# IDERA DASHBOARD 4.8.2



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# 1 Welcome to the IDERA Dashboard help wiki

IDERA Dashboard is a common technology designed to support multiple IDERA products with an integrated user experience across these products. Log in from anywhere to check the status of your monitored SQL Server instances and diagnose any issues. The customizable web dashboard makes sure the information most important to you is right where you want it.

View the current status of monitored instances, drill down into single instance details, view occurrences of performance issues, and see a roll-up of all active alerts. The IDERA Dashboard provides at-a-glance status of top issues and alerts with easy drill-down capabilities so you can identify and diagnose issues quickly.

### 1.1 IDERA Dashboard documentation

- Run IDERA Dashboard over TLS (HTTPS)
- Resolving the certificate error message

# 2 Other IDERA Dashboard-supported product documentation

# 2.1 Monitoring & Performance

- SQL Business Intelligence Manager product help
- SQL Diagnostic Manager product help
- SQL Inventory Manager product help
- SQL Workload Analysis product help

### 2.2 Backup and Administration

- SQL Enterprise Job Manager product help
- SQL Safe Backup product help

## 2.3 Security & Compliance

• SQL Compliance Manager product help

# 3 Customer Support

• Customer Support Portal

### 4 New Features and Fixed Issues

### 4.1 4.8.2 New Features

No new features for this version.

### 4.2 4.8.2 Fixed Issues

• SQLCORE-5621 Fixed a high CPU usage issue caused by openjdk.

### 4.3 4.8.1 New Features

No new features for this version.

### 4.4 4.8.1 Fixed Issues

• SQLCORE-5566 Patched a security risk related to Apache Log4j.

### 4.5 4.8 New Features

No new features for this version.

### 4.6 4.8 Fixed Issues

- **SQLCORE-5578** IDERA Dashboard now allows up to 10 simultaneous sessions with the same user credentials.
- **SQLCORE-5568** IDERA Dashboard now supports Apache Log4j version 2.17.
- **SQLCORE-5524** Encrypted passwords longer than 128 characters used to get cropped after a service restart; now the maximum length allowed is 255 characters.
- SQLCORE-5577 SQLDM alerts and data are now shown when connected to IDERA Dashboard from outside the server and through a VPN.
- **SQLCORE-5523** Users who are part of a group are now able to see SQLDM data in the Details View and Alerts tabs.

#### **Other Versions**

- Version 4.6
- Version 4.2
- Version 3.8
- Version 3.2
- Version 3.0

### 5 Known Issues

IDERA strives to ensure our products provide quality solutions for your SQL Server needs, but despite the efforts, IDERA Dashboard 4.8 has the known issues that we describe on this page. If you need further assistance with these issues or others, please contact IDERA Support.

### 5.1 Known Issues

- **SQLCORE-5608** Username validation is not case-sensitive.
- **SQLCORE-5609** A NullPointerException error might occur when accessing the About section from different products' main pages.
- **SQLCORE-5610** In the Overview tab, when a user Filters by Product, the filter text is still visible after refreshing or switching to another page and coming back, even though the filter is no longer applied.
- SQLCORE-5611 The user session does not expire.
- **SQLCORE-5612** In the Manage Tags tab, applied filters are not removed when deselected, though appearing deselected.
- **SQLCORE-5551** On SQLSafe, Backup and Restore operations from the Web Console are not working for both local and remote instances.

#### **Other Versions**

- Version 4.6
- Version 4.2
- Version 3.8
- Version 3.2
- Version 3.0

# 6 Welcome to IDERA Dashboard

The IDERA Dashboard is a common technology framework designed to support the entire IDERA product suite. The IDERA Dashboard allows users to get an overview of the status of their SQL Servers and hosted databases all in a consolidated view while providing users the means to drill into individual product dashboards for details.

