



CHAPTER 2

Installing Cisco Insight Reporter v3.1

The Cisco Insight Reporter v3.1 application requires installation on appropriate hardware selected. Installation steps required to install the software are captured in this chapter

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The Cisco Insight software is distributed as an archive file available at <http://www.cisco.com>.

The installation package for each platform contains:

- Cisco Insight Reporter v3.1 software
- Web server (Apache Tomcat)
- MySQL v5.1 database.

Downloading the Installation Package

This section describes how to download and extract the package of Cisco Insight Reporter software.

To download and extract the installation package, perform the following steps:

-
- Step 1** Connect to Cisco.com and download the software package.
 - Step 2** Copy the file on the file system of the destination server.
 - Step 3** Connect as root on the server and extract the downloaded .zip file with the following command:

```
Shell> unzip InsightReporter-[Version]-[TargetOS]-[TargetArchitecture].zip
```

For example:

```
InsightReporter-3.1.0-solaris10-x86-64bit.zip
InsightReporter-3.1.0-solaris9-sparc-32bit.zip
InsightReporter-3.1.0-rhel5-x86-64bit.zip
```

Installing Cisco Insight Reporter v3.1

During the installation process, the script checks if all the required software components are available and compliant with the installation of Cisco Insight Reporter v3.1.

Depending on the availability of an existing MySQL v5.1 database server or presence of a previous Insight Reporter installation, the script can handle any of the following scenarios:

- Full Installation of Insight Reporter v3.1—The server is compliant with the hardware and software requirements, but it does not have all Cisco Insight software components- the MySQL database server, the Apache-Tomcat web server, and the Java Runtime Environment (JRE).
- Integration with an Existing MySQL v5.1 Server—A MySQL 5.1 database server has been previously installed and is being populated by one or more Cisco SCMS Collection Managers that receive RDRs or NetFlow data from SCE/ASR devices. The Apache Tomcat web server and the Java Runtime Environment must not be present on the host. The script will install the appropriate packages.
- Upgrade Cisco Insight v2.0 to v3.1—A Cisco Insight V2.0 has been previously installed and is being used to report on traffic populated by one or more Cisco SCMS Collection Managers that receive RDRs or NF from SCE/ASR devices. The scripts will upgrade the system to v3.1.

In the first scenario, a full installation is performed. The script installs all required packages and starts all the processes. If the script detects an existing installation of MySQL v5.1 server, the second scenario is automatically chosen. It prompts for the root access credentials to the database server and then creates the Insight v3.1 schema. Eventually, it installs the JRE (if not already present) and the Insight web application.

If the script detects an existing installation of Insight v2.0 server, the third scenario is automatically chosen. It then starts the process for upgrading the existing database schema with the additional tables and upgrades Insight application to v3.1.

Full Installation

The script checks the server requirements and installs Apache Tomcat web server, MySQL Database server, the JRE and the Cisco Insight Reporter v3.1 software.

To install the installation package, perform the following steps:

Step 1 Locate and run the installer package:

```
cd <directory where installer was extracted>
./install.sh
```

You see code similar to following on your screen:

```
Shell> cd /root/installer
Shell> ./install.sh
```

Step 2 The script asks you to install JRE6 only if it does not find JRE6 installed on the machine. A question similar to the following appears on your screen:

```
Sun Java HotSpot(TM) JRE6 is required.  
Do you want to install JRE6? [Y/N] (default Y):
```

You may face any of the following scenarios:

- If you press **Enter**, the installer script installs the JRE6. If it is not able to install JRE6 it exits the installation procedure.
- If you press **N**, the installer script needs JRE6 to install the application and quits the installation procedure after giving a message.

