Impact Innovations Systems

ImageOptimization

Version 1.0

Installation Guide

Impact Innovations

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1   Product Description

ImageOptimization is a compression/conversion tool designed for Content Management Systems. ImageOptimization compresses image files and converts them to PDF (searchable and non-searchable) documents. This will save storage space and helps to search based on metadata.

ImageOptimization has three components - Web application, backend job processor, and database. Web application provides the user interface to create and run jobs. Backend job processor is responsible for compressing the files based on jobs created by the user. Database contains the information about the jobs.

Image Optimization uses PDFCompressor (by CVision Technologies) module to compress and convert images into PDF.

2   Quick Checklist

The rest of this document will outline the following in much greater detail, but here is a quick list of the software and information that may be needed during installation. Use this list ahead of time to allow for easier planning.

1. Java Development Kit, version 7.x – Included in the installation bundle
    a. Must match architecture of machine (64 bit or 32 bit)
2. Apache Tomcat 7.x – Included in the installation bundle
    a. Determine what port HTTP will run on
3. DFC 6.X runtime – Required to run repository jobs.
4. CVision PDF Compressor 5.0 or higher. Latest version is recommended.
5. SQL Server 2008/MYSQL Server – Needs to be installed separately before ImageOptimization installation
    a. Will need a new DB created
    b. Need username/password for new DB owner

3   ImageOptimization Installation

This Section provides details on how to install the prerequisites required for ImageOptimization to work. As soon as you begin the ImageOptimization Installation Wizard, you will be notified with a dialog box asking if you need to install the prerequisites for ImageOptimization. Java and Tomcat are bundled with the installer but they can be installed separately or existing installations can be used.

3.1   Installing Prerequisites

3.1.1   Installing PDFCompressor
Please refer to PDFCompressor installation document to install PDFCompressor on the machine.

NOTE: PDFCompressor path has to be set in path variable.
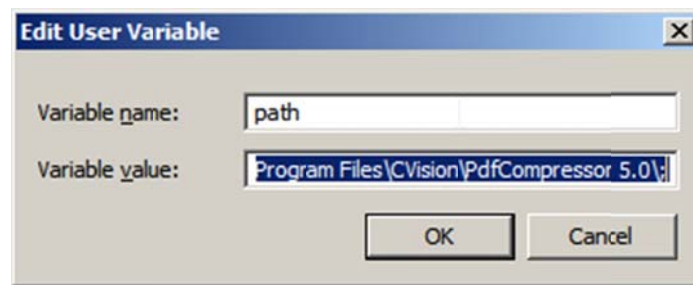
3.1.2   Installing Database
Please contact your database administrator to install either MS SQL Server or MY SQL Server. Please refer Configuring Database section for information about database schema location and configuring database information in ImageOptimization.

3.1.3   Installing Java
1. Download the latest update Java SE Development Kit 7. You can also use the java installation bundled with the installer. The 64 bit version is preferred if your hardware supports it.

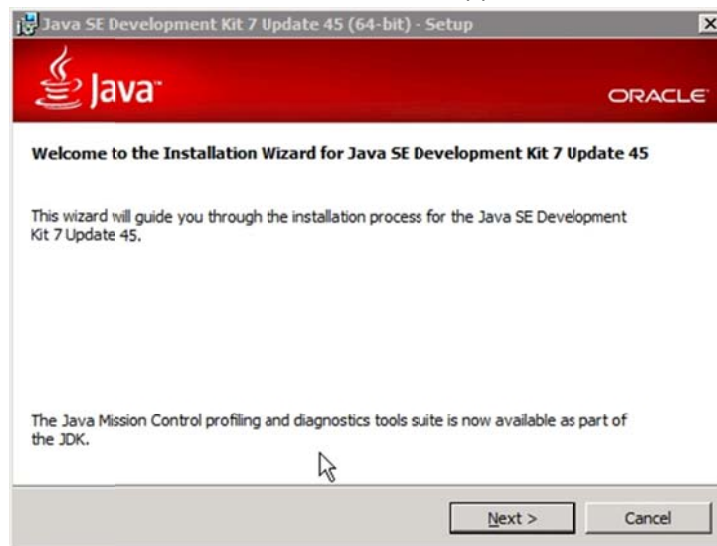2. Run the installation file and click next when the wizard appears.

Figure 1 Java Main Install Dialog

3. Leave the defaults selected in the Custom Setup screen unless you would like to change the "Install to" destination to anther drive. Click Next to continue.
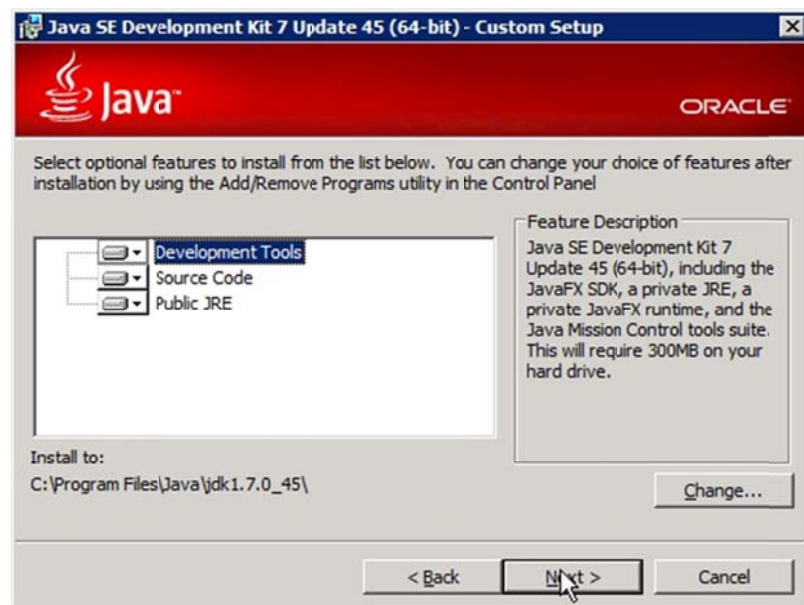

