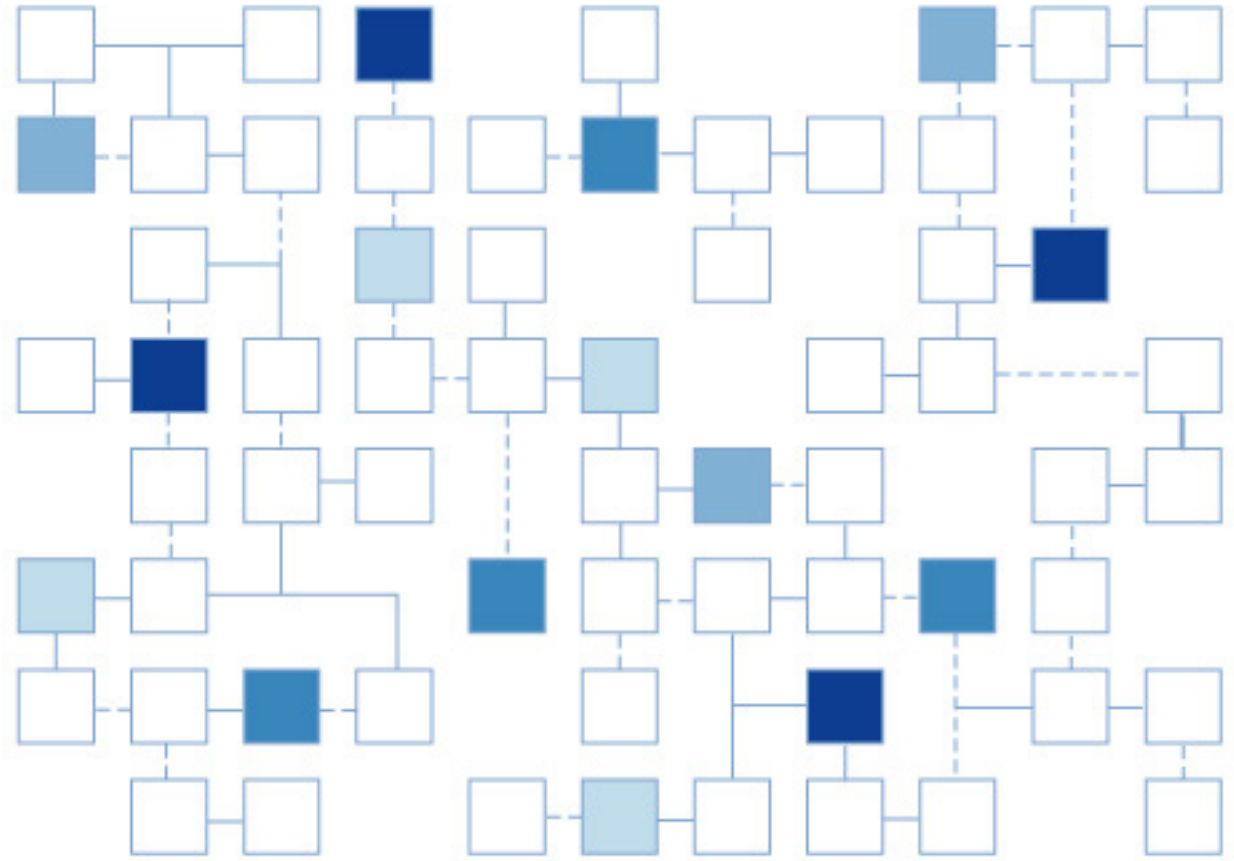
ExtraView™

Your Process. Your Workflow.

ExtraView Upgrade Guide
Version 6.1



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Manual Name: ExtraView Upgrade Guide
Revision Date: March 20, 2009

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UPGRADE SUPPORT

If you have questions, you may contact ExtraView Corporation in one of the following ways:

Telephone	(831) 461-7100. 7:00 a. m. to 5:00 p. m. PST Monday to Friday. Support for ExtraView is available outside of these hours by arrangement with ExtraView Corporation. If your Agreement with ExtraView Corporation gives you access to 24 x 7 support, you will be given a different telephone number for out-of-business-hours support.	
Email	support@extraview.com	
Web	ExtraView's web site	www.extraview.com
	ExtraView support site	support.extraview.net
Fax	(831) 461-7104	
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INTRODUCTION

This documentation covers the procedures to upgrade your current version of ExtraView on Solaris, Windows and Linux platforms. This manual will lead you through many of the design decisions that will help you size the appropriate hardware, and install supporting web and application servers. It is assumed that the reader of this manual is familiar with the following topics:

- Installation and configuration of your operating system software, whether it be Windows, Solaris or Linux
- Installation and configuration of Oracle database
- Functionality and operation of Apache web server software
- Functionality and operation of Tomcat application server software
- Installation and functionality of the Java Runtime Environment
- Installation and functionality of an ANSI C compiler such as the GNU C Compiler
- Installation and functionality of the SUDO facility (if required for your installation)
- Functionality of the Perl programming language (if you intend to use the ExtraView Command Line Interface)

With regard to these topics, this guide will give you only the key elements of settings essential to ExtraView.

Although the guide offers significant assistance in installing and configuring many of the server and database components that support ExtraView, it is not intended that it replace the installation and configuration documentation of these components.

ExtraView's consulting team is available to provide assistance with any of these items. Please refer to the Support section of this manual for information on how to contact ExtraView.

UPGRADE INSTRUCTIONS

Download the ExtraView Software

Before beginning the upgrade process, please ensure that you have downloaded the appropriate files from ExtraView Corporation's web site at the following URL:

```
http://www.extraview.com/download_ug.htm
```

At a minimum, you should download the ExtraView Application Software. You may also be using the Command Line Interface and/or the Perforce Integration Daemon – matching versions of these utilities are available at the same URL location.

For your convenience, ExtraView Corporation provides the referenced versions of Tomcat, Java and Perl on our website at the following URL:

```
http://www.extraview.com/download_support.htm
```

Tomcat Application Server – Linux/Solaris OS – Oracle and MSSQL Databases

Step 1: Upgrading the ExtraView Support Software

ExtraView 6 requires java JRE 1.5.0_14 or higher (not JRE 1.6). Since Tomcat 5 and higher require the JDK rather than the JRE, these instructions cover how to install that software. If your system is on an earlier version of Java, you must upgrade to the required version. We also strongly recommend upgrading to Tomcat 5.5.

If your system already has the JDK version 1.5.0_14 or higher installed, you can skip directly to Step 2 now.

Please follow the instructions below to install this version of Java and to change your Tomcat scripts to use this new version.

Organization of Installation Files

It is strongly recommended that you collect all the support software, except for the DBMS (Oracle or MSSQL),), under one top level directory. We recommend that this be named `/usr/local/extraview`. This provides for an easy overview of your installation for maintenance purposes. This convention also prevents accidental upgrades of some of the software components by a system administrator who is not familiar with ExtraView.

```
/usr/local/extraview
jdk1.5.0_14
apache-tomcat-5.5.25
ActivePerl-5.8
```

Set up Environment Variables for Quicker Installation

You can set up your environment for both correct and quicker installation. It is assumed that you will complete all the remaining steps without signing off from the target computer.

Log in as the `extraview` user.

```
export INSTALL=/usr/local/extraview/install;
export BASE=/usr/local/extraview;
mkdir $BASE
mkdir $INSTALL
```

Place all the downloaded software into the `$INSTALL` directory.

Install Java

The following will install Java into the directory `$BASE/j2sdk_1.5.0_14`

For Solaris

```
cd $INSTALL
cp jdk-1_5_0_14-solaris-sparc.sh $BASE
cd $BASE
chmod +x jdk-1_5_0_14-solaris-sparc.sh
./ jdk-1_5_0_14-solaris-sparc.sh
  yes
rm jdk-1_5_0_14-solaris-sparc.sh
```

For Linux

```
cd $INSTALL
cp jdk-1_5_0_14-linux-i586.bin $BASE
cd $BASE
chmod +x jdk-1_5_0_14-linux-i586.bin
./jdk-1_5_0_14-linux-i586.bin
  yes
rm j2sdkjdk-1_5_0_14-linux-i586.bin
```

Java is now installed in the directory `$BASE/j2sdk_1.5.0_14`

Install Tomcat

The following steps will install Tomcat into the directory `$BASE/apache-tomcat-5.5.25`

```
cd $INSTALL
cp apache-tomcat-5.5.25.tar.gz $BASE
cd $BASE
gunzip apache-tomcat-5.5.25.tar.gz
tar xvf apache-tomcat-5.5.25.tar
rm apache-tomcat-5.5.25.tar
```

Configure Tomcat

We can remove `*.bat` files since this is a UNIX installation.

```
cd $BASE/apache-tomcat-5.5.25/bin
rm *.bat
chmod 744 startup.sh shutdown.sh catalina.sh
```

The following will set the memory parameters for Tomcat and configure it to run with the correct java.

```
vi $BASE/apache-tomcat-5.5.25/bin/catalina.sh
```

Add the following lines:

```
JAVA_HOME=/usr/local/extraview/jdk1.5.0_14
CATALINA_HOME=/usr/local/extraview/apache-tomcat-5.5.25
CATALINA_OPTS="-server -Xms96m -Xmx512m -Djava.awt.headless=true
-Dfile_encoding=UTF-8"
vi $BASE/apache-tomcat-5.5.25/bin/startup.sh $BASE/apache-tomcat-
5.5.25/bin/shutdown.sh
```

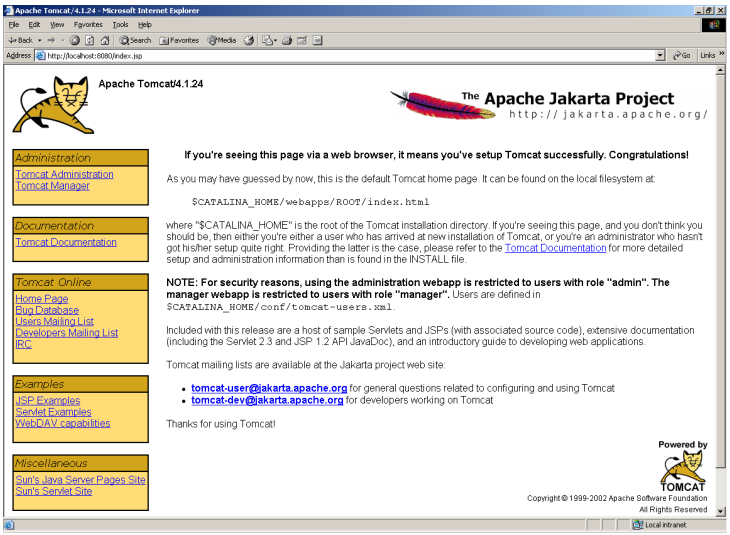
Add the following lines to each script:

```
JAVA_HOME=/usr/local/extraview/jdk1.5.0_14
CATALINA_HOME=/usr/local/extraview/apache-tomcat-5.5.25
```

Tomcat is now installed in the directory `$BASE/apache-tomcat-5.5.25`. You can start/stop tomcat using the following commands:

```
$BASE/apache-tomcat-5.5.25/bin/startup.sh
$BASE/apache-tomcat-5.5.25/bin/shutdown.sh
```

If you enter the URL of the server using port 8080 into a browser, for example `http://server.domain.com:8080`, you should see the Tomcat test page.



Install Perl

Perl is only required if your installation uses the Command Line Interface (CLI).. Installing Perl requires unzipping and untarring the code that is contained in the ActivePerl distribution file and then running the installation script (`sh install.sh`) and then defining the folder to install to `/usr/local/extraview/ ActivePerl-5.8`.

For Linux

```
cd $INSTALL
gunzip ActivePerl-5.8.8.820-i686-linux-glibc-2.2.4-gcc-274679.tar.gz
tar xvf ActivePerl-5.8.8.820-i686-linux-glibc-2.2.4-gcc-274679.tar
cd ActivePerl-5.8.8.820-i686-linux-glibc-2.2.4-gcc-274679
sh install.sh
```

Answer the questions and when prompted, provide the **expanded** value of `$BASE/ActivePerl-5.8` as the top level directory for install (the installer will not expand `$BASE` for you).

For example:

```
/usr/local/extraview/ActivePerl-5.8
```

For Solaris

```
cd $INSTALL
gunzip ActivePerl-5.8.8.820-sun4-solaris-2.6-cc-274679.tar.gz
tar xvf ActivePerl-5.8.8.820-sun4-solaris-2.6-cc-274679.tar.gz
cd ActivePerl-5.8.8.820-sun4-solaris-2.6-cc-274679
```

```
sh install.sh
```

Answer the questions and when prompted, provide the **expanded** value of `$BASE/ActivePerl-5.8` as the top level directory for install (the installer will not expand `$BASE` for you).

For example:

```
/usr/local/extraview/ActivePerl-5.8
```

For Linux and Solaris

```
cd $INSTALL
gunzip site-addon.tar.gz
cp site-addon.tar $BASE/ActivePerl-5.8
cd $BASE/ActivePerl-5.8
tar xvf site-addon.tar
rm site-addon.tar
```

Step 2: Upgrading the ExtraView Web Application

The ExtraView web application is generally installed under the directory named

```
/usr/local/extraview/tomcat/webapps
```

We suggest that your ExtraView application be installed in a folder called `evj` under this `webapps` folder. This will make your ExtraView application default URL

```
http://yourserver.yourdomain.com/evj/ExtraView
```

although you can change your web server settings offer the following as the URL

```
http://yourserver.yourdomain.com
```

to point directly to ExtraView/

Once you have located your application folder under the `webapps` directory, rename this folder so that it is not overwritten in the next step.

```
# mv evj evj_old
```

Installation of the ExtraView Servlet on Solaris / Linux

The file with a name of the format `evjxxx.tar` contains the ExtraView application. `xxx` is the version and build number of ExtraView that you are installing.

