Install and Configure CA CABI (Report) Server

The steps below cover the <u>installation and integration of the CABI Report Server as shown in the CA Identity Manager 14.2 Installation Guide</u>, adjusted to use the CA Identity Suite Virtual Appliance form factor.

Install and configure the following CA CABI components on each CA Report Server:

Pre-requisite Tomcat Installation

Install CA CABI (Report) Server

Post-Installation Configuration

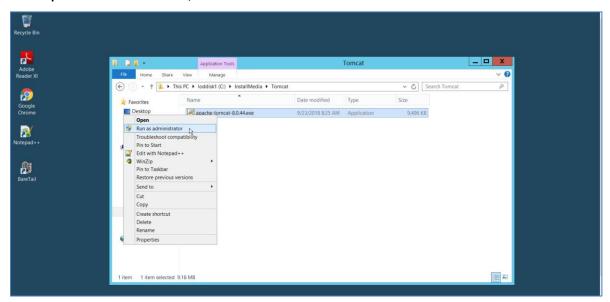
Complete the Identity Manager Integration

Verify Installation

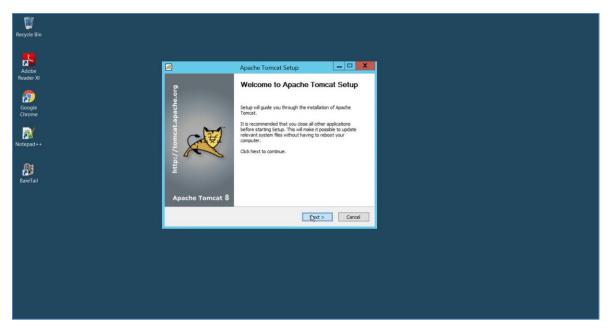
Pre-requisite Tomcat Installation

Go to the location where Tomcat install software is available.

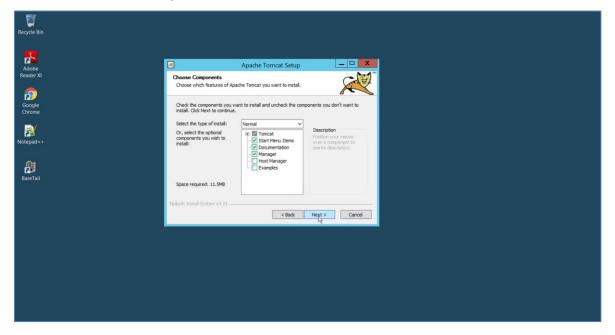
Select apache-tomcat-8.0.44.exe, then run as administrator.



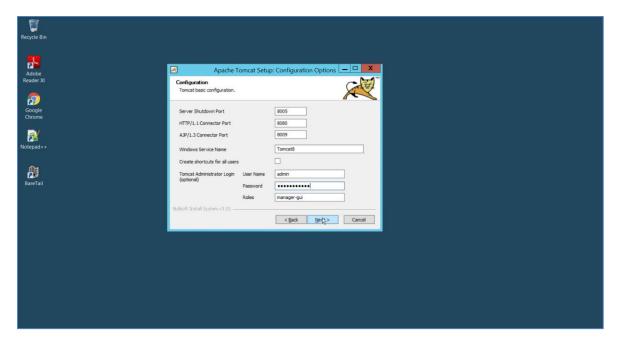
The **Apache Tomcat Setup** starts, displaying the **Welcome** screen. Click **Next** to continue.



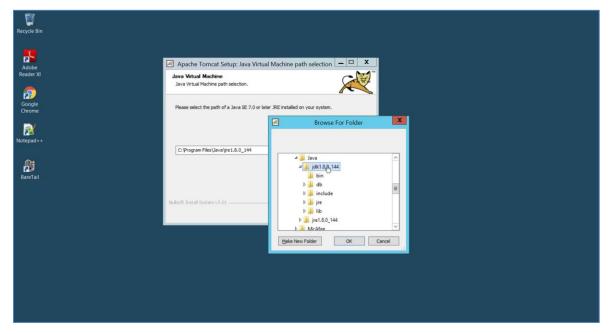
The **License Agreement** page is displayed. Click **I Agree** to continue. The **Choose Components** page is displayed. Use the default selected components and click **Next** to continue.



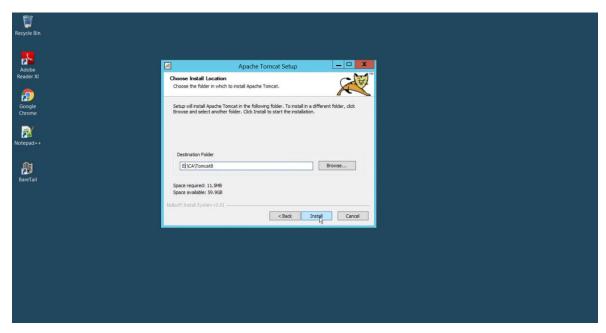
The **Configuration Options** screen is displayed, with **default ports** assigned to a standalone server and **Windows Service Name**. Provide Username of **admin** for the Tomcat Administrator Login and a somewhat complex password, like **P@ssword01!**. Be sure to document the password for future use. Click **Next** to continue.



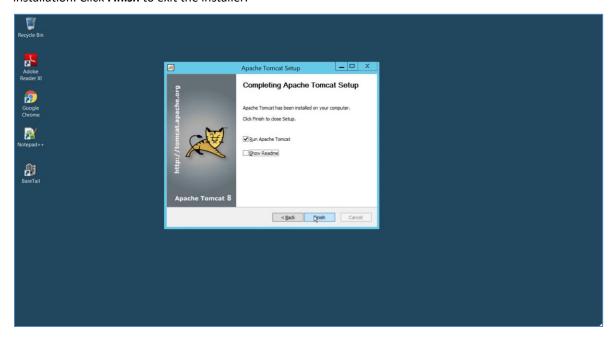
The Java Virtual Machine path selection screen displays. The installer shows the Java Runtime Environment path selected by default. Change the path to the Java SDK installation folder as the path to the required JRE, using the **Browse** button to open the Windows Explorer.



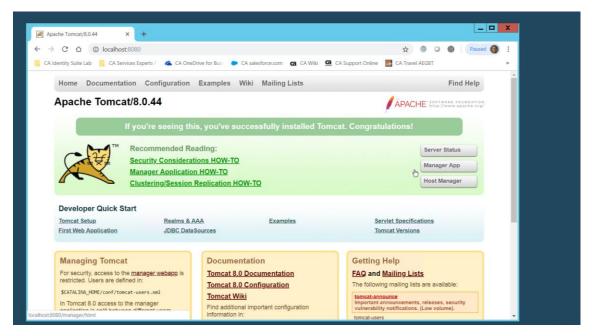
Change the install location to drive on the Windows Server used to install the CA software. The E: drive is shown in the example below. Click **Install** to continue.