Figure 2 Java Feature Selection

4. After the wizard finishing installing the JDK it will prompt you to also install the JRE. Again, change the "Install to" destination if needed and click next to continue.
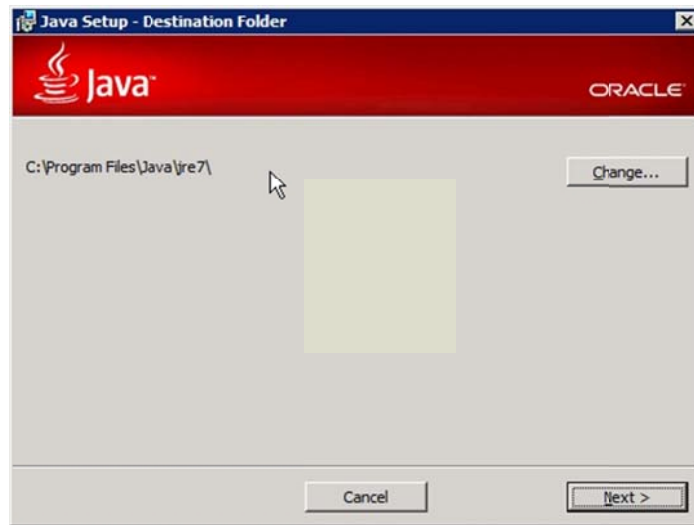

Figure 3 Java Install Location

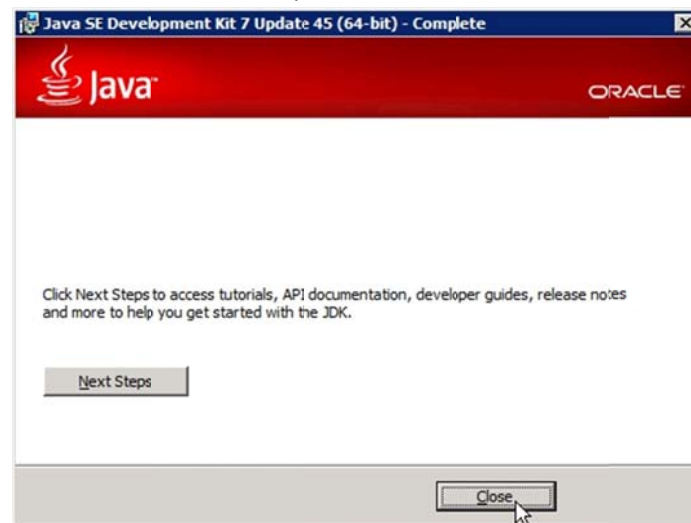5. Click Finish once the installation is complete.

Figure 4Java Installation Success

3.1.3.1   Setting up Environment Variables

1. In the Start menu,right click on "Computer" and select the "Propeties" menu item.
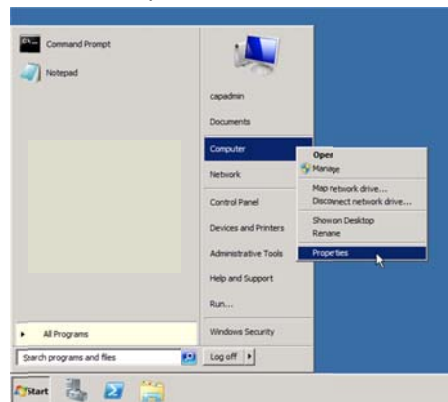

Figure 5 Opening System Properties

2. Click on "Advanced system settings" on the left sidebar.
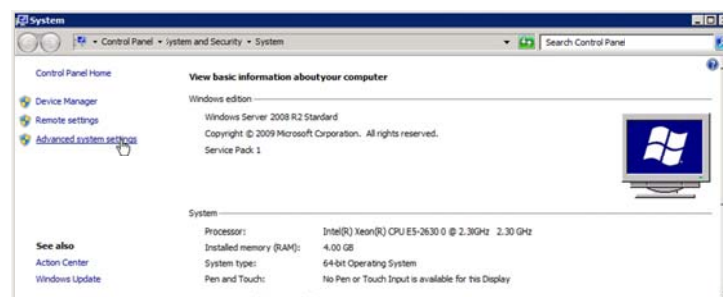

Figure 6 Advanced System Settings

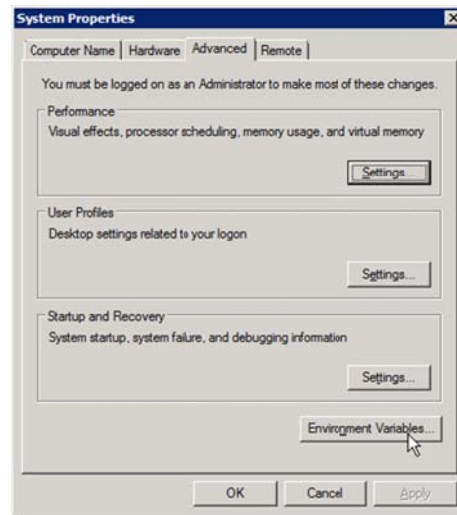3. Navigate to the Advanced tab and click on Environment Variables…

Figure 7 Environmental Variables Dialog

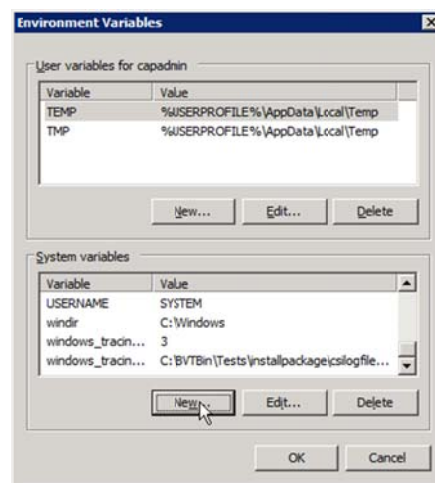4. Click the New… button under "System Variables" group.