Installation of the ExtraView Application

```
cp evjxxx.tar $BASE/apache-tomcat-5.5.25/webapps
cd $BASE/apache-tomcat-5.5.25/webapps
tar xvf evjxxx.tar
```

Now rename your existing evj application

```
mv evj evj.old
```

Now rename the new application to evj

```
mv evjxxx evj
```

Edit the `Configuration.properties` file to populate the needed parameters. You should bring over any settings from your existing file in evj.old/WEB-INF/configuration.

```
vi evj/WEB-INF/configuration/Configuration.properties
```

Enter correct values for the following entries:

Entry	Purpose
`DB_HOST`	The IP address or fully qualified name for your database server
`DB_SID`	This is the name of your database
`DB_USER`	This is the name of the database user created previously
`DB_PASSWORD`	This is the password for the above database user
`HOST`	Same as DB_HOST

`DB_URL`	Make sure that the correct entry is uncommented and edited for your DBMS (Oracle or MSSQL).). The entry for HOST should be set to the same as DB_HOST above. The entry for SID should be set to the same as DB_SID above. Examples of this entry are:
	For Oracle connection
	`jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(HOST =10.0.0.154)(PROTOCOL=tcp) (PORT=1521)) (CONNECT_DATA=(SID=ev)))`
	For SQL Server connection with Inet driver
	`jdbc:inetdae7://xxxx.extraview.com: 1433/extraview`
	For SQL Server connection with JTDS driver
	`jdbc:jtds:sqlserver://xxxx.extraview. com:1433/extraview`

`JDBCDriver`	Make sure that the correct entry is uncommented and edited for your DBMS. Examples are: For Oracle connection `oracle.jdbc.driver.OracleDriver`

	For SQL Server connection with Inet driver
	`com.inet.tds.TdsDriver`
	For SQL Server connection with JTDS driver
	`net.sourceforge.jtds.jdbc.Driver`

DBMS_INTERFACE	Make sure that the correct entry is uncommented and edited for your DBMS. Examples are:
	For Oracle connection
	`com.extraview.dbms.oracle.OracleDbms`
	For SQL Server connection
	`com.extraview.dbms.mssql.MssqlDbms`

PSP_LOG	This may have the value of YES or NO. The default is NO. When this is YES, then the ExtraView log will contain the SQL of all statements executed. This can be useful for debugging purposes
LOG_FILE_PATH_NAME	The pathname to the log that ExtraView will be written to. The default path is `logs/EVJ.log`. Note that this path is relative to the WEB-INF directory
XML_LOG_FLAG	TRUE or FALSE. If this is FALSE (the default) then the log is written in text format. If the value is TRUE, then the log is written in XML format
WEB_SERVER_NAME	The name of the web server that will be used internally in ExtraView. With one application server, this name is not important, but if you have a cluster of application servers, then these should be named logically to identify which web server carried out which action and to ensure that sessions initiated at a client browser will “stick” to the same application server
TEMPLATE_DIR	The name of the directory, relative to WEB-INF where the ExtraView HTML templates are stored. There is normally no need to alter this path
USER_TEMPLATE_DIR	The path to the directory, relative to WEB-INF where user HTML templates are stored. These are stored independently from the ExtraView HTML templates so they may be retained during an upgrade
CHART_DIR	When ExtraView creates charts, it requires a directory in which to store temporary files. This path is also relative to WEB-INF. The administrator should create a process that cleans out old files from this directory on a periodic basis
TEMP_DIR	This path, relative to WEB-INF is used to store temporary files. The administrator should create a process that cleans out old files from this directory on a periodic basis
DATA_DIR	This path, relative to WEB-INF is used to store temporary files. The administrator should create a process that cleans

	out old files from this directory on a periodic basis
DEBUG_SWITCH	The default is ON. If you want to turn off debugging, then this may be set to OFF. This is not recommended
DEBUG_LOG_LEVEL	This may have an integer value from 1 to 12. The default level is 6. At any level, all messages for this level and greater are logged. At the default level of 6, all server accesses to ExtraView are recorded in the log file, with the entry to the service being logged as well as the exit from the service. At the exit time, additional information such as the length of time that the service took to execute, and the user ID of the person making the access is also recorded. If there is any error message with a debug level higher than 6, this is also placed in the log file. For example, any warnings or program exceptions will be placed in the log
SSO_DO_UPSERT	If you are using a SSO server and making use of the "upsert" feature, then this should be set to YES, else leave this at the default value of NO
NOTIFICATION	This is an optional property, and based upon RFC 1891 (see http://www.ietf.org/rfc/rfc1891.txt). The property may be any combination of: NOTIFY_DELAY NOTIFY_FAILURE NOTIFY_SUCCESS with each option separated by a semi-colon. If this property is set, and your SMTP server supports this RFC, then the appropriate header is set in all SMTPMessage's originated by the BatchMail process. This functionality allows for an audit trail to be followed for emails sent via your email server.
RETURN_OPTION	This is an optional property, and based upon RFC 1891 (see http://www.ietf.org/rfc/rfc1891.txt). The property may be either: RETURN_FULL or RETURN_HDRS If this property is set, and your SMTP server supports this RFC, then the appropriate header for return emails is set in all SMTPMessage's originated by the BatchMail process. This functionality allows for an audit trail to be followed for emails sent via your email server.
Connection pool settings	These are described in detail in the section of the Installation guide named Connection Pool Configuration

The following is an example of the `Configuration.properties` using Oracle as

the database:

```
DB_HOST     = localhost
DB_SID      = ev
DB_USER     = extraview
DB_PASSWORD = password
DB_URL      = jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=
              (HOST==localhost)(PROTOCOL=tcp)(PORT=1521))
              (CONNECT_DATA=(SID=ev )))
JDBCDriver  = oracle.jdbc.driver.OracleDriver
DBMS_INTERFACE = com.extraview.dbms.oracle.OracleDbms
```

The following is an example of the Configuration.properties using MSSQL as the database:

```
DB_HOST     = localhost
DB_SID      = extraview
DB_USER     = extraview
DB_PASSWORD = password
DB_URL      = jdbc:inetdae7://localhost: 1433/extraview
JDBCDriver  = com.inet.tds.TdsDriver
DBMS_INTERFACE = com.extraview.dbms.mssql.MssqlDbms
```

If you are running MSSQL:

Starting with ExtraView 5.x, ExtraView now provides a JDBC driver for MSSQL. If you are upgrading from 4.x, you no longer need to use the Sprinta driver that was required in previous versions of ExtraView.

Now you need to copy over the files from your existing application that are specific to your installation:

```
cp evj_old/images/CompanyLogo.gif evj/images
cp -rf evj_old/WEB-INF/user_templates evj/WEB-INF
```

If you have user custom JavaScript code that was written either by ExtraView Corporation, or by your developers, you should add any of your custom methods in the `evj_old/javascript/user_javascript/UserJavascript.js` file to the new file in `evj/javascript/user_javascript`.

You may or may not have files in the `user_javascript` and the `user_templates` folders, depending on your initial installation.

If you have customized images other than the Company Logo, those have to be copied to the new installation from the old installation. Depending on your installation, you may also have installed images for additional locales. You will then have to perform the same action for each locale, by replacing `en_US` with the appropriate directory name. If you are upgrading from ExtraView 4.x or 5.x to 6.x, and you have a custom image set, please contact ExtraView Corporation to get further information on updating your image set for the new version of ExtraView.

```
cp -r evj_old/locales/en_US/images/images_custom evj
```

If you are upgrading from 4.x and had previously been using the 20-connection Sprinta driver for MSSQL, you can now use the default values provided in the `Configuration.properties` for 6.x for `ConnectionPoolSize` and `ConnectionPoolMax`, instead of the previously-limited 20, as the new jTDS driver does not have a 20 connection limit.

UserCustom Class Upgrade

If you have User Custom code implemented, please review the name of your User Custom class.

```
ls /usr/local/extraview/tomcat/webapps/evj/WEB-
INF/classes/com/extraview/usercustom/
```

If the class is named `UserCustom.class`, then you must contact ExtraView Corporation in order to make certain that you are upgrading your User Custom code to the correct new version. If it is named something similar to `YOURCOMPANY.class`, then it is safe to simply copy the old class file over to the new evj tree.

```
cd evj/WEB-INF
cp -r ../../evj_old/WEB-INF/classes .
```

Step 3: Upgrading the ExtraView database

You must backup your database before performing this step. ExtraView Corporation cannot guarantee that upgrades will complete successfully, therefore it is essential that you are able to revert to your existing installation.

You should take a full export of your database before running any of the following upgrade scripts. This will allow you to roll back to the previous version of ExtraView if there are any problems arising from the upgrade.

Edit the following file:

```
/usr/local/extraview/tomcat/webapps/evj/WEB-INF/data/runPatches.sh
```

Replace the following lines with the appropriate values for your system:

```
JAVA_HOME=/usr/local/extraview/java
TOMCAT_HOME=/usr/local/extraview/tomcat
```

Now save and exit from the editor.

To upgrade the database, run the following command:

```
sh runPatches.sh evj
```

where `evj` is the folder under `/usr/local/extraview/tomcat/webapps` that contains the ExtraView version 6 application code.

The upgrade process initiated by the above command looks at your installation to determine exactly which version of code and which version of the database schema is active. The process will then apply all the patches to bring your system up to the version 6 level. Some patches are very simple, some are more complex, and many take time dependent on the amount of data in your database.

As the individual patches are applied, you will see many lines of text scroll past on the screen. At some point, depending on the amount of data in your system, the patches may appear to "hang" while they perform large operations on the database – allow a reasonable amount of time (possibly 20 minutes or more) before you assume there is a problem with any individual part of the upgrade process. If you have any questions, please contact ExtraView Corporation.

Once the script has finished running, and you are returned back to a command prompt, and your upgrade to the database is complete.

For your reference, there is a log of the changes made to the database in the directory named `/tomcat/webapps/evj/WEB-INF/logs`. These are held in a `.log` file (the exact name is specified in the `Configuration.properties` file). It is recommended that you save that file until you have verified your upgrade, so that the ExtraView Support can review this with you if you run into any issues.

Step 4: Installing the ExtraView License Key

If you are currently running version 5.2.x you can skip this section.

If you are upgrading from a 4.x or 5.0.x version of ExtraView to a 6.x version of ExtraView, you will need to install the new license key provided to you by ExtraView Support. If you have not received a new license key file, please contact ExtraView Corporation as you will not be able to complete this installation without this file.

Copy the license.xml file that you received into the following directory:

```
/usr/local/extraview/tomcat/webapps/evj/WEB-INF/data
```

Edit the following file:

```
/usr/local/extraview/tomcat/webapps/evj/WEB-INF/data/installKey.sh
```

Replace the following lines with the appropriate values for your system:

```
JAVA_HOME=/usr/local/extraview/java
TOMCAT_HOME=/usr/local/extraview/tomcat
```

Now save and exit from the editor.

To install your license key, run the following command:

```
sh installKey.sh evj
```

where `evj` is the folder under `/usr/local/extraview/tomcat/webapps` that contains the ExtraView version 6 application code.

Step 5: Upgrading the CLI

If you do not use the ExtraView command line interface, you can skip this step. If you are installing it for the first time, please refer to the **ExtraView Installation and Configuration** guide for full instructions.

Copy the `evcli_unix.tar` file from

```
/usr/local/extraview/tomcat/webapps/evj/WEB-INF/data
```

to your local ExtraView installation of Perl – usually this is `/usr/local/extraview/perl`.

You should have a folder called `evapi`. Rename that folder to `evapi_old`. Untar `evcli_unix.tar` and rename the resulting directory to `evcli`.

```
tar xvf evcli_unix.tar
mv evjxx-yyy_evcli evcli
```

Now edit `evconfig.txt`. If you do not use the `evmail` utility, you only need to set one configuration setting:

```
SERVER = extraview.yourdomain.com/evj/ExtraView
```

Set this to point to your specific URL used to access ExtraView.

If you do use `evmail`, please note that there have been some changes to the regular expressions used to parse the subject line - you can copy the lines from your existing `evconfig.txt` in `evapi_old`, but please note that if you have changed the default subject `REGEX`, you will need to make that change again to the new configuration setting `EVMAIL_ID_REGEX`. If you have any questions, please contact ExtraView Corporation.

Now you can make the Perl commands executable:

```
chmod +x ev* manifest.pl
```

You need to change the first line of each Perl command to point to your current installation of Perl for ExtraView. Use the following command, replacing `$PERL_HOME` with the location of your ExtraView Perl installation:

```
$PERL_HOME/bin/perl -p -i -e
"s#/usr/local/bin/perl#$PERL_HOME/bin/perl#" ev* manifest.pl
```

Step 6: Restart ExtraView

The upgrade process is now complete. You must stop and restart the Apache Tomcat and Apache servers before signing on to ExtraView version 6.

To stop and restart Apache:

```
cd /usr/local/extraview/apache/bin
./apachectl restart (as root or using sudo)
```

To stop and restart Apache Tomcat to load the new version of ExtraView

```
cd /usr/local/extraview/tomcat/bin
./shutdown.sh
./startup.sh
```

You should now be able to log in to ExtraView and be running version 6.

Step 7: Patching the Oracle Database Software

This step is only required if you are running Oracle as your DBMS.

ExtraView has been affected by bugs in a number of Oracle releases. If you are running one of these Oracle releases, you should patch your installation. If you have access to Oracle Metalink, you should download the patch set from there. If not, ExtraView Corporation can provide you with information on how to retrieve the appropriate patch set. There are detailed instructions in the README file.

Oracle needs to be patched if on any of the following releases:

- 8.1.7, earlier than 8.1.7.4
- 9.0.1, earlier than 9.0.1.4
- 9.2, earlier than 9.2.0.6

If you are running Oracle Database 8i and wish to migrate your database to Oracle 9i, it is recommended that upgrade go to 9.2, since 9.0 is no longer supported by Oracle. As this is supported but not required by ExtraView 6.0, the procedure is not included in these instructions. If you are upgrading to Oracle10g, we strongly recommend 10.2.0.3 or higher, as there were bugs in the earlier versions of Oracle 10g that affect ExtraView.