Need help using IDERA Dashboard? See the following topics:

- · Installing the IDERA Dashboard
- Run IDERA Dashboard over TLS (HTTPS)
- Resolving the certificate error message

The table below shows the IDERA products and version numbers that support the latest IDERA Dashboard:

Product	Product Version
SQL Diagnostic Manager	10.4, 10.5, and 10.5.1
SQL Enterprise Job Manager	2.4
SQL Inventory Manager	2.6.3
SQL Safe	8.5.2, 8.6, and 8.6.1
SQL Workload Analysis	1.7.1

### 6.1 About IDERA

At IDERA, we deliver a new generation of tools for managing, administering, and securing your Microsoft Windows Servers, including SQL Server, PowerShell and Microsoft Dynamics. We employ numerous industry experts worldwide who are devoted to bringing proven solutions to you, the administrator. IDERA provides solutions that help you ensure server performance and availability and reduce administrative overhead and expense. Our award-winning products install in minutes, configure in hours and deploy worldwide in days. IDERA is a Microsoft Gold Certified Partner headquartered in Houston, Texas, with offices in London, UK, Melbourne, Australia, and Sao Paulo, Brazil.

### 6.1.1 IDERA products

Our tools are engineered to scale from managing a single server to enterprise deployments with thousands of servers. IDERA products combine ease of use with a design that installs in minutes, configures in hours, and deploys worldwide in days. To learn more about IDERA products, visit the IDERA Web site.

### 6.1.2 Contact IDERA

Please contact us with your questions and comments. We look forward to hearing from you. For support around the world, please contact us or your local partner. For a complete list of our partners, please see our Web site.

Sales	713.523.4433 1.877.GO.IDERA (464.3372) (only in the United States and Canada)
Sales Email	sales@idera.com
Support	713.533.5144  1.877.GO.IDERA (464.3372)  (only in the United States and Canada)  https://idera.secure.force.com/
Website	www.idera.com

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# 7 Software Requirements

### **Other Versions**

- Version 4.6
- Version 4.2
- Version 3.8
- Version 3.2
- Version 3.0

# 7.1 IDERA Dashboard services requirements

You need to comply with the following requirements to install the IDERA Dashboard:

Туре	Requirement	Suggestions
Microsoft .NET Framework version	4.0 or later	Make sure to install this software prior to the installation of the IDERA Dashboard.  For more information about the .NET Framework, see the MSDN article: .NET Framework Versions and Dependencies.
Microsoft Library	msolap.dll	The <b>msolap.dll</b> file needs to be installed where the data collection service runs. The installation will search for the file and if it is not found, it will prompt the user to install the file. This file can be installed by downloading and installing from the latest version of the SQL Server Feature Pack from Microsoft SQL Server 2016 Feature Pack (choose the ENU\x64\SQL_AS_OLEDB.msi installer).
Operating System	Windows Server 2008 R2 (86-bit) Windows Server 2008 R2 (64-bit) Windows Server 2012 R2 (64-bit) Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Windows 10 (64-bit)	

# 7.2 IDERA Dashboard repository requirements

The IDERA Dashboard supports any of the following versions for hosting its repositories:

- SQL Server 2008 R2 All Editions
- SQL Server 2012 R2 All Editions
- SQL Server 2014 All Editions
- SQL Server 2016 All Editions
- · SQL Server 2017
- SQL Server 2019
- (Linux Enterprise 7.3, Ubuntu 16.04).

## 7.3 Browser requirements

The IDERA Dashboard user interface can be accessed via web with the following browsers:

- Internet Explorer IE 10.x+
- Google Chrome
- Mozilla Firefox
- · Microsoft Edge
- Safari

### 7.4 Port requirements

The IDERA Dashboard uses the following ports by default:

- Idera Dashboard Core Services port: 9292
- Idera Dashboard Web Application Service port: 9290
- Idera Dashboard Web Application Monitor port: 9094
- Idera Dashboard Web Application SSL port: 9291
- The IDERA Dashboard Web Application service comes with TLS already set up. For more information on running the IDERA Dashboard over TLS, see Run IDERA Dashboard over TLS (HTTPS).

# 8 Permission Requirements

IDERA Dashboard requires specific permissions and rights for properly functioning services and repository.

# 8.1 Recommended permissions for trial installations

Туре	Requirement
Windows Permissions	Your Windows logon account has local Administrator permissions.
SQL Server Privileges	Your Windows logon account is a member of the <b>sysadmin</b> fixed server role on the SQL Server instance.