Figure 8 System Variables Dialog

5. Create a JAVA_HOME variable with the base path of the previously installed JDK and click OK.
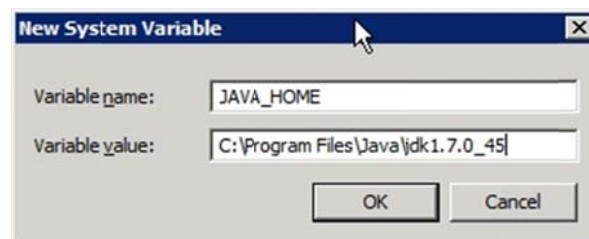

Figure 9 JAVA_HOME Environmental Variable Setting

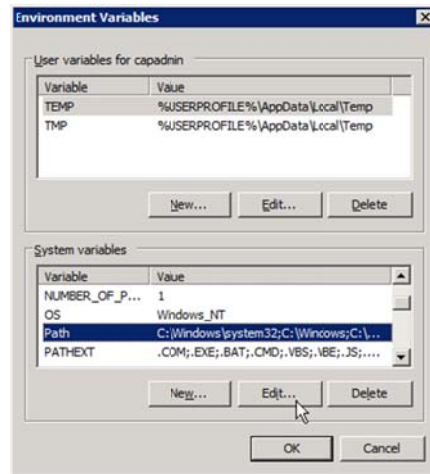6. Next select the "Path" variable under System variables and click Edit

Figure 10 Applying Changes

7. Be careful not to delete anything from this value, but add the following to the beginning of the "Variable value" (Hint: Press the "Home" key while your cursor is in the field to ensure you are at the beginning):

    %JAVA_HOME%\bin;

    (Note: Ensure that you have a semi-colon at the end)

    Click OK when finished.
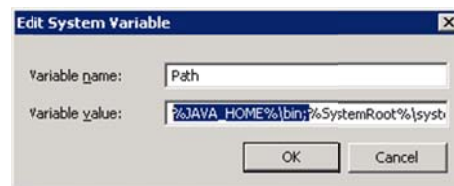
Figure 11 Adding to Environment path

8. Click OK on the next two dialogs to exit Environment Variabled and System Properties.

3.1.3.2   Verifying Java Installation

To ensure one has configured the server to use the correct version of Java, perform the following steps:

1. Open the run dialog from the start menu or by the pressing the combination **[WINDOWS]** key + **R.** Type in "**cmd**" and click OK.
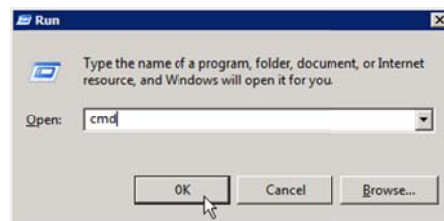
Figure 12 Opening the Command Prompt

2.   Type in the following command and ensure that the correct version of java is being used:
java -version(In this example it reports "1.7.0_45")

Figure 13 Testing out Java CLASSPATH

3.1.4   Installing Tomcat

1.   Run the tomcat executable or install tomcat bundled with ImageOptimization installer and click next when the wizard appears.

Figure 14 Tomcat Installation Screen

2.   Click "I agree" to accept the terms of the agreement.

Figure 15 Tomcat License Agreement

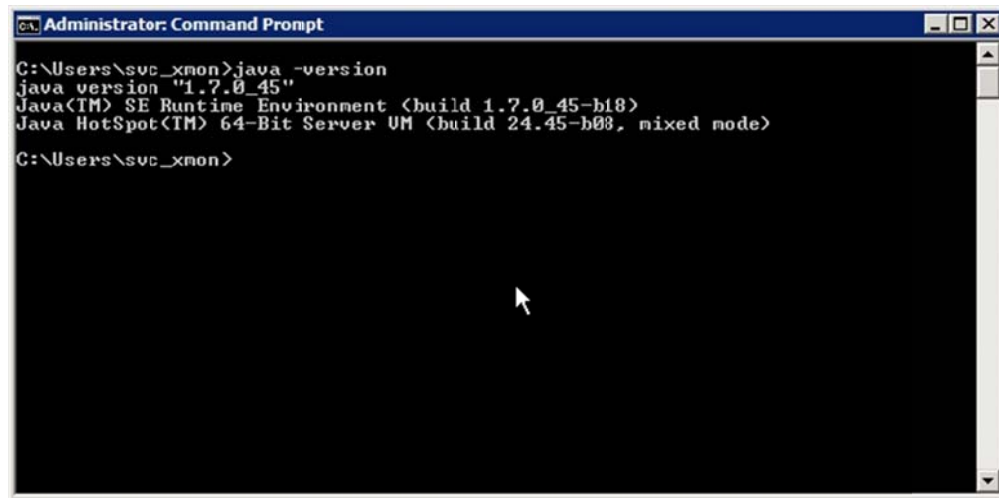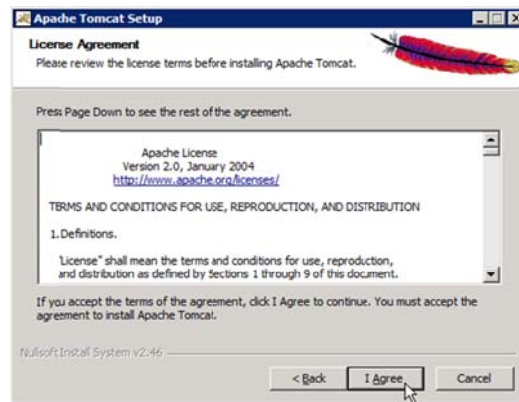3. Select the checkbox next to "Tomcat" which will change the check mark to green and the type on install to "Custom". Click Next to continue.
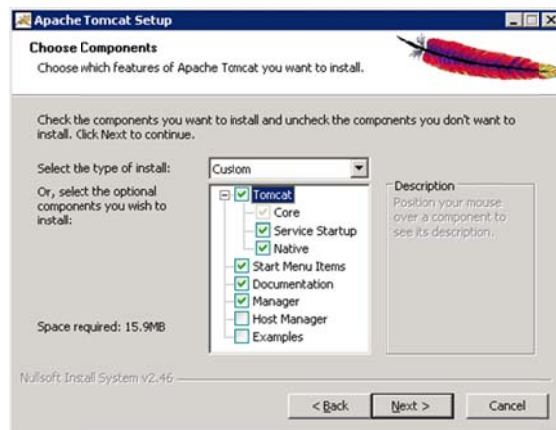
Figure 16 Tomcat Feature Selection

