HP TransactionVision

Software Version: 7.50

Web Application Installation and Configuration Guide

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Contents

1 TransactionVision Web Application Overview

The TransactionVision web application is an enterprise application for IBM WebSphere or BEA WebLogic. It provides the TransactionVision graphical user interface. All interaction takes place through web pages. Users and administrators login to the web user interface through a web browser. The web user interface communicates with the Analyzer to provide data collection configuration information such as communication links and data collection filters. It also connects to project database schemas to display project analysis and report results.

The following diagram shows the relationship of the TransactionVision Web Application to other TransactionVision components:
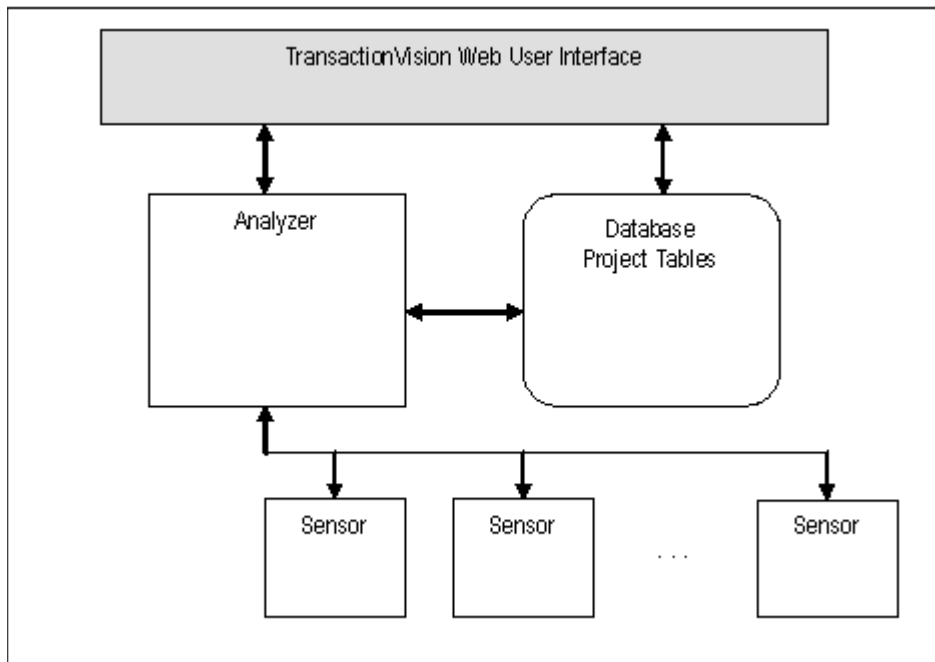
Installation Overview

The TransactionVision installation consists of the following three TransactionVision packages:

- The Analyzer binaries and configuration files. Install this package on all hosts where you want the Analyzer service to run. For instructions on installing and configuring the Analyzer, see the *TransactionVision Analyzer Installation and Configuration Guide*.

- The TransactionVision Web Application, which consists of WebSphere or WebLogic related files such as the .ear file, JSPs, servlets, etc. Install this package on the hosts that users and administrators will access via web browsers to use and manage TransactionVision. This guide provides instructions for installing the Web Application.

- TransactionVision Sensors. Install these packages on all hosts running applications that you wish to collect information about. For instructions on installing and configuring Sensors, see the *TransactionVision Sensor Installation and Configuration Guide*.

Installation steps vary for the different TransactionVision components on different platforms.

Before installing the Web Application, make sure the systems you are installing on meet the software requirements for TransactionVision. Requirements vary for each package (Sensors, Analyzer, and Web Application). See the TransactionVision Release Notes for detailed software requirements.

Upgrading from Previous TransactionVision Releases

The Java Servlet, JMS and EJB Sensors from TransactionVision 5.00 can be used with the TransactionVision 7.50 Analyzer. TransactionVision 7.50 Sensors may not be used with older versions of the TransactionVision Analyzer.

Additional TransactionVision Resources

The following documents are provided with TransactionVision:

- The *TransactionVision Planning Guide* provides information to help you plan the TransactionVision implementation in your environment.

- The *TransactionVision Analyzer Installation and Configuration Guide* provides instructions for installing and configuring the TransactionVision Analyzer, as well as configuring your database to work with the Analyzer. This file is also available from the TransactionVision Help menu.

- The *TransactionVision Sensor Installation and Configuration Guide* provides instructions for installing and configuring TransactionVision Sensors. This file is also available from the TransactionVision Help menu.

- The *TransactionVision Administration Guide* 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* provides instructions using TransactionVision analysis views. This file is also available from the TransactionVision Help menu.

- The *TransactionVision Advanced Customization Guide* provides information for creating custom beans and reports for use with TransactionVision.

- The *TransactionVision Security Guide* provides an overview of the security features and setup procedures of TransactionVision. These features and procedures ensure that data collected by TransactionVision is secure and accessible to the appropriate people.

2 Installing the Web Application on UNIX Platforms

To install the TransactionVision Web Application on UNIX platforms, perform the following steps.

1   Change to the directory location of the TransactionVision installation files (either a CD device or download directory). NOTE: On Solaris and HP-UX, you must copy the installation files from CD device to a temporary directory on your host's hard drive.

2   Log in as superuser:

```
su
```

3   Enter the following command to begin the installation procedure:

```
./install.sh
```

The following menu is displayed:

```
This script will install/uninstall different TransactionVision
components.

Unziping/Untaring common package files ...
Unziping/Untaring Analyzer package files ...
Unziping/Untaring web package files ...
Unziping/Untaring Application Server sensor package files ...
Unziping/Untaring JMS sensor package files ...
Unziping/Untaring WebSphere MQ sensor package files ...
```

Important! The six "Unzipping…" lines above are only for Solaris and HP-UX installations.

```
The following TransactionVision packages are available for
installation:

1. TransactionVision Analyzer
2. TransactionVision Web
3. TransactionVision Application Server Sensor
4. TransactionVision JMS Sensor
5. TransactionVision WebSphere MQ Sensor

99. All of above
q. Quit install

Please specify your choices (separated by ,) by number/letter:
```

Note that actual options and numbers depend on the installation files available on your computer: Also note that the Application Server Sensor package installs both the Servlet and EJB Sensors.

If this is the first time installing TransactionVision components on this computer, continue with "Initial Installation." If an earlier version of TransactionVision is installed on this computer, continue with "Upgrade Installation."

➤ If WebSphere 6.0 is shutdown during the installation while there is an active session connected to the WebSphere Application Server administration user interface, you will see the following message upon restart and logging back into the administration console:

```
The master configuration has been updated. You currently have workspace
conflicts with these modifications. To see these updates you must save or
discard your current worskpace modifications.
```

If you choose to save your workspace modifications at this point, any changes that the TransactionVision utilities had just made during installation will be reversed. Instead, choose to discard your current workspace modifications. Any new modifications can be made once the master configuration is then reloaded.

Initial Installation

1 To install only a single component, type the number associated with the TransactionVision component package and press **Return**. In this example, type **2** and press **Return** to install only the Web Application.

To install multiple, but not all components, type the numbers associated with the components you wish to install, separated by commas, and press **Return**.

To install all available components, type **99** and press **Return**.

The installation script installs the specified package(s), then displays the menu again.

2 To quit the installation procedure, type **q** and press **Return**. To install additional components, see the installation instructions for those components.

Upgrade Installation

1 To install only a single component, type the number associated with the TransactionVision component package and press **Return**. In this example, type **2** and press **Return** to install only the Web Application.

   To install multiple, but not all components, type the numbers associated with the components you wish to install, separated by commas, and press **Return**.

   To install all available components, type **99** and press **Return**. See the installation instructions for the other components you wish to install for information about installing those components.

   If the installation script determines that a previous version of TransactionVision is installed, it displays the following message:

   ```
   There is an earlier version of TransactionVision installed on the
   system.
   The earlier version has to be uninstalled before installing the current
   package(s).
   Continue with the uninstallation? (Y/N) [N]:
   ```

2 Type **Y** and press **Return** to uninstall the previous version. If you type **N** and press **Return**, the installation process ends without uninstalling the previous version or installing the new version.

   Before uninstalling the previous version, TransactionVision provides the option of migrating configuration files and project database schemas to the new installation:

   ```
   Installation has detected an previous installation of
   TransactionVision.
   Migration converts configuration files and database table schemas from
   the previous installation to the new installation.
   This step is required for TransactionVision to work correctly with
   existing projects generated by an earlier version of TransactionVision.
   Continue to migrate TransactionVision project tables and backed up
   configuration files from the previous version? (Y/N) [Y]
   Answer N and the database migration step can be performed at a later
   time using the MigrateDB.sh script.
   ```

3 Type **Y** and press **Return** to migrate configuration files and project database schemas from the previous installation to the new version. The installation script automatically creates a backup copy of existing configuration files for the migration. It then uninstalls the previous version of TransactionVision, installs the new Sensor package (and addition components, if specified), and displays the installation menu. Continue to step 4.

   If you choose not to migrate configuration files and project database schemas at this time, you may migrate project database schemas at a later time, after configuring TransactionVision components with the MigrateDB.sh script. See Appendix A, Utilities Reference, for information about this utility.

   If you type **N** and press **Return**, the installation script provides the option of making a backup copy of configuration files for future reference:

   ```
   Back up the configuration files from the previous installation? (Y/N)
   [Y]
     Answer N will over write those files, causing any setup information to
   be lost.
   ```

Type **Y** and press **Return** to create a backup copy of your configuration files. The installation script prompts you to specify a backup location:

```
Backup copy of configuration files to [/opt/HP/TransactionVision/
migrate_tv421_date_time]:
```

Press **Return** to use the default location, or enter the desired backup directory location. The installation utility performs the following tasks:

— Copies the current configuration files to the specified directory

— Uninstalls the previous version of TransactionVision.

— Installs the new web package (and additional components, if specified).

— Displays the installation menu again.

4 To quit the installation procedure, type **q** and press **Return**.

Installation Files

The following table shows the installation file names for the TransactionVision web package for each distributed platform.

Platform	Files
AIX	tvision_web_750_aix_power.bff
Linux	tvision_web_750_linux_x86.rpm
Solaris	tvision_web_750_solaris_sparc_pkg.gz

Uninstalling the Web Application

To uninstall TransactionVision components, perform the following steps:

1 Log in as superuser:

```
su
```

2 Enter the following command:

```
install.sh -u
```

The following menu is displayed (note that actual options depend on the TransactionVision packages installed on your computer):

```
The following TransactionVision packages are installed on the system:

1. TransactionVision Web
2. TransactionVision Analyzer
3. TransactionVision Application Server Sensor
4. TransactionVision JMS Sensor
5. TransactionVision WebSphere MQ Sensor

99. All of above
q. Quit uninstall

Please specify your choices (separated by ,) by number/letter:
```

3 Type the number associated with the TransactionVision package you wish to uninstall (1 for the Analyzer in this example) and press **Return**.

To uninstall all TransactionVision components, type **99** and press **Return**.

The installation script uninstalls the specified package, then displays the menu again.

If you uninstall the servlet Sensor, it will be first turned off in the WebSphere Application Server the Sensor is monitoring. The instrumented jar files under $WAS_HOME/classes will be removed.

4 To quit the uninstall, type **q** and press **Return**. If the common package is the only TransactionVision package still installed, it will be uninstalled automatically.

➤ After uninstalling the TransactionVision web user interface, you must clean up its temporary cache and distribution directory. WebSphere does not do this automatically, and any old files could cause a new installation to work incorrectly.

3 Installing the Web Application on Windows

The TransactionVision Analyzer and web user interface are installed as a single package on Windows. Note that you must be logged into the target system either as Administrator or as a user with Administrator privileges.

For migration to work properly on Windows when you are upgrading from a previous release, either the JAVA_HOME environment variable must be set or Java must be present in your path before you begin the installation. Migration requires Java; if neither of these is set, the installation may fail to migrate configuration files and you may need to run TVisionSetupInfo manually.

To install this package, perform the following steps:

1. Close all Windows programs currently running on your computer.

2. In the Windows Explorer, double-click **tvision_sensor_750_win.exe**. The InstallShield Welcome screen appears.

3. Click **Next**> and wait until the TransactionVision Setup Welcome screen appears.

If this is the first time installing the TransactionVision Web Application on this computer, continue with Initial Installation on page 18. If an earlier version of the TransactionVision Web Application is installed on this computer, continue with Upgrade Installation on page 18.

➤ If the InstallShield Save Files screen appears, click **Next**> to use the default folder for extracting installation files (for example, C:\Program Files\Hewlett-Packard\TransactionVision), or click **Change** to select the desired folder and click **Next**> to continue.

If WebSphere 6.0 is shut down during the installation while there is an active session connected to the WebSphere Application Server administration user interface, you will see the following message upon restart and logging back into the administration console.

```
The master configuration has been updated. You currently have workspace
conflicts with these modifications. To see these updates you must save or
discard your current worskpace modifications.
```

If you choose to save your workspace modifications at this point, any changes that the TransactionVision utilities had just made during installation will be reversed. Instead, choose to discard your current workspace modifications. Any new modifications can be made once the master configuration is then reloaded.

Initial Installation

For an initial installation, the Setup Welcome screen is displayed.

1   On the Setup Welcome screen, click **Next**> to display the TransactionVision license agreement.

2   Click **Yes** to accept the license agreement. The User Information screen appears.

3   Enter your name and company name, then click **Next**>. The Destination Location screen appears.

4   To use the default installation folder (C:\Program Files\Hewlett-Packard\TransactionVision), click **Next**>.

    To choose a different installation folder, click **Browse**..., select the desired installation folder, then click **Next**>. The Setup Type screen appears.

5   To install both the Analyzer and Web Application, select **Complete** and click **Next**>. To install only the Web Application, select **Custom**, click **Next**>, deselect the **Analyzer**, and click **Next**>.

    The selected packages are installed in the specified location. The Setup Complete page appears.

6   Click **Finish** to complete the installation.

7   If you are running WebLogic as a Windows service, continue with the steps in Modifying the Installation on page 19.

Upgrade Installation

For an upgrade installation, the installation wizard displays the setup maintenance menu.

1   If you wish to install TransactionVision with different settings from the previous installation, select **Remove** and click **Next**> to uninstall the previous installation, then begin the installation procedure again. If you are upgrading from a previous release, select **Reinstall** and click **Next**> to install TransactionVision using the settings from the previous installation. The Configuration File Migration dialog appears:
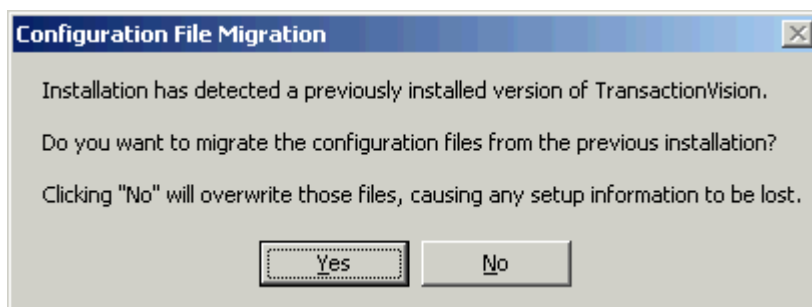
2   To maintain configuration information from the previous installation, click **Yes**. The installation wizard makes a backup copy of existing configuration files, installs the new version of TransactionVision, and opens an MS-DOS window to migrate existing configuration files to the new version. When complete, the Setup Complete screen appears.

3   To overwrite existing configuration files, click **No**. The installation wizard displays a message box asking whether you want to make a backup copy of existing configuration files before continuing the installation.
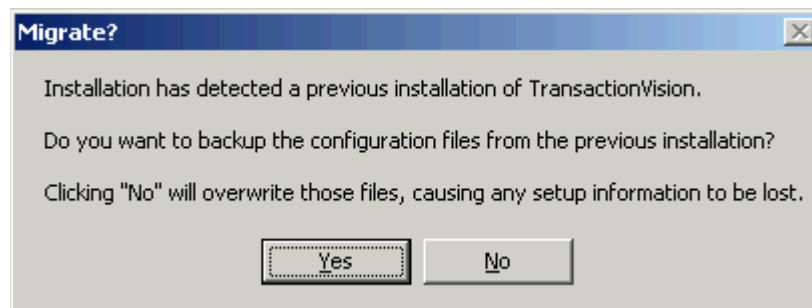
4   Click **Yes** to create a backup copy or **No** to continue the installation without backing up configuration files. The installation wizard then installs the new version of TransactionVision, overwriting existing configuration files, and displays the Setup Complete screen.