Step 3 The script asks you to install the MySQL database server. A question similar to the following appears on your screen:

```
Do you want to install MySQL server? [Y/N] (default Y):
```

You may face any of the following scenarios:

- If you press **N**, the installer script needs MySQL database server to install the application and quits the installation procedure after giving a message.
- If you press **Enter**, it continues with Step 4

**Note**

On Solaris, MySQL has to be separately installed and hence the installer skips the above step. To install MySQL on Solaris, follow the instructions mentioned in the section on "[Installing MySQL for Cisco Insight Reporter v3.1 on Solaris, page 2-12](#)."

In case, system already has MySQL database server then the above question does not appear on your screen and you need to follow the instructions mentioned in [Integration with an Existing MySQL v5.1 Server on page 2-7](#)

**Note**

For any issues in connecting to MySQL server, see section "[Troubleshooting MySQL Start-up and Connectivity Problem](#)" section on [page 4-2](#) in the chapter on [Troubleshooting](#)."

Step 4 The script asks you to enter the MySQL data directory for the MySQL server. A question similar to the following appears on your screen:

```
Enter MySQL data directory applicable for your installation (example /opt/mysql-data):
```

You may face any of the following scenarios:

- If you do not provide any value and press **Enter**, the installer script keep asking same question and does not proceed further until a valid input is entered.
- If you enter /opt/mysql-data and press **Enter**, the installer script installs MySQL and uses the given input as the data directory.

Step 5 The script asks you to install a new user for installation or upgrade existed user from Insight v2.0 to Cisco Insight Reporter v3.1. A question similar to the following appears on your screen:

Enter the OS username that will be used to install/upgrade (root not allowed):
You may face any of the following scenarios:

- If you enter a **non-existent OS user**, Cisco Insight Reporter v3.1 new fresh installation starts.
- If you enter an **existent OS user** under whom, Cisco insight v2 was installed, Cisco Insight Reporter v3.1 up-gradation starts (see section, [Upgrade Cisco Insight Reporter from Release v2.0, page 2-7](#)).

**Note**

This existing user of Insight Reporter can be distinguished under "/home" directory for Red Hat Enterprise Linux (RHEL) or CentOS and "/opt" directory of Solaris operating systems,

Step 6 The script starts the installation of JRE6 and MySQL database server on your system.

Similar to the following will appear on your screen:

```
Unpacking...
Checksumming...
Extracting...
UnZipSFX 5.50 of 17 February 2002, by Info-ZIP (Zip-Bugs@lists.wku.edu).
  inflating: jre-6u22-linux-i586.rpm
Preparing...      #####
jre               #####
Unpacking JAR files...
    rt.jar...
    jsse.jar...
    charsets.jar...
    localedata.jar...
    plugin.jar...
    javaws.jar...
    deploy.jar...

Done.
Preparing...
MySQL-client-advanced #####
Preparing...      #####
MySQL-server-advanced #####
```

PLEASE REMEMBER TO SET A PASSWORD FOR THE MySQL root USER !
To do so, start the server, then issue the following commands:

```
/usr/bin/mysqladmin -u root password 'new-password'
/usr/bin/mysqladmin -u root -h cisco password 'new-password'
```

Alternatively you can run:
/usr/bin/mysql_secure_installation

which will also give you the option of removing the test databases and anonymous user created by default. This is strongly recommended for production servers.

See the manual for more instructions.

```
Starting MySQL.[ OK ]
Giving mysqld 2 seconds to start
Starting MySQL^[[60G[^[[0;32m OK ^[[0;39m]
echo "In order to remove completely MySQL server, you need to execute the uninstall.sh
script located under user home directory."
creating user [test]
Default password is same as the username
```

```

Please change the password for user test by giving below command
passwd test
CONGRATS!! Installation finished
To uninstall the application please execute uninstall.sh in the [user home
directory]/Insight/bin
To bundle the logs please execute backup.sh in the [user home directory]/Insight/bin
To configure the application please execute config.sh in the [user home
directory]/Insight/bin

```

**Note**

The default password of MySQL root user is set to **password**.