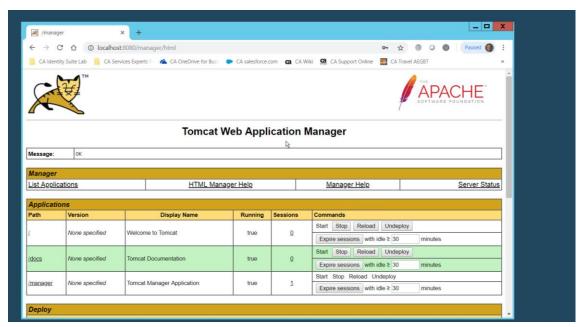
The Completing Apache Tomcat Setup screen displays when the installation finishes. Uncheck the **Show Readme** box unless you wish to read the file contents. Leave **Run Apache Tomcat** checked so you can validate the installation. Click **Finish** to exit the installer.



The **Apache Tomcat local home** page opens in your default browser. Choose the Manager App button to login to the **Web Application Manager** app. Use **admin** and the specified password to login using the Basic Authentication Form opened by your default browser.



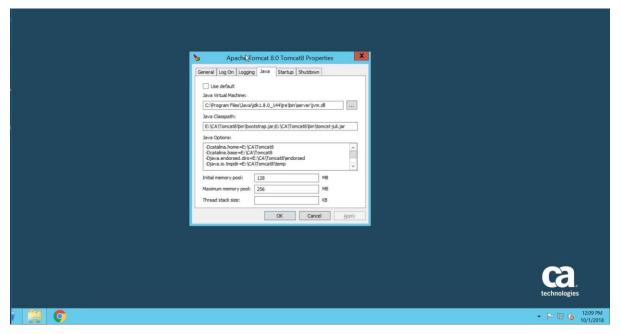
The **Apache Web Application Manager** page should display, validating the Tomcat Server installation. Close the browser window.



Use the Tomcat Configuration Manager widget in the Quick Launch Tray to stop the Tomcat Service before you proceed to install the CABI software.



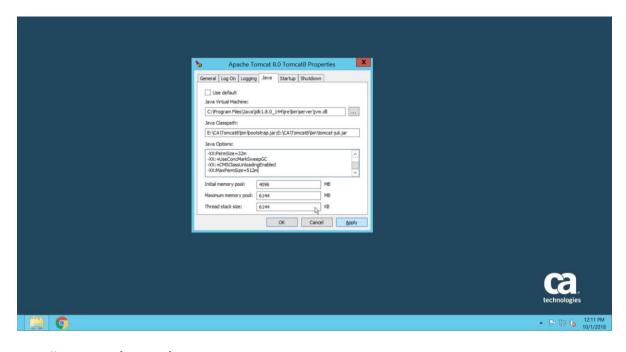
Configure Tomcat JVM Options before installing the Report Server. Open the Tomcat Configuration widget and select the Java tab.



Change the memory pool and thread stack to reflect: initial memory pool = 4096 MB; maximum memory pool = 6144 MB; and thread stack size = 6144 KB. Add the following Java Options to the end of the displayed values:

- -XX:PermSize=32m
- -XX:+UseConcMarkSweepGC
- -XX:+CMSClassUnloadingEnabled
- -XX:MaxPermSize=512m

The resulting Tomcat Properties panel should resemble the screen shot below:



Install CA CABI (Report) Server

Login to Windows server with service account provided for Jasper Reports Server. Set JAVA_HOME system environment variable; and add "%JAVA_HOME%\bin;" to the system PATH variable. The following steps are copied from the Installing CABI Jasper Reports Server section in the CABI 6.3 documentation.

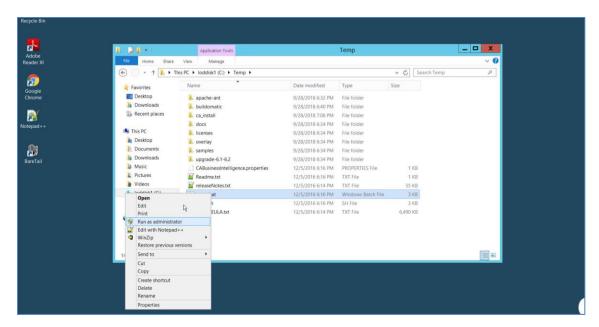
- 1. Right-click My Computer and select Properties.
- 2. Within Advanced tab, select Environment Variables.
- Create a System variable that is named JAVA_HOME (or edit existing) and reference where the JDK software is located, for example:
 C:\Program Files\Java\jdk1.8.0_73
- 4. Select **Path** from the list of system variables, and click the Edit button and append **%JAVA_HOME%\bin** to the list of paths (be sure to separate with ';')
- 5. Click OK.

One additional update is required to use a remote server hosting MS SQL Server. This update is covered in the Silent Install topics of the named CABI 6.3 documentation. The update is required when using the GUI or silent install processes.

- 1. Update the hosts file (%windir%\System32\drivers\etc\hosts) in Windows to insure the MS SQL Server hostname is resolvable. For example: xxx.xxx.xxx host.domain.com hostname. Here xxx.xxx.xxx is the ipv4 address of host name.
- 2. Ensure that the etc/host entries are correct.

Unzip the install software GEN5000000000001.zip to temporary folder on the Report Server host. Run the GUI Installer, setup.bat, as the local administrator (as shown below).

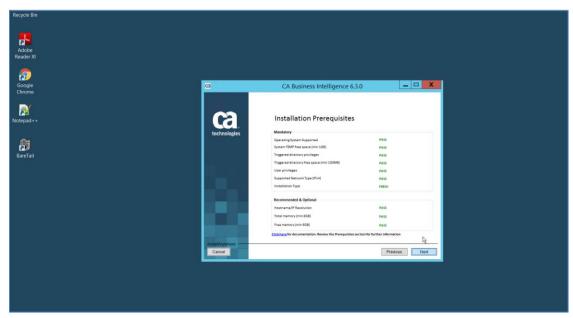
Run setup.bat as administrator ...



The CABI installation binary (InstallAnywhere) launches, preparing the installation package for execution.

The Language selection screen opens for the installer. Use the default of English and click Next to continue.

The Installation Prerequisites checks are executed, and the results are displayed (as shown below).

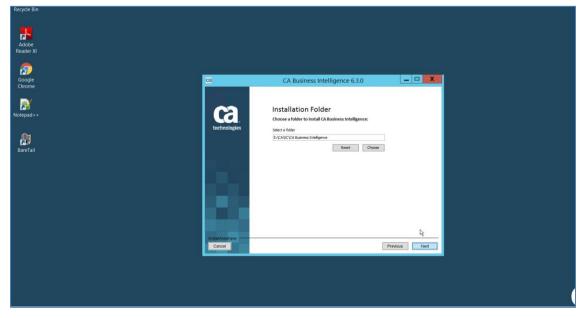


The **Introduction** screen displays. Click **Next** to continue the installation.

