



Infor Enterprise Server Installation Guide

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About this document

Objectives

This document describes how to install components using the Infor Enterprise Server Installer.

Document summary

This document contains these chapters:

- **Introduction (p. 7)**
Provides a brief introduction to the Enterprise Server Installer.
- **Requirements (p. 9)**
Lists the platforms that are supported by the Enterprise Server Installer.
- **Installation (p. 13)**
Explains how you install components using the Enterprise Server Installer.

Note:

A number of figures in this document may be based on a previous Enterprise Server release. They can differ slightly from your screens. However, the described functionality is identical.

This document does not describe how to manually install components, how to update an existing installation, and how to uninstall components. For details on topics such as manual installation, see the guides mentioned under *Related Documents (p. 7)* .

Comments?

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In your e-mail, refer to the document number and title. More specific information will enable us to process feedback efficiently.

Contacting Infor

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If we update this document after the product release, we will post the new version on this Web site. We recommend that you check this Web site periodically for updated documentation.

Introduction

You can use the Enterprise Server Installer to install Enterprise Server components such as Infor ES Web UI and Infor ES Connector for Web Services.

The components are delivered as a set of installable units.

The Enterprise Server installation medium contains these installable units:

- Infor Workspace
- Apache Tomcat
- Infor ES Web UI
- Infor Integration
- Infor ES Database Connector
- Infor ES Connector for Web Services

Web UI and Connector for Web Services cannot run without Tomcat.

Related Documents

- *Infor Enterprise Server Web UI - Installation and Configuration Guide (U8715 US)*
- *Infor Enterprise Server Connector for Web Services - Administration and User Guide (U9209 US)*
- *Infor Workspace Installation and Configuration Guide for Active Directory Federation Services*
- *Installation Guide for ODBC and JDBC Connectors for LN (U9173 US)*
- *Infor LN Installation Guide (U9498 US)*

Requirements

This chapter lists the platforms that are supported by the Enterprise Server Installer.

Platform support for the Enterprise Server Installer

This table shows the supported platforms by Installable Unit:

	AIX	HP_Itanium	Linux_x64	Solaris_Sparc	Windows_x64
Infor ES Connector for Web Services	Yes	Yes	Yes	Yes	Yes
Infor ES LN UI	Yes	Yes	Yes	Yes	Yes
Apache Tomcat 7.30	Yes	Yes	Yes	Yes	Yes
Infor ES Web UI	Yes	Yes	Yes	Yes	Yes
Infor Work-space	No	No	No	No	Yes
Infor ES Database Connector	No*	No*	No*	No*	Yes
Infor Integration	No	No	No	No	Yes
Bundled_JRE	No	No	Yes	Yes	Yes

*Use Infor Installation Wizard

For supported platform versions, see the documentation of each Installable Unit. If an Installable Unit is not supported on the current platform, it is not displayed in the Installer.

JRE

Before you start the installer on one of the following platforms, ensure the corresponding Java Runtime Environment (JRE) is installed:

- AIX
- HP_Itanium

For the following platforms, the software comes with a bundled JRE:

- Solaris_SPARC
- Linux (Intel 64 bits)
- Windows (i586 and x64)

If you use the installer on one of these platforms, the corresponding JRE can be installed automatically.

During installation you may choose a different JRE/JDK. If you start the installation from the NoVM directory, ensure a JRE version 1.6 or later is installed. The NoVM directory is located in the InstallableUnits folder on the installation medium; for example: InstallableUnits\Installer\Windows_x64\NoVM.

If you install using the bundled JRE, additional software is required on your system:

- If you install on a Unix system, ensure gunzip is available.
- If you install on Linux, ensure that you installed libXtst.so.6. If Oracle is installed, libXtst.so.6 may already be available in the Oracle installation folder.

See also the `installationinstructions.txt` file in the root of your Staging Area (Installation_Area).

