Release Notes
TransactionVision 7.50

These Release Notes provide the following information about TransactionVision 7.50:

Overview

Welcome to TransactionVision, the only software that enables you to promise and deliver extraordinary levels of service. TransactionVision traces WebSphere MQ API, CICS API, J2EE Servlet, EJB, JDBC and JMS calls across transaction-based systems and graphically displays the flow of messages between applications and queues. TransactionVision enables you to visually track transactions across each touch-point, enhancing your ability to detect and prevent information flow problems.

New in 7.50

New Features

- JDBC Sensor
- I18N Internationalization
- Microsoft SQL Server
- SonicMQ Sensor
- ActiveDirectory
- 64-bit Analyzer support
- Business Transaction Classification Editor
- CICS Sensor Enhancements
- Query Enhancements for Business Transaction Attributes
- 64-bit IDs for Event and Transactions

Platform Support Updates

- This release of TransactionVision includes expanded OS support for HP-UX 11i v3 on PARISC and Itanium, RedHat Enterprise Linux 5.0, OS/400 V5R4, and z/OS 1.8.
- This release also includes expanded platform support for newer versions of IBM WebSphere Application Server, BEA WebLogic, WebSphere MQ, WebSphere Business Integration Message Broker, TIBCO EMS, IBM DB2, IBM Directory Server, OpenLDAP, and Sun ONE.

HP Product Integration

TransactionVision 7.50 includes new integration features with the following HP products:

- Business Availability Center
- Business Process Insight
- Diagnostics
- Real User Management
- Business Process Management

Documentation

TransactionVision documentation is only provided in electronic format in this distribution. The Adobe Acrobat Reader is required to view these files.

- The *TransactionVision Planning Guide* (TransactionVision_Planning_Guide.pdf) provides information to help you plan the TransactionVision implementation in your environment.
- The *TransactionVision Sensor Installation and Configuration Guide* (TransactionVision_Sensor_Installation_Configuration_Guide.pdf) provides instructions for installing and configuring TransactionVision Sensors. This file is also available from the TransactionVision **Help** menu.
- The *TransactionVision Analyzer Installation and Configuration Guide* (TransactionVision_Analyzer_Installation_Configuration_Guide.pdf) provides instructions for installing and configuring the TransactionVision Analyzer and associated databases. This file is also available from the TransactionVision **Help** menu.
- The *TransactionVision Web Installation and Configuration Guide* (TransactionVision_Web_Installation_Configuration_Guide.pdf) provides instructions for installing and configuring the TransactionVision web application. This file is also available from the TransactionVision **Help** menu.
- The *TransactionVision Administrator's Guide* (TransactionVision_Administrator_Guide.pdf) provides instructions managing user accounts and communication links, configuring projects and data collection filters, and managing services and schemas. This file is also available from the TransactionVision **Help** menu.
- The *TransactionVision User's Guide* (TransactionVision_User_Guide.pdf) provides instructions using TransactionVision analysis views. This file is also available from the TransactionVision **Help** menu.
- The *TransactionVision Advanced Cusomization Guide,* previously named the *TransactionVision Programmer's Guide* (TransactionVision_Advanced_Customization_Guide.pdf) provides information for creating custom beans and reports for use with TransactionVision. This file is also available from the TransactionVision **Help** menu.

- The *TransactionVision Security Guide* (TransactionVision_Security_Guide.pdf) provides an overview of the security features and setup procedures of TransactionVision. The information in this document is provided to ensure that data collected by TransactionVision is secure and accessible to the appropriate people.

Installation

See the *TransactionVision Analyzer Installation and Configuration Guide*, *TransactionVision Web Installation and Configuration Guide*, and *TransactionVision Sensor Installation and Configuration Guide* for detailed instructions on installing and configuring TransactionVision. Prior to any new installation, it is recommended that the *Supported Platforms* section below be carefully reviewed. The *TransactionVision Planning Guide* contains important information for sizing and planning new installations.

Upgrading from a Previous Release

If the installation program or script detects an installation of TransactionVision release 5.0.0 when you install the TransactionVision Analyzer or Web User Interface, it provides an option to backup old configuration files and migrate them to release 7.50. After Analyzer and Web component migration, the **`TVisionSetupInfo`** and **`TVisionSetup`** scripts need to be run. From **`TVisionSetup`**, the web user interface option must be selected in order to re-install the TransactionVision Web User Interface application. Project databases must be migrated with the **MigrateDB** script after TransactionVision is installed and configured before you can use them with TransactionVision 7.50. Please be sure to backup your databases before running the **MigrateDB** script.