5   Click **Finish** to complete the installation.

Modifying the Installation

After you install TransactionVision Sensors on a host, you may wish to modify your installation. For example, suppose you initially install the Analyzer on a host, then later decide to install the Servlet and JMS Sensors. To modify your installation perform the following steps:

1   Close all Windows programs currently running on your computer.

2   In Windows Explorer, double-click **tvision_750_win.exe**. The InstallShield Welcome screen appears.

3   Click **Next>** to display the TransactionVision Setup Welcome screen.
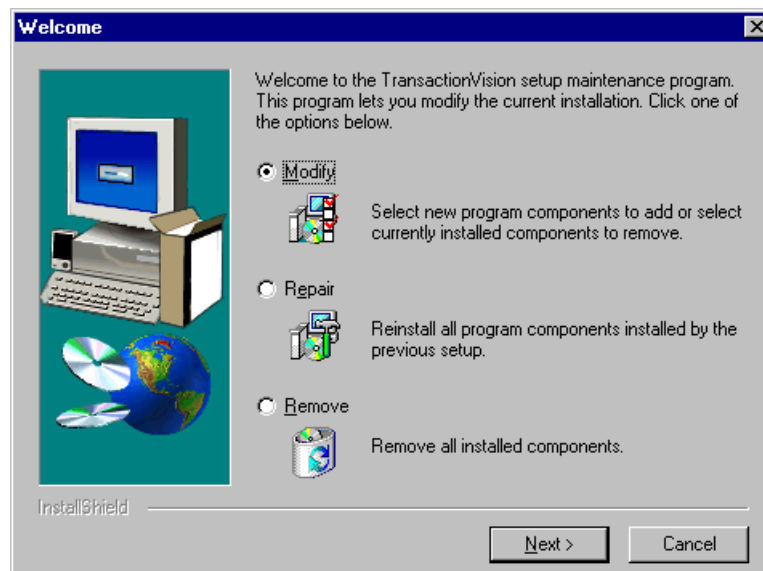
4   To install an additional component or remove an installed component, select **Modify**. To reinstall all TransactionVision components installed by the previous setup, select **Repair**. To uninstall all components, select **Remove**.

5   Click **Next**> and select the additional components you wish to install. The Configuration File Migration dialog appears:
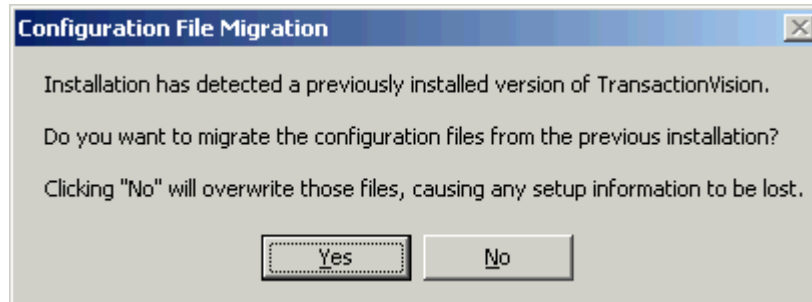
6   Click **No**, because migration is not required for installing additional components. The installation wizard displays a message box asking whether you want to make a backup copy of existing configuration files before continuing the installation. Click **No** again to continue the installation without backing up configuration files. The installation wizard then installs the selected TransactionVision components and displays the Setup Complete screen.

7   Click **Finish** to complete the installation. If you wish to display the migration log file created when migrating configuration and project database files to the new version, check View Migration Log File before clicking Finish.

Uninstalling the Web Application

To uninstall TransactionVision components, perform the following steps:

1   From the Start menu, select **Settings** > **Control Panel**.

2   Double-click **Add/Remove Programs**.

3   Select the HP TransactionVision package you wish to uninstall and click **Change/Remove**. The maintenance menu screen appears.

4   Select **Remove** and click **Next**> to remove TransactionVision components.

5   Click **OK** to confirm that you wish to uninstall the specified package. The specified package is uninstalled. The following types of files are not deleted:

     — Any files added after the installation

     — Any shared files associated with packages that are still installed

     If shared files do not appear to be associated with any installed packages (for example, if all other TransactionVision packages have been uninstalled), the Shared File Detected screen appears.

6   To leave all shared files installed, check Don't display this message again and click **No**.

7   To leave the current file, but display this message for any other shared files, click **No**.

8   To delete the shared file, click **Yes**.

If you uninstall the servlet Sensor, it will be first turned off in the WebSphere Application Server the Sensor is monitoring. The instrumented classes under $WAS_HOME/classes will be removed along with its parent directories if they are empty.

9   The Uninstallation Complete screen appears. Click **Finish** to complete the uninstallation procedure.

After uninstalling the TransactionVision web user interface, you must clean up its temporary cache and distribution directory. WebSphere does not do this automatically, and any old files could cause a new installation to work incorrectly.

4 Configuring the Web Application for IBM WebSphere

Configuration Overview

Once TransactionVision is installed, you must create an IBM DB2 or Oracle database for TransactionVision to save event data. Refer to the *TransactionVision Analyzer Installation and Configuration Guide* for the required database parameters. The TransactionVision setup utilities do not create the database.

After the database is created, the following setup tasks must be completed before you can use the TransactionVision Analyzer and web user interface:

- Create the TransactionVision database schema.
- Start the Analyzer service, if it is installed.
- Install and start the TransactionVision web application in your WebSphere application server. You may follow the instructions in Configuring WebSphere for TransactionVision Manually on page 81 if you prefer to configure your application server for the TransactionVision Web Application manually.
- Initialize LDAP entries for TransactionVision (optional).

TransactionVision provides two utilities to guide you through the setup process:

- The TVisionSetupInfo utility prompts you to enter information needed for the setup process and sets required environment variables.
- The TVisionSetup utility uses information you provide to TVisionSetupInfo to perform setup tasks.

If you are running the TransactionVision Web Application and Analyzer on the same system, you need only run these utilities once after installing both components. See the *TransactionVision Analyzer Installation and Configuration Guide* for additional Analyzer configuration instructions, database configuration instructions, and information about the configuration files used by the Analyzer.

If you need to change configuration information at a later time, you may simply run these utilities again.

Using TVisionSetupInfo

The **TVisionSetupInfo** utility modifies the following files:

- TVISION_HOME/config/datamgr/Database.properties
- TVISION_HOME/config/ldap/Ldap.properties
- TVISION_HOME/install/websphere/tvision-ws-config.properties
- TVISION_HOME/config/setup/Setup.properties

In addition, **TVisionSetupInfo** does the following:

- Saves the installation path for software tools in TVISION_HOME/config/setup/ DefaultInstallPath.xml
- Generates TVISION_HOME/bin/SetupEnv.[sh | bat], which is run by TVisionSetup to set the JAVA_HOME, CLASSPATH, and system library path environment variables required by TransactionVision
- Generates the script TVISION_HOME/bin/WSSetupEnv.[sh | bat] to setup command line parameters for configuring TransactionVision web application in WebSphere Application Server.

Required Information

The TVisionSetupInfo utility prompts you to enter the following information necessary to complete the configuration. Please review these information requirements before running TVisionSetupInfo so you will be prepared to enter appropriate responses.

The following tables show parameters and associated technology areas (database, message system provider, and application server and LDAP) that will be required. See the sections that follow for detailed descriptions of the parameters.

Parameter	Technology Database		
	DB2	Oracle	SQL Server
Log file location			
Database instance name	✓		✓
Database connection name	✓	✓	
Database name	✓	✓	✓
Database host	✓	✓	✓
Database user name	✓	✓	✓
Database user password	✓	✓	✓
Database listener port	✓	✓	✓
Database installation path	✓	✓	
JDBC driver installation path			✓

Parameter	Technology Message System Provider			
	WebSphere MQ	TIBCO EMS	SonicMQ	WebLogic JMS
WebSphere MQ installation path	✓			
TIBCO EMS installation path		✓		
SonicMQ installation path			✓	
WebLogic JMS installation path				✓

Parameter	Technology Application Server and LDAP	
	WebSphere Application Server	LDAP
WebSphere installation path	✓	
Application server cell name	✓	
Application server node	✓	
Application server name	✓	
Virtual host name	✓	
LDAP server name		✓
User directory location		✓
Group directory location		✓

Log File Location

You must supply the pathname of the directory where TransactionVision should store log files. The default value is TVISION_HOME/logs.

Database Properties

You must specify the type of database you plan to use with TransactionVision (IBM DB2, Oracle or SQL server).

▶ The TVisionSetupInfo utility automatically sets up the DB2 Universal JDBC driver (type 4) or the Oracle thin client driver. For instructions on using other drivers, such as the DB2 Universal Driver (type 2) or the Oracle oci driver.

For a DB2 database, you must supply the following information:

- The value of the DB2INSTANCE environment variable. The default value is DB2. 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.

- The name of the database connection to be used by TransactionVision. See Chapter 4 in the *TransactionVision Analyzer Installation and Configuration Guide* for more information on identifying the connection name and database name.

- The name of the database that TransactionVision will connect to. This name may be different from the "database_connection_name" if a client database connection is used. See Chapter 4 in the *TransactionVision Analyzer Installation and Configuration Guide* for more information on identifying the connection name and database name.

- The name of the host that the database runs on. The default value is local_host.

- The user name for connecting to the database. If this field is empty, the currently logged in user is used to make the database connection. Make sure that the user specified or currently logged in has privileges for database access.

- The password for the database user name. If this field is empty, the currently logged in user's password is used to make the database connection. If TVisionSetupInfo is able to detect an installed JCE provider that supports the DES encryption algorithm, it sets the jce_provider value in the Database.properties file to the class name of the JCE provider and encrypts the password. Otherwise, it disables the password encryption feature and stores the password as unencrypted text.

- The database port number. This is the TCP/IP port the database server is listening on. A typical value is 50000. To identify the correct value, select the following menu items from the DB2 Control Center while the DB2 administration server is running:

      All Systems > *system_name* > Instances > *instance_name*

  Right-click and select **Setup Communications** from the context menu. Click **Properties** to get the port number your database instance is using.

For an Oracle database, you must supply the following information:

- The name of the database connection to be used by TransactionVision. The default value is TVISION. See Chapter 4 in the *TransactionVision Analyzer Installation and Configuration Guide* for more information on identifying the connection name and database name.

- The name of the database that TransactionVision will connect to. The default value is TVISION. This name may be different from the "database_connection_name" if a client database connection is used. See Chapter 4 in the *TransactionVision Analyzer Installation and Configuration Guide* for more information on identifying the connection name and database name.

- The name of the host that the database runs on. The default value is local_host.

- The user name for connecting to the database. If this field is empty, the currently logged in user is used to make the database connection. Make sure that the user specified or currently logged in has privileges for database access.

- The password for the database user name. If this field is empty, the currently logged in user's password is used to make the database connection. If TVisionSetupInfo is able to detect an installed JCE provider that supports the DES encryption algorithm, it sets the jce_provider value in the Database.properties file to the class name of the JCE provider and encrypts the password. Otherwise, it disables the password encryption feature and stores the password as unencrypted text.

- The database port number. This is the TCP/IP port the database server is listening on. A typical value is 1521. To identify the correct value, run the lsnrctl command on the server side. Use the status command to find out the port number.

For an SQL Server database, you must supply the following information:

- The name of the host that the database runs on. The default value is local_host.

- The name of the SQL Server instance. This should typically be empty unless you are running multiple server instances.

- The port number to connect to on the SQL Server

- The name of the SQL Server database that TransactionVision will connect to. The default value is TVISION.

- The user name for connecting to the database. If this field is empty, the currently logged in user is used to make the database connection. Make sure that the user specified or currently logged in has privileges for database access.

- The password for the database user name. If this field is empty, the currently logged in user's password is used to make the database connection. If TVisionSetupInfo is able to detect an installed JCE provider that supports the DES encryption algorithm, it sets the jce_provider value in the Database.properties file to the class name of the JCE provider and encrypts the password. Otherwise, it disables the password encryption feature and stores the password as unencrypted text.

Messaging System Provider

You must specify the messaging system provider used to transfer TransactionVision configuration messages and events between Sensors and the Analyzer. Supported providers include WebSphere MQ, TIBCO EMS, SonicMQ and WebLogic JMS. You may specify one or more providers.

Installation Paths

You will be prompted to enter installation paths for the following required software:

- Database
- WebSphere MQ

Analyzer Settings

You must specify the following Analyzer information:

- The types of Sensors you are using in your environment

- The location of any JAR files that need to be added to the Analyzer CLASSPATH. These JAR files contain plugin beans that customize the Analyzer.

Web Application Server

You must specify the type of Web Application Server used in your environment (IBM WebSphere or BEA WebLogic). For WebSphere, you must specify the following:

- WebSphere application server cell name
- WebSphere application server node
- WebSphere application server name

- WebSphere virtual host name

LDAP

You must specify whether to use the TransactionVision insecure DEMO mode, which does not require an LDAP server setup. This mode provides four default accounts for logging into TransactionVision: Admin, Developer, Operator, and User. This mode is only provided for evaluation and testing; do NOT use it to collect critical data.

If you specify that you do NOT want to use DEMO mode, you must specify the following information. For more information about these properties, see Appendix E, LDAP Configuration Scenarios.

- LDAP server name. This is the URL of the server to connect to. It directory maps to the attribute of java.naming.provider.url, used in creating an initial JNDI context.

- User directory location. This is the path for the TransactionVision web user interface to use to look up users for authentication and retrieval of TransactionVision authorities. If you wish to use an existing user hierarchy, use this attribute to integrate with the existing directory structure. When a user logs in, the user name is combined with the UserDirectoryLocation to perform authentication. For example, if user joesmith logs into the web application and the value of this property is ou=Users,o=MyOrg,c=us TransactionVision attempts to authenticate cn=joesmith,ou=Users,o=MyOrg,c=us.

- TransactionVision creates by default a user location under ou=Users,ou+TVision,o=bristol,c=us if you do not wish to use an existing user directory. In order to have TransactionVision permissions, users in this directory must have a TVAuthorityGroup attribute. See the *TransactionVision Administration Guide* for more information.

- Group directory location. This property, similar to the user directory, specifies where to look up user groups. A group is considered to be a definition with one or more unique member attributes (such as the groupofuniquenames class) containing the list of users, and a TVisionAuthorityGroup attribute indicating what permissions to give this group.

TVisionSetupInfo Syntax

1 Set the TVISION_HOME environment variable to the absolute path of the installation directory. For example, on Solaris, TVISION_HOME would be /opt/HP/TransactionVision; on AIX it would be /usr/lpp/HP/TransactionVision.

2 Run the TVisionSetupInfo.[sh|bat] script. This utility modifies TransactionVision configuration files, so you must have file modification privileges to run it (typically root for UNIX or Administrator for Windows).

Operating System	Script Command
AIX, Linux, Solaris	<TVISION_HOME>/bin/TVisionSetupInfo.sh
Windows	<TVISION_HOME>\bin\TVisionSetupInfo.bat

When responding to user input prompts from TVisionSetupInfo, press **Enter** to accept the default value shown in brackets; otherwise, type the correct value and press **Enter**. To specify an empty value, press the spacebar, and then press **Enter**. Sample input and output below is shown in italics.

TVisionSetupInfo Prompts

Configuring Log Files

```
Checking Java version ...

This program collects configuration information in order to setup the
TransactionVision environment. This includes:
- Location of software that TransactionVision depends on such as WebSphere
MQ, the application server and the relational database system,
- Parameters required to connect to WebSphere MQ,
- Parameters to connect to the database system,
- Optional parameters to connect to the LDAP system
- Setup parameters for the TransactionVision Analyzer, and
- Setup parameters for the TransactionVision web component.

You will be prompted to input required configuration parameters. If a
default value is provided in [], pressing <Enter> will set the parameter to
this default value. Pressing <Space><Enter> will set the parameter to an
empty value.

Please specify name of directory where you want to store your log files
[C:\Program Files\Hewlett-Packard\TransactionVision\logs]:
C:\Program Files\Hewlett-Packard\TransactionVision\logs

Modifying *.Logging.xml files in log file directory C:\Program
Files\Hewlett-Packard\TransactionVision\logs

0 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\Analyzer.Logging.x
ml" has been successfully updated

78 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\Migrate.Logging.xm
l" has been successfully updated

141 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\Setup.Logging.xml"
has been successfully updated

219 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\UI.Logging.xml" has
been successfully updated
```

Configuring Database Properties

- `Type of Database (DB2/Oracle/SQLServer)? [DB2]: DB2`

  Enter the type of database you are using to store TransactionVision event data. The
  remaining database property prompts depend on the type of database you specify.

DB2 :

- `Value of your environment variable DB2INSTANCE [DB2]: DB2`

  Enter the name of the DB2 instance.

  ► 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.

- `Database connection name to be used by TransactionVision [TVISION]: TVDB`

  Enter the name of the database connection to be used. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of database TransactionVision connects to [TVISION]: TVDB`

  Enter the name of the database on the server to connect to. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of the host the database is running on [local_host]: devpc`

  Enter the name of the host the database server is running on.

- `Database user name [db2admin]:`

  Enter the user name to be used while making the database connection. Leave blank to use the currently logged in user to make the database connection.

- `User password [ibmdb2]:`

  Enter the password to be used while making the database connection. Leave blank to use the currently logged in user's password to make the database connection.

- `Database port number [50000]:`

  Enter the TCP/IP port number the database server is listening on. See Required Information on page 36 for instructions on identifying the correct port number.

  The TVisionSetupInfo utility automatically searches for an installed JCE provider that supports the DES encryption algorithm. If such a provider is found, TVisionSetupInfo sets the jce_provider value in the Database.properties file to the class name of the JCE provider. If no JCE provider is found, TVisionSetupInfo displays the following message:

  ```
  Java Cryptography Extension (JCE) is not present in your current JDK.
  Password encryption feature will be disabled and stored in plain text.
  ```

Oracle:

- `Database connection name to be used by TransactionVision [TVISION]: TVDB`

  Enter the Oracle Local Net Service Name for an oci client connection or the SID (system identifier) for a thin client connection. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of database TransactionVision connects to [TVISION]: TVDB`

  Enter the Oracle SID. This prompt does not appear for an Oracle thin client connection. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of the host the database is running on [local_host]: devpc`

  Enter the name of the host the database server is running on.

- `Database user name []:`

Enter the user name to be used while making the database connection. Leave blank to use the currently logged in user to make the database connection.