Prerequisites for the components

Each component has its own prerequisites. This table shows where you can find details on these prerequisites:

Component	For details, see
Infor Workspace	<p>The "Prerequisites" section in the <i>Infor Workspace Installation and Configuration Guide for Active Directory Federation Services</i></p> <p>If you install Infor Workspace through the Enterprise Server Installer, the Infor Workspace installer is started automatically. Therefore, in the <i>Infor Workspace Installation and Configuration Guide for Active Directory Federation Services</i>, skip the procedure for running the Infor Workspace setup.exe.</p> <p>After the installation is finished, you must configure Infor Workspace. Follow the instructions described after the procedure for running the Infor Workspace setup.exe.</p>
Infor ES Web UI	<p><i>Infor Enterprise Server Web UI - Installation and Configuration Guide (U8715 US)</i></p>

Infor Integration

Installation Guide for ODBC and JDBC Connectors for LN (U9173 US)

To install Infor Integration, a 32 bits Java Virtual Machine (JVM) is required.

Infor ES Database Connector

Infor LN Installation Guide (U9498 US)

Installation Guide for ODBC and JDBC Connectors for LN (U9173 US)

Infor ES Connector for Web Services

Infor Enterprise Server Connector for Web Services - Administration and User Guide (U9209 US)

To install components through the Enterprise Server Installer

This section describes how to install components through the Enterprise Server Installer.

You can also manually install the features. For details, see the guides mentioned under *Related Documents* (p. 7) .

Important!

You cannot mix-up both installation methods because the update and uninstall will not work fine anymore. We strongly recommend to use the Enterprise Server Installer.

Points of attention

When you use the Enterprise Server Installer, note the following:

- The installer uses only Tomcat 7.0.30 as Web server.
The installer installs and configures a Tomcat Web server for you. You cannot run the installer to install another Web server because it is attached to Tomcat 7.0.30.
- The installer can be installed only on a UNIX/Linux or Windows OS.
See *Platform support for the Enterprise Server Installer* (p. 9) .
- Using the installer, usually only one Web UI version can be active on the web server. When installing in the same directory as before, an update is done. When installing in a new destination directory, you must use different ports (HTTP port, AJP port, and Shutdown port) for the second Tomcat. In case of running as Windows Service, you must also change the service name in the batch files (InstallTomcatService, StartService, StopService, and UninstallService). Then start Web UI with the new HTTP port, for example: `http://localhost:8313`.

If you do a fresh install of Web UI in a folder that still contains configuration files of a previous Web UI installation, note the following:

- The installation process renames the existing WebtopProperties.xml file in the <installation folder>\Webtop\config folder to WebtopProperties.xml<date/time>.
- To use the settings in the old WebtopProperties.xml<date/time> file, copy it to WebtopProperties.xml.

New installation

The installer is delivered with a full version of the Enterprise Server medium, and contains setup programs for various platforms. The Enterprise Server medium contains two startup programs:

- Install.bat for Windows platforms
- Install.sh for Unix platforms

These startup programs automatically start the appropriate setup program for the operating system of the server.

Next to the startup programs is a folder called InstallableUnits. This folder contains subfolders that contain the setup programs for various platforms, and the Tomcat, Web UI, and Connector for Web Services versions that will be installed.

You can either copy the contents of the media to your system and then run the installer, or you can run the installer directly from the media. Before you overwrite an existing Installation_Area, you must remove its content first.

The Web UI and Connector for Web Services versions are packaged in WAR files (Web archives). If you copied the contents of the media to your system, you can later overwrite a .war file with another 10.4.x version and then run the installer again; this way, you can easily update your components.

Note

If you copy a .war file to your system, you must also copy the corresponding InstallableUnit.info file. This file contains information on the version and dependencies of the UI.

The Enterprise Server Installer checks whether a previous version was installed before. If a previous version is found, the installer checks whether this version has the same interface as the version to be installed. These situations can occur:

- The previous version has an older interface or no interface version.
You must also update all InstallableUnits that were installed before. If an installableUnit, which is currently not in the Installation_Area, was installed, you must remove this installableUnit first.
- The previous version has a higher interface.
The installation is aborted with a message that a newer version of the installer is required.
- The previous version has the same interface.
You can normally update the InstallableUnits.