Ignore the password changing instructions printed out by the MySQL RPM installation. To change the default password of MySQL root user follow next Step 7

Step 7 Change the password for the MySQL root user.

```
/usr/bin/mysqladmin -u root -ppassword password 'new-password'
```

To verify the new password, user can try

```

/usr/bin/mysqladmin -u root -h localhost -p ping
Enter password:
mysqld is alive
To verify the port 3306 is open or not, user can try
> telnet localhost 3306
Trying 127.0.0.1...
Connected to localhost.localdomain (127.0.0.1).
Escape character is '^]'.
...Connection closed by foreign host.

```

Integration with an Existing MySQL v5.1 Server

If the script detects an existing installation of MySQL v5.1 server, the second scenario (as mentioned on page 4, Step 3, Note) is automatically chosen. The process asks to install Apache Tomcat and then creates on the existing database engine the additional schemas required by the application. Eventually, the installer script installs the JRE and the Cisco Insight Reporter v3.1 application.

Because the MySQL database is already installed, the script needs to know the password of the root account.

To install the Cisco Insight Reporter v3.1 software, perform the following steps:

Step 1 Locate and run the installer package.

```
cd <directory where installer was extracted>
./install.sh
```

Example:

```
Shell> cd /root/installer
Shell> ./install.sh
```

Step 2 The script asks you to install the JRE6 only if it does not find it on the host. A question similar to the following appears on your screen:

```

Sun Java HotSpot(TM) JRE6 is required.
Do you want to install JRE6? [Y/N] (default Y):

```

You may face any of the following scenarios:

- If you press **Enter**, the installer script installs the JRE6. If it is not able to install JRE6 it exits the installation procedure.
- If you press **N**, as the installer script needs the JRE6 to install the application, it quits the installation procedure after prompting a message.

Step 3 The script asks you to create a new path for the MySQL server. A question similar to the following appears on your screen:

```
INPUT : An existing v5.1 MySQL installation was found on your system. Do you want to use
it to install Cisco Insight v3.1.0? [Y/N] (default Y):
```

You may face any of the following scenarios:

- If you press **N**, the installer script quits the installation procedure after showing the following message.
- **MSG:** MySQL is required to complete the installation of Cisco Insight Reporter. Please refer to the Installation guide for further details. Now exiting.
- If you press **Enter**, a question similar to the following appears on your screen:

```
INPUT : Enter the root password for MySQL:
```

You may face any of the following scenarios:

- If you do not provide any value and press **Enter**, the installer asks for a schema name. (after entering the schema name, again it will ask for the MySQL root password).
- If you provide a valid input and press **Enter**, the installer script proceeds to next step



Note

Characters are not being visible while typing the password.

A question similar to following appears on your screen:

```
INPUT : Enter schema name for insight local database(default is insight):
```

- 'insight' would be considered as default schema name If you do not provide schema name.
- If you provide a database schema name which already exists and press **Enter**, the installer again asks the schema name after displaying a below message.
- **MSG:** schema [<schema name>] already exists.
- If you provide a database schema name whose length is greater than 16 characters, the installer again asks the schema name after displaying a below message.
- **MSG:** Database schema name length should be less than or equal to 16 characters.
- If you provide a valid value and press **Enter**, the installer script creates the schema and installs the application only if you have entered a correct password.
- The scripts again ask the Mysql root password by displaying the below message in case you have left it blank in an earlier step.

```
Enter password:
```

You may face any of the following scenarios:

- It would quit the installation by displaying relevant message if you entered a wrong Mysql root password
- If you provide a valid password and press **Enter**, the installer script creates the schema and proceeds with the installation of the application.

While creating a schema and installing the application, the script displays the below information:

```
INFO : Cisco Insight schema created successfully
INFO : creating user [<username>]
Changing password for user <username>.
passwd: all authentication tokens updated successfully.
INFO : Default password is same as the username
INFO : Please change the password for user [<username>] by giving command 'passwd <OS user name>'
INFO : Proceeding to configuration
```

Step 4 The script starts the installation process on your system.



Note

After successful completion of the installation, ensure to configure the application before using it.