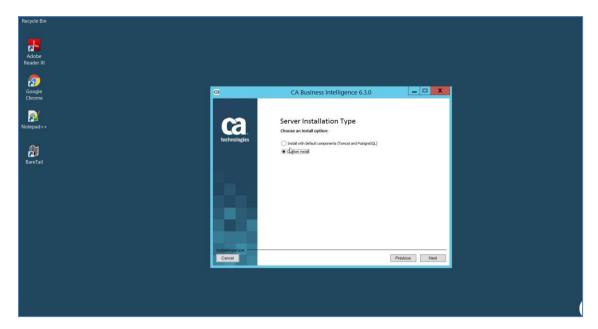
Use the scroll bar to review the **License Agreement** and activate the **I Accept** radio button. Select **I Accept** option and click **Next** to continue.



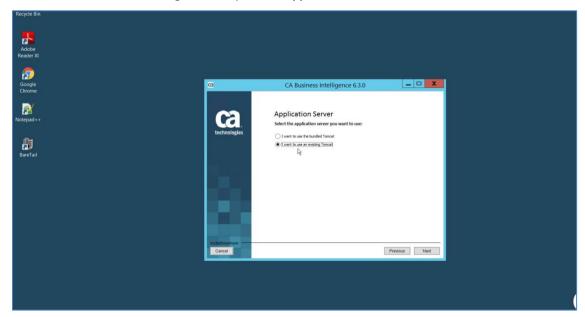
Choose the **Installation Folder** in the specified location for the install. The example below uses the **E:\CA** as the root path for the installation.



Select **Custom install** radio button on **Server Installation Type** screen.



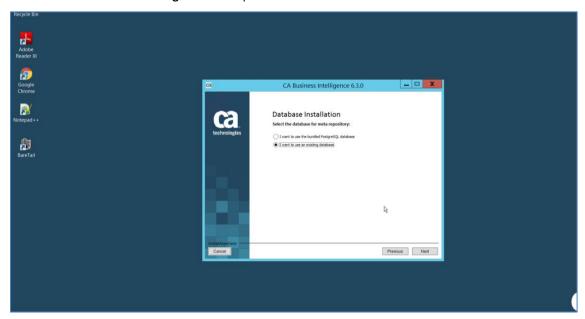
Select I want to use an existing Tomcat option on Application Server screen.



After selecting the Tomcat location on the **Existing Tomcat Details** screen, use the default name for Web App name, **jasperserver-pro**. Click **Next** to continue.

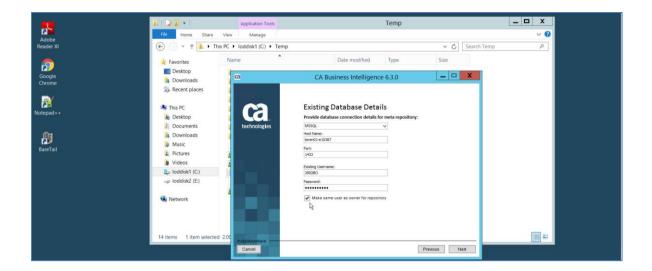


Select I want to use an existing database option on Database Installation screen. Click Next to continue.

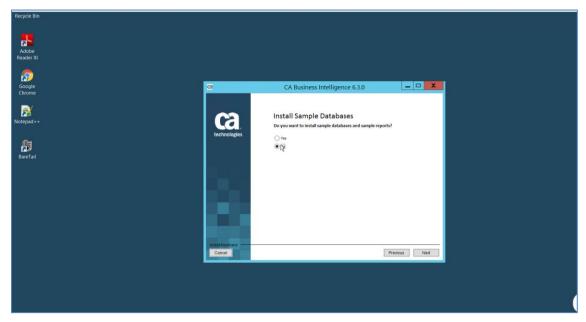


Select MSSQL and provide the database details.

Select the check box "Make same user as Owner for repository". Click Next



Select No on Install Sample Databases screen. Click Next to continue.



Set the **Repository Database** name to the specified, or **JSReptDB** as shown in the example below. Click **Next** to continue.



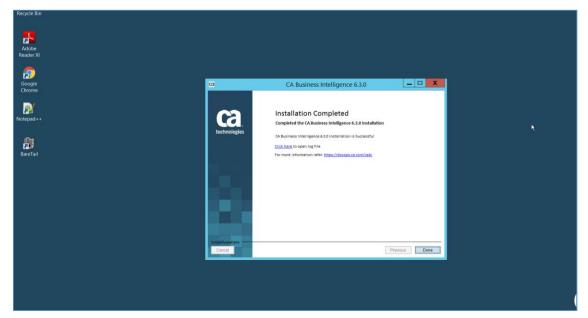
The Ready to Install screen displays to allow review of the installation parameters. Click **Install** to begin the installation or select **Previous** to return to an earlier screen to make a change.



The installation takes few minutes, between five and twenty depending on the virtual data center services. Various Installing screens display to advise you of the installation progress.



The **Installation Completed** screen displays, showing the final status of the installation. The following example shows a successful installation. Click **Done** to exit the installer.



Post-Installation Configuration

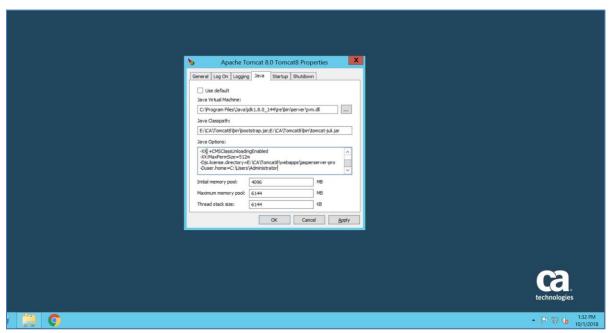
Two additional updates to the Tomcat Java Options are required before starting the Tomcat service to validate the installation.

Update the License Directory path to the Jasper Report Server installation path, -

Djs.license.directory=<Tomcatfolder>\webapps\<webappname>, replacing Tomcatfolder and webappname with the actual values. Remember webappname used the default value jasperserver-pro in this example.

If you are using Encryption=yes, the default for the GUI installation, set -Duser.home=C:\Users\Administrator, or the current user used to connect to the server.

Use the Tomcat Configuration widget to update the Java Options in the Java tab as shown below. Click **Apply** and **OK** to save the updates and close the Configuration tool.

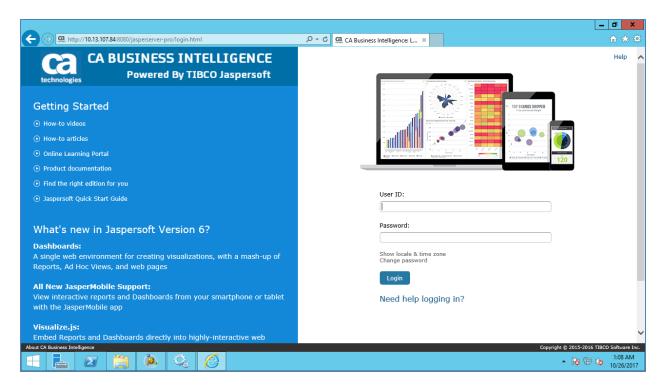


Start Tomcat using the same Tomcat Configuration Manager.