To update an InstallableUnit, such as Web UI, that has a dependency, such as Tomcat, you may also have to update the dependency. If the dependency is not available, or does not have the right version and build, you cannot update the InstallableUnit.

If a newer version of the installer is delivered, especially if the new installer has a different interface, we recommend to replace the Installation_Area. To find out the interface version of the installer, view the installer's **Welcome** panel or read the properties.txt file in the installer's root folder.

Installation procedure

To perform an automated installation:

Step 1: Check the system prerequisites

For Windows: Ensure you have administrative rights on your computer by logging in as a member of the Administrators group.

For UNIX/Linux: Ensure you have administrative rights on your computer by logging in as root. Also ensure you are working in a graphical environment (X Window System). The preferred method is to launch the (un)installer from a command shell in an xterm window.

Step 2: Optional: copy the installer to your system

Copy the contents of the media to a folder on your system.

Step 3: Start the setup program

Complete these steps:

1. Read the installationinstructions.txt file in the Installation_Area main directory. This file explains how you can start the installer for various platforms.
2. Start the appropriate installer for your platform.

Step 4: Perform the installation

The installer consists of various pages. Enter the required information and start the installation process. For details, refer to the installer's online Help.

When the installation is finished, the installer is automatically closed.

If you installed Infor Workspace, follow the instructions in the *Infor Workspace Installation and Configuration Guide for Active Directory Federation Services*. When you use this guide, take care of the following:

- You have already installed Infor Workspace through the Enterprise Server Installer. Therefore do not start the Infor Workspace setup.exe.
- Follow the instructions described after the procedure for running setup.exe.

Note

After the installation, you can configure the components. For details, see the guides mentioned under *Related Documents* (p. 7) .

If no Java environment is installed on the Web UI server, when you start Web UI, you are prompted to install Java.

Appendix A

To Self Sign a Tomcat Web server



To Self Sign a Tomcat Web server

This section will describe the following two processes:

- To self sign a Tomcat Web server to make it https-enabled
- To access the Tomcat Web server from a java-client.

These processes are important for the Tomcat Web server running Infor Security. The Tomcat web server needs this information to connect with the Web UI web server to make Single Sign On (SSO) possible. This also counts for the Web UI web server which must be able to connect to the Infor Security web server to get authenticated.

To self sign a Tomcat Web server to make it https-enabled.

You must generate a keystore-file for Tomcat and enable Secure Socket Layer (SSL) for Tomcat for:

- the Web UI Tomcat
- the Infor Security Tomcat

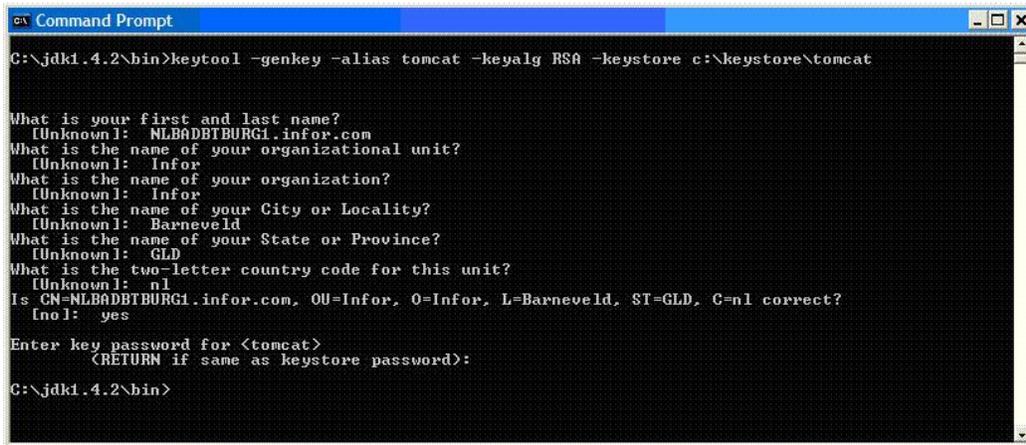
If the Web UI Tomcat and the Infor Security Tomcat are running on the same Tomcat instance you only have to perform the procedure once.