Upgrade Cisco Insight Reporter from Release v2.0

If the script detects an existing user with Cisco Insight Reporter v2 installed, the third scenario (as described on page 4, Step 3, Note) is automatically chosen.

The process upgrades the application and the existing database schema and integrates this latter with additional tables required by the new v3.1 release.

To upgrade the application, perform the following steps:

Step 1 Locate and run the installer package.

```
cd <directory where installer was extracted>
./install.sh
```

You see code similar to following on your screen:

```
Shell> cd /root/installer
Shell> ./install.sh
```

Step 2 The script asks you to install a new user for installation or upgrade existed user from Insight v2.0 to Cisco Insight Reporter v3.1. A question similar to the following appears on your screen:

```
INPUT : Enter the OS username that will be used to install/upgrade (root not allowed):
```

You will face the following scenario:

- If you enter a **non-existent user**, fresh installation get processed.
- If you enter an **existent user**, the upgrade workflow from version 2 to version 3 will be executed.

Before upgrading, the script will stop the Apache Tomcat server in case it was already running. Then it will upgrade the Cisco Insight Reporter application and the existing database schema with additional tables required by version 3.1.

Eventually, the messages below will be displayed:

```
INFO : Please start the Apache Tomcat server to start the Cisco Insight Reporter
application up.
INFO : CONGRATS!! Upgrade successfully completed
```



Note After the upgrade procedure has completed, there is no need to execute the script for configuring the application. Just start the Apache Tomcat server and start using the application.



Note If the script detects an existing user with Cisco Insight Reporter v2.0.1 or V3.0, scripts of Cisco Insight Reporter v3.1 upgrade the existed system to v3.1.

Configuring the Application

To configure the Cisco Insight Reporter v3.1 software on Red Hat Enterprise Linux (RHEL), CentOS Linux or Oracle Solaris operating systems, perform the following steps:

Step 1 Go to the <user home-dir>/Insight/bin directory.

```
cd <user home-dir>/Insight/bin
./config.sh
```

Example:

```
Shell> cd <user home-dir>/Insight/bin
Shell> ./config.sh
```

Step 2 Enter different application configuration parameters related to the Insight Reporter's database schema.

Configure the following configuration parameters:

```
"INPUT : Enter the Insight local database host name (default is localhost):
"INPUT : Enter the Insight local database port (default is 3306):
```



Note The application is configured by default during the installation process, to re-configure it after installation; you can follow the steps mentioned in this section.

Starting and Stopping the Application

To start and stop the application, perform the following steps:

Step 1 Run `/etc/init.d/tomcat-[user] start/stop` or `service tomcat-[user] start/stop`

Step 2 Invoke the following shell script to start tomcat:

```
/etc/init.d/tomcat-[user] start
```

or

```
service tomcat-[user] start
```

Step 3 Invoke the following shell script to stop the tomcat:

```
/etc/init.d/tomcat-[user] stop
```

or

```
service tomcat-[user] stop
```



Note

The same script (`/etc/init.d/tomcat-test`) is used to start tomcat automatically in case the host on which the tomcat service is running is rebooted. For any issues in starting the application, see section Troubleshooting application startup problem on page 4-4 in the chapter on troubleshooting.

Checking the Installation

After the application has been installed on the server, the administrator should verify the connectivity to the application.

To check if the application is working fine, perform the following steps:

Step 1 Start the application by performing the steps.



Note

The application is configured by default during the installation process, to re-configure it after installation; you can follow the steps mentioned in this section.

Step 2 Starting and Stopping the Application.

Step 3 Run the **Cisco Insight Reporter v3.1** application by entering the server IP http://<server_IP> in the browser.

When you run the Cisco Insight Reporter v3.1 application, you see a similar page to that in [Figure 2-1](#).

Figure 2-1 Login Page



- Step 4** The account created after the initial set-up has the privileges of the Super Admin role. The administrator can login the application by entering the username and password as *cisco / cisco*.