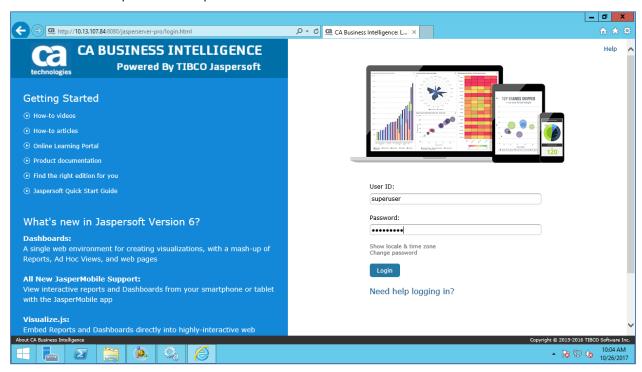


Open browser and access the below URL, replacing tomcat-hostname with the name of the server hosting the Jasper Report Server.

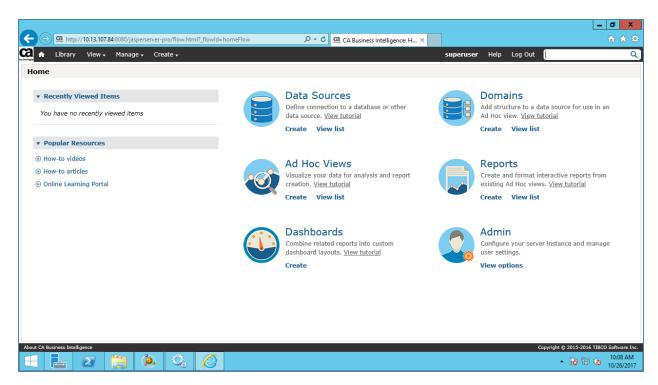
http://tomcat-hostname:8080/jasperserver-pro/



Enter username and password as superuser



The below screen is displayed after successful login.



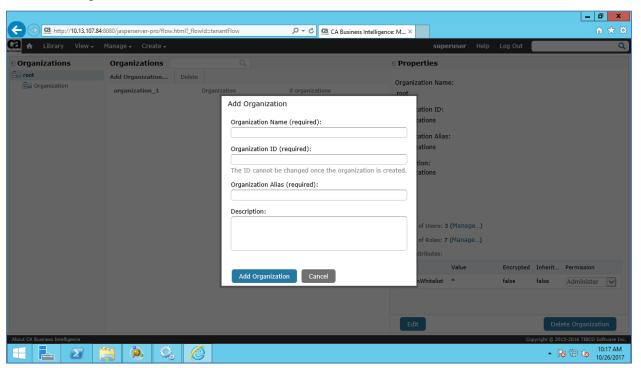
Create New Organization "IAM" by following the below steps.

Complete the Identity Manager Integration

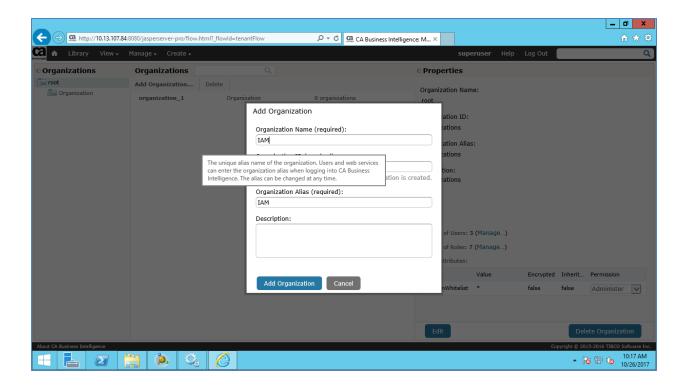
Click on Manage tab and select organizations.



Click on Add Organization



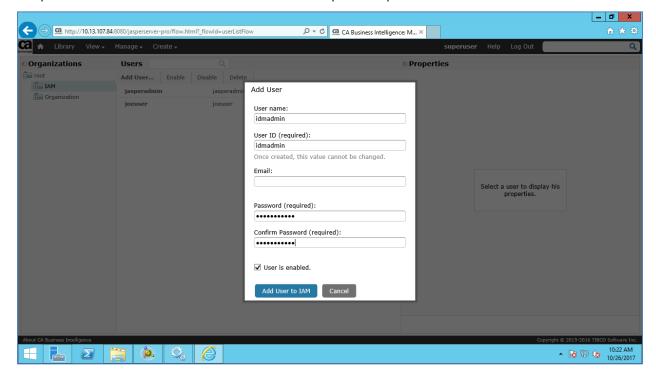
Provide the organization details as below, specifying IAM as the required Organization Name.

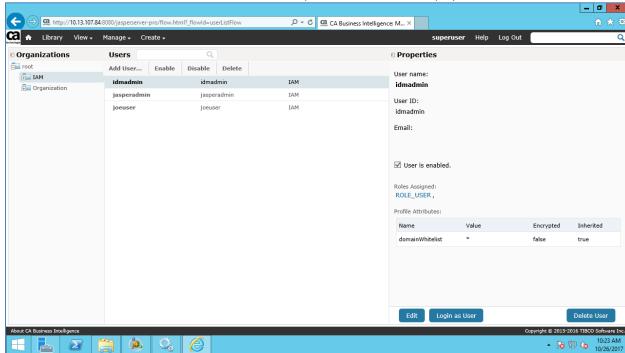


Create a new user, **idmadmin**, in the IAM Organization by following the below steps.

Click on Manage and select users. Click on Add User.

Complete the user details as shown below. Document the password provided in the above screen for future use.

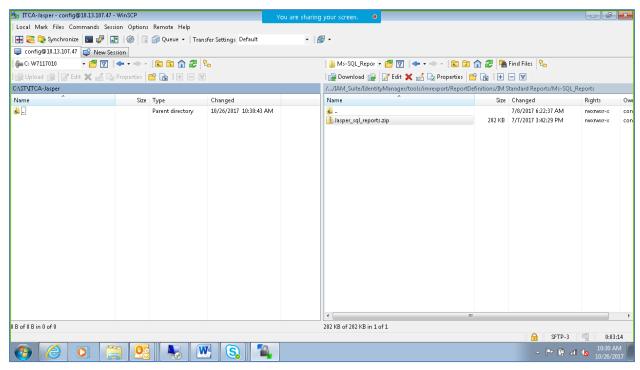




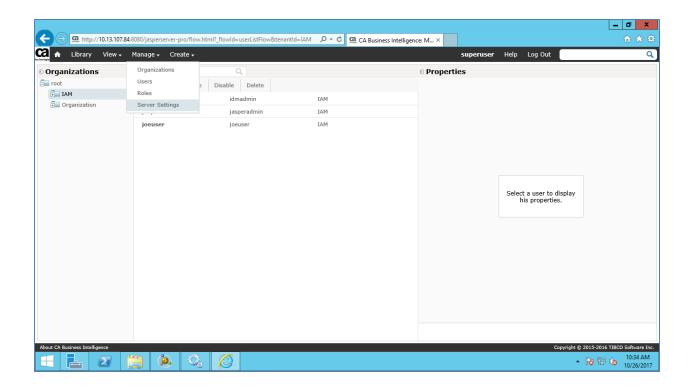
Click on "Add User to IAM" the below screen with the updates list of users is displayed.