Generate a keystore-file for Tomcat

To generate a keystore file in the c:\keystore folder named tomcat, you must run the keytool command from the command prompt:

```
keytool -genkey -alias tomcat -keyalg RSA -keystore c:\keystore\tomcat
```

You can find the application keytool in the bin-directory of a Java SDK.



```
C:\jdk1.4.2\bin>keytool -genkey -alias tomcat -keyalg RSA -keystore c:\keystore\tomcat

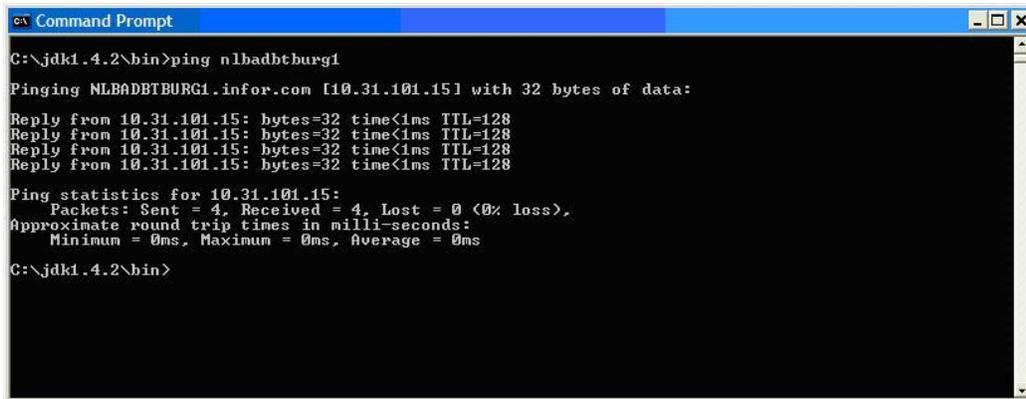
What is your first and last name?
[Unknown]: NLBADBTHURG1.infor.com
What is the name of your organizational unit?
[Unknown]: Infor
What is the name of your organization?
[Unknown]: Infor
What is the name of your City or Locality?
[Unknown]: Barneveld
What is the name of your State or Province?
[Unknown]: GLD
What is the two-letter country code for this unit?
[Unknown]: nl
Is CN=NLBADBTHURG1.infor.com, OU=Infor, O=Infor, L=Barneveld, ST=GLD, C=nl correct?
[no]: yes

Enter key password for <tomcat>
<RETURN if same as keystore password>:

C:\jdk1.4.2\bin>
```

The first and last name (see figure) must match the server-name where Tomcat runs.

Make sure the server-name does include the domain; the case of the server-name must be the same case as mentioned in the DNS. You can check the case in the DNS by running a ping command to the server, see following picture



```
C:\jdk1.4.2\bin>ping nlbadbthurg1

Pinging NLBADBTHURG1.infor.com [10.31.101.15] with 32 bytes of data:

Reply from 10.31.101.15: bytes=32 time<1ms TTL=128

Ping statistics for 10.31.101.15:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\jdk1.4.2\bin>
```

Note Expired certificates on your Infor PM Dashboards/ Infor LN server

Default a generated keystore is valid for 90 days. To extend this period and avoid certification conflicts you can regenerate the keystore file and exchange the certificates.

To check if your keystore is expired run the keytool with option -v -keystore. For example:

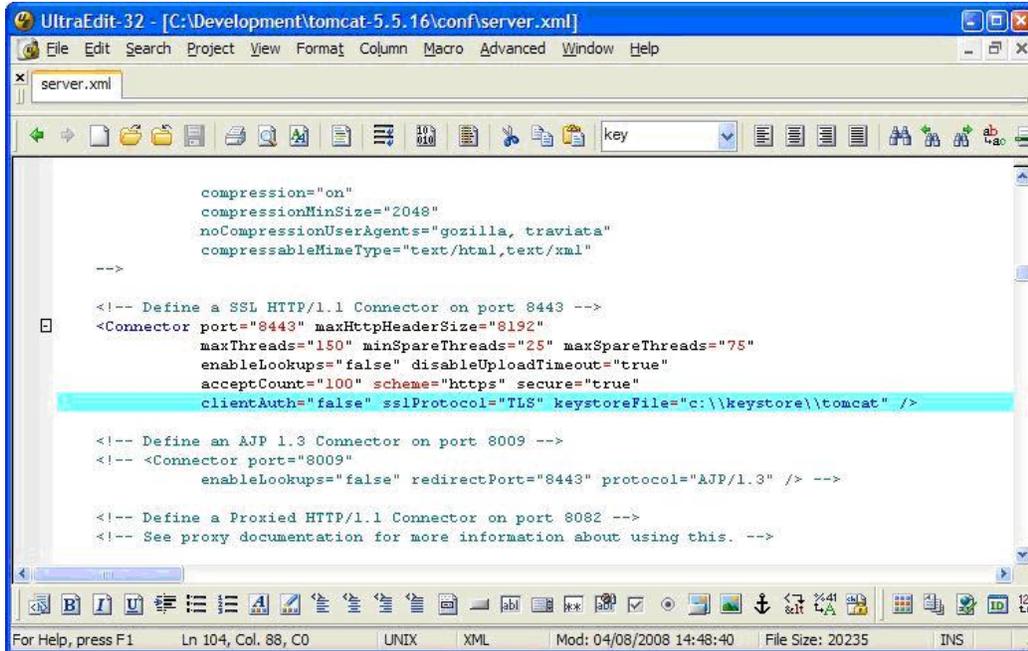
```
keytool -v -keystore
```

To extend the keystore file you must regenerate the keystore file and add the -validity <number of days> option to the command. For example:

```
keytool -genkey -alias tomcat -keyalg RSA -validity 365 -keystore c:\keystore\tomcat
```

Enable Secure Socket Layer (SSL) for Tomcat

Enable SSL for Tomcat by modifying the file `server.xml` located in the `conf`-directory of Tomcat with your text editor, for example UltraEdit 32.



By (re)starting Tomcat the web server can be accessed by a browser.

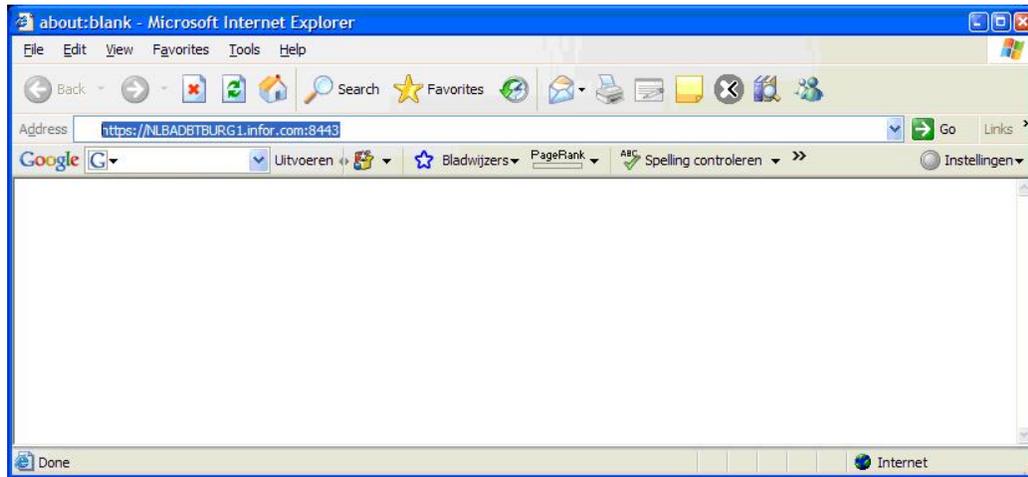
To access the Tomcat Web server from a java-client.