Advanced users can make many customizations to TransactionVision, and in some cases these advanced customizations will not be automatically migrated.

Backward Compatibility

All TransactionVision 5.0.0 Sensors can be used with the TransactionVision 7.50 Analyzer, but it is highly recommended that the 7.50 Sensors be installed to take advantage of the latest updates and enhancements. TransactionVision 7.50 Sensors **may not** be used with older versions of the TransactionVision Analyzer.

Supported Platforms

Supported WebSphere MQ Sensor Platforms

Platform	Operating Environment	WebSphere MQ	Supports WebSphere MQ API Exit Sensor
Microsoft Windows	Windows 2000, 2003 Server x86	6.0	Yes
Sun Solaris	Solaris 9, 10 SPARC	6.0 (32-bit), 6.0 (64-bit)	Yes
Hewlett-Packard HP-UX	HP-UX 11i v3 PARISC & Itanium	6.0 (32-bit), 6.0 (64-bit for library sensor only)	Yes
IBM AIX	AIX 5L 5.3 POWER	6.0 (32-bit), 6.0 (64-bit)	Yes
RedHat Linux	Enterprise Linux 4.0 & 5.0 WS/ES/AS x86	6.0 (32-bit), 6.0 (64-bit)	Yes
IBM i5/OS	i5/OS V5R3 iSeries	6.0	Yes
IBM z/OS	z/OS 1.7, 1.8 zSeries z/OS 1.7, 1.8 Batch z/OS 1.7, 1.8 CICS TS 2.x, 3.x z/OS 1.7, 1.8 RRS z/OS 1.7, 1.8 IMS 7.x, 8.x, 9.x	5.3, 6.0	N/A

Note: IBM has issued a flash alert regarding WebSphere MQ 5.3 CSD08 and CSD09. See the following for details: http://www-1.ibm.com/support/docview.wss?uid=swg21217437. TransactionVision does not support WebSphere MQ 5.3 CSD08 and CSD09 without the fixes specified in the above alert. Please follow the recommendations in the flash alert for updates to WebSphere MQ 5.3.

Note: BTTRACE and BTMQEXIT are **not** supported on z/OS.

Note: The C Library Sensor is not supported for monitoring Java applications on AS/400 systems. Please use the API Exit Sensor instead.

Important! When using multithreaded applications with WebSphere MQ on UNIX systems, ensure that the applications have sufficient stack size for the threads. IBM recommends using a stack size of at least 256KB when multithreaded applications are making MQI calls. When using the TransactionVision WebSphere MQ Sensor, even more stack size may be required; the recommended stack size is at least 512KB. For more information, see Chapter 7, "Connecting to and disconnecting from a queue manager," in the *WebSphere MQ Application Programming Guide*.

Supported Servlet Sensor Platforms

Platform	Operating Environment	Application Servers
Microsoft Windows Sun Solaris IBM AIX RedHat Linux	Windows 2000, 2003 Server x86 Solaris 9, 10 SPARC AIX 5L 5.3 POWER RedHat Enterprise Linux 4.0 & 5.0 WS/ES/AS x86	IBM WebSphere Application Server V5.1, 6.0, 6.1 BEA WebLogic Application Server 8.1.6, 9.2.2

Supported JMS Sensor Platforms

Platform	Operating Environment	JMS Service Provider
Microsoft Windows	Windows 2000, 2003 Server x86	WebSphere MQ 6.0, TIBCO EMS 4.2.0, 4.4.2, SonicMQ 7.5.1, WebLogic JMS 8.1.6
Sun Solaris	Solaris 9, 10 SPARC	WebSphere MQ 6.0 (32-bit and 64-bit), TIBCO EMS 4.2.0, 4.4.2, SonicMQ 7.5.1, WebLogic JMS 8.1.6
IBM AIX	AIX 5L 5.3 POWER	WebSphere MQ 6.0 (32-bit and 64-bit), TIBCO EMS 4.2.0, 4.4.2, SonicMQ 7.5.1, WebLogic JMS 8.1.6
RedHat Linux	RedHat Enterprise Linux 4.0 & 5.0 WS/ES/AS x86	WebSphere MQ 6.0(32-bit and 64-bit), TIBCO EMS 4.2.0, 4.4.2, SonicMQ 7.5.1, WebLogic JMS 8.1.6

Note: WebSphere JMS, which is the JMS embedded in WebSphere Application Server, is **not** supported.
Note: WebLogic JMS 9.2.2, which is the JMS embedded in WebLogic Application Server 9.2.2, is **not** supported.