Step 8: Post upgrade tasks

You will only have to perform this step if you are upgrading from a release earlier than 4.3.6 and you have been using the ExtraView Business Rules. The rules have been moved from the `rules.txt` file into the database. Log in to ExtraView as an administrator user and go to **Administration → Workflow → Setup and Maintain Business and Email Rules**. Copy the contents of the file:

```
evj_old/WEB-INF/configuration/rules.txt
```

into the rules section on the screen, and then press Update to save your changes.

Removing the BatchMail Utility

If you are upgrading from any previous version of ExtraView to version 6, you will have previously installed a standalone utility called BatchMail installed on your server. This utility was used to deliver outbound ExtraView email notifications. Starting in version 6 this utility is built into the ExtraView application, so during the upgrade to 6.x, you should turn off and/or uninstall the standalone BatchMail utility.

BatchMail is generally installed in `/usr/local/extraview/BatchMail` and is controlled via two shell scripts `startMail` and `stopMail`. You will likely have added these shell scripts to your UNIX or Linux startup scripts – you can simply remove those lines, or comment them out.

You should run the `stopMail` shell script to stop the current BatchMail process, or simply kill the process.

You can rename the `BatchMail` folder to `BatchMail.old` in case you want to roll back to the previous version of ExtraView.

Configuring the Built-in BatchMail Utility

ExtraView will generate outbound email messages when issues are created or updated, when escalation routines are triggered, or when the Ad Hoc Email feature is used. These email message files are saved to a folder on the application server, defined in the `EMAIL_DIRECTORY` behavior setting. There is only one `EMAIL_DIRECTORY` location per ExtraView application – regardless of whether you are running a single instance, or if you are clustered or load-balanced across one or more servers.

The BatchMail task in version 6 is a utility that polls the `EMAIL_DIRECTORY` location on a timed basis, and if it finds any email messages in the folder, it uses your mail server to deliver the email message to the recipients specified.

To configure the BatchMail utility, you must set the SMTP server and mail directory locations. Within the ExtraView administration screens, you will then create and configure a BatchMail Task, and configure the application to write the email messages in the `EMAIL_DIRECTORY` location.

Edit the file `BatchMail.properties`, located in the `tomcat/webapps/evj/WEB-INF/configuration` folder.

old line	`MAIL_SERVER=mail.yourdomain.com`
new line	`MAIL_SERVER=<=<name of a valid SMTP server>`
old line	`MAIL _DIR=C:\ExtraView\apache-tomcat-5.5\webapps\evj\WEB-INF\mailbox`

new line	`MAIL_DIR=<=<path to where ExtraView will write email messages`

The default location for the mailbox directory is `tomcat/webapps/evj/WEB-INF/mailbox`, but you can provide any absolute path.

In order to activate email notification, the following behavior settings must be configured from the ExtraView web interface. In the ExtraView administration section **Administration → Email Settings**, set the following behavior settings:

`EMAIL_DIRECTORY`	Must be set to the same value as MAIL_DIR in BatchMail configuration file. This is /usr/local/extraview/tomcat/webapps/evj/WEB-INF/mailbox in the example above. Both the application servers and the BatchMail services must have read and write access to this location.
`EMAIL_FROM_USER_ID`	Must be set to a valid email address
`EMAIL_NOTIFICATION`	Must be set to YES for email notification to be turned on

You can get more information about the other email settings in the Administration Guide

You must also set up the BatchMail Task. Go to the ExtraView administration section **Administration → System Controls → Manage the background tasks.** First, verify that you currently have at least 2 each of `SESSION_MONITOR` and `TASK_CONTROL_TASK` tasks in the list, and that at least one of each of these tasks has a current status of **STARTED**.

Click on the **Add a new task** button. From the drop down Task name list, select **Batch mail**. Enter a title for this new task. From the Node ID drop down list, select the node on which you wish to run the BatchMail task.

If you have a standard installation, the current node id will be **WS_A** (this is the `WEB_SERVER_NAME` value from the `Configuration.properties` file for the current instance).

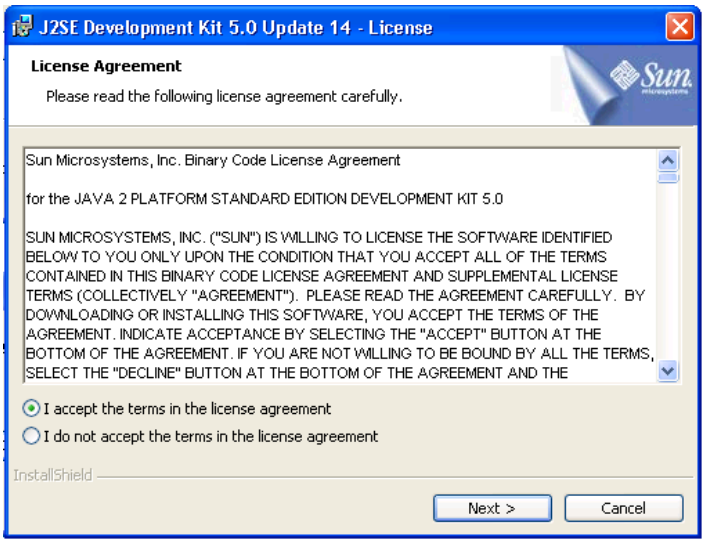
If you are running in a clustered or load-balanced environment, and if all of the instances (nodes) are on the same server, you should set up one BatchMail task to be shared by all nodes. If each node is on a separate server, you can either set the `MAIL_DIR` to a location accessible by all nodes and have a single task on one node, or you can build a location mapping to `MAIL_DIR` on each node, and have each node running its own BatchMail task.

Tomcat Application Server – Windows OS – Oracle and MSSQL Databases

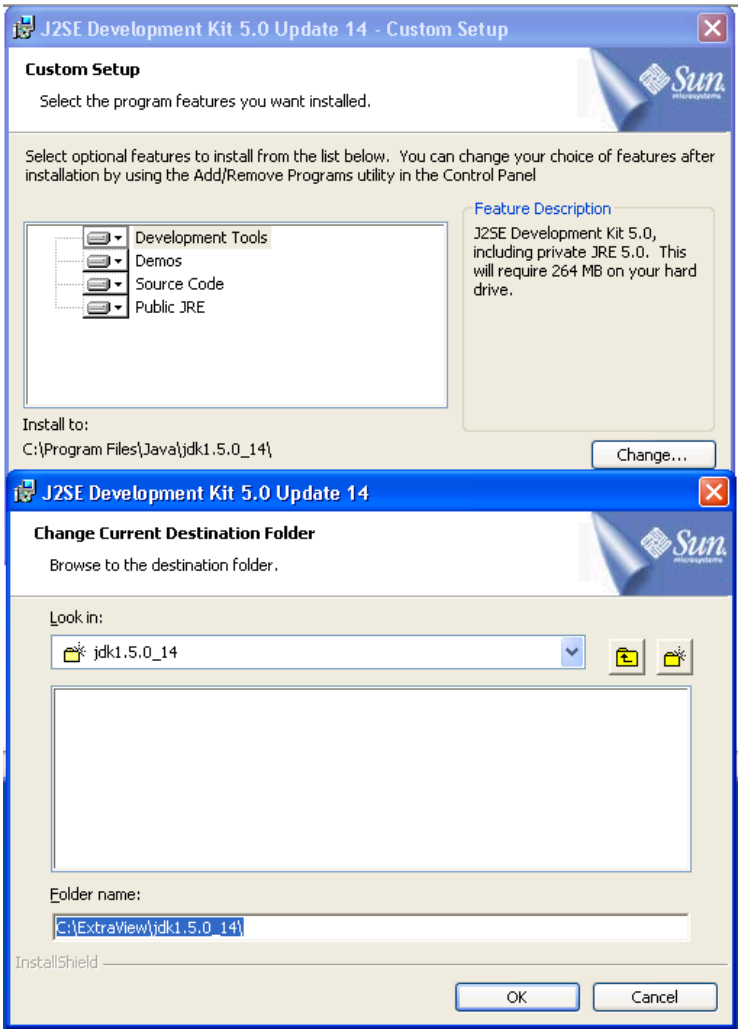
Step 1: Upgrading the ExtraView Support Software

Install Java

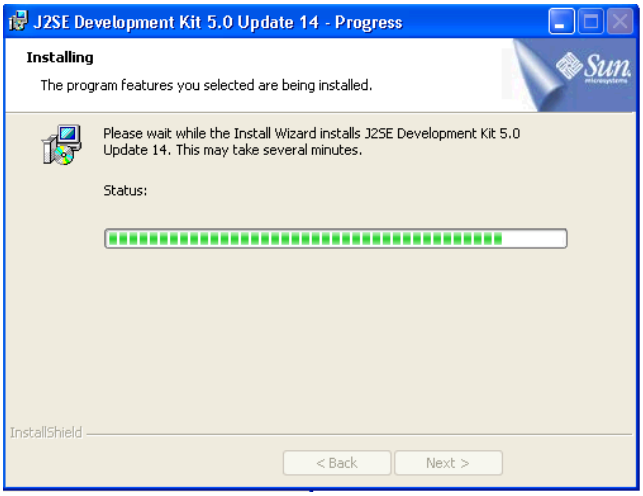
It is important that you install the Java J2SE, as the JRE does not contain everything that is needed to run Apache Tomcat version 5.5. To install, double-click on the file named `jdk-1_5_0_14-windows-i586-p.exe`. When asked to select an install folder, enter `C:\ExtraView\jdk1.5.0_14`, or the corresponding path for your system where you want to install Java.



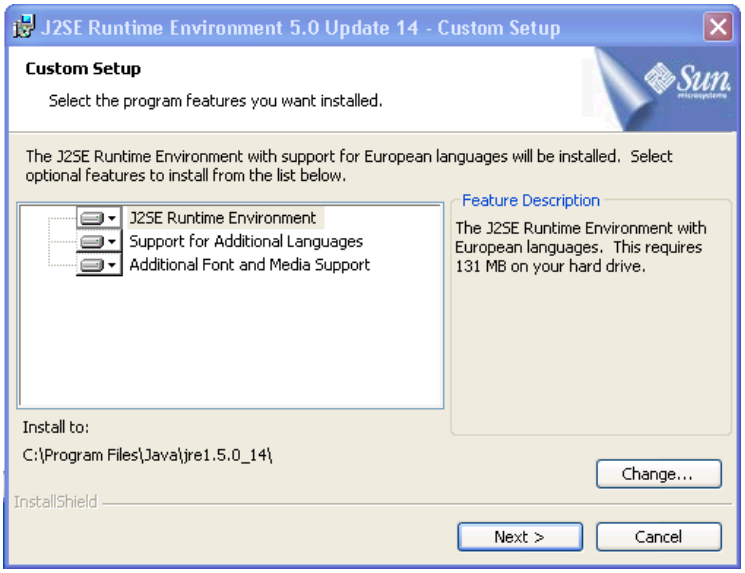
Use the defaults with the exception that you should alter the destination folder name to `C:\ExtraView\jdk1.5.0_14`.

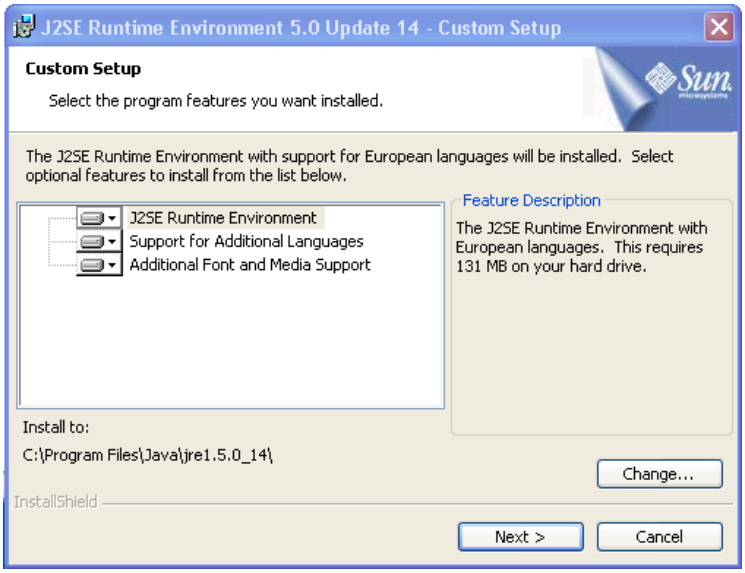


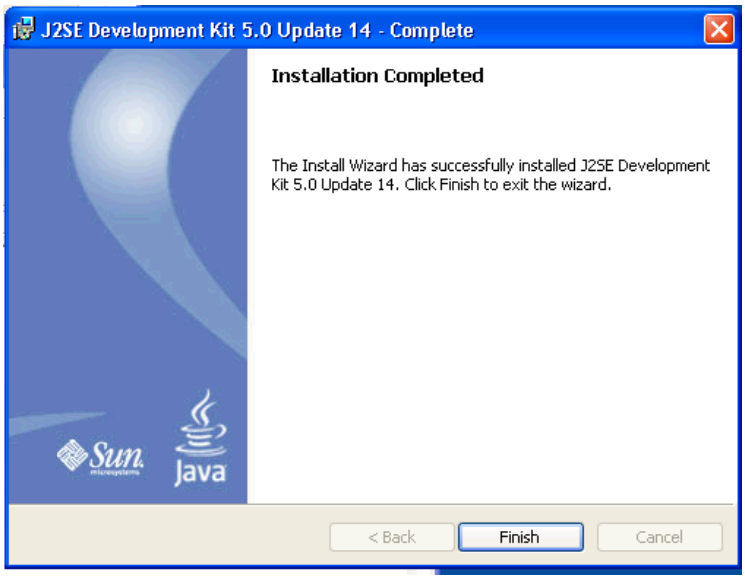
Allow the first part of the installation to complete:



The second part of the installation proceed by accepting the default options:

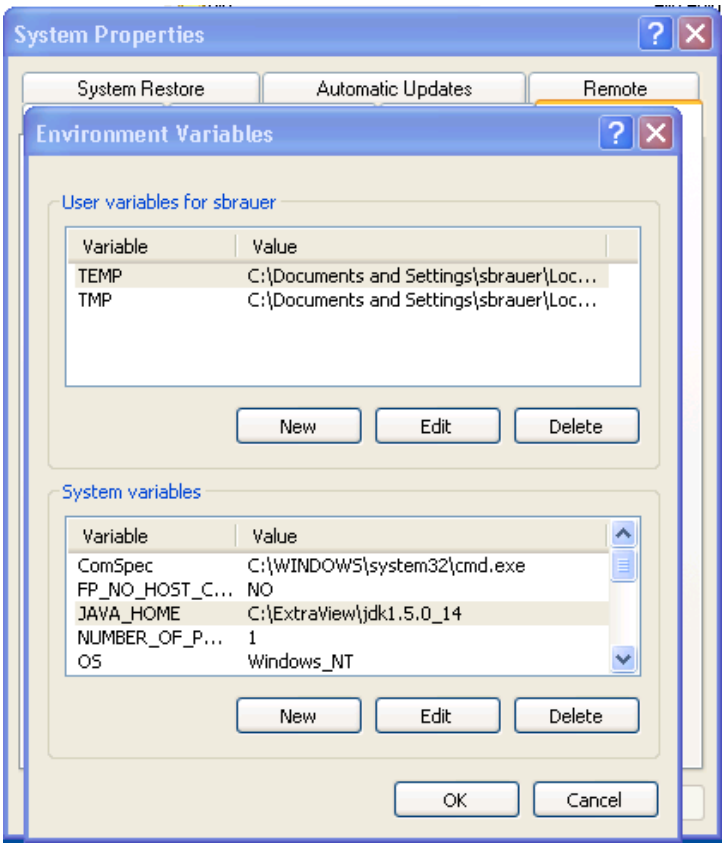






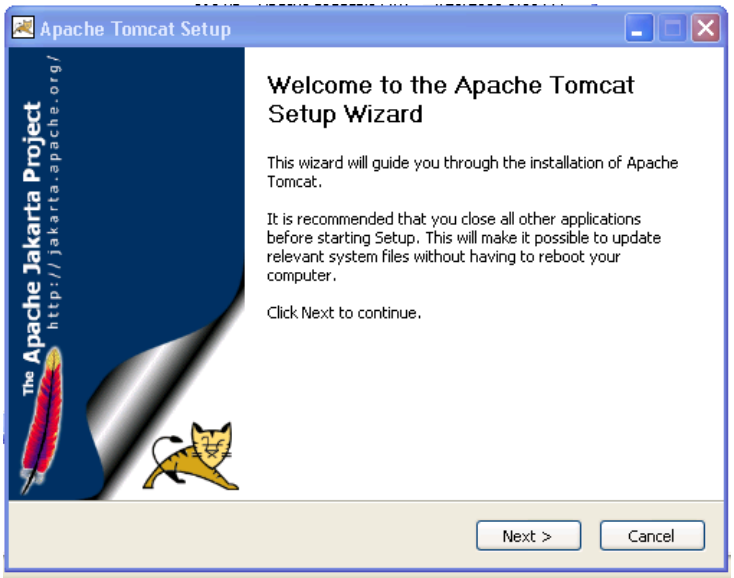
Now, go to the Windows Control Panel and select System. Select the Advanced tab and click on Environment Variables.. Under System Variables, define the variable `JAVA_HOME` as the directory where you installed Java:

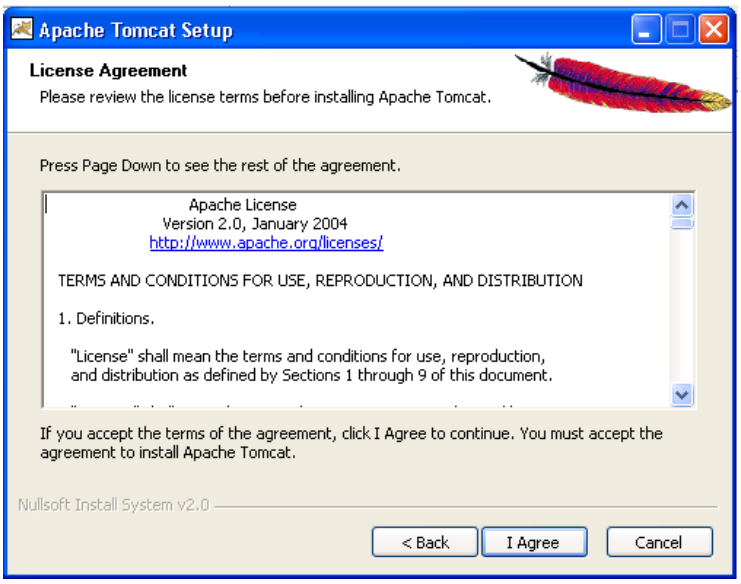
```
JAVA_HOME=C:\Extraview\jdk1.5.0_1
```



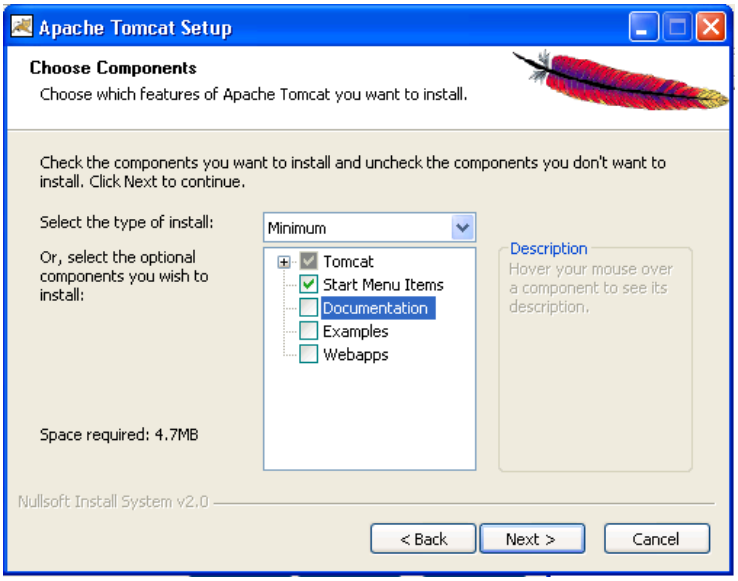
Install Apache Tomcat

Double-click on the downloaded file named apache-tomcat-5.5.25.exe.



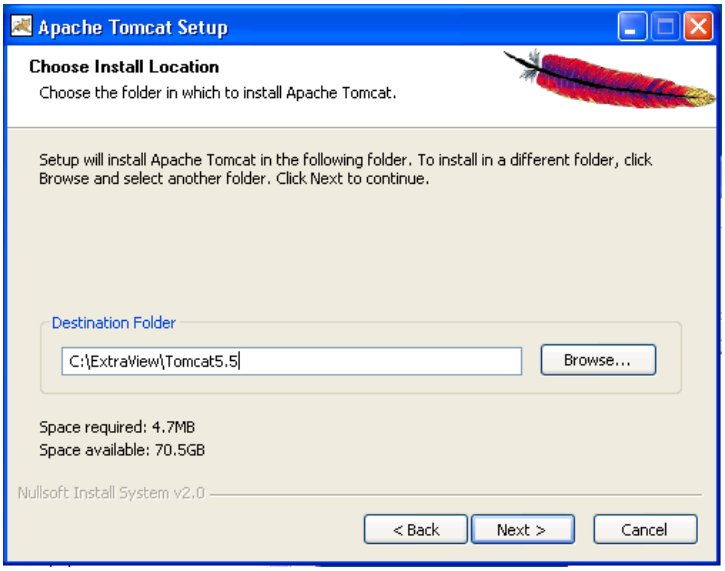


Install a minimum of the **Tomcat** and **Start Menu Items**.

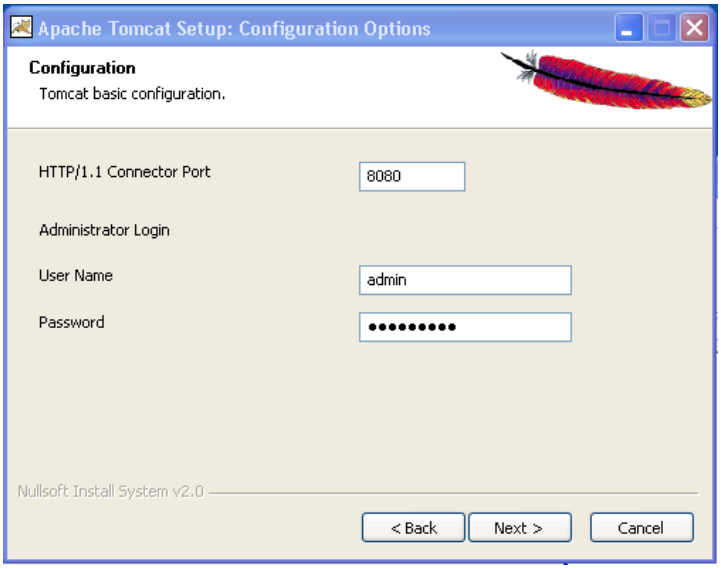


When asked to select an install folder, enter `C:\ExtraView\Tomcat5.5`, or the corresponding value for your system.

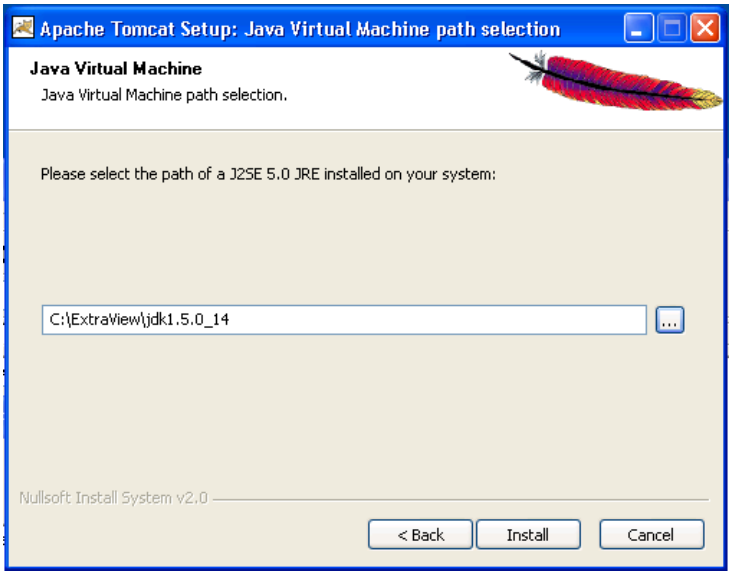
Note: The destination folder name suggested by the installer has a space character following Tomcat (Tomcat 5.5). This does not work in Windows, so make sure to remove the space.

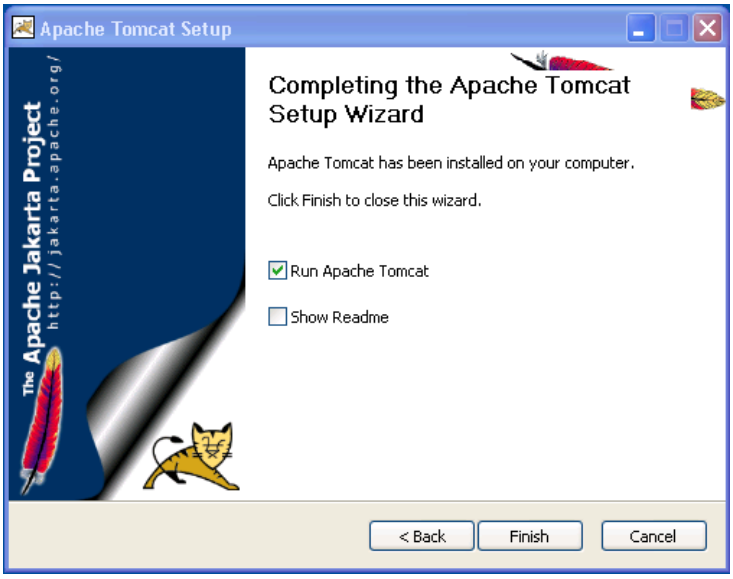


Ensure you make a note of the password you enter for the Administrator Login.



When you are asked which Java to use, make sure to enter the Java you installed in the previous step.

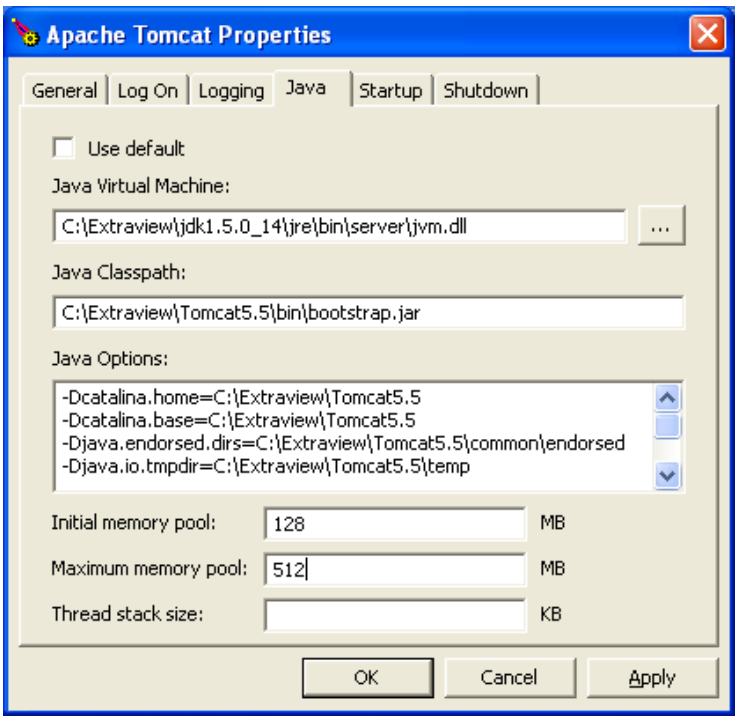




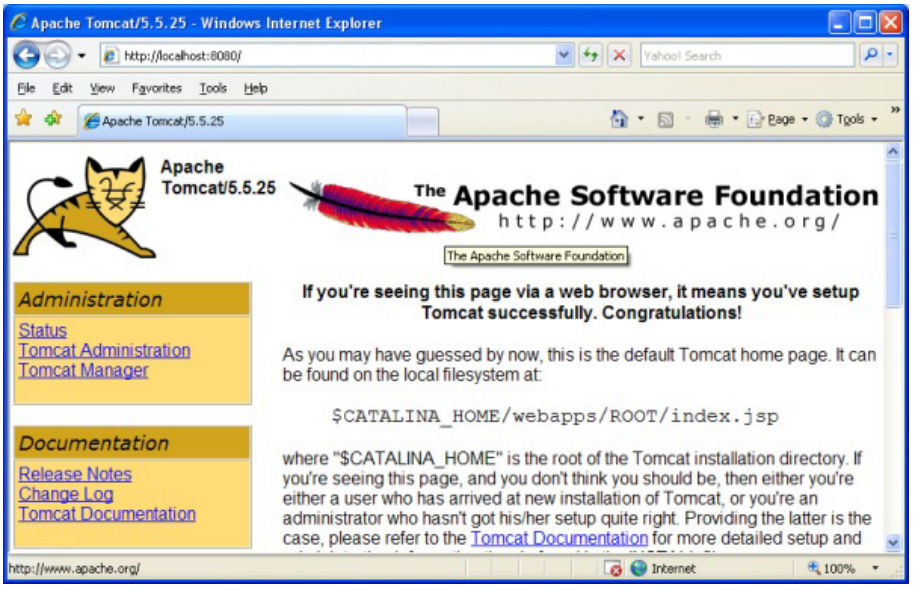
The next step is to configure sufficient memory for Tomcat Open the Tomcat configuration tool located at: **Program Files→ Apache Tomcat 5.5 → Configure Tomcat,** or if the Tomcat Service is running right click the tray icon and select the **Configure** option.