Get the certificate-file

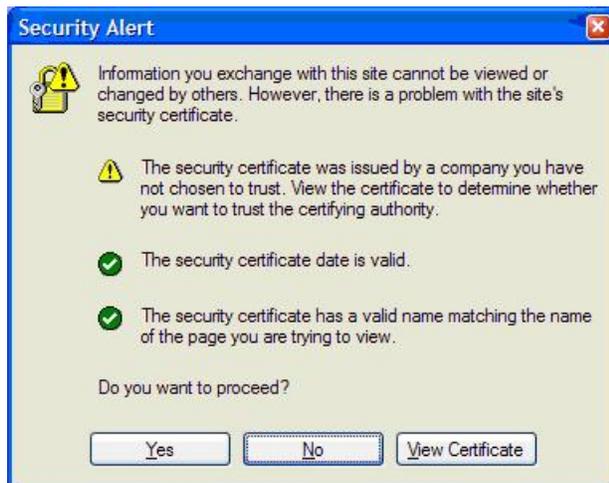
The certificate-file is needed to be able to call the web server from another Tomcat, for example the Tomcat running Infor Security. Take following steps:

Step 1:

Start a browser to obtain the certificate-file:

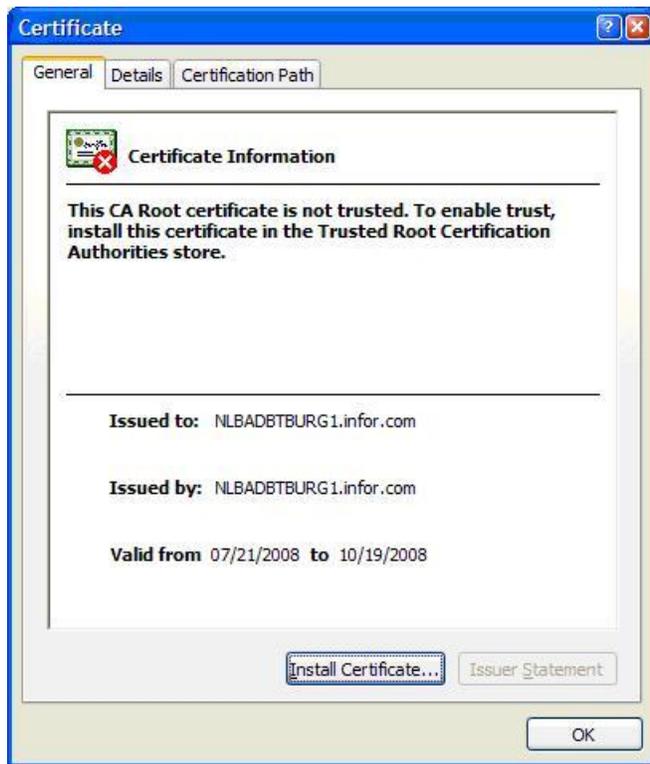


The browser will generate a Security Alert to warn you that the site cannot be trusted:



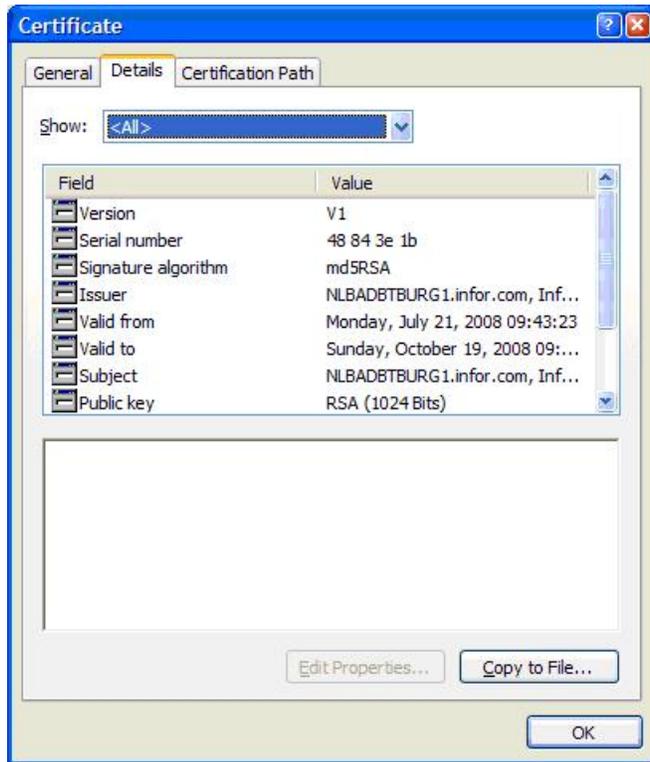
Step 2:

Click View Certificate.