Supported EJB Sensor Platforms

Platform	Operating Environment	Application Servers
Microsoft Windows Sun Solaris IBM AIX RedHat Linux	Windows 2000, 2003 Server x86 Solaris 9, 10 SPARC AIX 5L 5.3 POWER RedHat Enterprise Linux 4.0 & 5.0 WS/ES/AS x86	IBM WebSphere Application Server V5.1, 6.0, 6.1 BEA WebLogic Application Server 8.1.6, 9.2.2

Supported JDBC Sensor Platforms

Platform	Database Version	JDBC Driver	Operating Environment
Oracle	10g	Thin, oci drivers	Windows 2003 Server, Solaris 10, AIX 5L 5.3 RedHat Enterprise Linux 5.0
DB2	9.1	DB2 Universal Driver	Windows 2003 Server, Solaris 10, AIX 5L 5.3 RedHat Enterprise Linux 5.0

Supported CICS Sensor Platforms

Platform	Operating Environment	WebSphere MQ
z/OS	z/OS 1.7, 1.8 CICS TS 2.x, 3.x zSeries	5.3, 6.0

Supported Application Server Platforms for TransactionVision Web Application

Platforms	Operating Environments	Application Servers
IBM AIX	AIX 5L 5.3 POWER	IBM WebSphere Application Server V6.1
RedHat Linux	RedHat Enterprise Linux 4.0 & 5.0 WS/ES/AS x86	BEA WebLogic Application Server 9.2.2
Sun Solaris	Solaris 9, 10 SPARC	
Microsoft Windows	Windows 2000 & 2003 Server x86	

Note: Since both WebSphere Application Server 6.1 and BEA WebLogic Server 9.2.2 include the Java 1.5 JVM and this version of the JVM is not supported under Oracle 9.2, it is required that the Oracle 10 client be used to access Oracle 9.2 database servers from systems with these application servers.

Supported Database Management Systems

The following databases and associated platforms are supported by TransactionVision. Note that these are database server configurations that may be accessed remotely via the DB2 client or the Oracle oci or thin client interfaces. TransactionVision only supports JDBC 2.0.

DBMS Client/Server
DB2 8.2 FixPack 4+ (also known as DB2 8.1 FixPack 11)
DB2 9.1
Oracle 9.2
Oracle 10g
Microsoft SQL Server 2005

Note: There is a memory leak in the Oracle 9.2 OCI driver (Oracle bug number 2533353), which has been fixed in the patch Oracle 9.2.0.2.1. Hence, it is recommended that any Oracle clients connecting to the database using the Oracle 9 OCI driver either apply this patch or have a higher OCI driver version number that includes this patch.

Supported Analyzer Platforms

The following grid shows the Analyzer combinations supported by TransactionVision.

Operating Environment	WebSphere MQ	TIBCO EMS	SonicMQ
Windows 2000, 2003 Server x86	6.0	4.2.0, 4.4.2	7.5.1
AIX 5L 5.3 POWER	6.0	4.2.0, 4.4.2	7.5.1
Solaris 9, 10 SPARC	6.0	4.2.0, 4.4.2	7.5.1
RedHat Enterprise Linux 4.0 & 5.0 WS/ES/AS x86	6.0	4.2.0, 4.4.2	7.5.1

Supported Browser Configurations

The following grid shows the browser configurations supported by the TransactionVision Web Application.

Browser	Java Plugin
Microsoft IE 6.0 SP1	Sun Java 1.5.0
Microsoft IE 6.0 SP2	Sun Java 1.5.0
Microsoft IE 7	Sun Java 1.5.0

Supported WebSphere Business Integration Message Broker Configurations

The following grid shows the WebSphere Business Integration Message Broker configurations supported by TransactionVision.

Operating Environment	WBIMB Version
AIX 5L 5.3 POWER	6.1
Windows 2003 Server x86	6.1

Note: To use the WebSphere MQ API Exit Sensor in conjunction with WBIMB Trace Nodes, the API Exit Sensor library must remain in the location in which it was installed.

LDAP Support

TransactionVision supports the following LDAP servers:

- IBM Directory Server 5.1
- IBM Tivoli Directory Server 6.0, 6.1
- OpenLDAP 2.2, 2.3
- WebLogic 9.2.2 Embedded LDAP
- Sun ONE Directory Server 5.1 SP4, 5.2
- Microsoft Active Directory for Windows 2000 SP4 and for Windows 2003
- Microsoft Active Directory Application Mode (ADAM) for Windows 2003

Single Sign On Support

- SiteMinder 6.0
- Select Access 6.2

Java Support

TransactionVision supports the Java 1.5 Runtime Environment for running the Analyzer component. On Windows, the full Java SDK is required.