Set the memory parameters to a minimum of:

- 128 MB for Initial memory pool
- 512 MB for Maximum memory pool



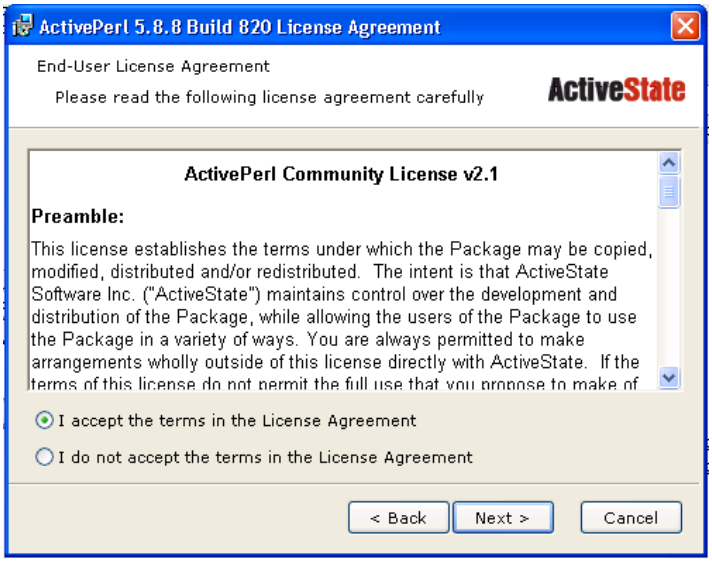
Enter `http://localhost:8080` into a local browser; you should see the following Tomcat test page:



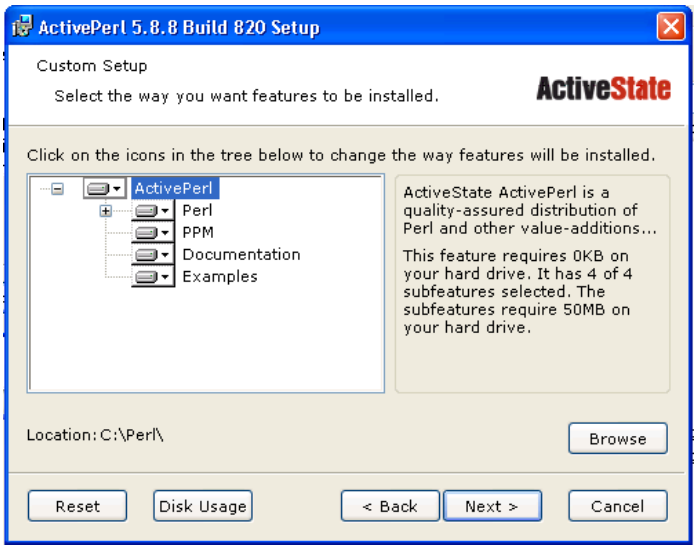
Install Perl

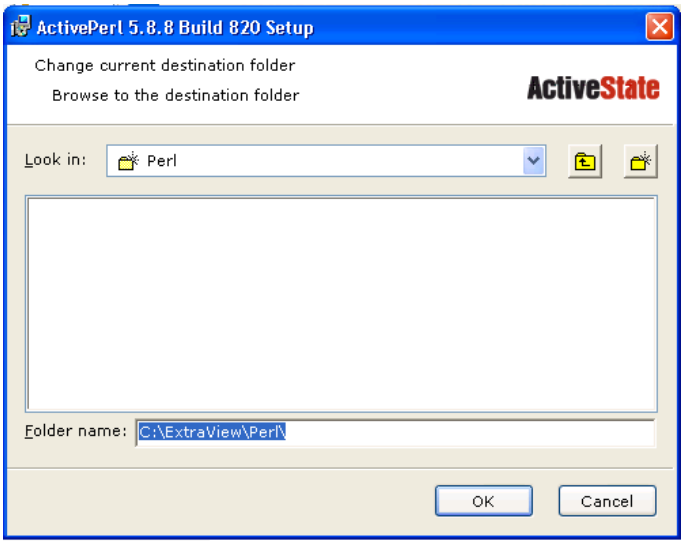
Double-click on the file named `ActivePerl-5.8.8.820-MSWin32-x86-274739.msi`. When asked to select an install folder, enter `C:\ExtraView\Perl`, or the corresponding value for your system.

Accept the License Agreement to continue:

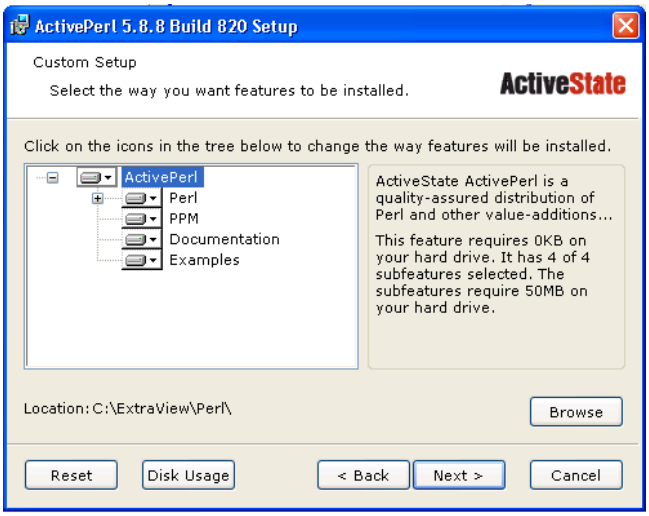


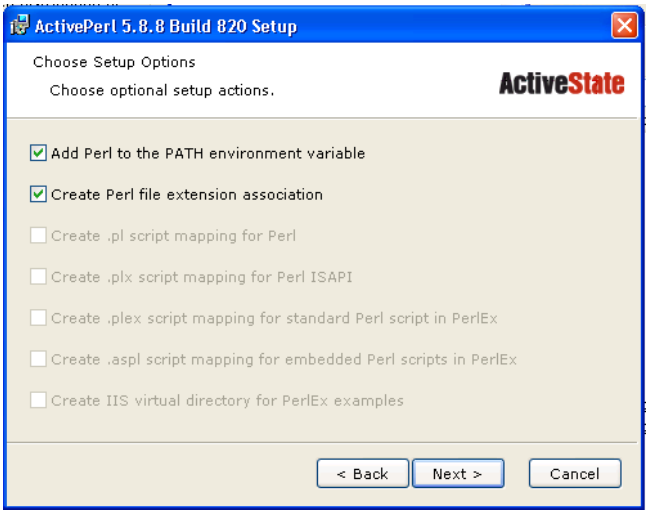
Click the **Browse** button and set the destination folder to `C:\ExtraView\Perl\.`

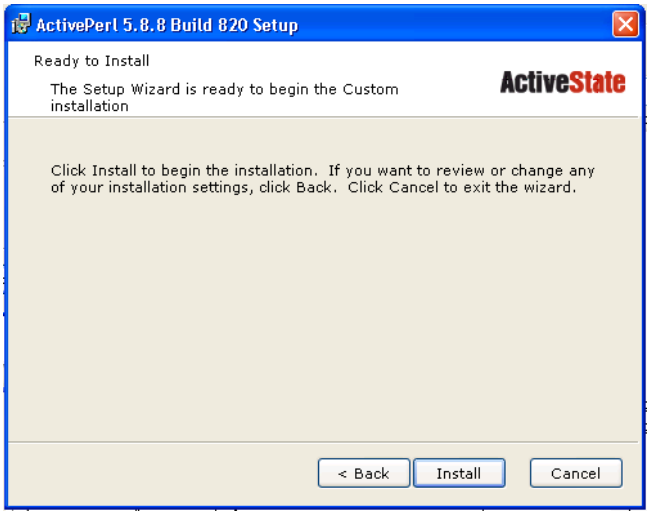


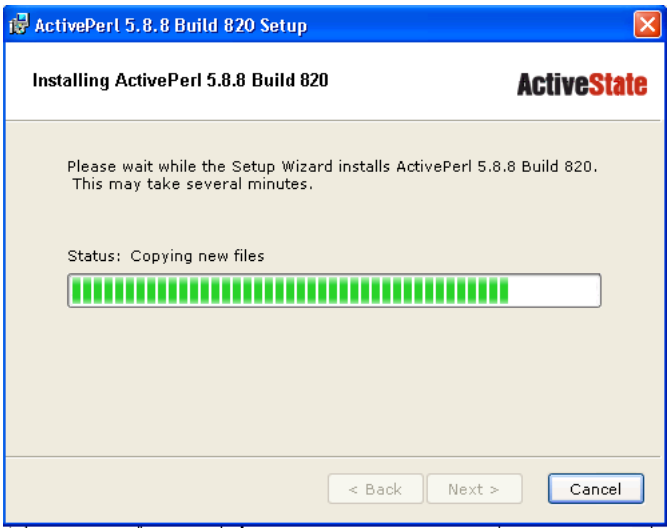


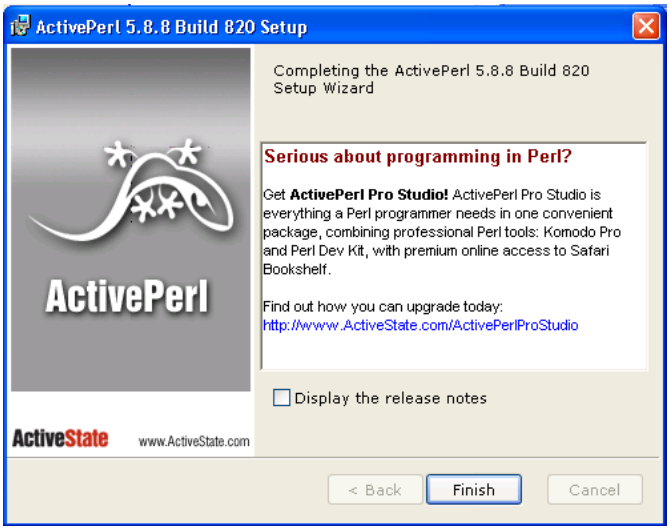
When you click the **OK** button you will return to the **Selection Page**. Click **Next** to continue.


ActivePerl 5.8.8 Build 820 Setup
Custom Setup
Select the way you want features to be installed.
ActiveState
Click on the icons in the tree below to change the way features will be installed.
ActivePerl
Perl
PPM
Documentation
Examples
ActiveState ActivePerl is a quality-assured distribution of Perl and other value-additions...
This feature requires 0KB on your hard drive. It has 4 of 4 subfeatures selected. The subfeatures require 50MB on your hard drive.
Location: C:\ExtraView\Perl\
Browse
Reset
Disk Usage
< Back
Next >
Cancel


ActivePerl 5.8.8 Build 820 Setup
Choose Setup Options
Choose optional setup actions.
ActiveState
Add Perl to the PATH environment variable
Create Perl file extension association
Create .pl script mapping for Perl
Create .plx script mapping for Perl ISAPI
Create .plex script mapping for standard Perl script in PerlEx
Create .aspl script mapping for embedded Perl scripts in PerlEx
Create IIS virtual directory for PerlEx examples
< Back
Next >
Cancel


ActivePerl 5.8.8 Build 820 Setup
Ready to Install
The Setup Wizard is ready to begin the Custom installation
ActiveState
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
< Back
Install
Cancel





To complete the Perl installation, extract the contents of the `site-addon.tar.gz` to the `C:\Extraview\Perl` folder.

ExtraView 6 requires java JRE 1.5.0_14 or higher (not JRE 1.6). Since Tomcat 5 and higher require the JDK rather than the JRE, these instructions will cover how to install that software. If your system is on an earlier version of Java, you need to upgrade to the required version. We also strongly recommend upgrading to Tomcat 5.5.

If your system is already using JDK version 1.5.0_14 or higher, you can skip directly to Step 2 now.

Please follow the instructions below to install this version of Java and to change your Tomcat scripts to use this new version.