# 8.2 Required permissions for production installations

Account	Action	Requirement
Windows user account	<ul> <li>Allows you to perform IDERA         Dashboard tasks, such as         adding an instance, using         standard SQL authentication.</li> <li>Allows you to create the IDERA         Dashboard Repository         database.</li> <li>Allows you to access the IDERA         Dashboard Repository.</li> <li>Allows you to start/restart the         IDERA Dashboard Service.</li> </ul>	<ul> <li>Windows administrator permission on the IDERA Dashboard computer.</li> <li>Read and write privileges on the IDERA Dashboard Repository database, execute privileges for stored procedures.</li> </ul>
SQL Server login	<ul> <li>Allows you to perform IDERA         Dashboard tasks, such as         adding an instance, using         standard SQL authentication.</li> <li>Allows you to create the IDERA         Dashboard Repository         database.</li> <li>Allows you to access the IDERA         Dashboard Repository.</li> <li>Allows you to start/restart the         IDERA Dashboard Service.</li> </ul>	<ul> <li>sysadmin OR</li> <li>dbcreator and securityadmin permissions.</li> <li>Read and write privileges on the IDERA Dashboard Repository database, execute privileges for stored procedures.</li> </ul>

Account	Action	Requirement
IDERA Dashboard Service account	<ul> <li>Allows you to install IDERA         Dashboard</li> <li>Allows the IDERA Dashboard         Service to access the IDERA         Dashboard Repository         database.</li> <li>Allows you to start/restart the         IDERA Dashboard Service.</li> </ul>	Windows administrator permission on the IDERA Dashboard computer.

# 8.3 Required permissions for managing elements

Action	Requirement
Manage users	Managing user account must have <b>Administrator privileges</b> on the domain Active Directory where the users reside.
Manage instances	Managing user account must have <b>Administrator privileges</b> on the instance.
Manage products	Managing user account must have <b>Administrator privileges</b> to edit the products.

### 8.4 IDERA Dashboard Roles

Assigning permissions to these registered users can be done from the Manage Users window available from the Administration menu. IDERA Dashboard includes the following user roles:

- Dashboard Administrator
- Dashboard Guest
- Product Administrator
- Product User
- Product Guest

Assign these unique roles to each IDERA product and the combination of product and role equate a permission for user.

To learn more about User Roles, see Manage Users.

# 9 Installing the IDERA Dashboard

#### **Other Versions**

- Version 4.6
- Version 4.2
- Version 3.8
- Version 3.2
- Version 3.0

This section guides you through the installation of the IDERA Dashboard, a common technology framework for IDERA products.

Before you install the IDERA Dashboard, be sure to have:

- A local administrator account on the machine where you are installing the product.
- Microsoft .NET 4.0 Framework or later installed.
- The IDERA Dashboard Web Application service comes with SSL already set up. By default, SSL works with a self-signed certificate. This certificate can be used for encryption only and does not prove the identity of the server

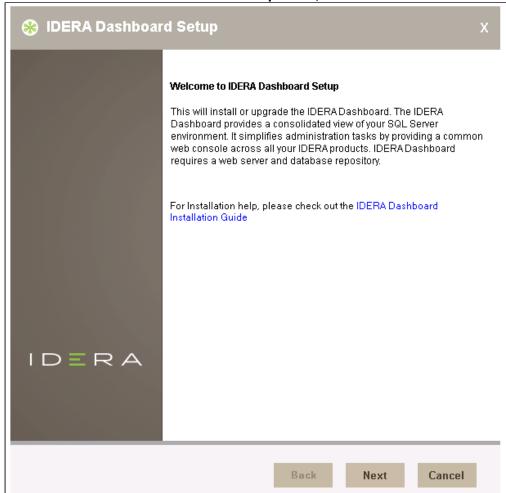
That default certificate is not signed by any well-known Certification Authority (CA), and is intended only for use in testing purposes. When a user attempts to open the SSL version of the IDERA Dashboard Web interface, a warning appears in the browser window. For more information about running the IDERA Dashboard over SSL, see Run IDERA Dashboard over TLS or SSL.

# 9.1 Start your installation

You can install the IDERA Dashboard on any computer that meets or exceeds the product requirements.