- `User password []:`

Enter the password to be used while making the database connection. Leave blank to use the currently logged in user's password to make the database connection.

- `Database port number [1521]:`

Enter the TCP/IP port number the database server is listening on. See Required Information on page 36 for instructions on identifying the correct port number.

The TVisionSetupInfo utility automatically searches for an installed JCE provider that supports the DES encryption algorithm. If such a provider is found, TVisionSetupInfo sets the jce_provider value in the Database.properties file to the class name of the JCE provider. If no JCE provider is found, TVisionSetupInfo displays the following message:

```
Java Cryptography Extension (JCE) is not present in your current JDK.
Password encryption feature will be disabled and stored in plain text.
```

SQLServer:

- `Name of the host the database is running on [local_host]:`

Enter the name of the host the database server is running on.`

- `Enter the SQL Server instance name (typically it is empty unless you have multiple instances of SQL Server running in the same host) []:`

Enter the name of the SQL Server instance you wish to use, or leave the field blank if only a single instance is installed.

- `Enter the port number that the SQL Server listener is on [1433]:`

Enter the port for the SQL Server listener process.

- `Name of database TransactionVision connects to [TVISION]: TVDB`

Enter the name of the database on the server to connect to.

- `Name of the host the database is running on [local_host]: devpc`

Enter the name of the host the database server is running on.

- `Database user name []:`

Enter the user name to be used while making the database connection. Leave blank to use the currently logged in user to make the database connection.

- `User password []:`

Enter the password to be used while making the database connection. Leave blank to use the currently logged in user's password to make the database connection.

The TVisionSetupInfo utility automatically searches for an installed JCE provider that supports the DES encryption algorithm. If such a provider is found, TVisionSetupInfo sets the jce_provider value in the Database.properties file to the class name of the JCE provider. If no JCE provider is found, TVisionSetupInfo displays the following message:

```
Java Cryptography Extension (JCE) is not present in your current JDK.
Password encryption feature will be disabled and stored in plain text.
```

Configuring Messaging System Provider

```
Please select your Queuing Product Type by number.
```

```
                        1.  WebSphere MQ
                        2.  TIBCO EMS
                        3.  SonicMQ
                        4.  WebLogic JMS
                        5.  All of the above
            Your Queuing Product [1]: 5
```

Enter the number corresponding to the messaging system provider you wish to use to transfer configuration and event messages between the Analyzer and Sensors. TVisionSetupInfo uses this information to generate the proper shell script to set up the Analyzer runtime environment correctly. If you want the Analyzer to collect events from any message system provider, select option **5**.

Configuring Installation Paths for Dependent Software

```
            Please select your web application server by number.


                    1.   IBM WebSphere Application Server
                    2.   BEA WebLogic
                    3.   None
            Your web application server product [1]: 1
            TransactionVision Info(FileUpdated): File "C:\Program
            Files\Hewlett-Packard\Tran
            sactionVision\config\setup\Setup.properties" has been successfully updated

            Retrieving installation path for dependent software tools ...


            WebSphere Application Server installation location [C:\Program
            Files\IBM\WebSp
            here\AppServer]:
```

The following prompt only appears if you selected DB2 as the database.

```
            DB2 installation location [C:\Program Files\IBM\SQLLIB]:
```

The following prompt only appears if you selected Oracle as the database.

```
            Oracle installation location [C:\oracle\product\10.2.0\db_1]:
```

The following prompt only appears if you selected SQLServer as the database.

```
            SQLServer JDBC Driver installation location [C:\sqlserver\jdbc]:
```

The following prompt only appears if you selected WebSphere MQ as a message system provider.

```
            WebSphere MQ installation location [C:\Program Files\IBM\WebSphere MQ]:
```

The following prompt only appears if you selected TIBCO EMS as a message system provider.

```
            TIBCO EMS installation location [C:\tibco\ems]:
```

The following prompt only appears if you selected SonicMQ as a message system provider.

```
            SonicMQ installation location [C:\Sonic\MQ7.5]:
```

The following prompt only appears if you selected WebLogic JMS as a message system provider.

```
            WebLogic installation location [C:\bea\weblogic81]:
```

```
TransactionVision Info(FileUpdated): File C:\Program
Files\Hewlett-Packard\Tran
sactionVision\config\setup\DefaultInstallPath.xml" has been successfully
updated
```

TransactionVision Analyzer Settings

```
Please select your Sensor types by number. This enables the Analyzer to
receive events from the selected Sensors. If you are selecting multiple
Sensor types, please separate them with ",".
    1.  CICS
    2.  EJB
    3.  Servlet
    4.  TIBCO EMS, SonicMQ JMS or WebLogic JMS
    5.  WebSphere MQ
    6.  WebSphere MQ IMS Bridge
    7.  WebSphere MQ JMS
    8.  JDBC
    9.  All of the above
Your Sensor type(s) [9] :
```

Enter the number corresponding to the types of TransactionVision Sensors you plan to use.
For multiple Sensor types, separate the numbers with a comma. For all Sensor types, enter **9**.

Customize the Analyzer Runtime Environment

```
The Analyzer can optionally be customized by plugin beans in JAR files.
The location of these JAR files needs to be added to the Analyzer
CLASSPATH.

Please specify a semicolon delimited list of any additional JAR files you
wish to be added to the CLASSPATH. (for example,
'C:\TVision\myext.jar;C:\TVision\myutil.jar') []:

TransactionVision Info(FileUpdated): File " C:\Program
Files\Hewlett-Packard\Tran
sactionVision\config\services\Analyzer.properties" has been successfully
updated
```

Specify the location of any JAR files that need to be added to the Analyzer CLASSPATH.
These JAR files contain plugin beans that customize the Analyzer.

Selecting Web Application Server

```
Please select your web application server by number:
    1. IBM WebSphere Application Server
    2. BEA WebLogic
    3. None
Your web application server product [1]: 2
```

Enter **1** for IBM WebSphere Application Server.

```
Does your target Application Server use a different configuration instance
from the default WebSphere install directory? [y]:
```

Answer **y** if your WebSphere Application Server has a separate configuration instance. A WebSphere configuration instance can be duplicated using the wsinstance command. If you answer y, you will be prompted to enter the directory location of the duplicate configuration instance:

```
Enter the location of your WebSphere Application Server configuration
instance [c:\temp\wsin]:

TransactionVision Info(FileUpdated): File "C:\Program Files\ C:\Program
Files\Hewlett-Packard\TransactionVision\bin\WebSetupEnv.bat" has been
successfully updated
```

Configuring LDAP Properties

```
Retrieving LDAP configuration parameters ...

TransactionVision provides an insecure DEMO mode which does not require an
LDAP server setup. This mode provides four default accounts: Admin,
Developer, Operator and User for logging into the system. Make sure to use
this DEMO mode only for evaluation and test purposes and not to collect
critical data.

Do you want to run TransactionVision in DEMO mode? (Y/N) [Y]: N
```

The following prompts only appear if you answer N to the previous prompt, indicating that you do not want to use DEMO mode:

```
LDAP server name points to the server to connect to. Its value should
contain a URL string such as "ldap://somehost:389".
LDAP server name [ldap://server_host:server_port]: ldap://devpc:389
```

Enter the URL of the server to connect to. It directly maps to the attribute of java.naming.provider.url, used in creating an initial JNDI context.

```
User directory location specifies to the web application what path to
lookup users under for authentication and retrieval of TransactionVision
authorities.
User directory location [ou=Users,ou=TVision,o=bti,c=us]:
```

Enter the path for the TransactionVision web user interface to use to look up users for authentication and retrieval of TransactionVision authorities. If you wish to use an existing user hierarchy, use this attribute to integrate with the existing directory structure. When a user logs in, the user name is combined with the UserDirectoryLocation to perform authentication. For example, if user joesmith logs into the web application and the value of this property is ou=Users,o=MyOrg,c=us TransactionVision attempts to authenticate cn=joesmith,ou=Users,o=MyOrg,c=us.

TransactionVision creates by default a user location under ou=Users,ou+TVision,o=bristol,c=us if you do not wish to use an existing user directory. In order to have TransactionVision permissions, users in this directory must have a TVAuthorityGroup attribute. See the *TransactionVision Administration Guide* for more information.

```
Group directory location specifies to the web application what path to
lookup user groups under for authentication and retrieval of
TransactionVision authorities.
Group directory location [ou=Groups,o=bti,c=us]:
```

This property, similar to the user directory, specifies where to look up user groups. A group is considered to be a definition with one or more unique member attributes (such as the groupofuniquenames class) containing the list of users, and a TVisionAuthorityGroup attribute indicating what permissions to give this group.

```
TransactionVision Info(FileUpdated): File "C:\Program Files\ C:\Program
Files\Hewlett-Packard\TransactionVision\config\ldap\Ldap.properties" has
been successfully updated
```

Configuring WebSphere Application Server Properties

When configuring the WebSphere application server initially, the following prompts appear:

▶ Values for WebSphere Application Server properties are case-sensitive. Be careful to type input in the correct case.

```
The following configuration parameters are required for setting up the
TransactionVision web application in the WebSphere Application Server.
Note: the parameter values are case sensitive.
Retrieving WebSphere Application Server configuration parameters ...
The following WebSphere profiles are available on this host:
    1. AppSrv01
    2. AppSrv02
```

The previous question appears only if you have multiple profiles. Otherwise, the following question is displayed:

```
The following WebSphere servers are available on this host:
    1. cell: testpcNode01Cell, node: testpcNode01, server: server1
    2. cell: testpcNode01Cell, node: testpcNode01, server: server2
Plese select the WebSphere server by number: 1
```

If you run TVisionSetupInfo at a later time to change any information, the following menu appears:

```
Your current WebSphere server setting is:
    cell: testpcNode01Cell, node: testpcNode01, server: server1
Would you like to change this? (y/n) [n]:
```

To change information, enter **y** to display the initial configuration menu. Select the desired server. To use the same information, enter **n**.

```
The following WebSphere virtual hosts are available on this host:
    1. admin_host
    2. default_host
Please select the WebSphere virtual host by number: 2
```

If TVisionSetupInfo cannot obtain this information from WebSphere, you will be required to input the cell name, node name, server name, and virtual host strings manually.

If you run TVisionSetupInfo at a later time to change any information, the following menu appears:

```
Your current WebSphere server setting is:
            cell: testpcNode01Cell, node: testpcNode01, server: server1
Would you like to change this? (y/n) [n]:
```

To change information, enter **y** to display the initial configuration menu. Select the desired server. To use the same information, enter **n**.

```
Generating script file for WebSphere Application Server configuration ...
```

```
TransactionVision Info(FileUpdated): File "C:\Program
Files\Hewlett-Packard\TransactionVision\bin\WSSetupEnv.bat" has been
successfully updated
```

Completion Information

```
TransactionVision Info(TVisionSetupInfoSuccess: TVisionSetupInfo has
completed successfully.
All program output and user input are logged to "C:\Program
Files\Hewlett-Packard\TransactionVision \logs\setup.log".
Please run TVisionSetup to complete TransactionVision setup.
```

Using TVisionSetup

Run TVisionSetup once after installation. You can use this utility to do any or all of the following:

- Initialize the database for TransactionVision, or verify that the database is initialized

- Verify that WebSphere MQ or TIBCO is set up for TransactionVision

- Initialize the TransactionVision Analyzer, or verify that the Analyzer is initialized

- Initialize LDAP entries for TransactionVision, or verify that LDAP entries are initialized

- Install the TransactionVision Web Application in your web application server, or verify that it is installed

Before You Begin

Set the JAVA_HOME environment variable to your Java installation directory. If you are using WebLogic 9, set JAVA_HOME to the JVM you are using to run your application server. WebLogic can be configured to use JRockit or Sun JVM located at <BEA_HOME> directory.

Before you run TVisionSetup, you must create a database to store TransactionVision data. Refer to your IBM DB2 or Oracle documentation for further information on database setup.

Required Information

For most tasks, TVisionSetup uses information provided in the TVisionSetupInfo utility. However, some tasks may require you to enter additional information. Please review these information requirements before running TVisionSetup so you will be prepared to enter appropriate responses.

Verify WebSphere MQ Setup

To verify WebSphere MQ setup for TransactionVision, you must supply the following information:

- The name of the WebSphere MQ queue manager you wish to verify

- Whether to test the server connection and/or the client connection. If you test the client connection, you must enter the following:

- Queue manager host name
- Queue manager channel name
- Queue manager port number

Verify TIBCO Setup

To verify TIBCO setup for TransactionVision, you must supply the following information:

- The name of the TIBCO EMS server host you wish to verify
- The port number of the TIBCO EMS server you wish to verify
- The user name you wish to use to connect to the TIBCO EMS server
- The password for the specified user name

Verify SonicMQ Setup

To verify SonicMQ setup for TransactionVision, you must supply the following information:

- Name of the SonicMQ broker host you wish to verify
- Port number of the SonicMQ broker you wish to verify
- User name you wish to use to connect to the SonicMQ broker
- Password for the specified user name

Initialize Analyzer

Once the Analyzer is initialized, you must specify whether to start the Analyzer.

Initialize LDAP

To initialize LDAP entries for TransactionVision, you must enter the following information:

- LDAP server type. The remaining information requirements depend on which type you select. Available selections include Active Directory and Active Directory Application Mode (ADAM).
- The method of authentication to use for importing schema and directory objects into your server. You may choose the currently logged user, a user DN, or a username/domain. You must specify an administrator privileged account.
- User name. This is the distinguished name for authentication. The specified user should have authority to create new LDAP entry.
- Password for the specified user name.
- Default group directory location. Specify the location where the TransactionVision related security definitions will be stored. It can be any valid path in your directory structure. If you are running this LDAP server only for TransactionVision, the typical directory location could be the root directory (the name of your suffix, for example: o=bti,c=us). If you are integrating with an existing LDAP server, consult with your LDAP server administrator to determine the location where these objects should be stored. For more information about the group directory location, see Appendix E, LDAP Configuration Scenarios.

- Whether to create the default root suffix. If you have not yet defined the LDAP suffix you wish to place TransactionVision objects under (for example, "o=bti,c=us"), you must first define this suffix using your LDAP administration tools before continuing. Once the suffix has been defined, you can either manually create the suffix node or you can have it created for you by answering yes to this prompt.

- Whether to create the default Admin user for IBM Directory Server or ADAM. Answer Y to create an Admin user object that has privileges to access TransactionVision. This user object is created using the default user object template. If you have existing or non-default users in your LDAP environment that you want the TransactionVision Admin user to be part of, create this user manually using those templates. For more information, see the "Managing Users" chapter of the *TransactionVision Administration Guide*.

- Whether to extend the user class object to include the TVAuthorityGroup attribute for Active Directory.

If you use IBM Directory Server or Active Directory Application Mode (ADAM) as the LDAP server for TransactionVision, the information you provide is used to set entries in your TransactionVision LDAP configuration file. In addition, the TVAuthorityGroup attribute, TVAuthorization class, and TVPerson class are added to your LDAP server's object class and attribute schema. Finally, a hierarchy named ou=TVision containing predefined security groups and a user entry for allowing an administrator to log in are created at the specified location.

If you use Active Directory as the LDAP server for TransactionVision, TransactionVision objects are not pluggable into the Active Directory administrative interface (such as Active Directory Users and Computers). They will appear there, but you must use the ADSI Edit LDAP editing module to modify them.

For IBM Directory Server or ADAM, a TVPerson object class is defined, derived from the base user/inetOrgPerson class of the directory server. Because Active Directory tools only recognize users created from the base user/inetOrgPerson class of the directory server, the schema definition of the base user object is extended for Active Directory to include the required TVAuthorityGroup attribute. If you are unable or do not desire to change the definition of your user object class, you may assign your users TransactionVision authorities by making them members of groups. In this case, skip this step by answering no to the "Extend user class object to include TVAuthorityGroup attribute?" question when your run TVisionSetup. You must then create or extend your group objects to include a TVAuthorityGroup object as described in Appendix E. Note that for Active Directory, you must use the ADSI Edit tool to edit the LDAP entries directly.

▶ Instead of using TVisionSetup to initialize the LDAP classes, an Administrator can manually import the schema and directory objects using the ldif files provided in TVHOME/config/ldap.

TVisionSetup Syntax

Use the following commands to run TVisionSetup:

Operating System	Script Command
AIX, Linux, Solaris	<TVISION_HOME>/bin/TVisionSetup.sh
Windows	<TVISION_HOME>\bin\TVisionSetup.bat

The syntax for TVisionSetup is as follows:

```
<TVISION_HOME>/bin/TVisionSetup [-rmiregp PORTNUMBER]
[-debug][-h]
```

- The default port number where the Analyzer listens for RMI calls is 1099; use the -rmiregp option to specify a different port number.
- Use the -debug option to start rmid and rmiregistry in debug mode.
- Use the -h option to print the usage message for this utility.

TVisionSetup must be run in a user environment which has the correct database environment set. For IBM DB2 this includes checking the DB2INSTANCE environment variable setting and that the user has database access rights. Refer to your IBM DB2 manual for further information.

TVisionSetup Menus

This command provides different menus, depending on whether the host is a WebSphere or WebLogic application server with the TransactionVision web user interface installed, and whether LDAP demo mode is used.

Enter the number corresponding to the desired menu action, or enter **99** to perform all actions. The results of each menu action are displayed as they are performed; press the **Enter** key to continue with the next menu item. Some menu actions require user input.