Step 2: Upgrading the ExtraView Web Application

The ExtraView web application is generally installed under

```
C:\ExtraView\<your tomcat version>\webapps
```

We suggest that your ExtraView application be installed in a folder named `evj` under this `webapps` folder. This will make your ExtraView application default URL

```
http://yourserver.yourdomain.com/evj/ExtraView
```

although you can change your web server settings later as well to provide

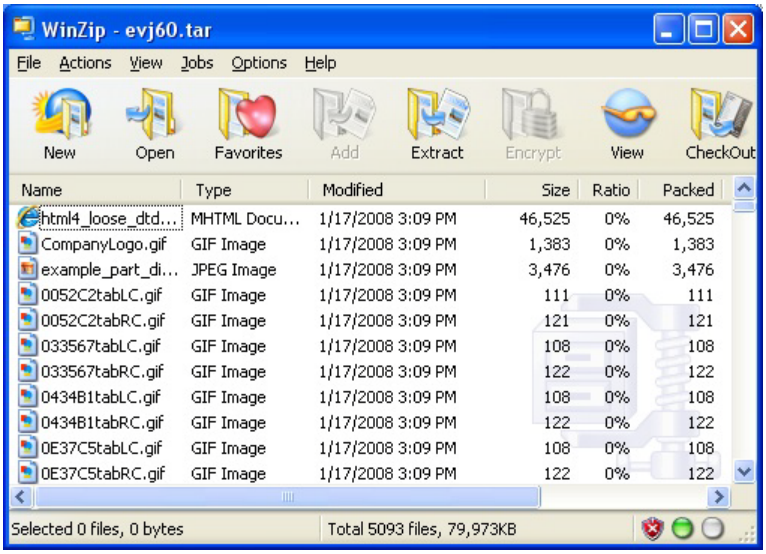
```
http://yourserver.yourdomain.com
```

as ExtraView's URL address.

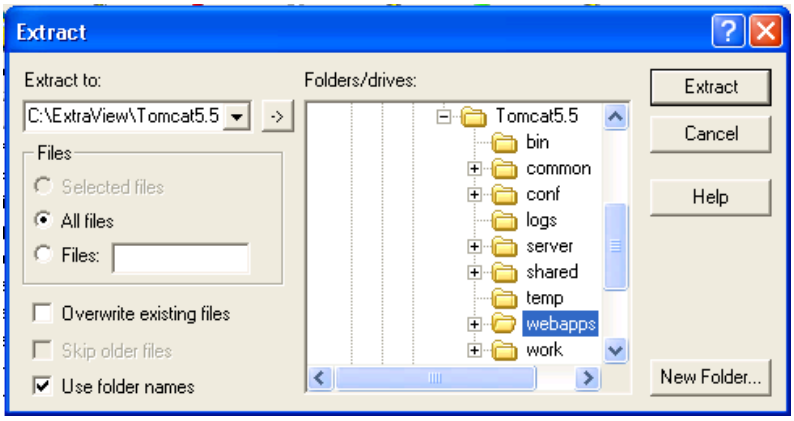
Once you have located your application folder under `webapps`, please rename this folder so that it is not overwritten in the next step. (i.e. rename `evj` to `evj.old`)

Installation of ExtraView

Use WinZip to expand the file called `evjXXX.tar`, where `XXX` is the version number of ExtraView that you are installing.



When asked to select a folder to extract to, enter `C:\ExtraView\Tomcat5.5\webapps`, or the corresponding value for your system. A directory called `evjXXX` will be automatically appended to the path that you select.



Stop the Apache Tomcat service so that you can rename the directory called `evjXXX` to `evj`, and complete the following steps.

Edit the `Configuration.properties` file to populate the needed parameters. You should bring over any settings from your existing file in the path `evj.old/WEB-INF/configuration.`

DB_HOST	The IP address, localhost or fully qualified name for your database server
DB_SID	This is the name of your database
DB_USER	This is the name of the database user created previously
DB_PASSWORD	This is the password for the above database user
HOST	Same as DB_HOST
DB_URL	Make sure that the correct entry is uncommented and edited for your DBMS (Oracle or MSSQL).). The entry for HOST should be set to the same as DB_HOST above. The entry for SID should be set to the same as DB_SID above
JDBCDriver	Make sure that the correct entry is uncommented and edited for your DBMS (Oracle or MSSQL))
DBMS_INTERFACE	Make sure that the correct entry is uncommented and edited for your DBMS (Oracle or MSSQL))

Note: Even though this is a Windows installation, you must use forward slashes "/" in paths in the `Configuration.properties` file..

The following is an example of the `Configuration.properties` file using Oracle as the database::

```
# evj production
DB_HOST     = localhost
DB_SID      = ev
DB_USER     = extraview
DB_PASSWORD = password
DB_URL      =
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(HOST=localhost)(PROTOCOL=tcp)(PORT=1521))(CONNECT_DATA=(SID=ev )))
JDBCDriver  = oracle.jdbc.driver.OracleDriver

# Which DBMS interface to use
DBMS_INTERFACE = com.extraview.dbms.oracle.OracleDbms
```

The following is an example of the `Configuration.properties` using MSSQL as the database::

```
# evj production
DB_HOST     = localhost
DB_SID      = extraview
DB_USER     = extraview
DB_PASSWORD = gVHrxk14UE

# jTDS driver
JDBCDriver = net.sourceforge.jtds.jdbc.Driver
DB_URL     = jdbc:jtds:sqlserver://localhost:1433/extraview

# Which DBMS interface to use
#DBMS_INTERFACE = com.extraview.dbms.oracle.OracleDbms
DBMS_INTERFACE = com.extraview.dbms.mssql.MssqlDbms
```

If you are running MSSQL:

Starting with ExtraView 5.x, a JDBC driver was provided for MSSQL installations. If you are upgrading from 4.x, you should no longer use the Sprinta JDBC driver that was required in previous versions of ExtraView.

Next, copy over the files from your existing installation that are specific to your installation:

Copy file	`evj_old\images\CompanyLogo.gif`
	to
	`evj\images`
Copy folder	`evj_old\WEB-INF\user_templates`
	to
	`evj\WEB-INF`

If you have user custom JavaScript code that was written either by ExtraView Corporation or by your developers, you should add any of your custom methods in the `evj_old/javascript/user_javascript/UserJavascript.js` file to the new file in `evj/javascript/user_javascript`. If you have questions about this step, please contact the ExtraView support team.

You may or may not have files in the `user_javascript` and `user_templates` folders, depending on your initial installation.

If you have customized images other than the company logo (CompanyLogo.gif), those have to be copied as well. Depending on your installation, you may have installed images for additional locales. You then have to perform the same action for each locale, by replacing `en_US` with the appropriate directory name. If you are upgrading from ExtraView 4.x or 5.x to 6.x, and you have a custom image set, please contact ExtraView support to get further information on updating your image set for the this version of ExtraView.

Copy folder `evj_old\locales\en_US\images\images_custom`

to

`evj\locales\en_US\images`

At this point, you can compare your

`evj_old\WEB-INF\configuration\Configuration.properties`

with the current file to determine if you have made any other changes that you wish to maintain. In particular:

- Look for any LDAP or SSO fields that you may have configured
- There are also several lines relating to the ConnectionPool settings – if your existing settings are higher than the defaults, or if you have changed your settings to appropriate numbers for your system, you should copy the old settings into the new `Configuration.properties` file.

UserCustom Class Upgrade

If you have User Custom code implemented, please review the name of your User Custom class:

```
C:\ExtraView\<your tomcat version>\webapps\evj\WEB-INF
\classes\com\extraview\usercustom
```

If the class is named `UserCustom.class`, then you must contact ExtraView Corporation in order to upgrade your User Custom code. If it is named something similar to `YOURCOMPANYUserCustom.class`, then it is safe to simply copy the classes directory over to the new `evj` tree.

Copy the directory

`C:\ExtraView\<your tomcat version>\webapps\evj_old\WEB-INF\classes`

to

`C:\ExtraView\<your tomcat version>\webapps\evj\WEB-INF\classes`

Step 3: Upgrading the ExtraView database

You must backup your database before performing this step. ExtraView

Corporation cannot guarantee that upgrades will complete successfully, therefore it is essential that you are able to revert to your existing installation.

You should take a full export of your database before running any of the following upgrade scripts. This will allow you to roll back to the previous version of ExtraView if there are any problems arising from the upgrade.

Edit the following file:

```
C:\ExtraView\<your tomcat version>\webapps\evj\WEB-
INF\data\runWindows.bat
```

Replace the following lines with the appropriate values for your system:

```
runPatches.bat D:\ExtraView\jdk-1.5.0_14 D:\ExtraView\apache-
tomcat-5.5.20 D:\ExtraView\apache-tomcat-5.5.20\webapps\evj
```

Replace `D:\ExtraView\jdk-1.5.0_14` with your path to your Java

Replace `D:\ExtraView\apache-tomcat-5.5.20` with your path to your Tomcat

Replace `D:\ExtraView\apache-tomcat-5.5.20\webapps\evj` with your path to your `evj` folder.

Now save and exit from the editor.

To upgrade the database, run the following command from a DOS window:

```
runWindows.bat
```

The upgrade process initiated by the above command looks at your installation to determine exactly which version of code and which version of the database schema is active. The process will then apply all the patches to bring your system up to the version 6 level. Some patches are very simple, some are more complex, and many take time dependent on the amount of data in your database.

As the individual patches are applied, you will see many lines of text scroll past on the screen. At some point, depending on the amount of data in your system, the patches may appear to "hang" while they perform large operations on the database – allow a reasonable amount of time (possibly 20 minutes or more) before you assume there is a problem with any individual part of the upgrade process. If you have any questions, please contact ExtraView Corporation.

Once the script has finished running, and you are returned back to a command prompt, and your upgrade to the database is complete.

For your reference, there is a log of the changes made to the database in the directory named `\tomcat\webapps\evj\WEB-INF\logs`. These are held in a `.log` file (the exact name is specified in the `Configuration.properties` file). It is recommended that you save that file until you have verified your upgrade, so that the ExtraView Support can review this with you if you run into any issues.

To upgrade the database, please now run `runWindows.bat` from a Windows Command line so that you can monitor the progress of the upgrade.

Step 4: Installing the ExtraView License Key

If you are currently running 5.2.x, you can skip this section.

If you are upgrading from a 4.x or 5.0.x version of ExtraView to a 6.x version of ExtraView, you will need to install the new license key provided to you by ExtraView Support. If you have not received a new license key file, please contact ExtraView Corporation as you will not be able to complete this installation without this file.

Copy the license.xml file that you received into the following directory:

```
C:\ExtraView\<your tomcat version>\webapps\evj\WEB-INF\data
```

Edit the following file:

```
C:\ExtraView\<your tomcat version>\webapps\evj\WEB-
INF\data\installKeyWindows.bat
```

Replace the following lines with the appropriate values for your system:

```
installKey.bat D:\ExtraView\jdk-1.5.0_14 D:\ExtraView\Tomcat5.5
D:\ExtraView\Tomcat5.5\webapps\evj %1
```

Replace `D:\ExtraView\jdk-1.5.0_14` with the path to your Java

Replace `D:\ExtraView\Tomcat5.5` with the path to your Tomcat

Replace `D:\ExtraView\Tomcat5.5 \webapps\evj` with the path to your `evj` folder

Replace `%1` with the name of the xml file that you have copied into the data folder

To install the license key, run `installKeyWindows.bat` from a Windows Command line so that you can monitor the progress of the utility.

Step 5: Upgrading the CLI

If you do not use the ExtraView command line interface, you can skip this step. If you are installing it for the first time, please refer to the **ExtraView Installation and Configuration** guide for full instructions.

Copy the `evcli_windows.zip` file from

```
C:\ExtraView\<your tomcat version>\webapps\evj\WEB-INF\data
```

to your local ExtraView installation of Perl – usually `C:\extraview\perl`

You should have a folder called `evapi`. Rename that folder to `evapi_old`. Unzipping `evcli_windows.zip` will result in a directory called `evjxx-yyy_evcli`. Rename that directory to `evcli`

Now edit `evconfig.txt`. If you do not use `evmail`, you only need to set one configuration setting -

```
SERVER = extraview.yourdomain.com/evj/ExtraView
```

Set this to point to your specific URL used to access ExtraView.

If you do use `evmail`, please note that there have been some changes to the regular expressions used to parse the subject line - you can copy the lines from your existing `evconfig.txt` in `evapi_old`, but please note that if you have changed the default subject `REGEX`, you will need to make that change again to the new configuration setting `EVMAIL_ID_REGEX`. If you have any questions, please contact ExtraView Corporation.

Step 6: Restarting ExtraView

The upgrade process is now complete. You must stop and restart the Apache Tomcat and Apache servers before signing on to ExtraView version 6. You can do this by stopping and restarting the Apache and Apache Tomcat services from your Windows Services console.

You should now be able to log in to ExtraView and be running version 6.

Step 7: Patching the Oracle Software – If using Oracle

This step is only required if you are running Oracle as your DBMS.

ExtraView has been affected by bugs in a number of Oracle releases. If you are running one of these Oracle releases, you should patch your installation. If you have access to Oracle Metalink, you should download the patch set from there. If not, ExtraView Corporation can provide you with information on how to retrieve the appropriate patch set. There are detailed instructions in the README file.

Oracle needs to be patched if on any of the following releases:

- 8.1.7, earlier than 8.1.7.4
- 9.0.1, earlier than 9.0.1.4
- 9.2, earlier than 9.2.0.6

If you are running Oracle Database 8i and wish to migrate your database to Oracle 9i, it is recommended that upgrade go to 9.2, since 9.0 is no longer supported by Oracle. As this is supported but not required by ExtraView 6.0, the procedure is not included in these instructions. If you are upgrading to Oracle10g, we strongly recommend 10.2.0.3 or higher, as there were bugs in the earlier versions of Oracle 10g that affect ExtraView.

Step 8: Post upgrade tasks

You will only have to perform this step if you are upgrading from a release earlier than 4.3.6 and you have been using the ExtraView Business Rules. The rules have been moved from the `rules.txt` file into the database. Log in to ExtraView as an administrator user and go to **Administration -> Workflow -> Setup and Maintain Business and Email Rules**. Copy the contents of the file:

```
evj_old\WEB-INF\configuration\rules.txt
```

into the rules section on the screen, and then press Update to save your changes.