Un-installing Cisco Insight Reporter v3.1

The Cisco Insight Reporter v3.1 provides a script for uninstalling the software packages. When you uninstall the application, the following packages are also removed:

- Cisco Insight Reporter v3.1 software
- Apache Tomcat web server (if it is installed during installation)
- MySQL server (if it is installed during installation)
- JRE6 (if it is installed during installation)

To uninstall the application, perform the following steps:

- Step 1** Log in as the **root user**
- Step 2** Navigate to the home directory of the newly created user and run the uninstall script.
- Step 3** Assume that the time of installation the new user created is test.

```
cd /home/test/Insight/bin
./uninstall.sh
```

You will get output similar to the following on your screen:

```
Shell> cd /home/test/Insight/bin
Shell> ./uninstall.sh
This would remove the Cisco Insight Reporter Application and the corresponding database.
If you wish to take a backup of the database schema, quit the un-installation and do so
now.
Do you want to continue with un-installation? [Y/N] (default Y):
If user enters N the wizard won't un-install the application and would quit the
un-installation procedure
If user enters Y then wizard would stop the tomcat, delete the user home directory and the
database schema

Stopping Tomcat
Using CATALINA_BASE:   /home/test/Insight/apache-tomcat-6.0.20
Using CATALINA_HOME:   /home/test/Insight/apache-tomcat-6.0.20
Using CATALINA_TMPDIR: /home/test/Insight/apache-tomcat-6.0.20/temp
Using JRE_HOME:        /usr
Killing: 3107
deleting user test
```



Note

Running the `uninstall.sh` without any parameters will only uninstall the Cisco Insight Reporter application but will NOT remove the MySQL engine and the Java Runtime Environment.

To uninstall the application but also the MySQL engine and the JRE installed during the installation procedure, run the "uninstall.sh" script with the following parameters:

```
./uninstall.sh java mysql
```

In case MySQL (as for the Solaris installation scenario) or the JRE are not installed by the Cisco Insight Reporter v3.1 installer, they will NOT be removed, EVEN using the mentioned parameters.

To uninstall the application under Solaris, run the `uninstall.sh` script from outside the user home directory

Example:

```
/opt/test/Insight/bin/uninstall.sh
```

In case the tomcat service has already been stopped (either manually or because it was terminated for some reason) then the result of the `uninstall.sh` script would be similar to the following:

```
Stopping Tomcat
Using CATALINA_BASE:   /home/test/Insight/apache-tomcat-6.0.20
Using CATALINA_HOME:   /home/test/Insight/apache-tomcat-6.0.20
Using CATALINA_TMPDIR: /home/test/Insight/apache-tomcat-6.0.20/temp
Using JRE_HOME:        /usr
Nov 22, 2010 5:11:43 PM org.apache.catalina.startup.Catalina stopServer
SEVERE: Catalina.stop:
java.net.ConnectException: Connection refused
    at java.net.PlainSocketImpl.socketConnect(Native Method)
    at java.net.PlainSocketImpl.doConnect(Unknown Source)
    at java.net.PlainSocketImpl.connectToAddress(Unknown Source)
    at java.net.PlainSocketImpl.connect(Unknown Source)
    at java.net.SocksSocketImpl.connect(Unknown Source)
    at java.net.Socket.connect(Unknown Source)
    at java.net.Socket.connect(Unknown Source)
    at java.net.Socket.<init>(Unknown Source)
    at java.net.Socket.<init>(Unknown Source)
    at org.apache.catalina.startup.Catalina.stopServer(Catalina.java:422)
```

```

at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown Source)
at java.lang.reflect.Method.invoke(Unknown Source)
at org.apache.catalina.startup.Bootstrap.stopServer(Bootstrap.java:337)
at org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:415)
Killing: 3107
/home/test/Insight/apache-tomcat-6.0.20/bin/catalina.sh: line 342: kill: (3107) - No such
process
deleting user test

```

As wizard was trying to stop the tomcat which was not running, it prompted these lines. So, please ignore these lines.