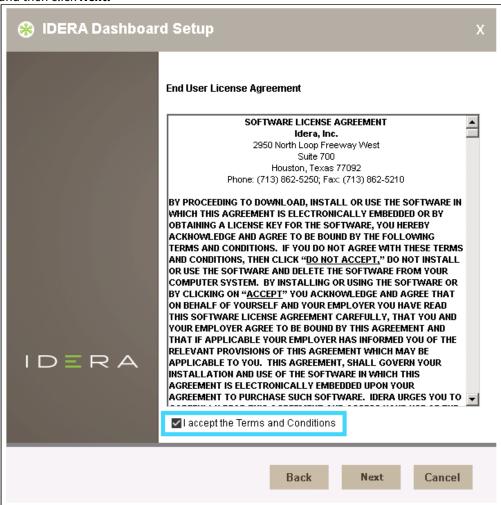
### To start installing the IDERA Dashboard:

1. Run IderaDashboardSetup in the root of the installation kit.

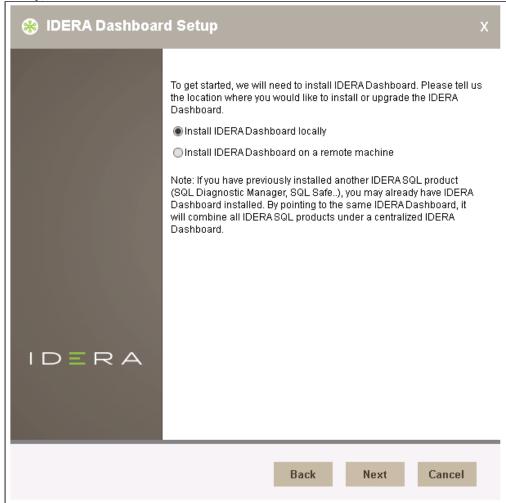


2. On the **Welcome to the IDERA Dashboard Setup** wizard, click **Next** to continue with the installation.

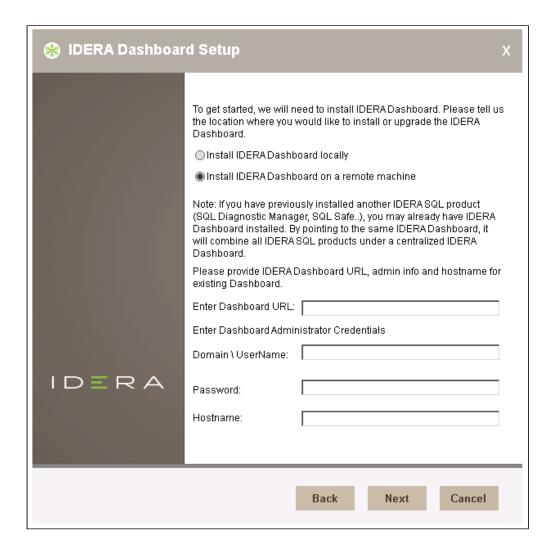
3. Review the license agreement. To accept this license agreement, click I accept the Terms and Conditions, and then click Next.



4. To Install the IDERA Dashboard on the server you are working in, select **Install the IDERA Dashboard locally**, and click **Next** to continue.



5. To install the IDERA Dashboard remotely, provide the **Dashboard URL**, **Dashboard Administrator Credentials**, the **Hostname**, and then click **Next** to continue.



### 9.2 Select an installation location

You can use the default install location or specify a different path (**Change**). For your first installation, we recommend using the default location. Click **Next** to continue with the installation.



### 9.3 Select a Windows user account to use for the service account

The IDERA Dashboard uses this account to connect, discover, and gather configuration information from SQL Servers in your Business environment. The installer grants the "Log on as a Service" right to the account that you specify.

### To specify a service account:

1. On the **Service Account** window, type appropriate credentials in the provided fields under which the services run.

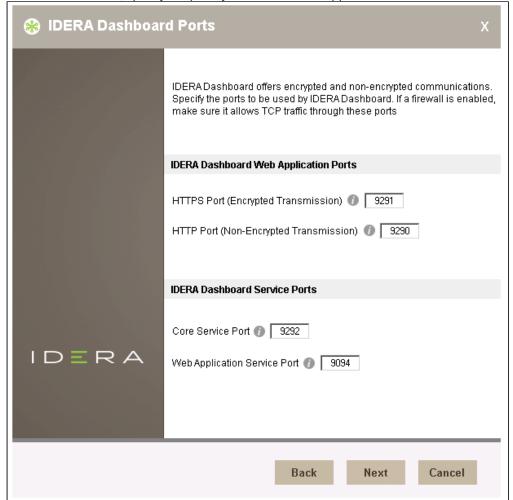
### 2. Click Next.