4. Change the fields on the next page to meet your server requirements. The defaults should suffice in most circumstances but some organizations might require different ports to be used, or they could already be in use by another application. Create a username and password for the Tomcat Administrator, leaving the Roles as "manager-gui". Click Next to continue.

Figure 17 Tomcat Installation Parameters
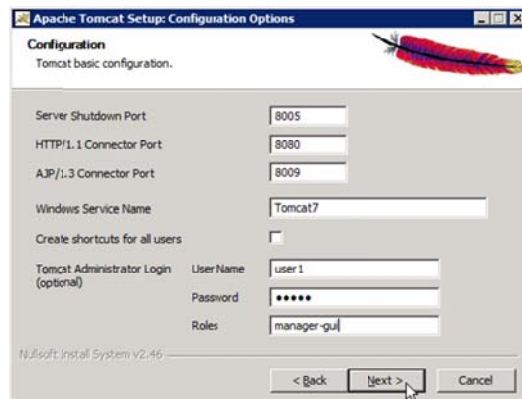
5. Browse and select the directory of the Java SDK previously installed instead of the default value. Select Next to continue.
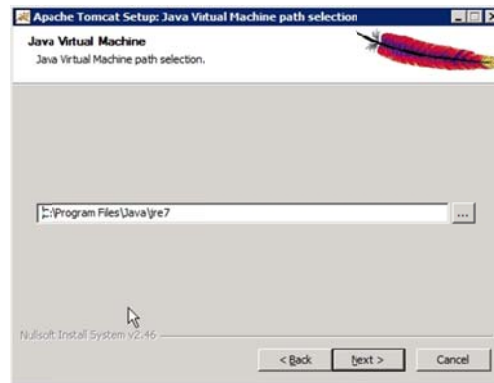

Figure 18 JRE Path Selection

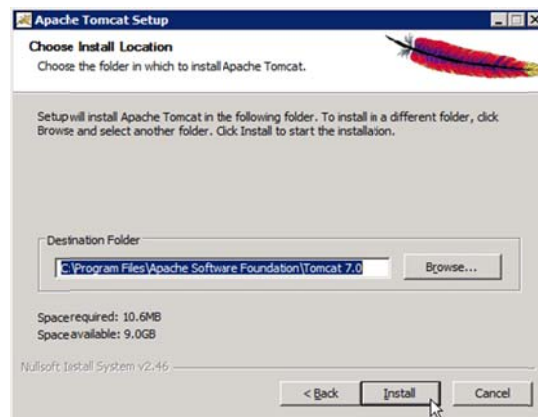6. Change the Destination Folder path if needed and click Install.

Figure 19 Tomcat Installation Directory

7. Leave the"Run Apache Tomcat" checkbox selected and click Finish when completed.

Figure 20 Tomcat Installation Finish

3.1.5   DFC Runtime Installation

DFC runtime needs to be installed on the machine for ImageOptimization to communicate with Documentum repository.

3.2   ImageOptimization Installation

ImageOptimization installer will install both web application and backend processor on the machine. Double click on the ImageOptimizationSetup file. You will be prompted to install prerequisites. If you already installed these then you can skip installing prerequisites by clicking on no. The prerequisites can be installed by clicking on yes.
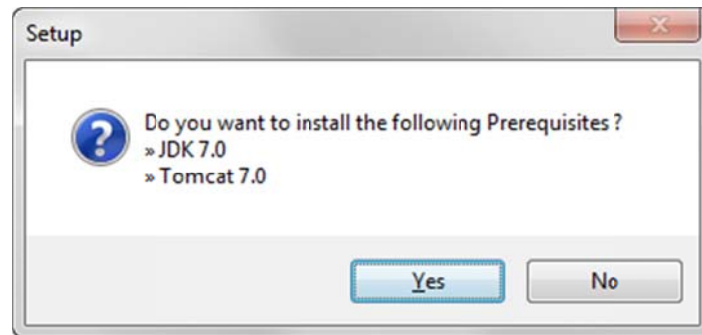
Figure 21 Prerequisites

NOTE: If you want to install only one of the prerequisites then select yes and cancel installation of individual components.