Re-installing Cisco Insight Reporter v3.1

You can reinstall the Cisco Insight Reporter v3.1 application.

To reinstall the application:

-
- Step 1** Uninstall the application. For an installation see [Un-installing Cisco Insight Reporter v3.1, page 2-10](#)
 - Step 2** Install the application. For installation see [Installing Cisco Insight Reporter v3.1, page 2-2](#)
-

Installing MySQL for Cisco Insight Reporter v3.1 on Solaris

The installation of Cisco Insight Reporter v3.1 on Solaris is similar to the installation on a Linux-based system. The only difference is that the MySQL engine has to be manually installed before running the installation procedure.

These are the steps required to install the Cisco Insight Reporter application on Solaris from scratch:

-
- Step 1** Ensure no MySQL instance is running and the MySQL engine is installed under "/opt/mysql" directory. To stop the running instance, use the following command:

```
/etc/init.d/mysql stop
```

Also kill any process connected on port 3306

```
netstat -an | fgrep 3306
```

If there is any output of above command, find out the PID of the process which is connected to port 3306, use the command as:

```
lsof -i tcp:3306
```

Kill the PID given by output of the above command by giving following command

```
kill -9 [PID]
```

- Step 2** Go to the directory where you have extracted the installer and give the following command (the example shows the package for Solaris 9 for SPARC 64-bit architecture, but is valid for the other supported Solaris versions)

```
gzip -d .pkgrpm/mysql-advanced-5.1.51-solaris9-sparc-64bit.pkg.gz
```

Create the system user for MySQL using the following command:

```
groupadd mysql
useradd -g mysql mysql
```

Execute following command

```
pkgadd -d .pkgrpm/mysql-advanced-5.1.51-solaris9-sparc-64bit.pkg
```

A question similar to the following appears on your screen:

- The following packages are available:

```
1  mysql      MySQL Advanced Server (Commercial)
      (sun4u) 5.1.51
```

```
Select package(s) you wish to process (or 'all' to process all packages). (default:
all) [?,??,q]:
```

- The selected base directory </opt/mysql> must exist before installation is attempted.

```
Do you want this directory created now [y,n,?,q]
```



Note This option is omitted if the directory /opt/mysql already exists

- This package contains scripts that will be executed with super-user privileges during the process of installing this package.

```
Do you want to continue with the installation of <mysql> [y,n,?]
```

After the MySQL installation has completed, execute the following commands:

```
chown -Rh root:mysql /opt/mysql
chgrp -Rh mysql /opt/mysql
```

Go to directory where you have unzipped the Cisco Insight Reporter v3.1 installer

```
cd /root/installer
```

and execute the following commands:

```
cp -f .pkgrpm/my_solaris.cnf /etc/mytemp.cnf
mv -f /etc/mytemp.cnf /etc/my.cnf
cp -f .pkgrpm/mysql /opt/mysql/mysql/scripts
cp -f .pkgrpm/mysql /etc/init.d/mysql
/opt/mysql/mysql/scripts/mysql_install_db --user=mysql --basedir=/opt/mysql/mysql
--datadir=/opt/mysql/mysql/data --defaults-file=/etc/my.cnf
chown -Rh root:mysql /opt/mysql
chown -Rh mysql:root /opt/mysql/mysql/data
cp /opt/mysql/mysql/bin/my_print_defaults /usr/bin/
chown root:root /etc/init.d/mysql
chmod 775 /etc/init.d/mysql
/etc/init.d/mysql start
/opt/mysql/mysql/bin/mysqladmin -u root -h [HOSTNAME] password 'password'
/opt/mysql/mysql/bin/mysqladmin -u root -h localhost password 'password'
```

where HOSTNAME is the host on which mysql is running

Go to directory where you have unzipped the Cisco Insight Reporter v3 installer and execute the install.sh script:

```
cd /root/installer
./install.sh
```