Supported JVMs for the JMS, JDBC, Servlet and EJB Sensors match those versions distributed with WebSphere Application Server 5.1/6.0/6.1 and WebLogic Application Server 8.1.6/9.2.2.

The applets that display the Transaction Analysis and Component Topology Analysis views use JRE 1.5.

Flash Player Support

The TransactionVision Web Application requires Adobe Flash Player version 9 or higher to display some report results.

Localization and I18N Support

In TransactionVision 7.50, the Web User Interface has only been localized for U.S. English. However, TransactionVision 7.50 is I18N compliant and supports display of event fields, user data, and reports in non-English locales, as well as non-English project names and query names.

Known Problems and Issues

- An unknown defect has been observed on AIX when a 64-bit client application attempts to connect a second time to the same queue manager while already connected (MQRC_ALREADY_CONNECTED). This has only been observed when using the 64-bit Client Library Sensor on AIX with WebSphere MQ 6.0.2.3. Earlier versions do not appear to have this issue.
- CICS long-running task correlation issue: It is common in a CICS/WMQ environment to have a CKTI like transaction that is long running which browses messages off of a request queue and then starts specific tasks to deal with each kind of request. TV would filter out this listener task altogether. If visibility into this transaction is required, customers should contact HP support for writing custom Java beans to break the business transaction.
- There is a known SonicMQ problem where if a SonicMQ application exits without using System.exit() and there are open SonicMQ sessions, the application will hang indefinitely. The effect of this problem when the JMS Java Agent is enabled is that it will hang until all Event Sessions become inactive. By default, EventSessionInactiveTimeout is set to 1 minute (set in SensorConfiguration.xml). This means when the Analyzer is collecting, such an application using the JMS sensor will potentially hang for up to 1 minute before finally exiting. Note, this is not an issue with WebSphere Application Server as it uses System.exit() to return to the operating system.
- Pre 7.5 TransactionVision Java Sensors only used the server name component when specifying a WAS application server's name to be filtered on. This was fixed in 7.50 to include both the cell name and node name of a WAS application server in order to correctly uniquely identify the applicatino server. If you are using TransactionVision 7.50 and are still collecting from 5.0 Java sensors, you need to be aware of the following limitation: If you wish your 5.0 TV Java sensors to filter on an application server, you must manually specify in the data collection filter an entry that only contains the server name. That is, for a 5.0 sensor, if you wished to limit filtering to a WAS instance 'WASNode02Cell/WASNode02/server1', you would enter a custom entry of 'server1' in the filter. While this would not allow you to filter on the cell or node name, it would still allow you to match on the server name component of the application server's full name.
- If the Analyzer is stopped or told to exit using the ServicesManager utility's -keepcollect option, the only way to tell the Sensors to completely stop is to start the Analyzer and project and then stop the project normally. Otherwise, the Sensors will continue to produce events which will collect on the event queue until the last configuration message sent by the Analyzer has expired. See the Configuration Message Expiry option in Create or Edit an Analyzer Host in the *TransactionVision Administrator's Guide*.
- There is a known WebSphere MQ Sensor issue that can potentially cause a hang when using Communication Links with Event Delivery Retry set to Retry Forever. However, this rare issue can only occur if the connection is lost to the queue manager or the queue manager is shut down.
- Before running the WebSphere Application Server 6.0, set the native library path in the application server's environment to include the database library directory. On Solaris, set LD_LIBRARY_PATH; on AIX, set LIBPATH. For DB2, set the path to include <DB2_HOME>/lib. For Oracle, set it to include <ORACLE_HOME>/lib.
- If you are using the Servlet, EJB, or JMS Sensor to monitor a WebSphere application server, you may see a java.lang.IllegalAccessError error on a WMQ java class in your WebSphere log files. When the TransactionVision Sensor installs itself on a WebSphere application server, it adds the WebSphere MQ jar files it requires to the server classpath. In some cases, a conflict can occur if this WebSphere server already has the WebSphere MQ jar files copied to the <WAS_INSTALL_DIR>/lib/ext directory. If you see this problem and the WMQ jar files are in your lib/ext directory, go to the Process Definition > Java Virtual Machine page in the server's administration console. Change the path of the MQ JMS jars in the WAS server

JVM classpath setting to point to their location in <WAS_INSTALL_DIR>/lib/ext instead of the WebSphere MQ home directory.