For detailed instructions on how to install java and tomcat, please refer to sections above.

1.   Stop Tomcat service. (From windows services)
2.   Click on Next to continue with the installation.
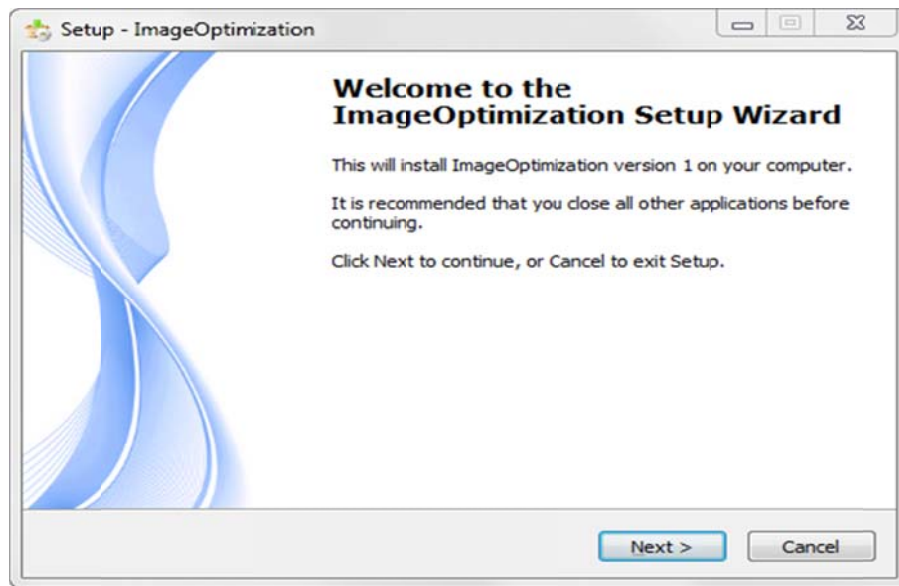
Figure 22 ImageOptimization Main Install

3. Choose the installation folder

Figure 23 ImageOptimization Install Location

4. Select tomcat installation directory

Figure 24 ImageOptimization Tomcat Location

5. Select the shortcut's folder in Main menu

Figure 25 ImageOptimization Shortcut Name

6. Click on Install to install ImageOptimization.
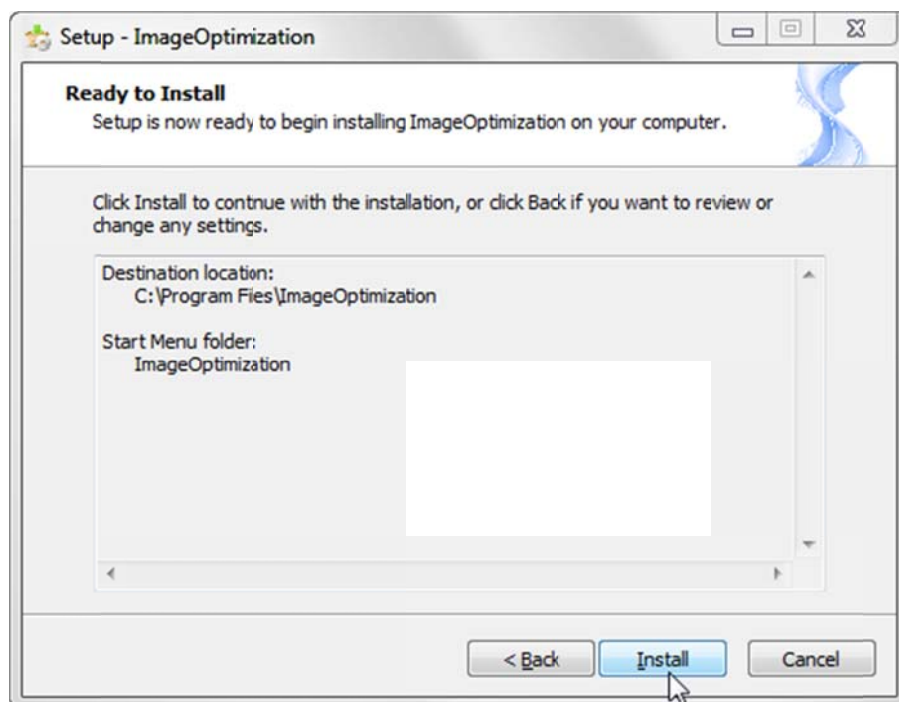
Figure 26 ImageOptimization Begin Install

7. Click on finish to finish the installation. The installer will close when finish button is clicked.
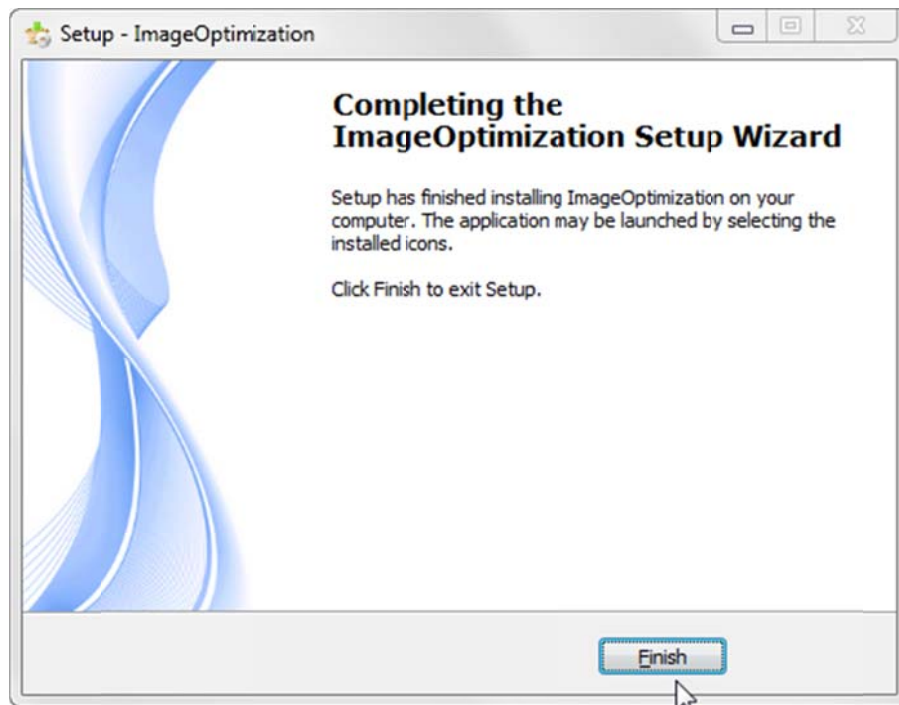
Figure 27 ImageOptimization Finish Install