Step 3:

Click the tab Details.



Step 4:

Click Copy to File... to retrieve the certificate-file:



Step 5:

Select a format and click Next to store the certificate-file

Add trusted web sites to the keystore

The certificate-file can be imported in the keystore file of another Tomcat on another machine. This Tomcat will then be able to make secure calls to the self signed web server. The import can be done with the following keytool command:

```
keytool -import -v -trustcacerts -file c:\nlbadbtburg1.cer -keystore c:\keystore\tomcat
```



```

C:\jdk1.4.2\bin>keytool -import -v -trustcacerts -file c:\nlbadbtburg1.cer -keystore c:\keystore\tomcat

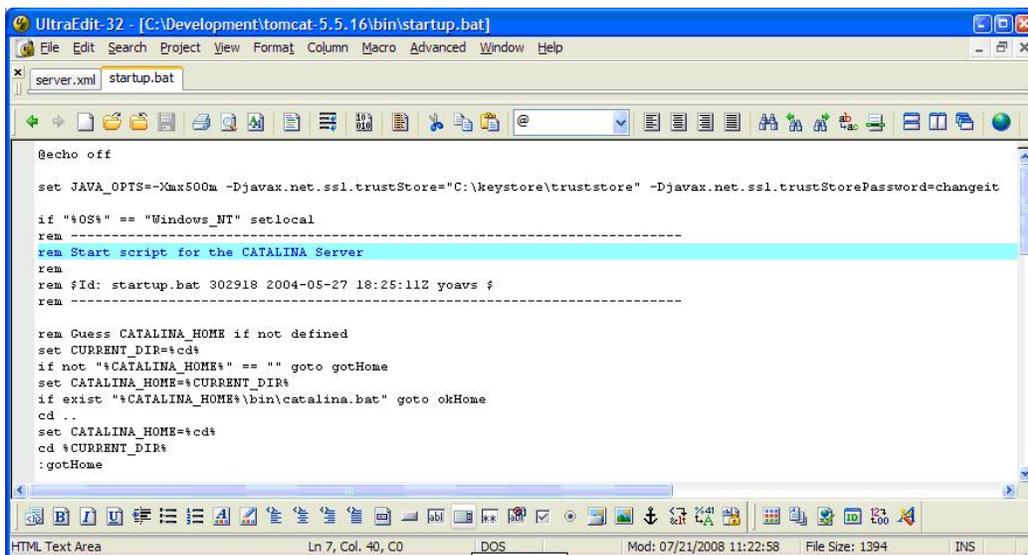
Owner: CN=NLBADBTBURGI.infor.com, OU=Infor, O=Infor, L=Barneveld, ST=GLD, C=nl
Issuer: CN=NLBADBTBURGI.infor.com, OU=Infor, O=Infor, L=Barneveld, ST=GLD, C=nl
Serial number: 48843efb
Valid from: Mon Jul 21 09:43:23 CEST 2008 until: Sun Oct 19 09:43:23 CEST 2008
Certificate fingerprints:
    MD5:  C9:39:59:35:16:A3:81:85:22:1A:2D:0B:BA:B2:F0:26
    SHA1: DP:E0:B9:A8:7E:BC:A0:E6:05:6C:4A:57:02:5D:0B:E6:27:11:12:CE
Trust this certificate? [no]: yes
Certificate was added to keystore
[Saving c:\keystore\tomcat]

C:\jdk1.4.2\bin>