# 9.4 Select service ports to use for the IDERA Dashboard

The IDERA Dashboard uses ports **9291**, **9290**, **9292**, and **9294** for the web application and dashboard services respectively. However, you can specify different service ports.

### To specify a service port:



1. On the Ports window, specify the ports you want the Web Application and Dashboard Services to use.

- 2. Verify that the Firewall allows TCP (Transmission Control Protocol) traffic through your specified ports.
- 3. Click Next.

# 9.5 Select a SQL Server instance to use for the IDERA Dashboard Repository database

The IDERA Dashboard is where all the Dashboard's configuration and aggregated data are stored.

#### To specify the SQL Server instance to install the Repository database on:

1. On the **Repository Database Setup** screen, specify the SQL Server instance you want to use for the IDERA Dashboard Repository database.

Repository Database Setup
Specify the information for IDERA Dashboard Repository Database
Specify the host SQL Server and Repository database name.

SQL Server Instance: [local]
Database Name: IderaDashboardRepository

By default, the setup program uses the credentials of your Windows login account to create the Repository database. You can use SQL Server authentication by selecting the option below

Use Microsoft SQL Server Authentication

Change

2. Type the name for the IDERA Dashboard Repository database.

3. If your SQL Server environment uses **SQL Server Authentication**, select the check box and click **Change** to enter SQL Server credentials. By default, the IDERA Dashboard uses your Windows credentials when connecting to the Repository database.

Please enter your SQL Authentication Credentials

Username:

Password:

Ok Cancel

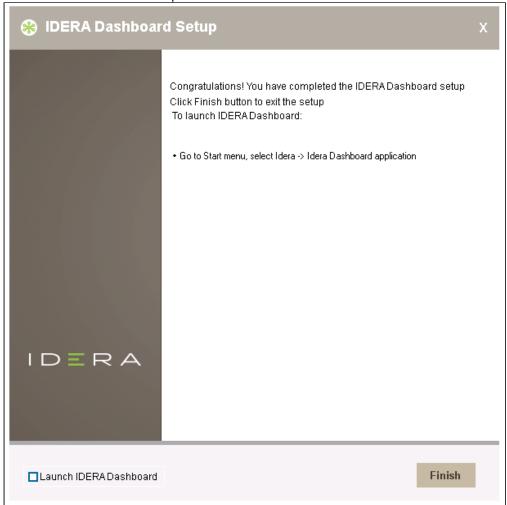
4. If you use **Microsoft SQL Server Authentication**, a new window displays where you can type the respective SQL Server login and password, Click **OK** to continue.

# 9.6 Complete the installation

Review the information on the **Ready to install the IDERA Dashboard** wizard and click **Install** to proceed.



Check the **Launch IDERA Dashboard** checkbox to run the application after the installation finishes. Click **Finish** to exit the IDERA Dashboard Setup Wizard.



The IDERA Dashboard installation is complete.

### 10 Run IDERA Dashboard over TLS or SSL

The IDERA Dashboard Web Application service comes with TLS1.2 already set up. By default, TLS works with a selfsigned certificate. This certificate can be used for encryption only and does not prove the identity of the server.

That default certificate is not signed by any well-known Certification Authority (CA) and is intended only for use in testing purposes. When a user attempts to open the TLS version of the IDERA Dashboard Web interface, a warning appears in the browser window.

If you decide to continue working with this self-signed certificate, you must perform several steps to "accept" the certificate before you can access the site. This step usually occurs only the first time you access the site. Then the self-signed certificate is stored in the browser database marked as trusted. This scenario is suitable for testing purposes.

If you want to obtain a CA-signed certificate, use the steps below to obtain a certificate signed by a well-known CA. The role of a CA is to verify that the IDERA Dashboard Web Application you are trying to access actually has the name you are trying to access it by and that this server actually belongs to your organization.

