tar
bin/linux-s390/TME/TEC/jre.tar
bin/$INTERP/TME/TEC/default_sm/tecsce.dtd
bin/$INTERP/TME/TEC/contrib/after_install.sh
bin/$INTERP/TME/TEC/sql/wdbmaint.sh
bin/$INTERP/TME/TEC/sql/genreorg.sh
bin/$INTERP/TME/TEC/sql/ora_idx_upgrade.sh
bin/$INTERP/TME/TEC/samples/correlation/correlate.rls
bin/$INTERP/TME/TEC/samples/correlation/log_default.rls
bin/$INTERP/TME/TEC/default_rb/TEC_RULES/netview.rls
bin/$INTERP/TME/TEC/default_rb/TEC_TEMPLATES/$INTERP/event_specifiers.wic
bin/$INTERP/TME/TEC/default_rb/TEC_TEMPLATES/$INTERP/templates.wic
bin/$INTERP/TME/TEC/default_rb/.rbtargets/EventServer/TEC_TEMPLATES/$INTERP/event_specifiers.wic
bin/$INTERP/TME/TEC/default_rb/.rbtargets/EventServer/TEC_TEMPLATES/$INTERP/templates.wic
bin/$INTERP/TME/TEC/adapters/bin/tecad_hpov
bin/$INTERP/TME/FORMAT_EDITOR/fmt_edit
bin/$INTERP/TME/RULE_BUILDER/builder
bin/$INTERP/TME/RULE_BUILDER/builder_data
bin/$INTERP/TME/ACP/acp
```

bin/\$INTERP/TME/ACP/acpep
 bin/\$INTERP/TME/ACP/acp_gateway
 bin/\$INTERP/TME/ACP/tec-acf-remove.sh
 bin/\$INTERP/bin/wstopcwgw
 bin/\$INTERP/bin/waddac
 bin/\$INTERP/bin/postemsg
 bin/\$INTERP/bin/postzmsg
 bin/\$INTERP/bin/wpostemsg
 bin/\$INTERP/bin/wpostzmsg
 bin/\$INTERP/bin/wlsemsg
 bin/\$INTERP/bin/wsetemsg
 bin/\$INTERP/bin/wtdbpace
 bin/\$INTERP/bin/tec_console
 bin/\$INTERP/bin/wcrtnvgroups
 bin/\$INTERP/bin/wupdnvgroups
 bin/w32-ix86/bin/tec_console.cmd
 bin/w32-ix86/bin/wcrtnvgroups.cmd
 bin/w32-ix86/bin/wupdnvgroups.cmd
 bin/generic_unix/TME/TEC/jcf.jar
 bin/generic_unix/TME/TEC/jcf.jks
 bin/generic_unix/TME/TEC/ibmjsse.jar
 bin/generic_unix/TME/TEC/jrim.jar
 bin/generic_unix/TME/TEC/jsafe.zip
 bin/generic_unix/TME/TEC/avail_common.jar
 bin/generic_unix/TME/TEC/tec_console.jar
 bin/generic_unix/TME/TEC/tec_ui_svr.jar
 bin/generic_unix/TME/TEC/evd.jar
 bin/generic_unix/TME/TEC/log.jar
 bin/generic_unix/TME/TEC/tec_rb.jar
 bin/generic_unix/TME/TEC/event.jar
 bin/generic_unix/TME/TEC/zce.jar
 bin/generic_unix/TME/TEC/xercesImpl-4.2.2.jar
 bin/generic_unix/TME/TEC/xml-apis-4.2.2.jar
 bin/lcf_bundle/bin/\$INTERP/bin/postemsg
 bin/lcf_bundle/bin/\$INTERP/bin/postzmsg
 bin/lcf_bundle/bin/\$INTERP/bin/wpostemsg
 bin/lcf_bundle/bin/\$INTERP/bin/wpostzmsg
 bin/lcf_bundle/bin/\$INTERP/TME/ACP/acpep
 bin/lcf_bundle/bin/\$INTERP/TME/ACP/acpep_install
 bin/lcf_bundle/bin/\$INTERP/TME/ACP/wacpadin
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/init.tecad_logfile
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/tecad_logfile.cfg
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/tecad-remove-logfile.sh
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/update_conf
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/tecad_snmp.cfg
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/tecad_logfile
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/logfile_gencds
 bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/tecad_snmp
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/tecad_snmps.exe
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/sctlnt.exe
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/sctlnmp.exe
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/sctlwin.exe
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/tecad_win.exe
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/tecadwins.exe
 bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/win_gencds.exe
 bin/\$INTERP/bin/wtdbclear
 bin/\$INTERP/bin/wtdumper
 bin/\$INTERP/bin/wtdumppl
 bin/\$INTERP/bin/wtdumptr
 bin/\$INTERP/bin/wrb
 bin/\$INTERP/TME/TEC/scripts/wstartmaint.sh
 bin/\$INTERP/TME/TEC/tec_rule_non_tme.tar
 bin/\$INTERP/TME/TEC/tec_ui_server

bin/\$INTERP/TME/TEC/.ui_server_config
bin/w32-ix86/bin/wcrtnvgroups.cmd
bin/w32-ix86/bin/wupdnvgroups.cmd
bin/\$INTERP/TME/TEC/default_rb/TEC_CLASSES/ibm_director.baroc
bin/\$INTERP/TME/TEC/default_rb/.rbtargets/EventServer/TEC_CLASSES/ibm_director.baroc
bin/linux-ix86/bin/waddacpattr
bin/linux-ix86/bin/wdelac
bin/linux-ix86/bin/wlsac
bin/linux-ix86/bin/wlsaddflt
bin/linux-ix86/bin/wlsadenv
bin/linux-ix86/bin/wlsadgui
bin/linux-ix86/bin/wlsadval
bin/linux-ix86/bin/wlsaenv
bin/linux-ix86/bin/wsetac
bin/linux-ix86/bin/wsetaddflt
bin/linux-ix86/bin/wsetadenv
bin/linux-ix86/bin/wsetadgui
bin/linux-ix86/bin/wsetadval
bin/linux-ix86/bin/wsetaenv
bin/linux-ix86/bin/wtouchac
bin/linux-ix86/bin/wchkclass
bin/linux-ix86/bin/wcomprules
bin/linux-ix86/bin/wcprb
bin/linux-ix86/bin/wcrtrb
bin/linux-ix86/bin/wcrtsrc
bin/linux-ix86/bin/wdelrb
bin/linux-ix86/bin/wdelrbclass
bin/linux-ix86/bin/wdelrbules
bin/linux-ix86/bin/wdelsrc
bin/linux-ix86/bin/wimprbclass
bin/linux-ix86/bin/wimprbrules
bin/linux-ix86/bin/wloadrb
bin/linux-ix86/bin/wlscurrb
bin/linux-ix86/bin/wlsvrcfg
bin/linux-ix86/bin/wlsrb
bin/linux-ix86/bin/wlsrbclass
bin/linux-ix86/bin/wlsrbules
bin/linux-ix86/bin/wlssrc
bin/linux-ix86/bin/wsendresp
bin/linux-ix86/bin/wsetsvrcfg
bin/linux-ix86/bin/wsetrb
bin/linux-ix86/bin/wsetsrc
bin/linux-ix86/bin/wstartesvr
bin/linux-ix86/bin/wstatesvr
bin/linux-ix86/bin/wstopesvr
bin/linux-ix86/bin/wrimsql
bin/linux-ix86/bin/winstruct_event
bin/linux-ix86/bin/wtdbstat
bin/linux-ix86/TME/TEC/tec_agent_demo
bin/linux-s390/bin/waddacpattr
bin/linux-s390/bin/wdelac
bin/linux-s390/bin/wlsac
bin/linux-s390/bin/wlsaddflt
bin/linux-s390/bin/wlsadenv
bin/linux-s390/bin/wlsadgui
bin/linux-s390/bin/wlsadval
bin/linux-s390/bin/wlsaenv
bin/linux-s390/bin/wsetac
bin/linux-s390/bin/wsetaddflt
bin/linux-s390/bin/wsetadenv
bin/linux-s390/bin/wsetadgui
bin/linux-s390/bin/wsetadval
bin/linux-s390/bin/wsetaenv

bin/linux-s390/bin/wtouchac
bin/linux-s390/bin/wchkclass
bin/linux-s390/bin/wcomprules
bin/linux-s390/bin/wcprb
bin/linux-s390/bin/wcrtrb
bin/linux-s390/bin/wertsrc
bin/linux-s390/bin/wdelrb
bin/linux-s390/bin/wdelrbclass
bin/linux-s390/bin/wdelrbrules
bin/linux-s390/bin/wdelsrc
bin/linux-s390/bin/wimprbclass
bin/linux-s390/bin/wimprbrules
bin/linux-s390/bin/wloadrb
bin/linux-s390/bin/wlscurrb
bin/linux-s390/bin/wlsvrcfg
bin/linux-s390/bin/wlsrb
bin/linux-s390/bin/wlsrbclass
bin/linux-s390/bin/wlsrbrules
bin/linux-s390/bin/wlssrc
bin/linux-s390/bin/wsendresp
bin/linux-s390/bin/wsetsvrcfg
bin/linux-s390/bin/wsetrb
bin/linux-s390/bin/wsetsrc
bin/linux-s390/bin/wstartesvr
bin/linux-s390/bin/wstatesvr
bin/linux-s390/bin/wstopesvr
bin/linux-s390/bin/wrimsql
bin/linux-s390/bin/winstruct_event
bin/linux-s390/bin/wtdbstat
bin/linux-s390/TME/TEC/tec_agent_demo
bin/generic_unix/TME/TEC/tec_ui_svr_stubs.jar
bin/lcf_bundle/bin/\$INTERP/TME/TEC/adapters/bin/tec_gwr
bin/lcf_bundle/bin/w32-ix86/TME/TEC/adapters/bin/wsighup.exe

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