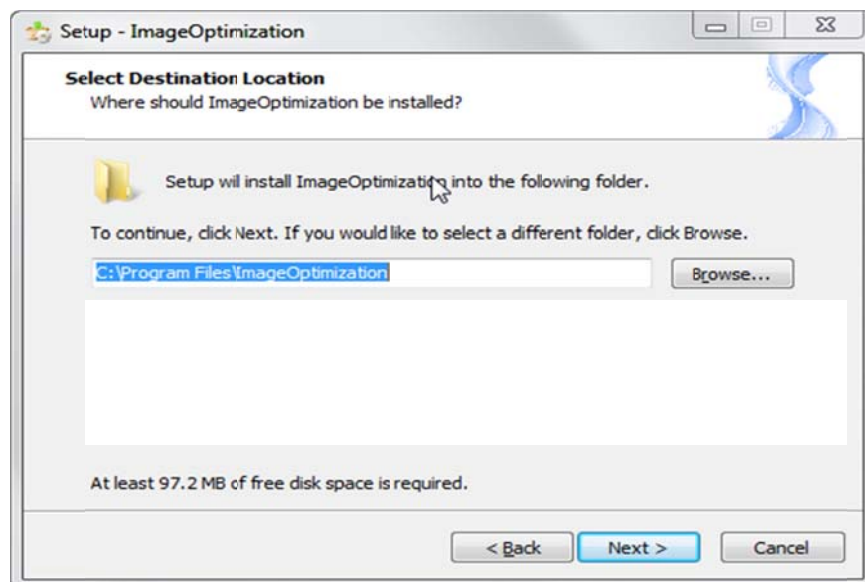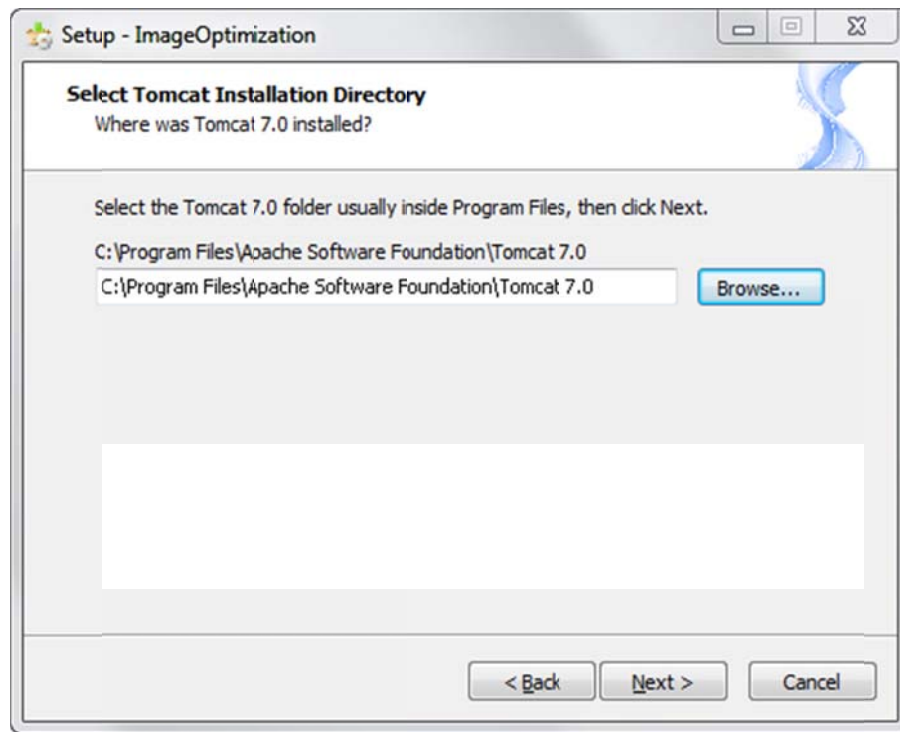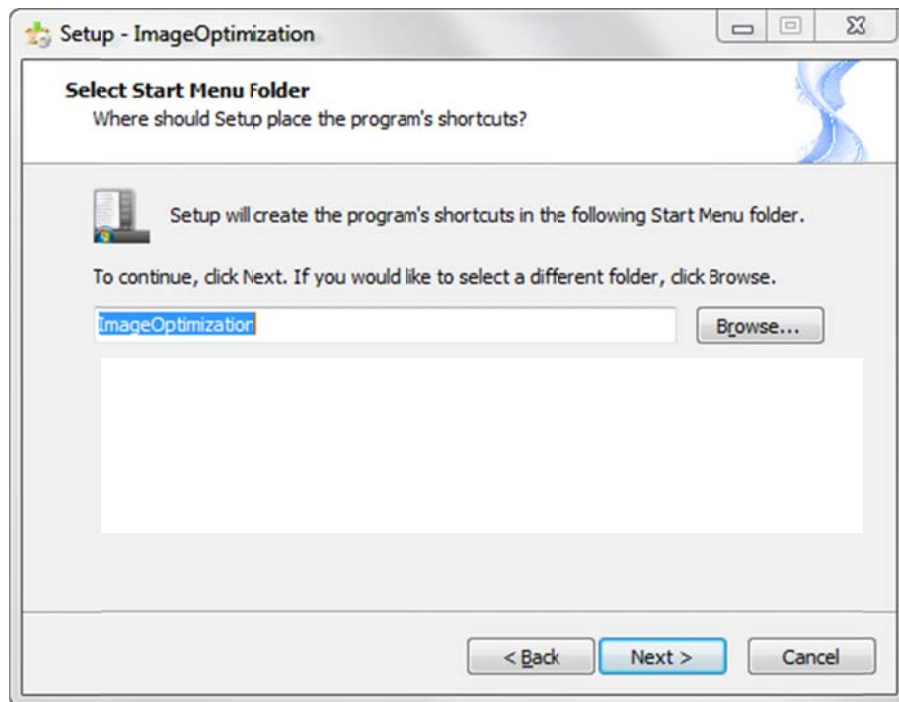8. Start tomcat service.