# 10.1 Obtaining a CA-signed certificate

Certificates are issued by trusted third-party Certification Authorities (CAs). Many CAs simply verify the domain name and issue the certificate, whereas others (VeriSign, etc.) verify the existence of your business, the ownership of your domain name, and your authority to apply for the certificate, providing a higher standard of authentication.

Every browser comes with a pre-defined list of well-known CAs.

Along with the name of your organization and the name of your server, a CA-signed certificate contains the public key of the server. This public key is used by the browser to encrypt data sent to the server. There is a private key on the server. The server uses the private key to decrypt the data encrypted by the public key. The private key should be kept secure on the server to prevent unauthorized access.

For more information about public key cryptography, see http://en.wikipedia.org/wiki/Public-key\_cryptography. To learn more about certificates and the steps to buy a certificate, refer to a CA website such as:

- VeriSign
- Thawte
- CAcert
- GoDaddy

# 10.2 Generating a certificate request

Before the CA can issue you the certificate, you should generate a private key and the certificate request and send it to the CA for signing. The certificate request and the private key should be generated using the openssl command unless otherwise instructed by the CA.



① While generating the private key and certificate request, replace the openssl command with the full path to binary, for example, C:\Openssl\bin\openssl.

### 10.3 Importing the certificate into the Trust-Store

The following steps show you how to install an SSL certificate purchased from a Certification Authority. Your SSL vendor may have different instructions, please check with them for proper certificate installation. The following examples refer to GoDaddy and VeriSign.

- Copy your private Key file (wildcard.idera.com.key) and Certificate file
   (wildcard.idera.com.crt) in PEM format, on the root directory where IDERA Dashboard Services
   host (i.e. "C:\Program Files\Idera\Dashboard").
- 3. Start a Windows Command Prompt by clicking **Start > Command Prompt** (right-click on Command Prompt to run as Administrator). Alternatively, you can go to **Start > Run** and then type **cmd** without quotes and press <Enter>.
- 4. Use the cd C:\ command to go to the root directory of the disk C:\, where you copied the Key and Certificate files.
- 5. Run the following commands to convert the key and the certificate from PEM to DER format.

```
"C:\OpenSSL\bin\openssl"
pkcs8 -topk8 -nocrypt -in wildcard.idera.com.key -inform PEM -out
wildcard.idera.com.key.der -outform DER

"C:\OpenSSL\bin\openssl" x509 -in wildcard.idera.com.crt -inform PEM -out
wildcard.idera.com.crt.der -outform DER
```

6. Use the cd command to go to the directory where the keytool is located:

```
cd "C:\Program Files\Idera\Dashboard\WebApplication\JRE\bin\"
```

- 7. To create the new keystore file, you have to download the ImportKey utility https://discourse.igniterealtime.org/uploads/default/original/2X/2/2638b26131247f7d11132bd2e3fba0e1ec87156b.zip.
- 8. Access IDERA's FTP server by navigating to the path ftp://downloads.idera.com/ in Internet Explorer (then follow the instructions on that page to log in), or by using the link in Windows File Explorer. Use the following credentials:

Username: ImportKeyDownload Password: 03gXm6tv

- Unzip the ImportKey utility to C:\Program Files\ Idera\Dashboard\WebApplication\JRE\b in\ directory.
- 10. In your Command Promp window, run the following command. It will launch the ImportKey utility and create the keystore file (default name is keystore. ImportKey) in your home directory (in Windows 2008 it is usually C:\Users\<your username>). The private key and the certificate will be placed there.

```
java ImportKey c:\wildcard.idera.com.key.der c:\wildcard.idera.com.crt.der
```

- (i) The keystore and key passwords both must be set to **password**. To do this, proceed with the next step.
- 11. The following command allows you to set the password for your keystore file. The default password is **importkey**. Enter it when prompted, in your Command Promp window, and then type the new password,

which must be set to **password**.

```
keytool -storepasswd -keystore c:\Users\Administrator\keystore.ImportKey
```

12. This command will allow you to set the password for the key file in the keystore. The default password is **importkey**. Enter it when prompted, and then type the new password, which must be set to **password**.

```
keytool -keypasswd -alias importkey -keystore c:
```

```
\Users\Administrator\keystore.ImportKey
```