- Running TransactionVision Sensors and Analyzers on VMWare systems can result in inaccurate event times. Because virtual machines work by time-sharing physical hardware, a virtual machine cannot exactly duplicate the timing behavior of a physical machine. This can result in a drift in the time reported by the guest operating system to the TransactionVision Sensors. The effect of this drift is that for transactions spanning multiple machines, relative transaction times will not be accurate. For a detailed description of this issue, see this document on the VMWare website: https://www.vmware.com/pdf/vmware_timekeeping.pdf.
- The TVISION_REPORT_ARGS environment variable is not currently supported with the API Exit Sensor.
- With certain update levels of IE 6.0, you may encounter a runtime error if you change the printing orientation options on the Print Setup > Page Setup dialog through the Print Preview window of the Component Topology or Transaction Analysis views. To workaround this issue, do not change the Page Setup options through the Print Preview menu option; instead, change this setting through the Print Setup menu option in the toolbar at the bottom of these views.
- Users who have browser pop-up blockers must disable them for the TransactionVision user interface. Otherwise, certain reports may bring up windows with Session Expired error messages, and help pages will be inaccessible. Consult the documentation for your pop-up blocker to determine how to add TransactionVision to the list of web applications for which pop-ups are enabled.
- The Tivoli TEC 3.8 Fix Pack 1 is recommended for fixing a problem where the Java EIF facility does not flush the cache file when the TEC server goes down and comes back up again.
- TransactionVision does not currently support queries containing user buffer data criteria in conjunction with other linear search criteria (WebSphere MQ MQI Broker and WebSphere MQ MQI Message Flow Name). Queries that use this combination will generate incorrect results.
- If the TransactionVision WebSphere MQ API exit sensor is enabled on a queue manager, do not enable the library sensor on an application connecting to that queue manager.
- You can use the TransactionVision Servlet Sensor to monitor WebLogic Web Services; however, there are some limitations. The Sensor currently does not support the monitoring of Web Services that are created as JWS files through the WebLogic Workshop tool. The Sensor tracks the WebServiceServlet. If a web service does not use this servlet (as in the case of JWS/Workshop created web servlets), no data is collected.
- TransactionVision does not currently support the TransactionVision UI component running in a cluster of WebSphere application servers. Also, multiple application servers running the UI component should not access the same TransactionVision database tables.
- Before starting your WebSphere 5 server, your DB2INSTANCE environment variable must be set. Failure to set this variable will cause a failure during TransactionVision startup and cause the WebSphere server to fail to start and initialize.
- If you upgrade either WebSphere MQ, WebSphere Application Server, WebLogic Application Server, TIBCO EMS, or SonicMQ, you must re-run the setupModule utility.
- When using MQ ActiveX (MQAX) objects with TransactionVision on a system with only the WebSphere MQ client installed, the TransactionVision sensor may fail. If both the MQ client and server are installed, MQAX objects always use the server; when it finds the TransactionVision mqm.dll, it assumes the server is installed and binds with it. However, because the server is not actually installed, the sensor fails. To work around this problem, remove the TransactionVision mqm.dll from the sensor lib directory to force MQAX to use the client library.
- When a new XDM file containing XML mappings to new tables is added, older projects not containing these new tables will fail to get loaded by TransactionVision. To work around this, add the new tables to the

older projects with the CreateSqlScript as follows:
`CreateSqlScript[.sh|.bat] -c -e -t` *`table-name schema-name`*

- Many TransactionVision web client pages contain session information and are temporary. Therefore, creating browser bookmarks to return to these pages at a later time may not work.
- When you print the Component Topology Analysis and Transaction Analysis views, a Java dialog appears asking you whether to allow the print job; this is a Java security feature. The first time you print from either of these views in a session, however, the dialog appears multiple times. Click OK each time the dialog appears to print the view.
- To print the Component Topology Analysis and Transaction Analysis views in landscape mode, set the page orientation on the TransactionVision Page Setup dialog, not on the Windows print dialog.
- The Event Detail view message data window shows an exception for large amounts of data, 1Mb and greater.
- For better performance, increase the DB2 database buffer pool sizes from the default value of 250 to 1024 or higher.
- Since the MQSeries-IMS bridge Sensor does not collect job step information, filtering on those job step values will not work.
- In the Component Topology Analysis view, WebSphere MQ Integrator broker nodes are shown with a flow name, even if grouping is set to Program Name or Program Name/Host Combination. Note that flows within a broker are individual threads and therefore can only be identified when grouping at the thread level. When grouping at the program level, only one flow name is shown when, in fact, the node represents all of the flows within the broker.
- When using the WebSphere MQ API Exit Sensor, if the exit_sensor.allow file exists and is left empty, no programs will be monitored.


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