3.3   Verifying Installation

Verify that the web application is deployed properly by navigating to <u><Tomcat_Install_Dir>\webapps\</u>.
You should be able to see imageoptimzation folder in webapps directory.

Verify that backend process is installed properly by navigating to <u><ImageOptimization_Install_Dir></u>. You
should be able to see lib folder and an uninstallation file.

After verifying the installation, ImageOptimization needs to be configured. Follow the steps outlined in
the next section to configure ImageOptimization.

4   ImageOptimization Configuration

ImageOptimization requires database, documentum, and logs to be configured before using the application. Stop tomcat service before the configurations.

4.1   Configuring Database

ImageOptimization uses database to store job related information and statistics.

4.1.1   Database Creation

Database needs to be created manually. The database scripts are located under the folder:

<ImageOptimization_Install_Dir>\lib\DataBase\SQLScripts

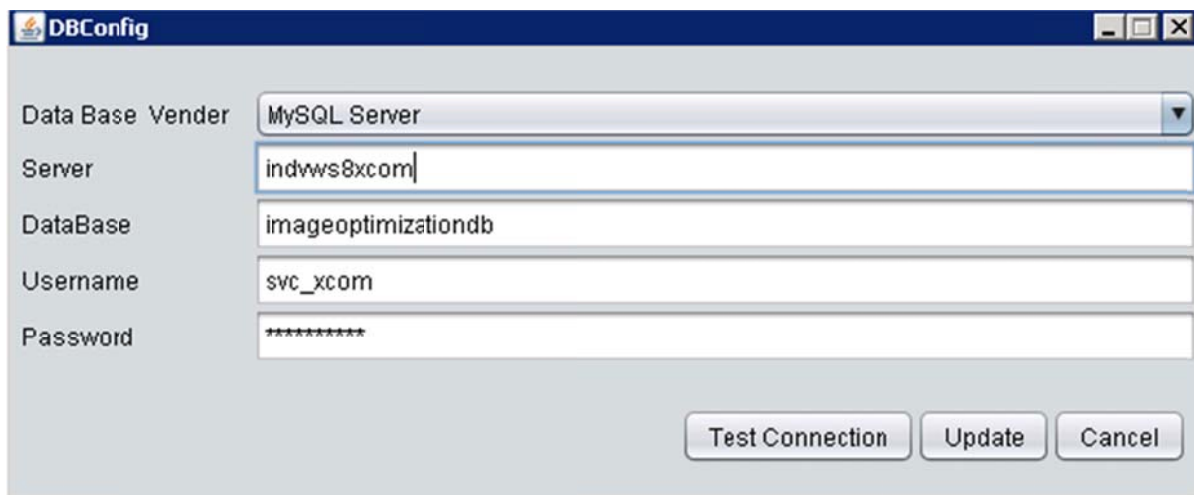Please contact your DB administrator to get the database schema installed on your database.

NOTE: You can create users for this database and use those credentials from ImageOptimization to interact with the database.

4.1.2   Database Configuration

The database information needs to be configured before using ImageOptimization application. Run the dbconfig utility included with the installation to configure the database. The utility is located at: <ImageOptimization_Install_Dir>\lib\DataBase\dbconfig.jar

NOTE: The user executing the jar file must have full privileges no <Tomcat_Install_Dir>\webapps folder.

Verify whether the database information was updated properly by checking jdbc.properties file present in <Tomcat_Install_Dir>\webapps\imageoptimization\WEB-INF\classes\ location.

Database can be manually configured by editing jdbc.properties file in <Tomcat_Install_Dir>\webapps\imageoptimization\WEB-INF\classes\ location.

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4.2   Configuring DFC

ImageOptimization requires DFC to interact with Documentum repositories for repository jobs.

Dfc.properties needs to be replaced in the following location:

<ImageOptimization_Install_Dir>\lib\config

4.3   Configuring Logs

Image Optimization uses two log files - one for the web application and one for the backend process. This will provide better flexibility to control and to use the logs. Web application log contains entries related to web application and process log will contain entries related to job processing. The log configuration files are located at <ImageOptimization_Install_Dir>\lib\config. The log files will be created at <Insert Here>.