The following menu appears if WebSphere Application Server and the TransactionVision web user interface are installed, and the DEMO mode is not used:

```
1. Initialize database for TransactionVision
2. Verify database initialization for TransactionVision
3. Verify WebSphere MQ setup for TransactionVision
4. Verify TIBCO setup for TransactionVision
5. Verify SonicMQ setup for TransactionVision
6. Initialize TransactionVision Analyzer
7. Verify TransactionVision Analyzer initialization
8. Initialize LDAP entries for TransactionVision
9. Verify LDAP initialization for TransactionVision
10. Install TransactionVision web application
11. Verify TransactionVision web application installation
99. Select all
V. Display version info for software
Type "quit" or "q" to exit
```

If demo mode is used, or the application server or TransactionVision web user interface are not installed, certain items are omitted from the menu. If an item is omitted, the remaining items are renumbered in sequence.

- If you specified in TVisionSetupInfo to use DEMO mode for LDAP, items 7 and 8 are omitted from the menu.
- If the WebSphere application server or TransactionVision web user interface are not installed, items 7, 8, 9, and 10 are omitted from the menu.

TVisionSetup Prompts

The following sections describe the required input for each menu item.

1   **Initialize database for TransactionVision**

    No input required.

2   **Verify Database initialization for TransactionVision**

No input required.

3   **Verify WebSphere MQ setup for TransactionVision**

This menu item displays the following output and prompts:

```
Verifying WebSphere MQ Java setup for TransactionVision ...
Please specify WebSphere MQ queue manager name:
Do you want to test WebSphere MQ server connection? (Y/N) [N]:
TransactionVision Info(MQInitialized): WebSphere MQ is loaded properly for
WebSphere MQ server connection
Do you want to test WebSphere MQ client connection? (Y/N) [N]:
```

If you answer Y, you are prompted to enter the following additional information:

```
Host name for WebSphere MQ queue manager:
Channel name for WebSphere MQ queue manager:
Port number for WebSphere MQ queue manager:
Hit <Enter> to continue ...:
```

4   **Verify TIBCO setup for TransactionVision**

This menu item displays the following output and prompts:

```
Verifying TIBCO EMS setup for TransactionVision ...
  TIBCO EMS Server Host Name []:
  TIBCO EMS Server Port Number []:
  User Name []:
  Password []:
Testing TIBCO EMS server connection ...
2005-04-12 09:21:35,631 [main] - TransactionVision Info(TIBCOInitialized):
TIBCO  is loaded properly for TIBCO connection
Hit <Enter> to continue...:
```

5   **Initialize TransactionVision Analyzer**

This menu item displays the following output and prompts:

```
Initializing TransactionVision Analyzer ...
Do you want to start TransactionVision Analyzer? (Y/N) [Y]:
Hit <Enter> to continue ...:
```

6   **Verify TransactionVision Analyzer initialization**

No input required.

7   **Initialize LDAP entries for TransactionVision**

This menu item displays the following output and prompts:

```
Initializing LDAP for TransactionVision ...
User name is used as the distinguished name for authentication. Specified
user should have authority to create new LDAP entry.
Logon user name:
User password:
Directory location to create default TransactionVision group :
```

Specify the location where the TransactionVision related security definitions will be stored. It can be any valid path in your directory structure. If you are running this LDAP server only for TransactionVision, the typical directory location could be the root directory (the name of your suffix, for example: o=bti,c=us). If you are integrating with an existing LDAP server, consult with your LDAP server administrator to determine the location where these objects should be stored.

```
If you have not yet defined the LDAP suffix you wish to place
TransactionVision objects under (for example, "o=bti,c=us"), you must
first define this suffix using the LDAP administration tools before
continuing. Once the suffix has been defined, you can either manually
create the suffix node or you can have it created for you by answering yes
to the below question.
Do you want to create default root suffix? (Y/N) [N]: y
Root suffix name:
Do you want to create default Admin user? (Y/N) [Y]:
```

Answer Y to create an Admin user object that has privileges to access TransactionVision. This user object is created using the default user object template. If you have existing or non-default users in your LDAP environment that you want the TransactionVision Admin user to be part of, create this user manually using those templates. For more information, see the "Managing Users" chapter of the *TransactionVision Administration Guide*.

```
Continue to initialize the LDAP entries for TransactionVision? (Y/N) [Y]:
Hit <Enter> to continue ...:
```

8   **Verify LDAP initialization for TransactionVision**

This menu item displays the following output and prompts:

```
Verifying LDAP initialization for TransactionVision ...
User name is used as the distinguished name for authentication. Specified
user should have authority to read LDAP entries.
Logon user name (ex. cn=root):
User password:
Enter directory location where the default TransactionVision objects were
created:
Continue to verify the LDAP entries for TransactionVision? (Y/N) [Y]:
If you have created default Admin user, do you want to test its login (Y/
N) [N]:
Hit <Enter> to continue ...:
```

9   **Install TransactionVision web application**

For the WebSphere application server, this menu item displays the following output and prompt:

```
Installing TransactionVision web application for WebSphere. This may take
a few minutes...
The WebSphere Application Server where TransactionVision web application
has just been installed must be restarted in order for TransactionVision to
work correctly.
Do you want to restart this application server? (Y/N) [Y]:
Hit <Enter> to continue ...:
```

If the TVisionSetup script detects whether the TransactionVision web application has already been installed for WebSphere. If so, it prompts you to uninstall the current application before installing the new one.

10   **Verify TransactionVision web application installation**

No input required.

Additional Procedures for WebSphere Application Server 6.1 Express Edition

If you are using WebSphere Application Server 6.1 Express Edition, perform the following steps from the WebSphere Admin console.

- Add com.bristol.tvision.home as JVM System property setting.

- Add the DB2 or Oracle JDBC driver to a server configuration

- Install and setup the TransactionVision web user interface

For detailed instructions, see Appendix D, Configuring Application Servers for TransactionVision.

5 Configuring the Web Application for BEA WebLogic

Configuration Overview

Once TransactionVision is installed, you must create an IBM DB2 or Oracle database for TransactionVision to save event data. Refer to the *TransactionVision Analyzer Installation and Configuration Guide* for the required database parameters. The TransactionVision setup utilities do not create the database.

After the database is created, the following setup tasks must be completed before you can use the TransactionVision Analyzer and web user interface:

- Create the TransactionVision database schema.

- Create modified versions of the StartWebLogic and StartManagedWebLogic scripts called tvStartWebLogic and tvStartManagedWebLogic for starting WebLogic servers for use with TransactionVision.

- Start the Analyzer service.

- Install and start the TransactionVision web application in your WebLogic application server.

- Initialize LDAP entries for TransactionVision (optional).

TransactionVision provides two utilities to guide you through the setup process:

- The TVisionSetupInfo utility prompts you to enter information needed for the setup process and sets required environment variables. It also generates the tvStartWebLogic and tvStartManagedWebLogic scripts.

- The TVisionSetup utility uses information you provide to TVisionSetupInfo to perform setup tasks.

If you are running the TransactionVision Web Application and Analyzer on the same system, you need only run these utilities once after installing both components. See the *TransactionVision Analyzer Installation and Configuration Guide* for additional Analyzer configuration instructions, as well as information about the configuration files used by the Analyzer.

If you need to change configuration information at a later time, you may simply run these utilities again.

Using TVisionSetupInfo

The TVisionSetupInfo utility modifies the following files:

- TVISION_HOME/config/datamgr/Database.properties
- TVISION_HOME/config/ldap/Ldap.properties
- TVISION_HOME/config/weblogic/tvision-wl-config.properties

In addition, TVisionSetupInfo does the following:

- Saves the installation path for software tools in TVISION_HOME/config/setup/ DefaultInstallPath.xml
- Generates TVISION_HOME/bin/SetupEnv.[sh | bat], which is run by TVisionSetup to set the JAVA_HOME, CLASSPATH, and system library path environment variables required by TransactionVision
- Generates the script TVISION_HOME/bin/WebSetupEnv.[sh | bat]to setup command line parameters for configuring TransactionVision web application in WebLogic Application Server.

Required Information

The TVisionSetupInfo utility prompts you to enter the following information necessary to complete the configuration. Please review these information requirements before running TVisionSetupInfo so you will be prepared to enter appropriate responses.

The following tables show parameters and associated technology areas (database and application server and LDAP) that will be required. See the sections that follow for detailed descriptions of the parameters.

Parameter	Technology Database		
	DB2	Oracle	SQL Server
Log file location			
Database instance name	✓		✓
Database connection name	✓	✓	
Database name	✓	✓	✓
Database host	✓	✓	✓
Database user name	✓	✓	✓
Database user password	✓	✓	✓
Database listener port	✓	✓	✓
Database installation path	✓	✓	
JDBC driver installation path			✓

| Parameter | Technology Application Server and LDAP | |
	WebLogic Application Server	LDAP
WebLogic installation location	✓	
Admin server name	✓	
Admin server host	✓	
Admin server port	✓	
Admin server user name	✓	
Admin server password	✓	
Domain directory	✓	
Deployment server	✓	
LDAP server name		✓
User directory location		✓
Group directory location		✓

Log File Location

You must supply the pathname of the directory where TransactionVision should store log files. The default value is TVISION_HOME/logs.

Database Properties

You must specify the type of database you plan to use with TransactionVision (IBM DB2, Oracle, or SQL Server).

For a DB2 database, you must supply the following information:

- The value of the DB2INSTANCE environment variable. The default value is DB2. 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.

- The name of the database connection to be used by TransactionVision. The default value is TVISION.

- The name of the database that TransactionVision will connect to. The default value is TVISION. This name may be different from the "database_connection_name" if a client database connection is used.

- The name of the host that the database runs on. The default value is local_host.

- The user name for connecting to the database. If this field is empty, the currently logged in user is used to make the database connection. Make sure that the user specified or currently logged in has privileges for database access.

- The password for the database user name. If this field is empty, the currently logged in user's password is used to make the database connection. If TVisionSetupInfo is able to detect an installed JCE provider that supports the DES encryption algorithm, it sets the jce_provider value in the Database.properties file to the class name of the JCE provider and encrypts the password. Otherwise, it disables the password encryption feature and stores the password as unencrypted text.

- The database port number. This is the TCP/IP port the database server is listening on. A typical value is 50000. To identify the correct value, select the following menu items from the DB2 Control Center while the DB2 administration server is running:

      All Systems > *system_name* > Instances > *instance_name*

   Right-click and select **Setup Communications** from the context menu. Click **Properties** to get the port number your database instance is using.

For an Oracle database, you must supply the following information:

- The driver to use. For Oracle 9, you may specify thin or oci; thin is the recommended client type. Note: For Weblogic to use Oracle JDBC OCI driver,. ORACLE_HOME must be set in the user profile that runs the server application. Also make sure that the Oracle library is included in the dynamic library load path.

- The name of the database connection to be used by TransactionVision. The default value is TVISION.

- The name of the database that TransactionVision will connect to. The default value is TVISION. This name may be different from the "database_connection_name" if a client database connection is used.

- The name of the host that the database runs on. The default value is local_host.

- The user name for connecting to the database. If this field is empty, the currently logged in user is used to make the database connection. Make sure that the user specified or currently logged in has privileges for database access.

- The password for the database user name. If this field is empty, the currently logged in user's password is used to make the database connection. If TVisionSetupInfo is able to detect an installed JCE provider that supports the DES encryption algorithm, it sets the jce_provider value in the Database.properties file to the class name of the JCE provider and encrypts the password. Otherwise, it disables the password encryption feature and stores the password as unencrypted text.

- The database port number. This is the TCP/IP port the database server is listening on. A typical value is 1521. To identify the correct value, run the **lsnrctl** command on the server side. Use the **status** command to find out the port number.

For an SQL Server database, you must supply the following information:

- The name of the host that the database runs on. The default value is local_host.

- The name of the SQL Server instance. This should typically be empty unless you are running multiple server instances.

- The port number to connect to on the SQL Server

- The name of the SQL Server database that TransactionVision will connect to. The default value is TVISION.

- The user name for connecting to the database. If this field is empty, the currently logged in user is used to make the database connection. Make sure that the user specified or currently logged in has privileges for database access.

- The password for the database user name. If this field is empty, the currently logged in user's password is used to make the database connection. If TVisionSetupInfo is able to detect an installed JCE provider that supports the DES encryption algorithm, it sets the jce_provider value in the Database.properties file to the class name of the JCE provider and encrypts the password. Otherwise, it disables the password encryption feature and stores the password as unencrypted text.

Messaging System Provider

You must specify the messaging system provider used to transfer TransactionVision configuration messages and events between Sensors and the Analyzer. Supported providers include WebSphere MQ and TIBCO EMS. You may specify one or both providers.

Installation Paths

You will be prompted to enter installation paths for the following required software:

- Database
- WebSphere MQ

Analyzer Settings

You must specify the following Analyzer information:

- The types of Sensors you are using in your environment
- The location of any JAR files that need to be added to the Analyzer CLASSPATH. These JAR files contain plugin beans that customize the Analyzer.

Web Application Server

You must specify the type of Web Application Server used in your environment (IBM WebSphere or BEA WebLogic).

For WebLogic, you must specify the following:

- WebLogic installation location
- Admin server name
- Admin server host
- Admin server port
- Admin server user name
- Admin server password
- Domain directory
- Deployment server

LDAP

You must specify whether to use the TransactionVision insecure DEMO mode, which does not require an LDAP server setup. This mode provides four default accounts for logging into TransactionVision: Admin, Developer, Operator, and User. This mode is only provided for evaluation and testing; do NOT use it to collect critical data.

If you specify that you do NOT want to use DEMO mode, you must specify the following information. For more information about these properties, see Appendix E, LDAP Configuration Scenarios.

- LDAP server name. This is the URL of the server to connect to. It directory maps to the attribute of java.naming.provider.url, used in creating an initial JNDI context.

- User directory location. This is the path for the TransactionVision web user interface to use to look up users for authentication and retrieval of TransactionVision authorities. If you wish to use an existing user hierarchy, use this attribute to integrate with the existing directory structure. When a user logs in, the user name is combined with the UserDirectoryLocation to perform authentication. For example, if user joesmith logs into the web application and the value of this property is ou=Users,o=MyOrg,c=us TransactionVision attempts to authenticate cn=joesmith,ou=Users,o=MyOrg,c=us.

  TransactionVision creates by default a user location under ou=Users,ou+TVision,o=bristol,c=us if you do not wish to use an existing user directory. In order to have TransactionVision permissions, users in this directory must have a TVAuthorityGroup attribute. See the *TransactionVision Administration Guide* for more information.

- Group directory location. This property, similar to the user directory, specifies where to look up user groups. A group is considered to be a definition with one or more unique member attributes (such as the groupofuniquenames class) containing the list of users, and a TVisionAuthorityGroup attribute indicating what permissions to give this group.

TVisionSetupInfo Syntax

1 Set the TVISION_HOME environment variable to the absolute path of the installation directory. For example, on Solaris, TVISION_HOME would be /opt/HP/TransactionVision; on AIX it would be /usr/lpp/HP/TransactionVision.

2 Run the TVisionSetupInfo.[sh|bat] script. This utility modifies TransactionVision configuration files, so you must have file modification privileges to run it (typically root for UNIX or Administrator for Windows).

Operating System	Script Command
AIX, Linux, Solaris	<TVISION_HOME>/bin/TVisionSetupInfo.sh
Windows	<TVISION_HOME>\bin\TVisionSetupInfo.bat

When responding to user input prompts from TVisionSetupInfo, press **Enter** to accept the default value shown in brackets; otherwise, type the correct value and press **Enter**. To specify an empty value, press the spacebar, and then press **Enter**. Sample input and output below is shown in italics.

➤ If you are using the WebLogic application server and configuring the TransactionVision web user interface on a managed server, you must run the WebLogic Admin Server and Node Manager for the TransactionVision setup utilities to work correctly. When invoking the WebLogic Admin Server and Node Manager, your database library (regardless of which database you use) must be in the system library path (PATH on Windows, LD_LIBRARY_PATH on Solaris).

By default all of the integration columns are created in the database when the schema is created. These should be dropped only by an advanced user, probably for performance reasons, if they are sure that none of the integrations will ever be used. You can disable this by running TVisionSetupInfo with the -integration option.

TVisionSetupInfo Prompts

Configuring Log Files

```
Checking Java version ...
This program collects configuration information in order to setup the
TransactionVision environment. This includes:
- Location of software that TransactionVision depends on such as WebSphere
MQ, the application server and the relational database system,
- Parameters required to connect to WebSphere MQ,
- Parameters to connect to the database system,
- Optional parameters to connect to the LDAP system
- Setup parameters for the TransactionVision Analyzer, and
- Setup parameters for the TransactionVision web component.
You will be prompted to input required configuration parameters. If a
default value is provided in [], pressing <Enter> will set the parameter to
this default value. Pressing <Space><Enter> will set the parameter to an
empty value.
Please specify name of directory where you want to store your log files
[C:\Program Files\Hewlett-Packard\TransactionVision\logs]:
C:\Program Files\Hewlett-Packard\TransactionVision\logs
Modifying *.Logging.xml files in log file directory C:\Program
Files\Hewlett-Packard\TransactionVision\logs
0 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program Files\Hewlett-Packard\TransactionVision
\config\logging\Analyzer.Logging.xml" has been successfully updated
78 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\Migrate.Logging.xm
l" has been successfully updated
141 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\Setup.Logging.xml"
has been successfully updated
219 [main] INFO AppLog  - TransactionVision Info(FileUpdated): File
"C:\Program
Files\Hewlett-Packard\TransactionVision\config\logging\UI.Logging.xml" has
been successfully updated
```

Configuring Database Properties

- `Type of Database (DB2/Oracle/SQLServer)? [DB2]: DB2`

  Enter the type of database you are using to store TransactionVision event data. The remaining database property prompts depend on the type of database you specify.