A question similar to the following appears on your screen:

```
Sun Java HotSpot(TM) JRE6 is required.
Do you want to install JRE6? [Y/N] (default Y):
Do you want to create a new system user for installation? [Y/N] (default Y):
```

After the installation has finished, go to <user home directory>/Insight/bin and execute the config.sh script

```
cd /opt/test/Insight/bin
./config.sh
```

To start/stop the tomcat service, use the following command:

```
/etc/init.d/tomcat-{user-created} start
/etc/init.d/tomcat-{user-created} stop
```



Note

During uninstallation, to manually uninstall the MySQL engine, remove the mysql package and the related directories using the following commands:

```
/etc/init.d/mysql stop
pkgrm mysql
rm -f /etc/init.d/mysql
rm -rf /opt/mysql
rm -rf /var/run/mysqld/
rm -rf /var/lib/mysql/
rm -f /var/log/mysqld.log
rm -f /etc/my.cnf
userdel mysql
groupdel mysql
```

Setup and Installation for HA Scenario

In a high-availability scenario, a 1 + 1 redundant setup in Active Standby mode is supported. Only one server is active at a time. Only cold-failover is supported.

To set up and install high-availability scenarios, perform the following steps:

-
- Step 1** Set up both instances separately using the steps described in the section [Installing Cisco Insight Reporter v3.1, page 2-2](#)
- Configure an external Load Balancer (LB) to point only to the active instance. It is recommended to use a LB software such as Apache HTTP Server with the mod-jk connector.
- Step 2** Set up MySQL Replication. When the primary instance fails, the LB needs to be manually pointed to secondary instance. The slave instance of MySQL has to be made as primary instance. When the master has recovered, set it again as primary instance.
-

Enabling HTTPS

If a LB is used in front of the Apache Tomcat server, it should support HTTPS.

Step 1 Go to the home directory of the user. Assume that the OS user created at the time of installation is insight.

```
cd /home/insight
```

Step 2 Go to the Apache Tomcat bin directory.

```
cd /Insight/apache-tomcat-6.0.20/bin
```

Step 3 Create a certificate keystore by executing the following command:

```
$JAVA_HOME/bin/keytool -genkey -alias insight -keypass insight -keystore insight.bin -storepass insight
```

Output similar to the following appears on your screen:

```
What is your first and last name?
[Unknown]: Your Name
What is the name of your organizational unit?
[Unknown]: Your BU
What is the name of your organization?
[Unknown]: Your Organization
What is the name of your City or Locality?
[Unknown]: Your City
What is the name of your State or Province?
[Unknown]: Your State
What is the two-letter country code for this unit?
[Unknown]: Your Country
Is CN=Your Name, OU=Your BU, O=Your Organization, L=Your City, ST=Your State, C=Your
Country correct?
[no]: yes
```

This generates a keystore file named insight.bin in the Tomcat bin directory



Note Ensure that the keypass and storepass passwords are the same.

Step 4 Go to the conf directory inside the Apache Tomcat directory:

```
cd ../conf
```

Step 5 Open the server.xml file inside the conf directory. Find the HTTPS connector, uncomment it and save the file.

The HTTPS connector will be similar to the following:

```
<!-- Define a SSL HTTP/1.1 Connector on port 443
This connector uses the JSSE configuration, when using APR, the
connector should be using the OpenSSL style configuration
described in the APR documentation -->
<!--
<Connector port="443" protocol="HTTP/1.1" SSLEnabled="true"
maxThreads="150" scheme="https" secure="true"
clientAuth="false" sslProtocol="TLS"
keystoreFile="${user.home}/Insight/apache-tomcat-6.0.20/bin/insight.bin"
keystorePass="insight"/>
-->
```

**Note**

This is an optional step only required if you wish to run Cisco Insight Reporter in a secure mode.

After you configure SSL on Apache Tomcat , enter the following URL in the browser:

<https://<server IP>:443/>

Add the exception and accept the certificate the first time.