 $Retrieve\ jasper_sql_reports.zip\ from\ the\ deployment\ IDS\ vApp\ server\ at\ the\ following\ location:$

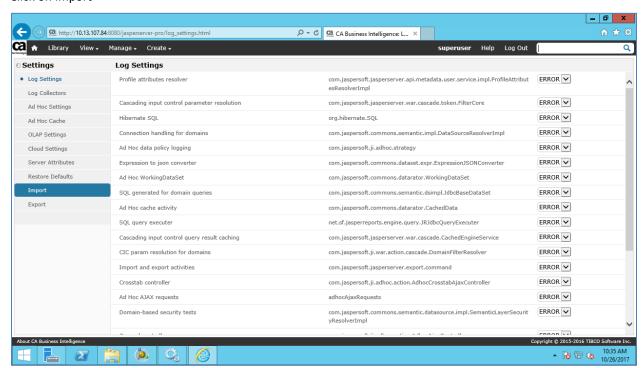
/opt/CA/IdentityManager/IAM_Suite/IdentityManager/tools/imrexport/ReportDefinitions/IM Standard Reports/Ms-SQL_Reports



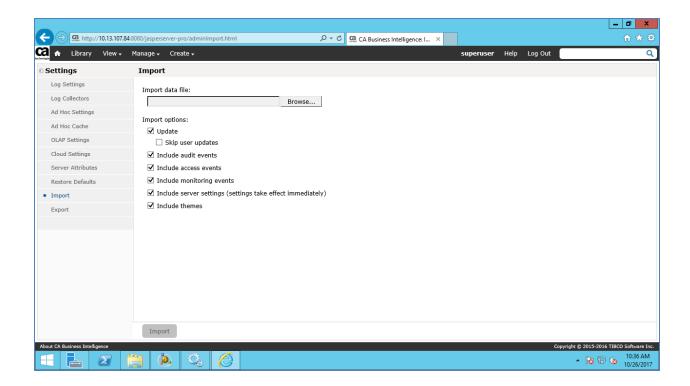
Go to Server Settings



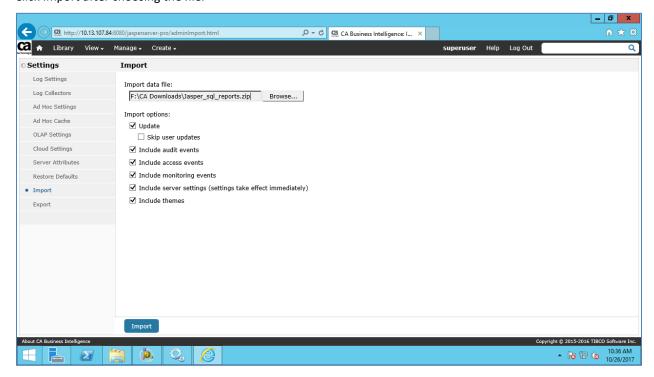
Click on Import



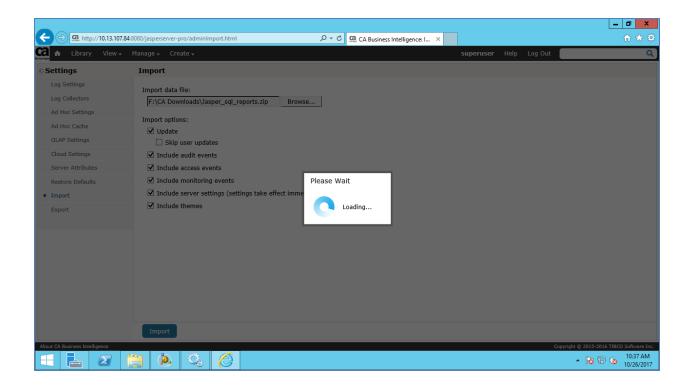
Click browse to choose the location of Jasper_sql_reports.zip



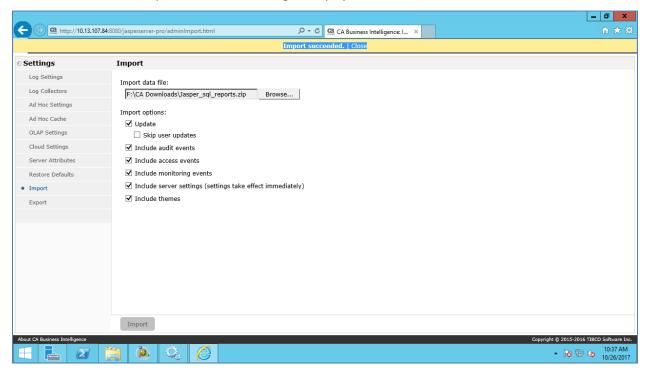
Click Import after choosing the file.



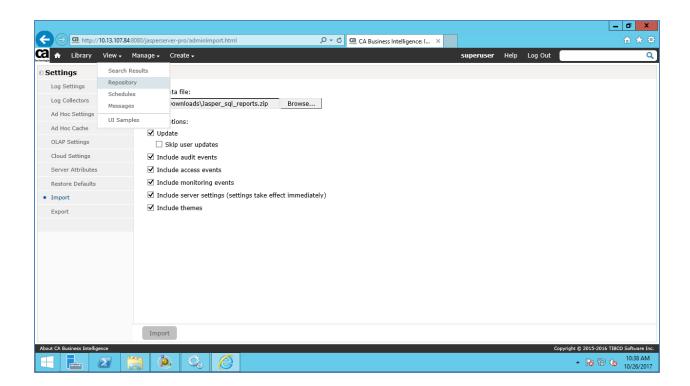
The below intermediate screen is displayed. Wait for few minutes.



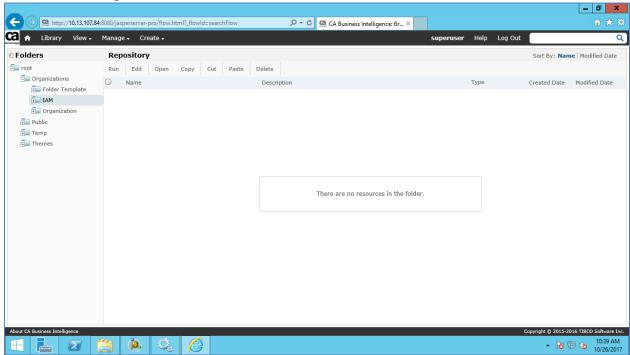
The below screen with "Import Succeeded" message is displayed.