DB2 :

- `Value of your environment variable DB2INSTANCE [DB2]: DB2`

  Enter the name of the DB2 instance.

  ▶ 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.

- `Database connection name to be used by TransactionVision [TVISION]: TVDB`

  Enter the name of the database connection to be used. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of database TransactionVision connects to [TVISION]: TVDB`

  Enter the name of the database on the server to connect to. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of the host the database is running on [local_host]: devpc`

  Enter the name of the host the database server is running on.

- `Database user name [db2admin]:`

  Enter the user name to be used while making the database connection. Leave blank to use the currently logged in user to make the database connection.

- `User password [ibmdb2]:`

  Enter the password to be used while making the database connection. Leave blank to use the currently logged in user's password to make the database connection.

- `Database port number [50000]:`

  Enter the TCP/IP port number the database server is listening on. See Required Information on page 56 for instructions on identifying the correct port number.

  The TVisionSetupInfo utility automatically searches for an installed JCE provider that supports the DES encryption algorithm. If such a provider is found, TVisionSetupInfo sets the jce_provider value in the Database.properties file to the class name of the JCE provider. If no JCE provider is found, TVisionSetupInfo displays the following message:

  ```
  Java Cryptography Extension (JCE) is not present in your current JDK.
  Password encryption feature will be disabled and stored in plain text.
  ```

Oracle:

- `Database connection name to be used by TransactionVision [TVISION]: TVDB`

  Enter the Oracle Local Net Service Name for an oci client connection or the SID (system identifier) for a thin client connection. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of database TransactionVision connects to [TVISION]: TVDB`

  Enter the Oracle SID. This prompt does not appear for an Oracle thin client connection. See Chapter 4, Configuring Databases for more information on identifying the connection name and database name.

- `Name of the host the database is running on [local_host]: devpc`

  Enter the name of the host the database server is running on.

- `Database user name []:`

Enter the user name to be used while making the database connection. Leave blank to use the currently logged in user to make the database connection.

- `User password []:`

Enter the password to be used while making the database connection. Leave blank to use the currently logged in user's password to make the database connection.

- `Database port number [1521]:`

Enter the TCP/IP port number the database server is listening on. See Required Information on page 56 for instructions on identifying the correct port number.

The TVisionSetupInfo utility automatically searches for an installed JCE provider that supports the DES encryption algorithm. If such a provider is found, TVisionSetupInfo sets the jce_provider value in the Database.properties file to the class name of the JCE provider. If no JCE provider is found, TVisionSetupInfo displays the following message:

```
Java Cryptography Extension (JCE) is not present in your current JDK.
Password encryption feature will be disabled and stored in plain text.
```

SQLServer:

- `Name of the host the database is running on [local_host]:`

Enter the name of the host the database server is running on.`

- `Enter the SQL Server instance name (typically it is empty unless you have multiple instances of SQL Server running in the same host) []:`

Enter the name of the SQL Server instance you wish to use, or leave the field blank if only a single instance is installed.

- `Enter the port number that the SQL Server listener is on [1433]:`

Enter the port for the SQL Server listener process.

- `Name of database TransactionVision connects to [TVISION]: TVDB`

Enter the name of the database on the server to connect to.

- `Name of the host the database is running on [local_host]: devpc`

Enter the name of the host the database server is running on.

- `Database user name []:`

Enter the user name to be used while making the database connection. Leave blank to use the currently logged in user to make the database connection.

- `User password []:`

Enter the password to be used while making the database connection. Leave blank to use the currently logged in user's password to make the database connection.

The TVisionSetupInfo utility automatically searches for an installed JCE provider that supports the DES encryption algorithm. If such a provider is found, TVisionSetupInfo sets the jce_provider value in the Database.properties file to the class name of the JCE provider. If no JCE provider is found, TVisionSetupInfo displays the following message:

```
Java Cryptography Extension (JCE) is not present in your current JDK.
Password encryption feature will be disabled and stored in plain text.
```

Configuring Messaging System Provider

```
Please select your Queuing Product Type by number.
```

```
             1.  WebSphere MQ
             2.  TIBCO EMS
             3.  SonicMQ
             4.  WebLogic JMS
             5.  All of the above
      Your Queuing Product [1]: 5
```

Enter the number corresponding to the messaging system provider you wish to use to transfer configuration and event messages between the Analyzer and Sensors. TVisionSetupInfo uses this information to generate the proper shell script to set up the Analyzer runtime environment correctly. If you want the Analyzer to collect events from any message system provider, select option **5**.

Configuring Installation Paths for Dependent Software

```
      Please select your web application server by number.


             1.   IBM WebSphere Application Server
             2.   BEA WebLogic
             3.   None
      Your web application server product [1]: 2
      TransactionVision Info(FileUpdated): File "C:\Program
      Files\Hewlett-Packard\Tran
      sactionVision\config\setup\Setup.properties" has been successfully updated

      Retrieving installation path for dependent software tools ...
      DB2 installation location [C:\Program Files\sqllib]:
      WebSphere MQ installation location [C:\Program Files\IBM\WebSphere MQ]:
      TransactionVision Info(FileUpdated): File C:\Program Files\ C:\Program
      Files\Hewlett-Packard\TransactionVision\config\setup\DefaultInstallPath.
      xml" has been successfully updated
```

TransactionVision Analyzer Settings

```
      Please select your Sensor types by number. This enables the Analyzer to
      receive events from the selected Sensors. If you are selecting multiple
      Sensor types, please separate them with ",".
         1.  CICS
         2.  EJB
         3.  Servlet
         4.  TIBCO EMS, SonicMQ JMS or WebLogic JMS
         5.  WebSphere MQ
         6.  WebSphere MQ IMS Bridge
         7.  WebSphere MQ JMS
         8.  JDBC
         9.  All of the above
      Your Sensor type(s) [9] :
```

Enter the number corresponding to the types of TransactionVision Sensors you plan to use. For multiple Sensor types, separate the numbers with a comma. For all Sensor types, enter **9**.

Customize the Analyzer Runtime Environment

```
      The Analyzer can optionally be customized by plugin beans in JAR files.
```

```
The location of these JAR files needs to be added to the Analyzer
CLASSPATH.

Please specify a semicolon delimited list of any additional JAR files you
wish to be added to the CLASSPATH. (for example,
'C:\TVision\myext.jar;C:\TVision\myutil.jar') []:

TransactionVision Info(FileUpdated): File "C:\Program
Files\Hewlett-Packard\Tran
sactionVision\config\services\Analyzer.properties" has been successfully
updated
```

Specify the location of any JAR files that need to be added to the Analyzer CLASSPATH.
These JAR files contain plugin beans that customize the Analyzer.

Selecting Web Application Server

```
Please select your web application server by number:
1. IBM WebSphere Application Server
2. BEA WebLogic
3. None
Your web application server product [1]: 2
```

Enter **2** for WebLogic. The following question appears:

```
WebLogic installation location [C:\bea\weblogic81]:
enter_your_weblogic_install_directory
TransactionVision Info(FileUpdated): File "C:\Program
Files\Hewlett-Packard\TransactionVision\bin\WebSetupEnv.bat" has been
successfully updated
```

Configuring LDAP Properties

```
Retrieving LDAP configuration parameters ...
TransactionVision provides an insecure DEMO mode which does not require an
LDAP server setup. This mode provides four default accounts: Admin,
Developer, Operator and User for logging into the system. Make sure to use
this DEMO mode only for evaluation and test purposes and not to collect
critical data.
Do you want to run TransactionVision in DEMO mode? (Y/N) [Y]: N
```

The following prompts only appear if you answer N to the previous prompt, indicating that
you do *not* want to use DEMO mode:

```
LDAP server name points to the server to connect to. Its value should
contain a URL string such as "ldap://somehost:389".
LDAP server name [ldap://server_host:server_port]: ldap://devpc:389
```

Enter the URL of the server to connect to. It directly maps to the attribute of
java.naming.provider.url, used in creating an initial JNDI context.

```
User directory location specifies to the web application what path to
lookup users under for authentication and retrieval of TransactionVision
authorities.
User directory location [ou=Users,ou=TVision,o=bti,c=us]:
```

Enter the path for the TransactionVision web user interface to use to look up users for
authentication and retrieval of TransactionVision authorities. If you wish to use an existing
user hierarchy, use this attribute to integrate with the existing directory structure. When a

user logs in, the user name is combined with the UserDirectoryLocation to perform authentication. For example, if user joesmith logs into the web application and the value of this property is ou=Users,o=MyOrg,c=us TransactionVision attempts to authenticate cn=joesmith,ou=Users,o=MyOrg,c=us.

TransactionVision creates by default a user location under ou=Users,ou+TVision,o=bristol,c=us if you do not wish to use an existing user directory. In order to have TransactionVision permissions, users in this directory must have a TVAuthorityGroup attribute. See the *TransactionVision Administration Guide* for more information.

```
Group directory location specifies to the web application what path to
lookup user groups under for authentication and retrieval of
TransactionVision authorities.
Group directory location [ou=Groups,o=bti,c=us]:
```

This property, similar to the user directory, specifies where to look up user groups. A group is considered to be a definition with one or more unique member attributes (such as the groupofuniquenames class) containing the list of users, and a TVisionAuthorityGroup attribute indicating what permissions to give this group.

```
TransactionVision Info(FileUpdated): File "C:\Program
Files\Hewlett-Packard\TransactionVision\config\ldap\Ldap.properties" has
been successfully updated
```

Configuring WebLogic Application Server Properties

For the WebLogic application server, the following prompts appear:

```
The following configuration parameters are required for setting up the
TransactionVision web application in WebLogic.
 Note: The parameter values are case sensitive.
 Retrieving WebLogic configuration parameters ...
WebLogic Admin Server name [your_adminserver_name]: AdminServer
WebLogic Admin Server host [your_adminserver_host]: mypc
WebLogic Admin Server port [your_adminserver_port]: 7080
WebLogic User Name for Admin Server [your_user_name]: user_name
WebLogic User Password for Admin Server [your_password]: password
Directory for WebLogic domain which you are configuring [your_domain_dir]:
C:\bea\user_projects\domains\myworkdomain
Name of WebLogic Server where TransactionVision will be deployed
[your_server_name]: DevServer
TransactionVision Info(FileUpdated): File "C:\Program
Files\Hewlett-Packard\TransactionVision\config\weblogic\tvision-wl-config
.properties" has been successfully updated
TransactionVision Info(ScriptCreationSuccessful): Script
"C:\bea\user_projects\domains\myworkdomain\ tvStartWebLogic.cmd" created
successfully.
TransactionVision Info(ScriptCreationSuccessful): Script
"C:\bea\user_projects\domains\myworkdomain\ tvStartManagedWebLogic.cmd"
created successfully.
```

Note that the following scripts are created:

- tvStartWebLogic.cmd

- tvStartManagedWebLogic.cmd

Use these scripts instead of the WebLogic scripts for starting a WebLogic server. For detailed information about how these scripts differ from the original WebLogic scripts, see Appendix D, Configuring Application Servers for TransactionVision.

Completion Information

```
TransactionVision Info(TVisionSetupInfoSuccess)
: TVisionSetupInfo has completed successfully.
All program output and user input are logged to "C:\Program
Files\Hewlett-Packard\TransactionVision\logs\setup.log".
Please run TVisionSetup to complete TransactionVision setup.
```

Note that for WebLogic, TVisionSetupInfo creates the following two files. Once you deploy the TransactionVision Web Application, use these files rather than the ones supplied by WebLogic to start WebLogic Admin and Managed Servers:

- tvStartWebLogic.[sh|cmd]

  Starts the WebLogic Admin server. You must run this before continuing with TVisionSetup.

- tvStartManagedWebLogic.[sh|cmd]

  Starts the WebLogic Managed server. If the WebLogic Server where you plan to deploy the TransactionVision Web Application is a managed server, you must run this before continuing with TVisionSetup.

Using TVisionSetup

Run TVisionSetup once after installation. You can use this utility to do any or all of the following:

- Initialize the database for TransactionVision, or verify that the database is initialized
- Verify that WebSphere MQ or TIBCO is set up for TransactionVision
- Initialize the TransactionVision Analyzer, or verify that the Analyzer is initialized
- Initialize LDAP entries for TransactionVision, or verify that LDAP entries are initialized
- Install the TransactionVision Web Application in your WebLogic application server, or verify that it is installed

Before You Begin

Before you run TVisionSetup, you must set the correct database environment in your user environment and start required WebLogic servers with the scripts generated by TVisionSetupInfo.

Set Correct Database Environment

Set the JAVA_HOME environment variable to your Java installation directory. If you are using WebLogic 9, set JAVA_HOME to the JVM you are using to run your application server. WebLogic can be configured to use JRockit or Sun JVM located at <BEA_HOME> directory.

To run TVisionSetup, the correct database environment must be set in your user environment:

- For IBM DB2, the DB2INSTANCE environment variable must be set and you must have database access rights. For Oracle, this includes checking that the user has database access rights and, if necessary, that the ORACLE_HOME environment variable is set.

- A database to store TransactionVision data must be created before running TVisionSetup.

Refer to your IBM DB2 or Oracle documentation for further information on database setup.

Start WebLogic Servers

Before running TVisionSetup, you must start the WebLogic Admin Server with the tvStartWebLogic script created by TVisionSetupInfo. If you plan to deploy the TransactionVision Web Application on a Managed Server, you must also run tvStartManagedWebLogic.

Required Information

For most tasks, TVisionSetup uses information provided in the TVisionSetupInfo utility. However, some tasks may require you to enter additional information. Please review these information requirements before running TVisionSetup so you will be prepared to enter appropriate responses.

Verify WebSphere MQ Setup

To verify WebSphere MQ setup for TransactionVision, you must supply the following information:

- The name of the WebSphere MQ queue manager you wish to verify

- Whether to test the server connection and/or the client connection. If you test the client connection, you must enter the following:

- Queue manager host name

- Queue manager channel name

- Queue manager port number

Verify TIBCO Setup

To verify TIBCO setup for TransactionVision, you must supply the following information:

- The name of the TIBCO EMS server host you wish to verify

- The port number of the TIBCO EMS server you wish to verify

- The user name you wish to use to connect to the TIBCO EMS server

- The password for the specified user name

Verify SonicMQ Setup

To verify SonicMQ setup for TransactionVision, you must supply the following information:

- Name of the SonicMQ broker host you wish to verify

- Port number of the SonicMQ broker you wish to verify

- User name you wish to use to connect to the SonicMQ broker
- Password for the specified user name

Initialize Analyzer

Once the Analyzer is initialized, you must specify whether to start the Analyzer.

Initialize LDAP

To initialize LDAP entries for TransactionVision, you must enter the following information:

- User name. This is the distinguished name for authentication. The specified user should have authority to create new LDAP entry.

- Password for the specified user name.

- Default group directory location. Specify the location where the TransactionVision related security definitions will be stored. It can be any valid path in your directory structure. If you are running this LDAP server only for TransactionVision, the typical directory location could be the root directory (the name of your suffix, for example: o=bti,c=us). If you are integrating with an existing LDAP server, consult with your LDAP server administrator to determine the location where these objects should be stored.

- Whether to create the default root suffix. If you have not yet defined the LDAP suffix you wish to place TransactionVision objects under (for example, "o=bti,c=us"), you must first define this suffix using your LDAP administration tools before continuing. Once the suffix has been defined, you can either manually create the suffix node or you can have it created for you by answering yes to this prompt.

- Whether to create the default Admin user. Answer Y to create an Admin user object that has privileges to access TransactionVision. This user object is created using the default user object template. If you have existing or non-default users in your LDAP environment that you want the TransactionVision Admin user to be part of, create this user manually using those templates. For more information, see the "Managing Users" chapter of the *TransactionVision Administration Guide*.

TVisionSetup Syntax

Use the following commands to run TVisionSetup:

Operating System	Script Command
AIX, Linux, Solaris	<TVISION_HOME>/bin/TVisionSetup.sh
Windows	<TVISION_HOME>\bin\TVisionSetup.bat

The syntax for TVisionSetup is as follows:

```
<TVISION_HOME>/bin/TVisionSetup [-rmiregp PORTNUMBER]
[-installweb][-clearweb][-h]
```

- The default port number where the Analyzer listens for RMI calls is 1099; use the -rmiregp option to specify a different port number.

- Use the -installweb option to install the TransactionVision Web Application in your application server.

- Use the –clearweb option to uninstall the TransactionVision Web Application from your application server.

- Use the -h option to print the usage message for this utility.

TVisionSetup must be run in a user environment which has the correct database environment set. For IBM DB2 this includes checking the DB2INSTANCE environment variable setting and that the user has database access rights. Refer to your IBM DB2 manual for further information.

To use TVisionSetup to configure the TransactionVision web user interface on a WebLogic managed server, you must login as root or have Administration rights. Otherwise, some of the WebLogic configuration files (such as embedded LDAP files) cannot be accessed. To use the embedded WebLogic LDAP server, see the "Managing Users" chapter of the *TransactionVision Administration Guide* before running TVisionSetup.

TVisionSetup Menus

This command provides different menus, depending on whether the host is a WebSphere or WebLogic application server with the TransactionVision web user interface installed, and whether LDAP demo mode is used.