4.4   Configuring Thread Pool

Image Optimization has the ability to compress multiple files concurrently depending on the value configured in thread pool configuration. Thread pool configuration file is located at <Insert Here>. Change the element value of ThreadPool.

NOTE: PDF Compressor will create more than one (if OCR is enabled during compression) background process to compress images. The memory consumption is directly proportional to the number of threads configured. It is not recommended to run more than 5 threads at a time.

Start tomcat service after the configuration.

4.5   Verifying Configuration

Open the URL: http://<ImageOptimizationServer>:<Port>/imageoptimization from any of the supported web browsers (for a list of supported web browsers, please refer to release notes) to access web UI.
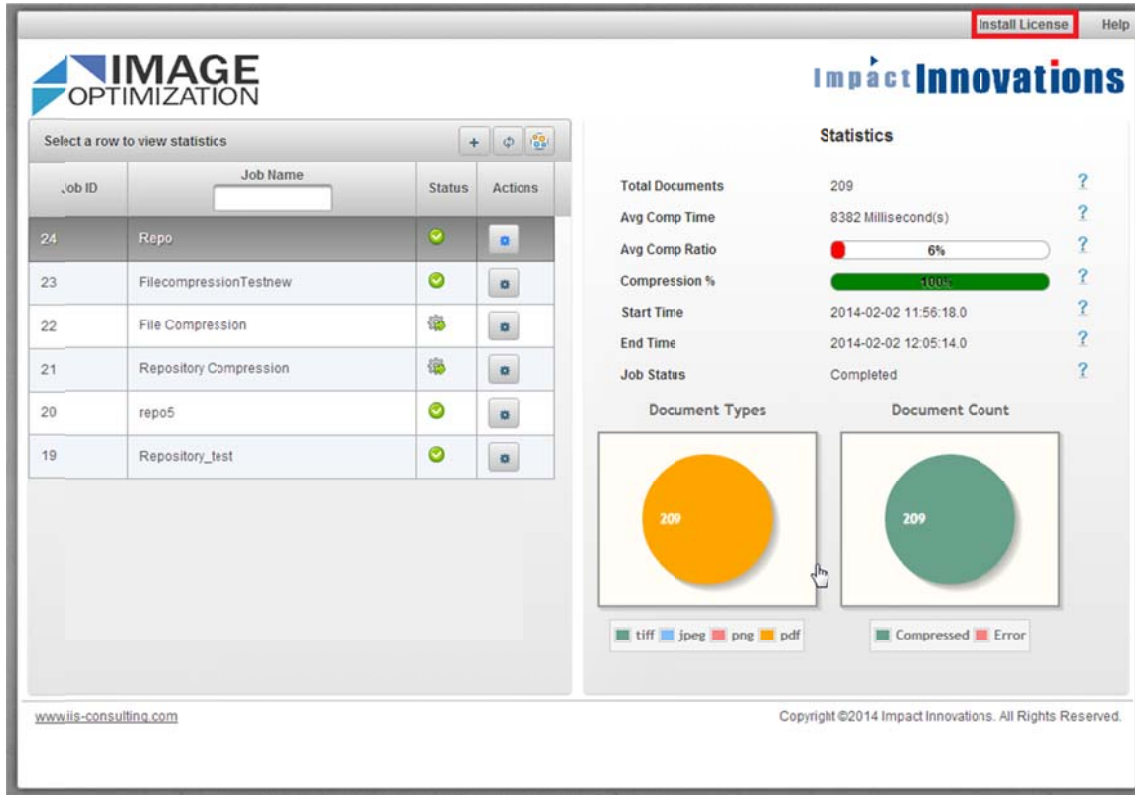
4.6   Creating Shortcut

You can create an internet shortcut to easily access ImageOptimization web UI. Create a new shortcut in windows and specify the URL in the location textbox. This will create a new internet shortcut.

5   Installing License

ImageOptimization requires a license to use.

1. Click on the Licensing link on ImageOptimization web UI.
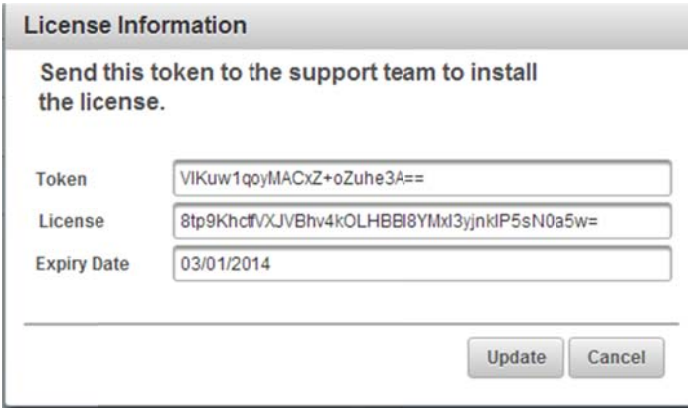

2. Please copy the token and send an email to IIS support (support@iis-conuslting.com) to request a license.
3. Support team will generate a license and will send it to you. Copy the license key and paste it in the license field.

4. Click on update to update the license.
5. Verify whether the license is successfully installed by clicking on the license link on web UI. You should be able to see the expiration date on the license panel.

6   Uninstalling ImageOptimization

ImageOptimization is installed as a standard Microsoft Windows application. If you need to remove the application from a computer, use the Add/Remove Programs option from the Windows Control Panel. Make sure tomcat service is **NOT** running when you run the uninstaller.

NOTE: The uninstaller will not delete the job related configuration files located in <INSERT>. They have to be manually deleted.

7   Troubleshooting and Support

Please contact IIS support (support@iis-consulting.com) if you have any issues with installation or configuration.