Go to View – Repository

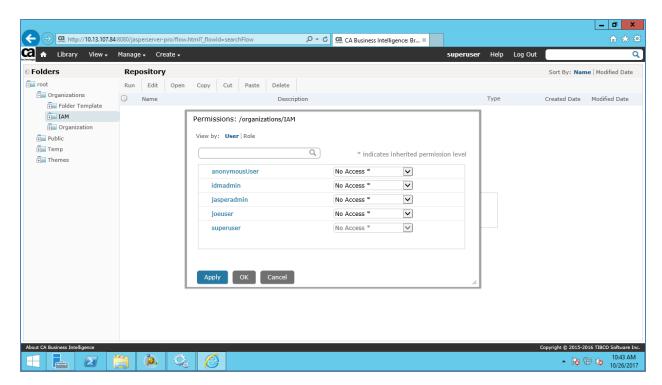


Select IAM under Organization

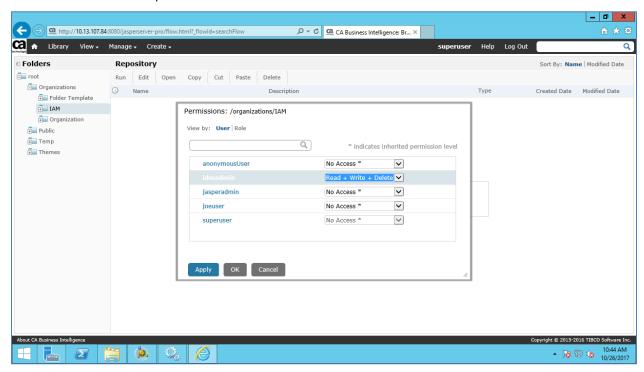


Right click on IAM and select permissions

Click on User

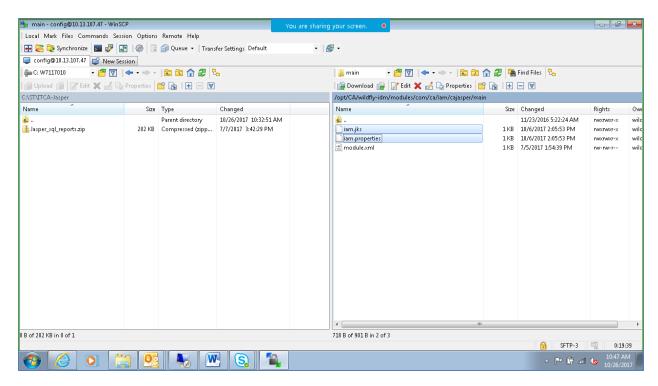


Select Read+Write+Delete permissions as shown in the below screen.



Copy the key files from App Server VApp from the below location

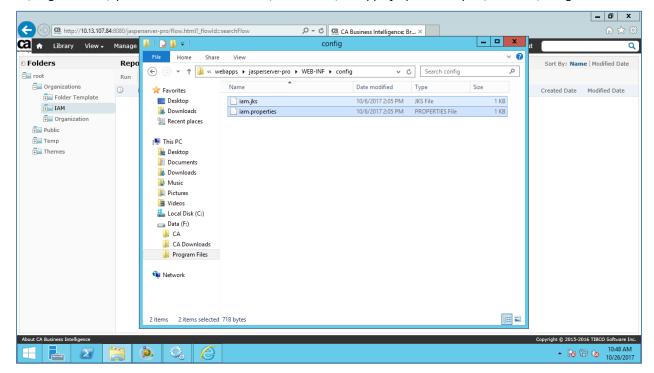
/opt/CA/wildfly-idm/modules/com/ca/iam/cajasper/main



..

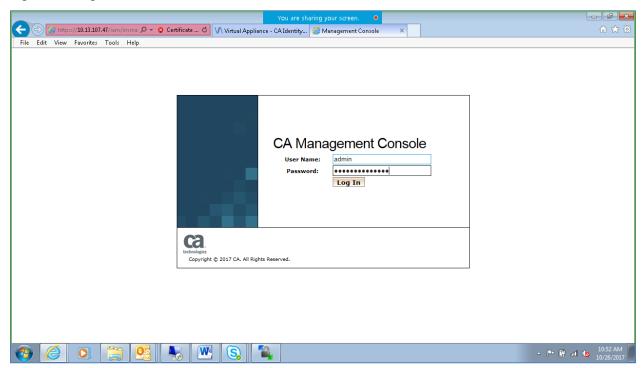
Copy the files to

F:\Program Files\Apache Software Foundation\Tomcat 8.0\webapps\jasperserver-pro\WEB-INF\config

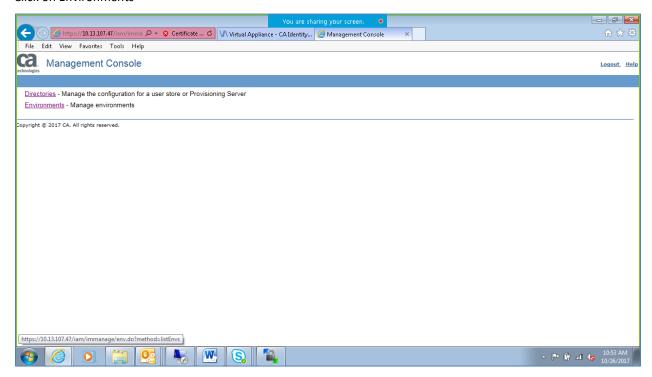


Restart Tomcat after copying the above files.

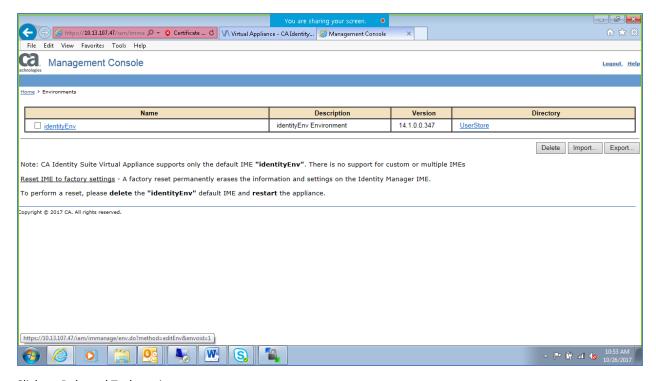
Login IM Management Console.