Enter the number corresponding to the desired menu action, or enter **99** to perform all actions. The results of each menu action are displayed as they are performed; press the **Enter** key to continue with the next menu item. Some menu actions require user input.

The following menu appears if WebSphere Application Server and the TransactionVision web user interface are installed, and the DEMO mode is *not* used:

```
1. Initialize database for TransactionVision
2. Verify database initialization for TransactionVision
3. Verify WebSphere MQ setup for TransactionVision
4. Verify TIBCO setup for TransactionVision
5. Verify SonicMQ setup for TransactionVision
6. Initialize TransactionVision Analyzer
7. Verify TransactionVision Analyzer initialization
8. Initialize LDAP entries for TransactionVision
9. Verify LDAP initialization for TransactionVision
10. Install TransactionVision web application
11. Verify TransactionVision web application installation
99. Select all
V. Display version info for software
Type "quit" or "q" to exit
```

If demo mode is used, or the application server or TransactionVision web user interface are not installed, certain items are omitted from the menu. If an item is omitted, the remaining items are renumbered in sequence.

- If you specified in TVisionSetupInfo to use DEMO mode for LDAP, items 7 and 8 are omitted from the menu.

- If the WebLogic application server or TransactionVision web user interface are not installed, items 7, 8, 9, and 10 are omitted from the menu.

TVisionSetup Prompts

The following sections describe the required input for each menu item.

1 **Initialize database for TransactionVision**

No input required. Note that this menu item always creates the TVision schema in the default tablespace. To use a different tablespace, run the CreateSqlScript script the -ts option.

2 **Verify Database initialization for TransactionVision**

No input required.

3 **Verify WebSphere MQ setup for TransactionVision**

This menu item displays the following output and prompts:

```
Verifying WebSphere MQ Java setup for TransactionVision ...
Please specify WebSphere MQ queue manager name:
Do you want to test WebSphere MQ server connection? (Y/N) [N]:
TransactionVision Info(MQInitialized): WebSphere MQ is loaded properly for
WebSphere MQ server connection
Do you want to test WebSphere MQ client connection? (Y/N) [N]:
```

If you answer Y, the following you are prompted to enter the following additional information:

```
Host name for WebSphere MQ queue manager:
Channel name for WebSphere MQ queue manager:
Port number for WebSphere MQ queue manager:
Hit <Enter> to continue ...:
```

4 **Verify TIBCO setup for TransactionVision**

This menu item displays the following output and prompts:

```
Verifying TIBCO EMS setup for TransactionVision ...
  TIBCO EMS Server Host Name []:
  TIBCO EMS Server Port Number []:
  User Name []:
  Password []:
Testing TIBCO EMS server connection ...
2005-04-12 09:21:35,631 [main] - TransactionVision Info(TIBCOInitialized):
TIBCO  is loaded properly for TIBCO connection
Hit <Enter> to continue...:
```

5 **Initialize TransactionVision Analyzer**

This menu item displays the following output and prompts:

```
Initializing TransactionVision Analyzer ...
Do you want to start TransactionVision Analyzer? (Y/N) [Y]:
Hit <Enter> to continue ...:
```

6 **Verify TransactionVision Analyzer initialization**

No input required.

7 **Initialize LDAP entries for TransactionVision**

This menu item displays the following output and prompts:

```
Initializing LDAP for TransactionVision ...
User name is used as the distinguished name for authentication. Specified
user should have authority to create new LDAP entry.
Logon user name:
User password:
Directory location to create default TransactionVision group :
```

Specify the location where the TransactionVision related security definitions will be stored. It can be any valid path in your directory structure. If you are running this LDAP server only for TransactionVision, the typical directory location could be the root directory (the name of your suffix, for example: o=bti,c=us). If you are integrating with an existing LDAP server, consult with your LDAP server administrator to determine the location where these objects should be stored.

```
If you have not yet defined the LDAP suffix you wish to place
TransactionVision objects under (for example, "o=bti,c=us"), you must
first define this suffix using the LDAP administration tools before
continuing. Once the suffix has been defined, you can either manually
create the suffix node or you can have it created for you by answering yes
to the below question.
Do you want to create default root suffix? (Y/N) [N]: y
Root suffix name:
Do you want to create default Admin user? (Y/N) [Y]:
```

Answer Y to create an Admin user object that has privileges to access TransactionVision. This user object is created using the default user object template. If you have existing or non-default users in your LDAP environment that you want the TransactionVision Admin user to be part of, create this user manually using those templates. For more information, see the "Managing Users" chapter of the *TransactionVision Administration Guide*.

```
Continue to initialize the LDAP entries for TransactionVision? (Y/N) [Y]:
Hit <Enter> to continue ...:
```

8   **Verify LDAP initialization for TransactionVision**

This menu item displays the following output and prompts:

```
Verifying LDAP initialization for TransactionVision ...
User name is used as the distinguished name for authentication. Specified
user should have authority to read LDAP entries.
Logon user name (ex. cn=root):
User password:
Enter directory location where the default TransactionVision objects were
created:
Continue to verify the LDAP entries for TransactionVision? (Y/N) [Y]:
If you have created default Admin user, do you want to test its login (Y/
N) [N]:
Hit <Enter> to continue ...:
```

9   **Install TransactionVision web application**

Before performing this step, make sure you use the tvStartWebLogic script created by TVisionSetupInfo to start the WebLogic Admin Server. If you are deploying the TransactionVision Web Application on a WebLogic Managed Server, you must also run tvStartManagedWebLogic.

For the WebLogic application server, this menu item displays the following output and prompt if you are deploying the TransactionVision Web Application on the Admin Server:

```
Installing TransactionVision web application for WebLogic. This may take a
few minutes...

You are deploying TransactionVision web application to your Admin Server.
If your WebLogic Administration Server has not been started by script
"C:\bea\user_projects\domains\integration\ tvStartWebLogic.cmd", please
restart it before proceeding with this procedure in order to correctly set
up TransactionVision web application.
```

```
Do you want to continue? (y/n) [y]: y
```

If you are deploying on a Managed Server and the TransactionVision Web Application has *not* been previously installed, this menu item displays the following output and prompt:

```
Installing TransactionVision web application for WebLogic. This may take a
few minutes...

In order to proceed with the TransactionVision web application
installation, your WebLogic Managed Server must be restarted. In order to
automatically restart your WebLogic Managed Server it must be configured
to be remotely started through your WebLogic Administration Server, and
your WebLogic Node Manager must be running.  If this is the case, and you
wish to restart your server now, answer yes to automatically restart your
server.  If this is not the case then you will need to restart your server
manually using the script at 'C:\bea\user_projects\domains\
integration\tvStartManagedWebLogic.cmd', before you can use
TransactionVision.

Attempt to automatically restart this WebLogic Managed Server? [y/n] [y]:
```

If you are deploying on a Managed Server where the TransactionVision Web Application has been previously installed, this menu item displays the following output and prompt:

```
Installing TransactionVision web application for WebLogic.
 This may take a few minutes...

A web application named TransactionVision has already been installed on
the server.  It has to be uninstalled before proceeding with the
installation.

Do you want to uninstall it? (y/n) [n]: y

In order to proceed with the TransactionVision web application
installation, your WebLogic Managed Server must be restarted. In order to
automatically restart your WebLogic Managed Server it must be configured
to be remotely started through your WebLogic Administration Server, and
your WebLogic Node Manager must be running.  If this is the case, and you
wish to restart your server now, answer yes to automatically restart your
server.  If this is not the case then you will need to restart your server
manually using the script at 'C:\bea\user_projects\domains\
integration\tvStartManagedWebLogic.cmd', before you can use
TransactionVision.

Attempt to automatically restart this WebLogic Managed Server? [y/n] [y]:
```

Note that you *must* uninstall the previously installed TransactionVision Web Application before deploying the new installation.

10 **Verify TransactionVision web application installation**

No input required.

6 Configuring Web Application Logging

Log Files

By default, all TransactionVision components log error and warning messages to the appropriate log files. The location of log files is specified when you run TVisionSetupInfo or SensorSetup and stored in the Setup.properties file.

The Web Application logs error messages to the ui.log file.

Circular Logging

By default, the Web Application employs a form of circular logging. When the log file reaches the configured maximum size, it is renamed as a backup file and a new, empty log file is created. By default, the maximum log size is 10 MB and there is one backup log file.

Using the defaults, when a log file (for example, the Web Application log file ui.log, reaches 10 MB in size, it is renamed ui.log.1 and a new ui.log file is created. If you change the configuration so that there are two backup files, the following events take place when ui.log reaches 10 MB:

- ui.log.2 is removed if it exists.
- ui.log.1 is renamed ui.log.2.
- ui.log is renamed ui.log.1.
- A new ui.log is created.

If you do not wish to use circular logging, you may change the configuration to use linear logging, in which a single log file is generated.

The <TVISION_HOME>/config/logging/*.Logging.xml files specify the type of logging used, the maximum log file size, and the number of backup log files for each component. For example, Sensor.Logging.xml specifies the configuration for the servlet and JMS Sensors. This file contains entries similar to the following:

```
<appender class="tvision.org.apache.log4j.RollingFileAppender"
name="SENSOR_LOGFILE">
  <param name="File" value="C:\Program Files\ C:\Program
Files\Hewlett-Packard\TransactionVision\logs\sensor.log"/>
  <param name="Append" value="true"/>
  <param name="MaxBackupIndex" value="2"/>
  <param name="MaxFileSize" value="10MB"/>
  <layout class="tvision.org.apache.log4j. PatternLayout">
    <param name="ConversionPattern" value="%d [%t] %-5p %c %x - %m%n"/>
  </layout>
</appender>
```

Maximum Log File Size

To change the maximum size of the log file, change the value of the `MaxFileSize` parameter to the desired size. Values provided should end in "MB" or "KB" to distinguish between megabytes and kilobytes.

Maximum Number of Backup Log Files

To change the number of backup files, change the value of the `MaxBackupIndex` parameter to the desired number of backup files.

Changing from Circular to Linear Logging

To use linear logging rather than circular logging, do the following:

1 In the appender class value, change `RollingFileAppender` to `FileAppender`. For example, in the previous example, change the first line to the following:

```
<appender class="tvision.org.apache.log4j.FileAppender"
name="SENSOR_LOGFILE">
```

2 Remove the entries for the `MaxBackupIndex` and `MaxFileSize` parameters.

Trace Logging

Trace logging provides verbose information of what a TransactionVision Analyzer is doing internally. It is used mainly to troubleshoot problems and should not be turned on in production environments.

To enable trace logging for the TransactionVision web user interface, set the value of the trace property in the <TVISION_HOME>/config/ui/UI.properties file to on. After modifying this configuration file, you must restart the web user interface for the change to take effect. To restart the TransactionVision web user interface, use your application server administration console.

Using Windows and UNIX System Logs

On UNIX and Windows platforms, you can configure TransactionVision to log output to the system event logging facilities—the event log for Windows or syslog for UNIX. Examples of the logging configuration files needed to do this can be found in TVISION_HOME/config/logging/system/*/Sensor.Logging.xml.

For both Windows and UNIX, you must define a specialized event appender.

Windows Event Appender

The following example shows how to configure the Windows event appender to use the event log:

```
<appender name="NT_EVENT_LOG" class="tvision.org.apache.log4j.nt
.NTEventLogAppender">
  <layout class="tvision.org.apache.log4j.PatternLayout">
    <param name="ConversionPattern" value="%d [%t] - %m%n"/>
  </layout>
</appender>
```

NT_EVENT_LOG can then be referenced in a catagory definition of your choice. For example:

```
<category additivity="false" class="com.bristol.tvision.util.
log.XCategory" name="sensorLog">
  <priority class="com.bristol.tvision.util.log.XPriority" value="info"/>
  <appender-ref ref="NT_EVENT_LOG"/>
</category>
```

On Windows, you must also add a special DLL to your path. This DLL, NTEventLogAppender.dll, can be found in the config\logging\system\bin directory. For example:

```
set path=%TVISION_HOME%\config\logging\system\bin;%PATH%
```

UNIX Event Appender

The following example shows a UNIX event appender to use syslog:

```
<appender name="SYSLOG" class="tvision.org.apache.log4j.net.
SyslogAppender">
  <param name="SyslogHost" value="localhost"/>
  <param name="Facility" value="local0"/>
  <layout class="tvision.org.apache.log4j.PatternLayout">
      <param name="ConversionPattern" value="[%t] %-5p %c %x
- %m%n"/>
  </layout>
</appender>
```

Specify the SyslogHost and Facility parameters as appropriate for your environment.

A Utilities Reference

MigrateConfig

Location:

```
TVISION_HOME/bin/MigrateConfig.[sh|bat]
```

Description:

This is an internal script called during TransactionVision installation to migrate configuration files from an older version of TransactionVision to the current version.

Do NOT call this script directly; it may only be run during installation.

MigrateDB

Location:

```
TVISION_HOME/bin/MigrateDB.[sh|bat]
```

Description:

Migrates project database files from an older version of TransactionVision to the current version. This script may be run by the TransactionVision installation process, or at a later time. It must be run in configured TransactionVision environment; the Database.properties must be set correctly for communication with the database.

Syntax:

```
MigrateDB
```

TVisionSetup

Location:

```
TVISION_HOME/bin/TVisionSetup.[sh|bat]
```

Purpose:

This should be run once after installation. This program helps users setup the LDAP, database, TransactionVision services and WebSphere application.

Different options are presented based on which options are installed and/or running. The following menu appears if WebSphere Application Server and the TransactionVision web user interface are installed, and the DEMO mode is **not** used:

```
1. Initialize database for TransactionVision
2. Verify database initialization for TransactionVision
3. Verify WebSphere MQ setup for TransactionVision
4. Verify TIBCO setup for TransactionVision
5. Initialize TransactionVision Analyzer
6. Verify TransactionVision Analyzer initialization
7. Initialize LDAP entries for TransactionVision
8. Verify LDAP initialization for TransactionVision
9. Install TransactionVision web application
10. Verify TransactionVision web application installation
99. Select all
V. Display version info for software
Type "quit" or "q" to exit
```

If demo mode is used, or the WebSphere application server or TransactionVision web user interface are not installed, certain items are omitted from the menu. If an item is omitted, the remaining items are renumbered in sequence.

- If you specified in TVisionSetupInfo to use DEMO mode for LDAP, items 7 and 8 are omitted from the menu.

- If the WebSphere application server or TransactionVision web user interface are not installed, items 7, 8, 9, and 10 are omitted from the menu.

Syntax:

```
TVisionSetup [-rmiregp PORTNUMBER][-installweb] [-cleanweb] [-h]
```

Options:

Option	Description
-rmiregp PORTNUMBER	Port number on which the Analyzer starts. Default to 1099 if not specified
-installweb	Install the TransactionVision Web Application on the Application Server
-cleanweb	Uninstall the TransactionVision Web Application from the Application Server
-h	Displays a usage message

TVisionSetupInfo

Location:

```
TVISION_HOME/bin/TVisionSetupInfo.[sh|bat]
```

Purpose:

Collects information from the administrator about external tools used by TransactionVision so that CLASSPATH and library path can be setup correctly before running TransactionVision. This utility performs the following:

- Saves installation path for software tools in TVISION_HOME/config/setup/ DefaultInstallPath.xml.

- Modifies TVISION_HOME/config/datamgr/Database.properties based on user input.

- Modifies TVISION_HOME/config/ldap/Ldap.properties based on user input.

- If you are using the WebSphere application server, modifies TVISION_HOME/config/ websphere/tvision-ws-config.properties based on user input.

- If you are using the WebLogic application server, modifies TVISION_HOME/config/ websphere/tvision-wl-config.properties based on user input.

- Generates TVISION_HOME/bin/SetupEnv.[sh|bat] which sets the minimum set of environment variables (JAVA_HOME, CLASSPATH, shared library path for different platforms, etc.) required by TVision.

- If you are using the WebSphere application server, generates TVISION_HOME/install/ websphere/WSSetupEnv.[sh|bat] to setup command line parameters for importing different .xml files to XMLConfig.

Syntax:

```
TVisionSetupInfo.[sh|bat]
```

Notes:

TVISION_HOME/config/setup/Setup.properties is used to specify the XML file that stores the default software installation path and setup logging file.

User is free to modify any modified/generated files later on.

Since this utility modifies TransactionVision's configuration files, the user needs to have file modification privilege to run it (root on Unix or Administrator on Windows).

The format of TVISION_HOME/config/setup/DefaultInstallPath.xml is as follows:

```
<?xml version="1.0"?>
<DefaultInstallPath>
    OS name="Windows">
    <DB2>C:\Program Files\IBM\sqllib</DB2>
    <WebSphereMQ>C:\Program Files\IBM\WebSphere MQ</WebSphereMQ>
    <WebSphereMQJava>C:\Program Files\IBM\WebSphere MQ\Java</
WebSphereMQJava>
  <WebSphereAppServer>C:\Program Files\Websphere\ AppServer</
WebSphereAppServer>
  <WebLogic>C:\bea\weblogic81</WebLogic>
  </OS>
  <OS name="SunOS">
```

```
        <DB2>/opt/IBMdb2/V7.1</DB2>
        <Oracle></Oracle>
        <WebSphereMQ>/opt/mqm</WebSphereMQ>
        <WebSphereMQJava>/opt/mqm/java</WebSphereMQJava>
        <WebSphereAppServer>/opt/WebSphere/AppServer </WebSphereAppServer>
<WebLogic>/usr/local/bea/weblogic81</WebLogic>
    </OS>
    <OS name="AIX">
        <DB2>/usr/lpp/db2_07_01</DB2>
        <Oracle></Oracle>
        <WebSphereMQ>/usr/lpp/mqm</WebSphereMQ>
        <WebSphereMQJava>/usr/lpp/mqm/java</WebSphereMQJava>
        <WebSphereAppServer>/usr/WebSphere/AppServer </WebSphereAppServer>
<WebLogic></WebLogic>
    </OS>
    <OS name="Linux">
        <DB2>/usr/IBMdb2/V7.1</DB2>
        <Oracle></Oracle>
        <WebSphereMQ>/opt/mqm</WebSphereMQ>
        <WebSphereMQJava>/opt/mqm/java</WebSphereMQJava>
        <WebSphereAppServer>/opt/WebSphere/AppServer </WebSphereAppServer>
        <WebLogic></WebLogic>
    </OS>
</DefaultInstallPath>
```

B Configuration Files

The TransactionVision setup utilities save Web Application configuration information necessary for TransactionVision to operate in the following configuration files. You may also modify these files directly if you need to make any changes to your configuration.