Removing the BatchMail Utility

If you are upgrading from any previous version of ExtraView to version 6, you will have a standalone utility called BatchMail installed on your server. This utility was used to deliver outbound ExtraView email notifications. Starting in version 6 this utility is built into the ExtraView application, so during the upgrade to 6.x, you should turn off and/or uninstall the standalone BatchMail utility.

BatchMail is generally installed in `c:/Extraview/BatchMail` and is controlled via a Windows service. You should stop the `ExtraViewBatchMail` service and change it so that it does not start automatically.

Once you have completed the upgrade and verified that all is working, you can return to this guide and complete the un-installation of the `ExtraViewBatchMail` service. We recommend that you wait until you are satisfied with the upgrade before completing this step, so that you can roll back to your previous version of ExtraView if need be.

In the scripts folder of your BatchMail installation (usually this can be found at `C:\ExtraView\BatchMail\scripts`) locate

If you are using `BatchMail` as a Windows Service, you will need to remove the service, and re-create it once you have changed the Java home.In your `BatchMail/scripts` folder, you should have two filesthe file:

```
ExtraViewBatchMail.exe
installExtraViewBatchMail.bat
```

Start a Windows Command prompt and run the following command:

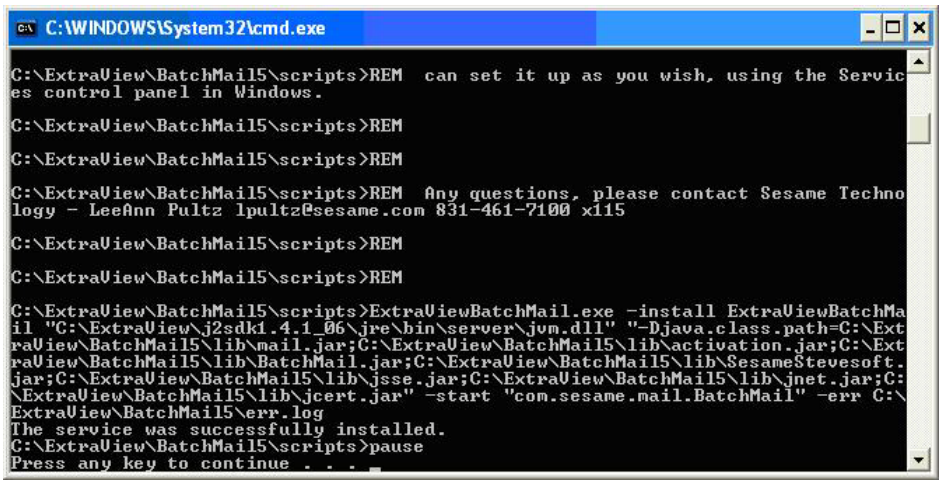
```
ExtraViewBatchMail –uninstall ExtraViewBatchMail
```

Edit `installBatchMailService.bat` and follow the instructions at the top of this file to put in the correct values for your new java JVM DLL file.

If necessary edit the file `BatchMail\scripts\installBatchMailService.bat` according to instructions in top of the file.

```
ExtraViewBatchMail.exe -install ExtraViewBatchMail
"C:\ExtraView\j2sdk1.4.1_06\jre\bin\server\jvm.dll" "-
Djava.class.path=C:\ExtraView\BatchMail5\lib\mail.jar;C:\ExtraView\BatchMail5\lib\activation.jar;C
:\ExtraView\BatchMail5\lib\BatchMail.jar;C:\ExtraView\BatchMail5\lib\SesameStevesoft.jar;C:\ExtraV
iew\BatchMail5\lib\jsse.jar;C:\ExtraView\BatchMail5\lib\jnet.jar;C:\ExtraView\BatchMail5\lib\jcert
.jar" -start "com.sesame.mail.BatchMail" -err C:\ExtraView\BatchMail5\err.log
pause
```

double-click on the file `installBatchMailService.bat`



Configuring the Built-in BatchMail Utility

ExtraView will generate outbound email messages when issues are created or updated, when escalation routines are triggered, or when the Ad Hoc Email feature is used. These email message files are saved to a folder on the application server, defined in the `EMAIL_DIRECTORY` behavior setting. There should be only one `EMAIL_DIRECTORY` location per ExtraView application – regardless of whether you are running a single instance, or if you are clustered or load-balanced across one or more servers.

The BatchMail task is a utility that polls the `EMAIL_DIRECTORY` location on a timed basis, and if it finds any email messages in the folder, it uses your SMTP mail server to deliver the email message to the recipients specified.

To configure the BatchMail utility, you must set the SMTP server and mail directory locations. Within the ExtraView administration screens, you will then create and configure a BatchMail Task, and configure the application to write the email messages in the `EMAIL_DIRECTORY` location.

Edit the `BatchMail.properties` file, located in your `tomcat/webapps/evj/WEB-INF/configuration` folder.

old line `MAIL_SERVER=mail.yourdomain.com`

new line `MAIL_SERVER=<=<name of a valid SMTP server>`

old line `MAIL _DIR=C:\ExtraView\apache-tomcat-5.5\webapps\evj\WEB-INF\mailbox`

new line `MAIL_DIR=<=<path to where ExtraView will write email messages`

The default location for the mailbox directory is `tomcat/webapps/evj/WEB-INF/mailbox`, but you can provide any absolute path.

In order to activate email notification, the following behavior settings must be configured from the ExtraView web interface. In the ExtraView administration section **Administration → Email Settings**, set the following behavior settings:

`EMAIL_DIRECTORY`	Must be set to the same value as MAIL_DIR in BatchMail configuration file. This is `/usr/local/extraview/tomcat/webapps/evj/WEB-INF/mailbox` in the example above. Both the application servers and the BatchMail services must have read and write access to this location.
`EMAIL_FROM_USER_ID`	Must be set to a valid email address
`EMAIL_NOTIFICATION`	Must be set to YES for email notification to be turned on

You can get more information about the other email settings in the Administration Guide

You must also set up the BatchMail Task. Go to the ExtraView administration section **Administration → System Controls → Manage the background tasks.** First, verify that you currently have at least 2 each of `SESSION_MONITOR` and `TASK_CONTROL_TASK` tasks in the list, and that at least one of each of these tasks has a current status of **STARTED**.

Click on the **Add a new task** button. From the drop down Task name list, select **Batch mail**. Enter a title for this new task. From the Node ID drop down list, select the node on which you wish to run the BatchMail task.

If you have a standard installation, the current node id will be **WS_A** (this is the `WEB_SERVER_NAME` value from the `Configuration.properties` file for the current instance).

If you are running in a clustered or load-balanced environment, and if all of the instances (nodes) are on the same server, you should set up one BatchMail task to be shared by all nodes. If each node is on a separate server, you can either set the `MAIL_DIR` to a location accessible by all nodes and have a single task on one node, or you can build a location mapping to `MAIL_DIR` on each node, and have each node running its own BatchMail task.

WebLogic Server – Linux/Solaris OS – Oracle Database

Step 1: Upgrading the ExtraView Support Software

ExtraView 6 requires java JRE 1.5.0_14 or higher (not JRE 1.6). If your system is on an earlier version of Java, you need to upgrade to the required version.

If your system is already using JDK version 1.5.0_14 or higher, you can skip directly to Step 2 now.

Set up Environment Variables for Quicker Installation

You can set up your environment for both correct and quicker installation. It is assumed that you will complete all the remaining steps without signing off from the target computer.

Log on as the `extraview` user.

```
export INSTALL=/usr/local/extraview/install;
export BASE=/usr/local/extraview;
mkdir $BASE
mkdir $INSTALL
```

Place all the downloaded software into the `$INSTALL` directory.

Install Java

The following steps will install Java into the directory `$BASE/j2sdk_1.5.0_14`

For Solaris

```
cd $INSTALL
cp jdk-1_5_0_14-solaris-sparc.sh $BASE
cd $BASE
chmod +x jdk-1_5_0_14-solaris-sparc.sh
./ jdk-1_5_0_14-solaris-sparc.sh
  yes
rm jdk-1_5_0_14-solaris-sparc.sh
```

For Linux

```
cd $INSTALL
cp jdk-1_5_0_14-linux-i586.bin $BASE
```

```
cd $BASE
chmod +x jdk-1_5_0_14-linux-i586.bin
./jdk-1_5_0_14-linux-i586.bin
  yes
rm j2sdkjdk-1_5_0_14-linux-i586.bin
```

Java is now installed in the directory `$BASE/j2sdk_1.5.0_14`

Install Perl

Perl is only required if your installation is going to use the Command Line Interface.. Installing Perl requires unzipping and untarring the code that is contained in the ActivePerl distribution file and then running the installation script (`sh install.sh`) and then defining the folder to install to `/usr/local/extraview/ ActivePerl-5.8`.

For Linux

```
cd $INSTALL
gunzip ActivePerl-5.8.8.820-i686-linux-glibc-2.2.4-gcc-274679.tar.gz
tar xvf ActivePerl-5.8.8.820-i686-linux-glibc-2.2.4-gcc-274679.tar
cd ActivePerl-5.8.8.820-i686-linux-glibc-2.2.4-gcc-274679
sh install.sh
```

Answer the questions and when prompted, provide the **expanded** value of

`$BASE/ActivePerl-5.8` as the top level directory for install (the installer will not expand `$BASE` for you)

For example:

```
/usr/local/extraview/ActivePerl-5.8
```

For Solaris

```
cd $INSTALL
gunzip ActivePerl-5.8.8.820-sun4-solaris-2.6-cc-274679.tar.gz
tar xvf ActivePerl-5.8.8.820-sun4-solaris-2.6-cc-274679.tar.gz
cd ActivePerl-5.8.8.820-sun4-solaris-2.6-cc-274679
sh install.sh
```

Answer the questions and when prompted, provide the **expanded** value of `$BASE/ActivePerl-5.8` as the top level directory for install (the installer will not expand `$BASE` for you)

For example:

```
/usr/local/extraview/ActivePerl-5.8
```

For Linux and Solaris

```
cd $INSTALL
gunzip site-addon.tar.gz
cp site-addon.tar $BASE/ActivePerl-5.8
cd $BASE/ActivePerl-5.8
tar xvf site-addon.tar
rm site-addon.tar
```

Step 2: Upgrading the ExtraView Application

Installation of the ExtraView Servlet on Solaris / Linux

The file with a name of the format `evjxxx.tar` contains the ExtraView application. `xxx` is the version and build number of ExtraView that you are installing.

Installation of the ExtraView Application

Copy the `evjxxx.tar` file to your WebLogic exploded directory location and untar it. This location will be referred to as $BASE_DIR in the remainder of these instructions.

Edit the `Configuration.properties` file to populate the needed parameters. You should bring over any settings from your existing file in `evj.old/WEB-INF/configuration`.

```
vi evj/WEB-INF/configuration/Configuration.properties
```

Enter correct values for the following entries:

Entry	Purpose
`DB_HOST`	The IP address or fully qualified name for your database server
`DB_SID`	This is the name of your database
`DB_USER`	This is the name of the database user created previously
`DB_PASSWORD`	This is the password for the above database user
`HOST`	Same as DB_HOST
`DB_URL`	Make sure that the correct entry is uncommented and edited for your DBMS (Oracle or MSSQL).). The entry for HOST should be set to the same as DB_HOST above. The entry for SID should be set to the same as DB_SID above.

	Examples of this entry are:
	For Oracle connection
	`jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(HOST =10.0.0.154)(PROTOCOL=tcp) (PORT=1521)) (CONNECT_DATA=(SID=ev)))`
	For SQL Server connection with Inet driver
	`jdbc:inetdae7://xxxx.extraview.com: 1433/extraview`
	For SQL Server connection with JTDS driver
	`jdbc:jtds:sqlserver://xxxx.extraview. com:1433/extraview`

`JDBCDriver`	Make sure that the correct entry is uncommented and edited for your DBMS. Examples are:
	For Oracle connection
	`oracle.jdbc.driver.OracleDriver`
	For SQL Server connection with Inet driver
	`com.inet.tds.TdsDriver`
	For SQL Server connection with JTDS driver
	`net.sourceforge.jtds.jdbc.Driver`

`DBMS_INTERFACE`	Make sure that the correct entry is uncommented and edited for your DBMS. Examples are:
	For Oracle connection
	`com.extraview.dbms.oracle.OracleDbms`
	For SQL Server connection
	`com.extraview.dbms.mssql.MssqlDbms`

`PSP_LOG`	This may have the value of YES or NO. The default is NO. When this is YES, then the ExtraView log will contain the SQL of all statements executed. This can be useful for debugging purposes
`LOG_FILE_PATH_ NAME`	The pathname to the log that ExtraView will be written to. The default path is `logs/EVJ.log`. Note that this path is relative to the WEB-INF directory
`XML_LOG_FLAG`	TRUE or FALSE. If this is FALSE (the default) then the log is written in text format. If the value is TRUE, then the log is written in XML format
`WEB_SERVER_NAME`	The name of the web server that will be used internally in ExtraView. With one application server, this name is not important, but if you have a cluster of application servers, then these should be named logically to identify which web server carried out which action and to ensure that sessions initiated at a client browser will “stick” to the same application server
`TEMPLATE_DIR`	The name of the directory, relative to WEB-INF where the

	ExtraView HTML templates are stored. There is normally no need to alter this path
USER_TEMPLATE_DIR	The path to the directory, relative to WEB-INF where user HTML templates are stored. These are stored independently from the ExtraView HTML templates so they may be retained during an upgrade
CHART_DIR	When ExtraView creates charts, it requires a directory in which to store temporary files. This path is also relative to WEB-INF. The administrator should create a process that cleans out old files from this directory on a periodic basis
TEMP_DIR	This path, relative to WEB-INF is used to store temporary files. The administrator should create a process that cleans out old files from this directory on a periodic basis
DATA_DIR	This path, relative to WEB-INF is used to store temporary files. The administrator should create a process that cleans out old files from this directory on a periodic basis
DEBUG_SWITCH	The default is ON. If you want to turn off debugging, then this may be set to OFF. This is not recommended
DEBUG_LOG_LEVEL	This may have an integer value from 1 to 12. The default level is 6. At any level, all messages for this level and greater are logged. At the default level of 6, all server accesses to ExtraView are recorded in the log file, with the entry to the service being logged as well as the exit from the service. At the exit time, additional information such as the length of time that the service took to execute, and the user ID of the person making the access is also recorded. If there is any error message with a debug level higher than 6, this is also placed in the log file. For example, any warnings or program exceptions will be placed in the log
SSO_DO_UPSERT	If you are using a SSO server and making use of the “upsert” feature, then this should be set to YES, else leave this at the default value of NO
NOTIFICATION	This is an optional property, and based upon RFC 1891 (see http://www.ietf.org/rfc/rfc1891.txt). The property may be any combination of: NOTIFY_DELAY NOTIFY_FAILURE NOTIFY_SUCCESS with each option separated by a semi-colon. If this property is set, and your SMTP server supports this RFC, then the appropriate header is set in all SMTPMessage’s originated by the BatchMail process. This functionality allows for an audit trail to be followed for emails sent via your email server.