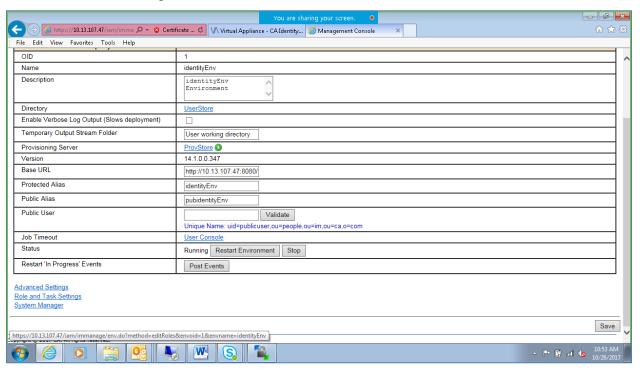
Click on Environments



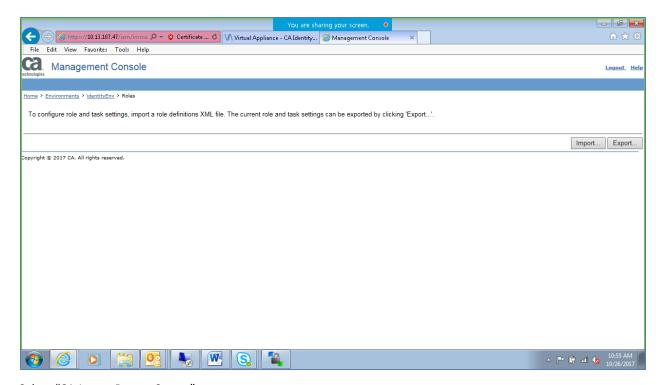
Click on identityEnv



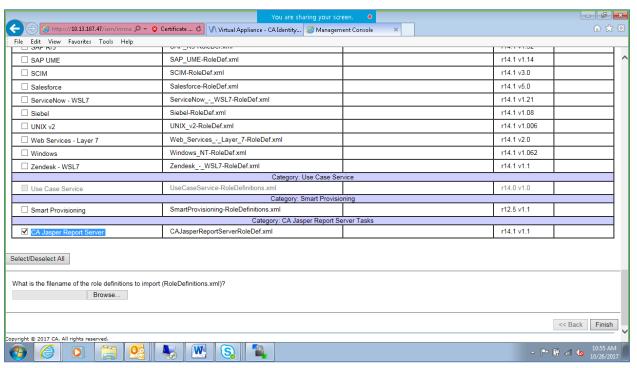
Click on Role and Task settings



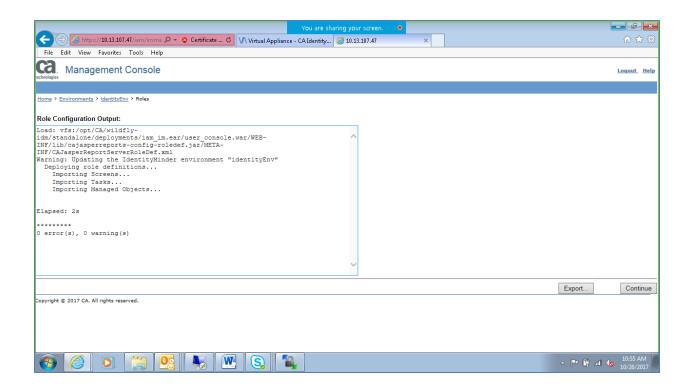
Click on Import



Select "CA Jasper Report Server"

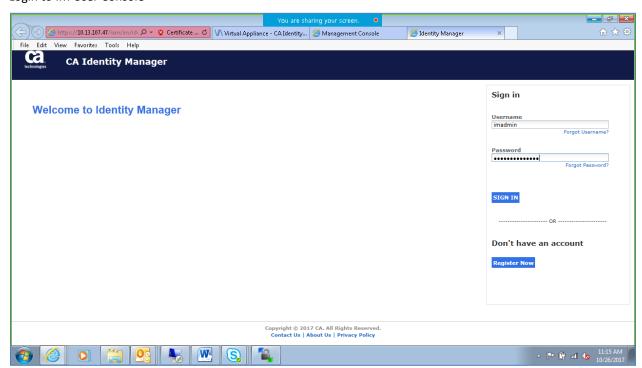


Click Finish

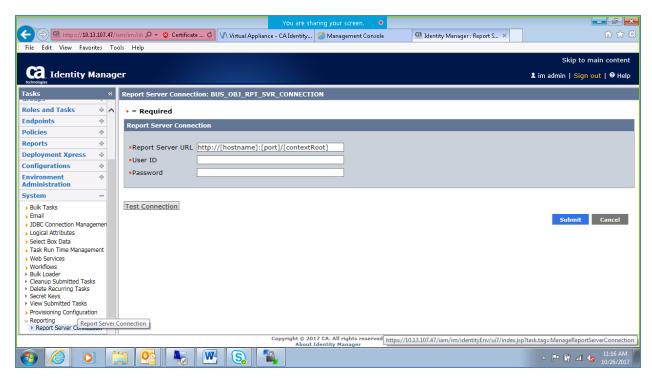


Click continue and Restart Environment

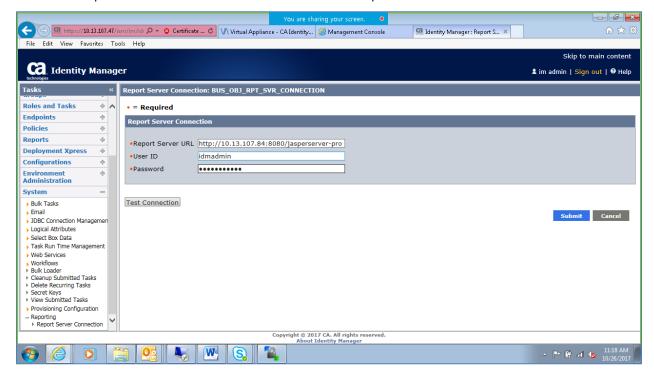
Login to IM User Console



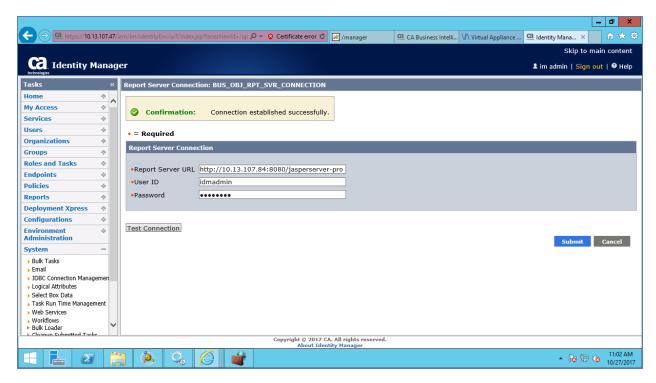
System ->Reporting ->Report Server Connection



Provide the Report Server URL. Enter username as idmadmin and password.