```

Using the keystore as truststore in Tomcat

In the Tomcat startup.bat file set the following JAVA_OPTS:



```

@echo off

set JAVA_OPTS=-Xmx500m -Djavax.net.ssl.trustStore="C:\keystore\truststore" -Djavax.net.ssl.trustStorePassword=changeit

if "%OS%" == "Windows_NT" setlocal
rem -----
rem Start script for the CATALINA Server
rem
rem #Id: startup.bat 302918 2004-05-27 18:25:11Z yoavs #
rem -----

rem Guess CATALINA_HOME if not defined
set CURRENT_DIR=%cd%
if not "%CATALINA_HOME%" == "" goto gotHome
set CATALINA_HOME=%CURRENT_DIR%
if exist "%CATALINA_HOME%\bin\catalina.bat" goto okHome
cd ..
set CATALINA_HOME=%cd%
cd %CURRENT_DIR%
:gotHome

```

This Tomcat server can now create https-calls to the web server(s) mentioned in the keystore-file. These JAVA_OPTS must also be set for the Tomcat running Infor Security.

Note 1

When the Web UI server is placed on a Unix machine, you must place quotes in the JAVA_OPTS variable as follows:

```
vi setenv.sh
```

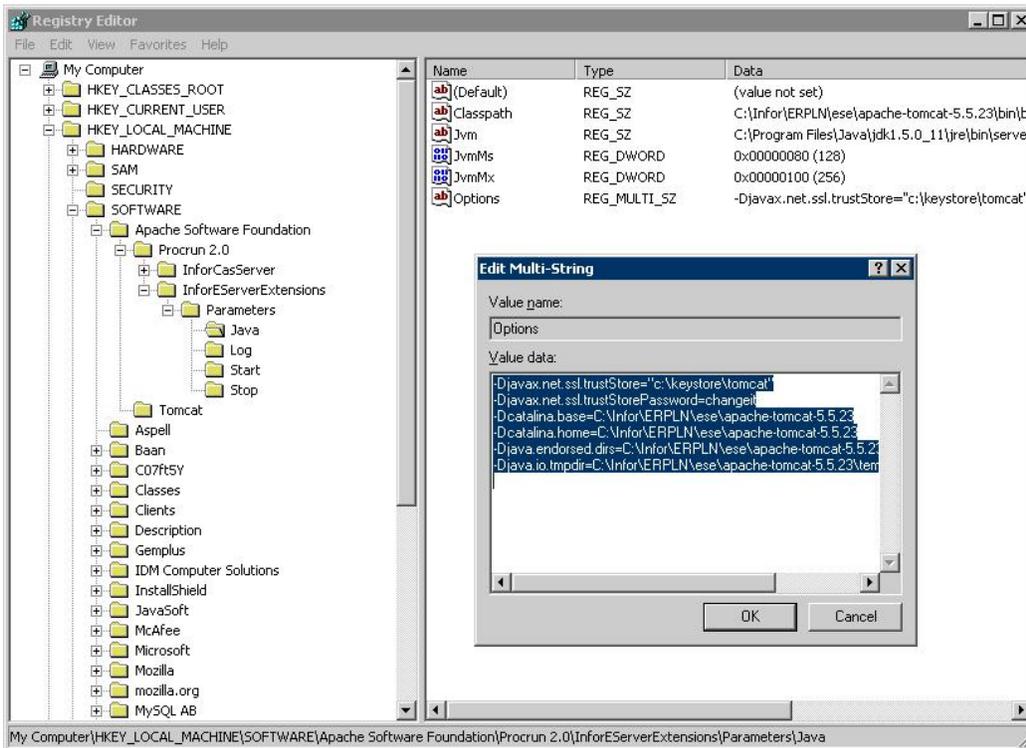
```
JAVA_HOME=/usr/jdk1.7.0_04
```

```
JAVA_OPTS= "-server -XX:+AggressiveHeap -XX:MaxPermSize=128m -Djavax.net.ssl.trustStore=/usr/app/tomcat/keystore -Djavax.net.ssl.trustStorePassword=changeit "
```

```
export JAVA_HOME JAVA_OPTS
```

Note 2

Start Tomcat with startup.bat and not as a service. If Tomcat is started as a service you can change the options by adding trustStore-options in front of the existing options in the registry as follows:



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