RETURN_OPTION	This is an optional property, and based upon RFC 1891 (see http://www.ietf.org/rfc/rfc1891.txt). The property may be either: RETURN_FULL or RETURN_HDRS If this property is set, and your SMTP server supports this RFC, then the appropriate header for return emails is set in all SMTPMessage's originated by the BatchMail process. This functionality allows for an audit trail to be followed for emails sent via your email server.
Connection pool settings	These are described in detail in the section of the Installation guide named Connection Pool Configuration

The following is an example of the `Configuration.properties` using Oracle as the database:

```
DB_HOST     = localhost
DB_SID      = ev
DB_USER     = extraview
DB_PASSWORD = password
DB_URL      = jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=
              (HOST==localhost)(PROTOCOL=tcp)(PORT=1521))
              (CONNECT_DATA=(SID=ev )))
JDBCDriver  = oracle.jdbc.driver.OracleDriver
DBMS_INTERFACE = com.extraview.dbms.oracle.OracleDbms
```

The following is an example of the `Configuration.properties` using MSSQL as the database:

```
DB_HOST     = localhost
DB_SID      = extraview
DB_USER     = extraview
DB_PASSWORD = password
DB_URL      = jdbc:inetdae7://localhost: 1433/extraview
JDBCDriver  = com.inet.tds.TdsDriver
DBMS_INTERFACE = com.extraview.dbms.mssql.MssqlDbms
```

If you are running MSSQL:

Starting with ExtraView 5.x, ExtraView now provides a JDBC driver for MSSQL. If you are upgrading from 4.x, you no longer need to use the Sprinta driver that was required in previous versions of ExtraView.

Now you need to copy over the files from your existing application that are specific to your installation:

```
cp evj_old/images/CompanyLogo.gif evj/images
cp -rf evj_old/WEB-INF/user_templates evj/WEB-INF
```

If you have user custom JavaScript code that was written either by ExtraView Corporation, or by your developers, you should add any of your custom methods in the `evj_old/javascript/user_javascript/UserJavascript.js` file to the new file in `evj/javascript/user_javascript`.

You may or may not have files in the `user_javascript` and `user_templates` folders, depending on your initial installation.

If you have customized images other than the Company Logo, those have to be copied to the new installation from the old installation. Depending on your installation, you may also have installed images for additional locales. You will then have to perform the same action for each locale, by replacing `en_US` with the appropriate directory name. If you are upgrading from ExtraView 4.x or 5.x to 6.x, and you have a custom image set, please contact ExtraView Corporationmailto:support@extraview.com to get further information on updating your image set for the new version of ExtraView.

```
cp –r evj_old/locales/en_US/images/images_custom evj
```

If you are upgrading from 4.x and had previously been using the 20-connection Sprinta driver for MSSQL, you can now use the default values provided in the `Configuration.properties` for 6.x for `ConnectionPoolSize` and `ConnectionPoolMax`, instead of the previously-limited 20, as the new jTDS driver does not have a 20 connection limit.

A new version of the `weblogic.xml` file has been provided in this ExtraView version. It is located in `evjxx-yyy/WEB-INF`.

UserCustom Class Upgrade

If you have User Custom code implemented, please review the name of your User Custom class.

```
ls /usr/local/extraview/tomcat/webapps/evj/WEB-
INF/classes/com/extraview/usercustom/
```

If the class is named `UserCustom.class`, then you must contact ExtraView Corporation in order to make certain that you are upgrading your User Custom code to the correct new version. If it is named something similar to `YOURCOMPANY.class`, then it is safe to simply copy the old class file over to the new evj tree.

```
cd evj/WEB-INF
cp –r ../../evj_old/WEB-INF/classes .
```

Step 3: Upgrading the ExtraView Database

You must backup your database before performing this step. ExtraView Corporation cannot guarantee that upgrades will complete successfully, therefore it is essential that you are able to revert to your existing installation.

You should take a full export of your database before running any of the following upgrade scripts. This will allow you to roll back to the previous version of ExtraView if there are any problems arising from the upgrade.

Edit the following file:

```
evjxx-yyy/WEB-INF/data/runPatchesWebLogic.sh
```

Replace the following lines:

```
JAVA_HOME=/usr/local/extraview/java
WL_HOME=/usr/local/bea/weblogic81
EV_BASE=/path/to/extraview/application/evjxx-yyy
```

Now save and exit from the editor.

To upgrade the database, run the following command:

```
sh runPatchesWebLogic.sh evjxx-yyy
```

The upgrade process initiated by the above command looks at your installation to determine exactly which version of code and which version of the database schema is active. The process will then apply all the patches to bring your system up to the version 6 level. Some patches are very simple, some are more complex, and many take time dependent on the amount of data in your database.

As the individual patches are applied, you will see many lines of text scroll past on the screen. At some point, depending on the amount of data in your system, the patches may appear to "hang" while they perform large operations on the database – allow a reasonable amount of time (possibly 20 minutes or more) before you assume there is a problem with any individual part of the upgrade process. If you have any questions, please contact ExtraView Corporation.

Once the script has finished running, and you are returned back to a command prompt, and your upgrade to the database is complete.

For your reference, there is a log of the changes made to the database in the directory named `/evj/WEB-INF/logs`. These are held in a `.log` file (the exact name is specified in the `Configuration.properties` file). It is recommended that you save that file until you have verified your upgrade, so that the ExtraView Support can review this with you if you run into any issues.

Step 4: Installing the ExtraView License Key

If you are currently running version 5.2.x you can skip this section.

If you are upgrading from a 4.x or 5.0.x version of ExtraView to a 6.x version of ExtraView, you will need to install the new license key provided to you by ExtraView Support. If you have not received a new license key file, please contact ExtraView Corporation as you will not be able to complete this installation without this file.

Copy the license.xml file that you received into the following directory:

```
$BASE_DIR/evj/WEB-INF/data
```

Edit the following file:

```
/$BASE_DIR/evj/WEB-INF/data/installKey.sh
```

Replace the following lines with the appropriate values for your system:

```
JAVA_HOME=/usr/local/extraview/java
WL_HOME=/usr/local/bea/weblogic81
EV_BASE==/path/to/extraview/application/evjxx-yyy
```

Now save and exit from the editor.

To install your license key, run the following command:

```
sh installKey.sh
```

Step 5: Upgrading the CLI

If you do not use the ExtraView command line interface, you can skip this step. If you are installing it for the first time, please refer to the **ExtraView Installation and Configuration** guide for full instructions.

Copy the `evapi_unix.tar` file from

```
$BASE_DIR/evjxx-yyy/WEB-INF/data
```

to your local ExtraView installation of Perl – usually this is `/usr/local/extraview/perl.`

You should have a folder called `evapi`. Rename that folder to `evapi_old`. Untar `evcli_unix.tar` and rename the resulting directory to `evcli`.

```
tar xvf evapi_unix.tar
mv evjxx-yyy_evapi evapi
```

Now edit `evconfig.txt`. If you do not use the `evmail` utility, you only need to set one configuration setting:

```
SERVER = extraview.yourdomain.com/evj/ExtraView
```

Set this to point to your specific URL used to access ExtraView.

If you do use `evmail`, please note that there have been some changes to the regular expressions used to parse the subject line - you can copy the lines from your existing `evconfig.txt` in `evapi_old`, but please note that if you have changed the default subject `REGEX`, you will need to make that change again to the new configuration setting `EVMAIL_ID_REGEX`. If you have any questions, please contact ExtraView Corporation.

Now you can make the Perl commands executable:

```
chmod +x ev* manifest.pl
```

You need to change the first line of each Perl command to point to your current installation of Perl for ExtraView. Use the following command, replacing `$PERL_HOME` with the location of your ExtraView Perl installation:

```
$PERL_HOME/bin/perl -p -i -e
"s#/usr/local/bin/perl#$PERL_HOME/bin/perl#" ev* manifest.pl
```

Step 6: Restart ExtraView

The upgrade process is now complete. You must now redeploy the `evj` web application within WebLogic before logging into ExtraView version 6.

Step 7: Patching the Oracle Database Software

This step is only required if you are running Oracle as your DBMS.

ExtraView has been affected by bugs in a number of Oracle releases. If you are running one of these Oracle releases, you should patch your installation. If you have access to Oracle Metalink, you should download the patch set from there. If not, ExtraView Corporation can provide you with information on how to retrieve the appropriate patch set. There are detailed instructions in the README file.

Oracle needs to be patched if on any of the following releases:

- 8.1.7, earlier than 8.1.7.4
- 9.0.1, earlier than 9.0.1.4
- 9.2, earlier than 9.2.0.6

If you are running Oracle Database 8i and wish to migrate your database to Oracle 9i, it is recommended that upgrade go to 9.2, since 9.0 is no longer supported by Oracle. As this is supported but not required by ExtraView 6.0, the procedure is not included in these instructions. If you are upgrading to Oracle10g, we strongly recommend 10.2.0.3 or higher, as there were bugs in the earlier versions of Oracle 10g that affect ExtraView.

Step 8: Post upgrade tasks

You will only have to perform this step if you are upgrading from a release earlier than 4.3.6 and you have been using the ExtraView Business Rules. The rules have been moved from the `rules.txt` file into the database. Log in to ExtraView as an administrator user and go to **Administration → Workflow → Setup and Maintain Business and Email Rules**. Copy the contents of the file:

```
evj_old/WEB-INF/configuration/rules.txt
```

into the rules section on the screen, and then press Update to save your changes.

Removing the BatchMail Utility

If you are upgrading from any previous version of ExtraView to version 6, you will have a standalone utility called BatchMail installed on your server. This utility was used to deliver outbound ExtraView email notifications. Starting in version 6 this utility is built into the ExtraView application, so during the upgrade to 6.x, you should turn off and/or uninstall the standalone BatchMail utility.

BatchMail is generally installed in `/usr/local/extraview/BatchMail` and is controlled via two shell scripts `startMail` and `stopMail`. You will likely have added these shell scripts to your UNIX or Linux startup scripts – you can simply remove those lines, or comment them out.

You should run the `stopMail` shell script to stop the current BatchMail process, or simply kill the process.

You can rename the `BatchMail` folder to `BatchMail.old` in case you want to roll back to the previous version of ExtraView.

Configuring the Built-In BatchMail utility

ExtraView will generate outbound email messages when issues are created or updated, when escalation routines are triggered, or when the Ad Hoc Email feature is used. These email message files are saved to a folder on the application server, defined in the `EMAIL_DIRECTORY` behavior setting. There is only one `EMAIL_DIRECTORY` location per ExtraView application – regardless of whether you are running a single instance, or if you are clustered or load-balanced across one or more servers.

The BatchMail task in version 6 is a utility that polls the `EMAIL_DIRECTORY` location on a timed basis, and if it finds any email messages in the folder, it uses your mail server to deliver the email message to the recipients specified.

To configure the BatchMail utility, you must set the SMTP server and mail directory locations. Within the ExtraView administration screens, you will then create and configure a BatchMail Task, and configure the application to write the email messages in the `EMAIL_DIRECTORY` location.

Edit the file `BatchMail.properties`, located in the `tomcat/webapps/evj/WEB-INF/configuration` folder.

old line `MAIL_SERVER=mail.yourdomain.com`

new line `MAIL_SERVER=<=<name of a valid SMTP server>`

old line `MAIL _DIR=C:\ExtraView\apache-tomcat-5.5\webapps\evj\WEB-INF\mailbox`

new line `MAIL_DIR=<=<path to where ExtraView will write email messages`

The default location for the mailbox directory is `tomcat/webapps/evj/WEB-INF/mailbox`, but you can provide any absolute path.

In order to activate email notification, the following behavior settings must be configured from the ExtraView web interface. In the ExtraView administration section **Administration → Email Settings**, set the following behavior settings:

`EMAIL_DIRECTORY`	Must be set to the same value as MAIL_DIR in BatchMail configuration file. This is `$BASE_DIR/evj/WEB-INF/mailbox` WEB-INF/mailbox in the example above. Both the application servers and the BatchMail services must have read and write access to this location.
`EMAIL_FROM_USER_ID`	Must be set to a valid email address
`EMAIL_NOTIFICATION`	Must be set to YES for email notification to be turned on

You can get more information about the other email settings in the Administration Guide

You must also set up the BatchMail Task. Go to the ExtraView administration section **Administration → System Controls → Manage the background tasks.** First, verify that you currently have at least 2 each of `SESSION_MONITOR` and `TASK_CONTROL_TASK` tasks in the list, and that at least one of each of these tasks has a current status of **STARTED**.

Click on the **Add a new task** button. From the drop down Task name list, select **Batch mail**. Enter a title for this new task. From the Node ID drop down list, select the node on which you wish to run the BatchMail task.

If you have a standard installation, the current node id will be **WS_A** (this is the `WEB_SERVER_NAME` value from the `Configuration.properties` file for the current instance).

If you are running in a clustered or load-balanced environment, and if all of the instances (nodes) are on the same server, you should set up one BatchMail task to be shared by all nodes. If each node is on a separate server, you can either set the `MAIL_DIR` to a location accessible by all nodes and have a single task on one node, or you can build a location mapping to `MAIL_DIR` on each node, and have each node

running its own BatchMail task.