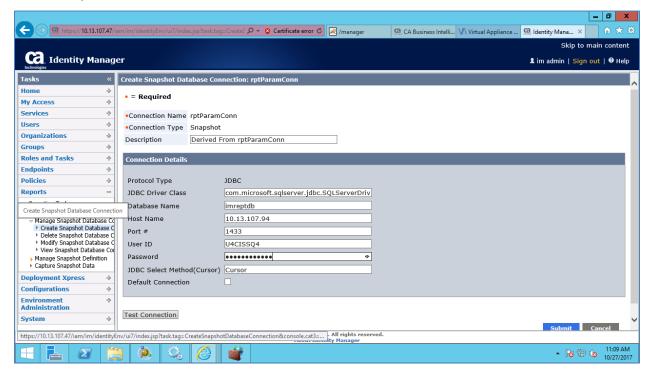


Click on Test connection. The below Connection established successfully is displayed.



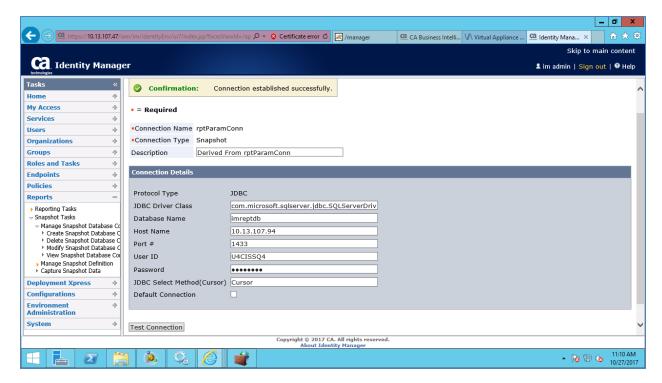
Click on Submit.

Create a Snapshot Database Connection.



Enter password, then click on **Test Connection**.

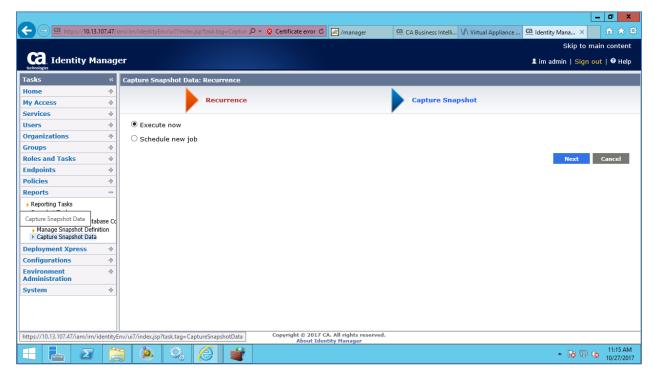
The below Connection established successfully message is displayed.



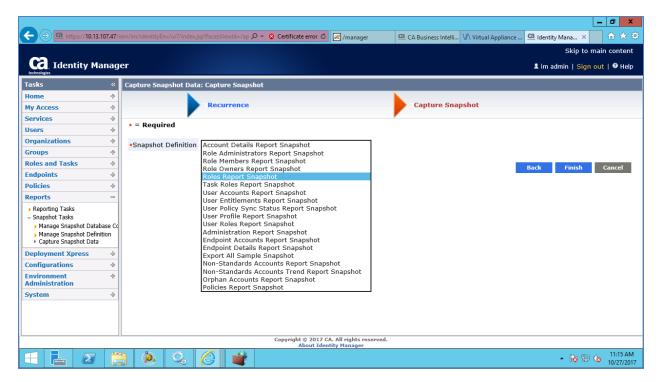
Click on Submit.

Verify Installation

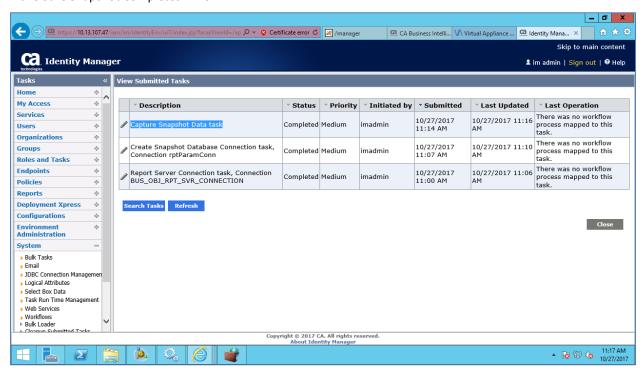
Go to the IM User Console and navigate to Capture Snapshot Data shown in the below screen. Select Execute Now and click Next.



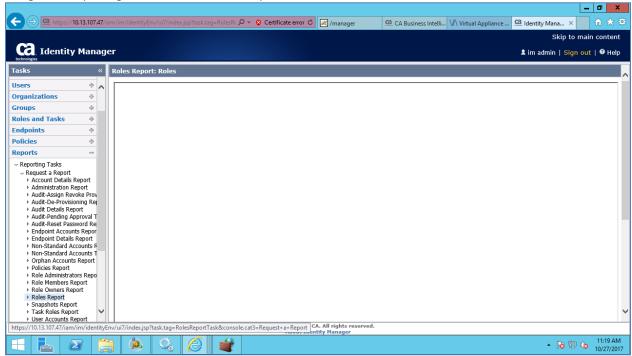
Select "Roles Report Snapsot" and click Finish.



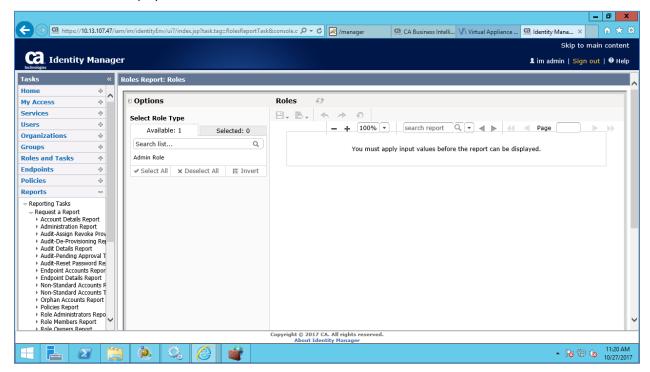
Make Sure Snapshot Completes in VST.



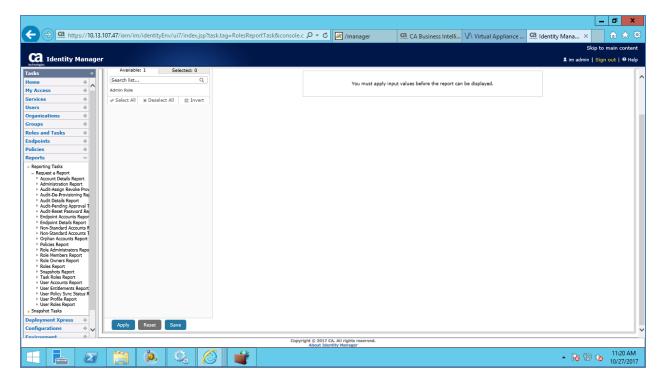
Navigate to Reporting Tasks and select Roles report.



The below screen is displayed.



Click Apply to generate the report.



The below Report screen is displayed.