➤ If you modify property files, you must restart the associated application for your changes to take effect. To restart the TransactionVision web user interface, use your application server administration console.

JobManager.properties

The <TVISION_HOME>/config/jobs/JobManager.properties file specifies configuration information for TransactionVision jobs. This file specifies the following properties:

- BeansXMLFile

  Specifies the location of the configuration file listing job templates available when you create a new project.

- logSize

  Specifies the number of entries to keep in the log file.

Ldap.properties

The <TVISION_HOME>/config/ldap/Ldap.properties file specifies how the web user interface interacts with an LDAP server. This file specifies the following properties:

- LDAPServerName
- ContextFactory
- UserDirectoryLocation
- GroupDirectoryLocation
- UseSSL
- CertificateTrustStore
- CryptProvider
- UseUID
- RDNPrefix

LDAPServerName

This property points to the server to connect to. It directly maps to the attribute of java.naming.provider.url, used in creating an initial JNDI context. The value of this property should contain a URL string (for example, ldap://somehost:389).

ContextFactory

This property contains the Java class name to be created as the initial context factory, depending on which implementation you wish to use. The value of the property should be the fully qualified class name of the factory class that will create an initial context. If you are using WebSphere 4.0, set it to com.sun.jndi.LdapCtxFactory. For WebSphere 3.5.4, set it to com.ibm.jndi.LDAPCtxFactory.

UserDirectoryLocation

This property specifies to the web application what path to use to look up users for authentication and retrieval of TransactionVision authorities. If you wish to use an existing user hierarchy, use this attribute to integrate with the existing directory structure. When a user logs in, the user name is combined with the UserDirectoryLocation to perform authentication. For example, if user joesmith logs into the web application and the value of this property is ou=Users,o=MyOrg,c=us TransactionVision attempts to authenticate cn=joesmith,ou=Users,o=MyOrg,c=us.

TransactionVision creates by default a user location under ou=Users,ou+TVision,o=bristol,c=us if you do not wish to use an existing user directory. In order to have TransactionVision permissions, users in this directory must have a TVAuthorityGroup attribute. See the *TransactionVision Administration Guide* for more information.

GroupDirectoryLocation

This property, similar to UserDirectoryLocation, specifies where to look up user groups. A group is considered to be a definition with one or more unique member attributes (such as the groupofuniquenames class) containing the list of users, and a TVisionAuthorityGroup attribute indicating what permissions to give this group.

To use the GroupDireectoryLocation in TransactionVision, you must configure the additional items in your LDAP schema and directory tree.

The way that TransactionVision expects a group to be laid out is a directory object with a number of uniqueMember values corresponding to each user in this group, such as the groupOfUniqueNames object class.

In addition to the group members, TransactionVision looks for an attribute called TVAuthorityGroup in this object. TVAuthorityGroup points to the TransactionVision security definition to be assigned to all members of this group. To accomplish this task in your LDAP administration interface, you need to define a new schema object. This object should be derived from groupOfUniqueNames, or a similar class that contains a uniqueMember attribute. To this new object class, add the attribute TVAuthorityGroup. This attribute is added to your LDAP schema by the LDAP Initialization steps of TVisionSetup, which you need to have already run.

After you have successfully created this schema object, create an instance of it in your directory tree, and assign to it the users that should be a member of it. The following ldif definition gives an example of creating such an entry.

```
dn: cn=AdminGroup,ou=TVision,o=bti,c=us
objectclass: TVgroup
objectclass: groupOfUniqueNames
objectclass: top
cn: AdminGroup
TVAuthorityGroup: cn=Admin,ou=Security,ou=TVision,o=bti,c=us
uniqueMember: cn=Joe Smith,ou=Users,ou=TVision,o=bti,c=us
```

The following table describes the contents of the entry:

Value	Description
dn	The name and location of the newly created group. In this example, an object named cn=AdminGroup, located in ou=TVision,o=bti,c=us. The ou=TVision,o=bti,c=us would also be the value to assign the GroupDirectoryLocation property as that is where TransactionVision will find the group.
objectclass	The object class defined to add the TVAuthorityGroup attribute, TVgroup in this example. Change TVgroup to the name you used to create the schema class.
cn	The group name for this user.
TVAuthorityGroup	The location of the privileges to be given this user—in this example cn=Admin,ou=Security, ou=TVision,o=bti,c=us.
uniqueMember	The location of a member of this group. Note that uniqueMember should contain reference to an already existing directory entry, as the directory server will validate it and possibly generate an error if it does not exist.

UseSSL

This property is used in conjunction with CertificateTrustStore and CryptProvider to enable communication with the LDAP server using SSL. If UseSSL is true, SSL will be enabled on the directory connection by setting Context.SECURITY_PROTOCOL to "ssl".

▶ To use SLL, JSSE (or another third-party SSL package) extensions must be installed. JSSE is available at http://java.sun.com. For more information about setting up SSL, see the *TransactionVision Administration Guide*.

CertificateTrustStore

Set this property to the key store (created by keytool) containing the trusted certificate for the LDAP server. The system property javax.net.ssl.trustStore is set to this value.

CryptProvider

Set this property to the Cryptographic Service Provider you wish to register as set by java.security.Security.addProvider(). If you are using the standard JSSE package, leave this property set to the default value com.sun.net.ssl.internal.ssl.Provider.

UseUID

If this property is set to true, TransactionVision assumes that the user name entered on the login page is the user id (UID) attribute of a user entry in the directory. It attempts to locate and authenticate the user by searching for user entries with the matching UID attribute. If this property is not defined or is set to false, TransactionVision assumes the user name entered on the login page is the RDN part of the distinguished name of the user entry in the directory.

RDNPrefix

If this property is specified, TransactionVision uses the prefix value as the name part of the name=value pair when it generates the RDN part of the user entry for lookup in the LDAP directory. For example, if the RDNPrefix is set to sn and the user name is joe, then the RDN for this user is sn=joe. This will be concatenated with the subdirectory to form a complete distinguished name for directory entry lookup and authentication.

If this property is not set, TransactionVision assumes the prefix value is cn.

Example

The following is an example Ldap.properties file:

```
LDAPServerName=ldap://myhost
ContextFactory=com.sun.jndi.ldap.LdapCtxFactory
IBMContextFactory=com.ibm.jndi.LDAPCtxFactory
UserDirectoryLocation=ou=Users,ou=TVision,o=bristol,c=us
GroupDirectoryLocation=ou=Groups,ou=TVision,o=bristol,c=us
```

License.properties

The <TVISION_HOME>/config/license/License.properties file specifies the TransactionVision license code supplied by HP support.

Setup.properties

The <TVISION_HOME>/config/setup/Setup.properties file specifies the following properties:

- default_tool_install_path

  The directory location of the DefaultInstallPath.xml file, which lists the locations of software components required by TransactionVision

- logs_dir

  The name of the directory in which to store log files

- logging_xml

  The name of the logging configuration file

- minimum_java_version

  The minimum Java version required by TransactionVision

- minimum_java_version_sun

  The minimum Java version required by TransactionVision on the Solaris platform

- maximum_java_version

  The highest Java version supported by TransactionVision

StatisticsCache.properties

The <TVISION_HOME>/config/services/StatisticsCache.proper-ties file defines setting used in the static mode of the component topology analysis. It contains the following entries:

- flush_interval

  Specifies how often the statistics cache is written out to the database. Until the data is written to the database, it won't be visible in graph. Depending on the volume of incoming requests, it might be useful to either flush more often, or less often. A longer flush time means fewer database writes, but will result in a larger cache size.

- timeslice_interval

  Specifies the duration in minutes of the timeslice for which event statistics should be calculated. The concept of a timeslice is used to partition data into different pieces so that depending on what timeframe one is interested in looking at this data can be quickly retrieved. A timeslice represents a period of time during which all events belonging to the same program and MQ object are condensed into a single statistic. For example, if you had a program putting messages to a particular queue, all the statistics data relating to the program and the queue (latency times, success counts, etc.) during a particular timeslice are stored in the same database row. By changing the values of the time slice interval you

can control how big and how efficient access to the statistics table is. The larger the timeslice, the more efficient the storage of results will be; the trade-off you lose is that your time slice interval is the smallest increment of time that you can view your data in. For example, if you were to set a time slice of one day, you would not be able to view these statistics on an hourly basis.

tvision-wl-config.properties

The <TVISION_HOME>/config/weblogic/tvision-wl-config.properties file specifies WebLogic application server information for the TransactionVision web user interface. This file specifies the following properties:

- adminserver_name

  Specifies the administration server name.

- adminserver_host

  Specifies the administration server host name.

- adminserver_port

  Specifies the administration server communication port number.

- admin_user_name

  Specifies the administration user name.

- admin_user_password

  Specifies the administration user password.

- domain_dir

  Specifies the domain directory.

- server_name

  Specifies the name of the server where TransactionVision will be deployed.

tvision-ws-config.properties

The <TVISION_HOME>/config/websphere/tvision-ws-config.properties file specifies WebSphere application server information for the TransactionVision web user interface. This file specifies the following properties:

- appserver_node_name

  Specifies the application server node name.

- appserver_name

  Specifies the application server name.

- virtual_host_name

  Specifies the virtual host name.

- cell_name

  For WebSphere Application Server 5.x, specifies the cell name.

- root_URL

  For WebSphere Application Server 4.x, specifies the root URL for the TransactionVision web user interface.

- adminserver_host

  For WebSphere Application Server 4.x, specifies the administrative server host name.

- adminserver_port

  For WebSphere Application Server 4.x, specifies the administrative server port number.

UI.properties

The <TVISION_HOME>/config/ui/UI.properties file specifies properties used by the TransactionVision web user interface. It contains the following entries:

- ui_config_dir

  Specifies the location of the user interface configuration files.

- view_config_filename

  Specifies the file defining TransactionVision views.

- reports_xml_filename

  Specifies the location of the file listing available reports.

- category_xml_filename

  Specifies the location of the query configuration file.

- category_xsl_filename

  Specifies the location of the query style sheet.

- filter_config_xml

  Specifies the location of the data collection filter configuration file.

- filter_config_xsl

  Specifies the location of the data collection filter style sheet.

- detail_modifier_xsl

  Specifies the location of the Event Detail view style sheet.

- logging_xml

  Specifies the location of the user interface log file.

- support_url

  The URL for product support.

- autologin

  Enables the "Remember Login" check box on the TransactionVision login page. Setting the checkbox causes the user name and password to be saved as a cookie. so that users are not prompted for a user name and password the next time they try to access TransactionVision. The password is encrypted using the specified Java JCE provider.

- jceProvider

Specifies the name of the JCE package used to encrypt the password if autologin is true. If you don't have a JCE package, you can download one from java.sun.com.

- trace

  Enables trace logging for the TransactionVision web user interface. For more information, see Trace Logging on page 64.

- logout_Redirect

  This property specifies the URL that should be displayed when a user logs out from TransactionVision, such as an SSO logout page.

- dashboard_xml_filename

  The dashboard report configuration file name.

- hasProxySensor

  Set to True to enable the dynamic Component Topology Analysis view to show proxy related links if you are using the Proxy Sensor.

C TransactionVision Changes to WebSphere Application Server

A number of changes are made to WebSphere Application Server during TransactionVision installation and configuration.

JVM System Property Settings

The following properties are added to the server's JVM system property settings.

- com.bristol.tvision.home

  Specifies the TransactionVision installation directory. This is required by the TransactionVision web user interface and Sensors.

- com.ibm.websphere.classloader.plugin

  Loads the TransactionVision Servlet Sensor. It should be set to com.bristol.tvision.sensor.servlet.ClassLoaderPlugin.

- com.bristol.tvision.sensor.disableApps

  Disables the Servlet Sensor for any application name listed. Delimit multiple applications with a comma, semi-colon, or colon. The default value is TransactionVision,adminconsole.

JVM Classpath Updates

The following are added to the application server's JVM classpath. They are required by the TransactionVision Sensor.

- <tv_install_dir>/java/lib/tvisionsensorservlet.jar
- <tv_install_dir>/java/lib/tvisionsensorejb.jar
- <tv_install_dir>/java/lib/tvjavaext.jar
- <tv_install_dir>/java/lib/tvisionsensorjms.jar (if you want to monitor JMS calls)
- <tv_install_dir>/java/lib/com.ibm.mqjms.jar (if you want to monitor JMS calls)
- <was_install_dir>/lib/j2ee.jar
- <webspheremq_java_dir>/lib
- <webspheremq_java_dir>/lib/com.ibm.mqjms.jar
- <webspheremq_java_dir>/lib/com.ibm.mq.jar
- <webspheremq_java_dir>/lib/com.ibm.mqbind.jar
- <webspheremq_java_dir>/lib/jta.jar
- <webspheremq_java_dir>/lib/connector.jar

- <webspheremq_java_dir>/lib/providerutil.jar
- <webspheremq_java_dir>/lib/fxcontext.jar

Added Files

The following files are added to <was_install_dir> classes. They are required by the TransactionVision Sensor.

- tvisionsensorcheck.jar
- tvisionservletinstrument.jar

D Configuring Application Servers for TransactionVision

Typically, you can use the TransactionVision TVisionSetupInfo and TVisionSetup utilities to configure your application server for the TransactionVision web user interface. However, there may be situations where you prefer or are required to configure your application server manually.

The following sections describe the process required to configure the TransactionVision web user interface for IBM WebSphere and BEA WebLogic.

Configuring WebSphere for TransactionVision Manually

The following tasks are performed by TVisionSetup. However, if you prefer, you may perform these steps from the WebSphere Admin console.

- Add com.bristol.tvision.home as JVM System property setting
- Add the DB2 or Oracle JDBC driver to a server configuration
- Install and setup the TransactionVision web user interface

Add com.bristol.tvision.home as JVM System Property Setting

1 Select **Servers** > **Application Servers** > **server1**.

2 Select **Process Definition** > **Java Virtual Machine**.

3 Select **Custom Properties**.

4 Click **New** and add the following:

```
Name:  com.bristol.tvision.home
Value:<TVISION_HOME>
```

For example:

```
com.bristol.tvision.home  = C:\Program Files\ C:\Program
Files\Hewlett-Packard\TransactionVision
```

Add the DB2 or Oracle JDBC Driver to a Server Configuration

Perform this task from the WebSphere Admin Console:

1 Select **Resources** > **JDBC Providers**.

2 Select the scope you want to use: cell, node, server.

3 Click **New** and select **DB2 Legacy CLI-based Type 2 JDBC Driver** or **Oracle JDBC Driver** (depending on what type of database you are using) in the pull down list for field JDBC Providers. Then click **OK**.

> For IBM WebSphere Application Server to use Oracle JDBC OCI driver, ORACLE_HOME must be set in the user profile that runs WebSphere Application Server. Also make sure that the Oracle library is included in the dynamic library load path.

4   Select **Environment** > **Manage WebSphere Variables**.

5   Select the scope you want to use: cell, node, server.

6   If you are using DB2, find/add the variable "DB2_JDBC_DRIVER_PATH". If it is not already pointed to the right place, set it to the directory where your db2java.zip is located. If you are using Oracle, find/add the variable "ORACLE_JDBC_DRIVER_PATH". If it is not already pointed to the right place, set it to the directory where your class12.zip is located.

7   Save the changes.

8   Restart the server for settings to take effect.

Install and Set up the TransactionVision Web User Interface

Perform the following steps from the WebSphere Admin Console:

1   Select **Applications** > **Install New Application**.

2   Click **Browse** in section Path to select your tvision.ear file. Click **Next**.

3   Make your selection in section Virtual Host then click **Next**.

4   Follow instructions on following pages to finish the installation.

5   Save the changes to Master configuration.

6   Select **Servers** > **Application Servers**.

7   Select the server where you installed TransactionVision web application.

8   Select **Process Definition** in the list of Additional Properties.

9   Select **Java Virtual Machine** in the list of Additional Properties.

10   Select **Custom Properties** in the list of Additional Properties.

11   Add following Name/Value pair:

        com.bristol.tvision.home = <tv_install_dir>

12   Save the changes to Master configuration.

13   Restart the server for the settings to take effect.

Configuring WebLogic for TransactionVision Manually

The following steps describe the process required to manually configure the TransactionVision web user interface for the BEA WebLogic application server.

Configure WebLogic for the TransactionVision Web User Interface

To configure WebLogic for the TransactionVision web user interface, you must perform the following tasks:

- Add the required environment setup to the server.
- Deploy the tvision.ear file.

Add Environment Setup to Admin Server

To deploy a WebLogic Admin Server, copy startWebLogic.[cmd|sh] to tvStartWebLogic.[cmd|sh] and modify the copied file to add the following environment settings. See Modify startWebLogic and startManagedWebLogic Scripts on page 84 for instructions on modifying these files.

Windows:

```
set JAVA_OPTIONS= -Dcom.bristol.tvision.home="<tv_install_dir>" %JAVA_OPTIONS%
set CLASSPATH=<path_of_jar_file_for_JDBC_driver>;%CLASSPATH%
```

UNIX:

```
JAVA_OPTIONS=" -Dcom.bristol.tvision.home="<tv_install_dir>" $JAVA_OPTIONS"
CLASSPATH="<path_of_jar_file_for_JDBC_driver>:$CLASSPATH"
export CLASSPATH
```

▶ Add the classes at the beginning of CLASSPATH. For some domain types, the startWebLogic script calls another WebLogic script. In these cases, modify the called script as well, as described in Modify startWebLogic and startManagedWebLogic Scripts on page 84.

Add Environment Setup to Managed Server

If you plan to start a managed server with the startManagedWebLogic[.cmd|.sh] script, copy startManagedWebLogic.[cmd|sh] to tvStartManagedWebLogic.[cmd|sh] and modify the copied file to add the same environment settings as for monitoring an Admin Server.

▶ As with the Admin Server, these classes at the beginning of CLASSPATH. Any scripts called from startManageWebLogic must be updated as well.

If you plan to start a managed server via the Node Manager using the Admin Console, perform the following steps:

1 Select your server name under Servers in the left panel.

2 Select the Configuration tab in the right panel.

3 Select the Remote Start tab in the right panel.

4 Add the following jar files to the Class Path field:

   Full path of the jar file for the JDBC driver class; for example:

```
<db2_install>\java\db2java.zip
<weblogic_install>\server\lib\weblogic.jar
```

5 Add the following Java option to the Arguments field:

```
-Dcom.bristol.tvision.home="<tvision_install>"
```

6   Click **Apply** at the end of the page.

7   Restart the server.

Deploy tvision.ear File

To deploy the tvision.ear file with WebLogic 8.1, perform the following steps:

1   In the left panel, select **Deployments** > **Applications**.

2   In the right panel, select the **Deploy a new Application** link.

3   Navigate to your <tvision_install>\ui directory and check the radio button next to
    tvision.ear.

4   Click **Target Application**.

5   Check the server where you are deploying TransactionVision then click **Continue**.

6   Check one of the radio buttons in the **Source Accessibility** section.

7   Input **TransactionVision** in the Name: field of the Identify section.

8   Click **Deploy**. TransactionVision should show up under **Deployments > Applications** in the
    left panel.

Modify startWebLogic and startManagedWebLogic Scripts

The following instructions are based on contents of the default **startWebLogic** and
startManageWebLogic scripts created by the WebLogic Configuration Wizard. If you have
customized these scripts, these instructions can only be used as reference.

The instructions depend on the domain type.

WebLogic 8.1 on Windows

Server Domain

The startWebLogic.cmd calls the utility weblogic.Server at the end. Copy startWebLogic.cmd
to tvStartWebLogic.cmd and add the required additional environment setup to the copied
tvStartWebLogic.cmd before the following line:

```
%JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
weblogic.Server
```

The startManagedWebLogic.cmd calls the utility weblogic.Server at the end. Copy
startManagedWebLogic.cmd to tvStartManagedWebLogic.cmd and add the required
additional environment setup to the copied tvStartManagedWebLogic.cmd before the
following line:

```
"%JAVA_HOME%\bin\java" %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.management.username=%WLS_USER%
-Dweblogic.management.password=%WLS_PW%
-Dweblogic.management.server=%ADMIN_URL%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
weblogic.Server
```

Workshop Domain

The startWebLogic.cmd calls the utility weblogic.Server at the end. Copy startWebLogic.cmd to tvStartWebLogic.cmd and add the required additional environment setup to the copied tvStartWebLogic.cmd before the following section:

```
if "%WLS_REDIRECT_LOG%"=="" (
  echo Starting WLS with line:
  echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %SERVER_CLASS%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%
) else (
  echo Redirecting output from WLS window to %WLS_REDIRECT_LOG%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%  1>&2 >"%WLS_REDIRECT_LOG%"
)
```

The startManagedWebLogic.cmd calls startWebLogic.cmd at the end. Copy startManagedWebLogic.cmd to tvStartManagedWebLogic.cmd and edit the copied tvStartManagedWebLogic.cmd to change the following line

```
call startWebLogic.cmd nodebug verbose nopointbase production
noiterativedev notestconsole %3 %4 %5 %6 %7 %8 %9
```

to:

```
call tvStartWebLogic.cmd nodebug verbose nopointbase production
noiterativedev notestconsole %3 %4 %5 %6 %7 %8 %9
```

Portal Domain

The startWebLogic.cmd calls the utility weblogic.Server at the end. Copy startWebLogic.cmd to tvStartWebLogic.cmd and add the required additional environment setup to the copied tvStartWebLogic.cmd before the following section:

```
if "%WLS_REDIRECT_LOG%"=="" (
  echo Starting WLS with line:
  echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %SERVER_CLASS%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%
) else (
  echo Redirecting output from WLS window to %WLS_REDIRECT_LOG%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
```

```
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%  1>&2 >"%WLS_REDIRECT_LOG%"
)
```

The startManagedWebLogic.cmd calls startWebLogic.cmd at the end. Copy
startManagedWebLogic.cmd to tvStartManagedWebLogic.cmd and edit the copied
tvStartManagedWebLogic.cmd to change the following line:

```
call startWebLogic.cmd nodebug nopointbase production
```

to:

```
call tvStartWebLogic.cmd nodebug nopointbase production
```

Integration Domain

The startWebLogic.cmd calls the utility weblogic.Server at the end. Copy startWebLogic.cmd
to tvStartWebLogic.cmd and add the required additional environment setup to the copied
tvStartWebLogic.cmd before the following section:

```
if "%WLS_REDIRECT_LOG%"=="" (
  echo Starting WLS with line:
  echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %SERVER_CLASS%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%
) else (
  echo Redirecting output from WLS window to %WLS_REDIRECT_LOG%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%  1>&2 >"%WLS_REDIRECT_LOG%"
)
```

The startManagedWebLogic.cmd calls startWebLogic.cmd at the end. Copy
startManagedWebLogic.cmd to tvStartManagedWebLogic.cmd and edit the copied
tvStartManagedWebLogic.cmd to change the following line:

```
call startWebLogic.cmd nodebug verbose nopointbase production
noiterativedev notestconsole %3 %4 %5 %6 %7 %8 %9
```

to:

```
call tvStartWebLogic.cmd nodebug verbose nopointbase production
noiterativedev notestconsole %3 %4 %5 %6 %7 %8 %9
```

Platform Domain

The startWebLogic.cmd calls the utility weblogic.Server at the end. Copy startWebLogic.cmd
to tvStartWebLogic.cmd and add the required additional environment setup to the copied
tvStartWebLogic.cmd before the following section:

```
if "%WLS_REDIRECT_LOG%"=="" (
  echo Starting WLS with line:
  echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %SERVER_CLASS%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%
) else (
  echo Redirecting output from WLS window to %WLS_REDIRECT_LOG%
  %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%
-Dweblogic.Name=%SERVER_NAME%
-Dweblogic.ProductionModeEnabled=%WLS_PRODUCTION_MODE%
-Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy"
%SERVER_CLASS%  1>&2 >"%WLS_REDIRECT_LOG%"
)
```

The startManagedWebLogic.cmd calls startWebLogic.cmd at the end. Copy
startManagedWebLogic.cmd to tvStartManagedWebLogic.cmd and edit the copied
tvStartManagedWebLogic.cmd to change the following line:

```
call startWebLogic.cmd nodebug verbose nopointbase production
noiterativedev notestconsole %3 %4 %5 %6 %7 %8 %9
```

to:

```
call tvStartWebLogic.cmd nodebug verbose nopointbase production
noiterativedev notestconsole %3 %4 %5 %6 %7 %8 %9
```

WebLogic 8.1 on UNIX

Server Domain

The startWebLogic.sh calls the utility weblogic.Server at the end. Copy startWebLogic.sh to
tvStartWebLogic.sh and add the required additional environment setup in the copied
tvStartWebLogic.sh before the following line:

```
${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
weblogic.Server
```

The startManagedWebLogic.sh calls the utility weblogic.Server at the end. Copy
startManagedWebLogic.sh to tvStartManagedWebLogic.sh and add the required additional
environment setup in the copied tvStartManagedWebLogic.sh before the following line:

```
"$JAVA_HOME/bin/java" ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS} \
-Dweblogic.Name=${SERVER_NAME}                               \
-Dweblogic.management.username=${WLS_USER}                   \
-Dweblogic.management.password=${WLS_PW}                     \
-Dweblogic.management.server=${ADMIN_URL}                    \
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy" \
weblogic.Server
```

Workshop Domain

The startWebLogic.sh calls the utility weblogic.Server at the end. Copy startWebLogic.sh to tvStartWebLogic.sh and add the required additional environment setup in the copied tvStartWebLogic.sh before the following section:

```
if [ "${WLS_REDIRECT_LOG}" = "" ] ; then
  echo "Starting WLS with line:"
  echo "${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${SERVER_CLASS}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}
else
  echo "Redirecting output from WLS window to ${WLS_REDIRECT_LOG}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}  1>&2 >"${WLS_REDIRECT_LOG}"
fi
```

The startManagedWebLogic.sh calls startWebLogic.sh at the end. Copy startManagedWebLogic.sh to tvStartManagedWebLogic.sh and edit the copied tvStartManagedWebLogic.sh to change the following line:

```
./startWebLogic.sh nodebug verbose nopointbase production noiterativedev
notestconsole $3 $4 $5 $6 $7 $8 $9
```

to:

```
./tvStartWebLogic.sh nodebug verbose nopointbase production noiterativedev
notestconsole $3 $4 $5 $6 $7 $8 $9
```

Portal Domain

The startWebLogic.sh calls the utility weblogic.Server at the end. Copy startWebLogic.sh to tvStartWebLogic.sh and add the required additional environment setup in the copied tvStartWebLogic.sh before the following section:

```
if [ "${WLS_REDIRECT_LOG}" = "" ] ; then
  echo "Starting WLS with line:"
  echo "${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${SERVER_CLASS}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}
else
  echo "Redirecting output from WLS window to ${WLS_REDIRECT_LOG}"
```

```
    ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}  1>&2 >"${WLS_REDIRECT_LOG}"
fi
```

The startManagedWebLogic.sh calls startWebLogic.sh at the end. Copy startManagedWebLogic.sh to tvStartManagedWebLogic.sh and edit the copied tvStartManagedWebLogic.sh to change the following line:

```
./startWebLogic.sh nodebug nopointbase production
```

to:

```
./tvStartWebLogic.sh nodebug nopointbase production
```

Integration Domain

The startWebLogic.sh calls the utility weblogic.Server at the end. Copy startWebLogic.sh to tvStartWebLogic.sh and add the required additional environment setup in the copied tvStartWebLogic.sh before the following section:

```
if [ "${WLS_REDIRECT_LOG}" = "" ] ; then
  echo "Starting WLS with line:"
  echo "${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${SERVER_CLASS}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}
else
  echo "Redirecting output from WLS window to ${WLS_REDIRECT_LOG}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}  1>&2 >"${WLS_REDIRECT_LOG}"
fi
```

The startManagedWebLogic.sh calls startWebLogic.sh at the end. Copy startManagedWebLogic.sh to tvStartManagedWebLogic.sh and edit the copied tvStartManagedWebLogic.sh to change the following line:

```
./startWebLogic.sh nodebug verbose nopointbase production noiterativedev
notestconsole $3 $4 $5 $6 $7 $8 $9
```

to:

```
./tvStartWebLogic.sh nodebug verbose nopointbase production noiterativedev
notestconsole $3 $4 $5 $6 $7 $8 $9
```

Platform Domain

The startWebLogic.sh calls the utility weblogic.Server at the end. Copy startWebLogic.sh to tvStartWebLogic.sh and add the required additional environment setup in the copied tvStartWebLogic.sh before the following section:

```
if [ "${WLS_REDIRECT_LOG}" = "" ] ; then
  echo "Starting WLS with line:"
  echo "${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${SERVER_CLASS}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}
else
  echo "Redirecting output from WLS window to ${WLS_REDIRECT_LOG}"
  ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}
-Dweblogic.Name=${SERVER_NAME}
-Dweblogic.ProductionModeEnabled=${WLS_PRODUCTION_MODE}
-Djava.security.policy="${WL_HOME}/server/lib/weblogic.policy"
${SERVER_CLASS}  1>&2 >"${WLS_REDIRECT_LOG}"
fi
```

The startManagedWebLogic.sh calls startWebLogic.sh at the end. Copy startManagedWebLogic.sh to tvStartManagedWebLogic.sh and edit the copied tvStartManagedWebLogic.sh to change the following line:

```
./startWebLogic.sh nodebug verbose nopointbase production noiterativedev
notestconsole $3 $4 $5 $6 $7 $8 $9
```

to:

```
./tvStartWebLogic.sh nodebug verbose nopointbase production noiterativedev
notestconsole $3 $4 $5 $6 $7 $8 $9
```

E LDAP Configuration Scenarios

There are two typical scenarios for a new TransactionVision installation. Either you have an existing LDAP server that you wish to integrate with, or you do not have an LDAP server and need to set one up. This section will give an overview of the most common steps considerations and setup steps for getting your LDAP server working with TransactionVision. These steps require some basic understanding of how LDAP works and focus on just giving an overview of what needs to be configured without getting into the specifics of a particular LDAP server.

See the *TransactionVision Administration Guide* for a description of managing LDAP users for TransactionVision.

Quick Steps to Get LDAP Up and Running with TransactionVision

For a first time installation of LDAP, which is being used solely for TransactionVision, after installing the LDAP server software, decide is where you want to store the TransactionVision LDAP objects. If you have not created one yet, a root LDAP suffix must be defined in your LDAP directory structure. This name is typically (might vary slightly depending on which LDAP server you use) something in the form of "o=yourCompanyName,c=country". Decide a path under your defined suffix to place your TransactionVision users, and their defined security attributes. In these examples, we will put our objects in a directory called TVision off our main suffix – that is, "ou=TVision,o=yourCompanyName,c=country".

Once you have defined this suffix, and settled on a directory to place the objects, you can proceed with running the TVisionSetup and TVisionSetupInfo scripts to initialize LDAP settings. TVisionSetupInfo will ask a few questions about where TransactionVision objects are expected. When it asks about the User Directory location, give it the path to where you wish to define your users; for example, ou=Users,ou=TVision,o=yourCompanyName,c=country. The Group directory location also allows for defining Transaction vision securities by the groups users belong to—this is an optional value, if it exists it will be searched for user groups, but if you do not plan on using this at least initially, you can leave it blank.

After defining and setting up the above, run TVisionSetup to initialize and populate LDAP with the default TransactionVision objects. The TVisionSetup steps will ask you for the user name and password to log in, and then the directory location under which it should create the ou=TVision directory. In our example, we are just putting this off the main suffix so we enter o=yourCompanyName,c=country.

The next question asks if you want to create the default root suffix. This question is important because after you define the suffix in your LDAP server, you still need to create to root object itself. This step provides a shortcut for doing this—if your suffix has not yet been created, answer Y to this question and it will be created for you. TVisionSetup will then create all the LDAP objects.

If you use an LDAP browser to view the results, you will see it has created the default security groups (Administrator, Developer, Operator, User) in directory location ou=Security,ou=TVision,o=yourCompanyName,c=country. It has also created the default

Admin users in ou=Security,ou=TVision,o=yourCompanyName,c=country, which has a TVAuthoritygroup attribute that points to the Admin Security authorization in the ou=Security directory. At this point you should be able to log in to TransactionVision as the Admin user. Any further users can be added to your ou=Users,ou=TVision,o=yourCompanyName,c=country directory (you will need to use your LDAP administration tools for this) to enable them to also access the web pages.

See TVisionSetup Prompts on page 39 for the TVisionSetup prompts.

Add or Integrate TransactionVision to an Existing Set of LDAP Users

In this scenario, it is assumed that the suffix you wish to place TransactionVision objects under, the user directories all already exist, and you want to enable already existing user objects to access TransactionVision. If you want to create a separate directory location for TransactionVision from your existing user definitions, you could still follow steps similar to the previous section.

There are two tasks that need to be set to get TransactionVision to work with an existing LDAP directory. First you need to tell TransactionVision where your existing users and/or groups are located. Specify the appropriate directory location when prompted while running TVisionSetupInfo (or by modifying the corresponding attribute in you ldap.properties file). Then run TVisionSetup to initialize the TranactionVision LDAP entries. This script will do two things: it will add the TransactionVision LDAP schema definitions to your specified LDAP server, and it will create the ou=TVision directory object containing the default security permissions in the directory location you specify.

Second, you need to add the necessary TransactionVision attributes to the users and/or groups you wish to enable for TransactionVision. Enable any user you wish to have access to TransactionVision. In order for TransactionVision to recognize a user, it must have an attribute named TVAuthoritygroup which points to the TV security definition for this user. This attribute is created in the schema when TVisionSetup initialization is run. In order to give a user TransactionVision access, simply add this attribute to their user object in LDAP.

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