- 13. Use Internet Explorer to download the intermediate certificate chain for the Certification Authority (CA). For example, point Internet Explorer to https://certs.godaddy.com/repository.
- 14. Save the intermediate certificate chain to the root directory of the disk C:\ on the server hosting the IDERA Dashboard services.
- 15. Import the received trusted certificate into your keystore file, by running the following command in your Command Promp window:

```
keytool -import -alias intermed -file c:\sf_issuing.crt -keystore c:
\Users\Administrator\keystore.ImportKey -trustcacerts
```

- internet Explorer may change the file extension. If the command above does not work, try sf\_issuing.cer instead of sf\_issuing.crt.
- 16. Open Windows File Explorer on the machine hosting the IDERA Dashboard services. Navigate to the following directory C:\Program Files\Idera\Dashboard\WebApplication\
- 17. Rename the file keystore to keystore.old.
- 18. Then rename the file C:\Users\<your username>\keystore.ImportKey to C:\Program
  Files\Idera\Dashboard\WebApplication\conf\keystore, and move that file into "C:
  \Program Files\Idera\Dashboard\WebApplication\conf".
- 19. Finally, restart the IDERA Dashboard Web Application service to complete the setup, and log into the IDERA Dashboard to verify that the certificate has been successfully applied.

#### **keytool Options**

- alias. All keystore entries are accessed via unique aliases. Aliases are case-insensitive. An alias is specified
  when you add an entity to the keystore using the -import command. Subsequent keytool commands
  must use this same alias to refer to the entity.
- **file**. Define absolute or relative path to your certificate file. If you define only the file name, it means, that the file is located in the root directory.
- **keystore**. Each keytool command has a —keystore option for specifying the name and location of the persistent keystore file for the keystore managed by keytool. A keystore is created when you use —import command to add data to a keystore that does not already exist. If you do not specify a —keystore option, the default keystore is a file named .keystore in your home directory (as determined by the "user.home" system property). If that file does not already exist, it will be created.

Read more about Java keytool for Windows:

http://java.sun.com/javase/6/docs/technotes/tools/windows/keytool.html

# 11 Upgrade Tomcat 7 manually

To manually update Tomcat 7.0 perform the steps below:

- 1. Open Windows Services Manager and stop Idera Dashboard Web Application Service.
- 2. Go to the official Apache Tomcat 7 downloads website (https://tomcat.apache.org/download-70.cgi), and download the zip files for **Core** and **Embedded** located under **Binary Distributions**.
- 3. Extract the Jar libraries of the **lib** folder from the **Core** zip folder.
- 4. Replace the Jar libraries in the installed IDERA Dashboard lib folder (i.e. "C:\Program Files\Idera\Dashboard\WebApplication\lib").
- 5. Extract the Jar libraries of the **embedded** zip folder.
- 6. Replace the Jar libraries in the installed IDERA Dashboard **lib** folder (i.e. "C:\Program Files\Idera\Dashboard\WebApplication\lib").
- 7. Open Windows Services Manager and start Idera Dashboard Web Application Service.

Steps to validate IDERA Dashboard Tomcat version:

- 1. Open Windows Command Prompt.
- 2. Type the DOS command to enter the IDERA Dashboard Web Application Lib folder (e.g. "cd C:\Program Files\Idera\Dashbaord\WebApplication\lib")
- 3. Type the following command: java -cp catalina.jar org.apache.catalina.util.ServerInfo
  - (i) To execute this command, you need to have Java installed and the JAVA HOME path set on the system. Click here for more information.
- 4. The output should be as shown below:

```
C:\Program Files\Idera\Dashboard\WebApplication\lib> java -cp catalina.jar org.a pache.catalina.util.ServerInfo
Server version: Apache Tomcat/7.0.82
Server built: Sep 29 2017 12:23:15 UTC
Server number: 7.0.82.0
OS Name: Windows Server 2012 R2
OS Version: 6.3
Architecture: x86
JUM Version: 1.8.0_151-b12
JUM Vendor: Oracle Corporation
```

The Server number indicates the Tomcat version IDERA Dashboard is currently using.

# 12 Migrate IDERA Dashboard Repositories

The SQL Server backup and restore components provide the option to migrate repositories between instances. You can use these components to migrate the IDERA Dashboard Repositories between SQL Server Windows and SQL Server Linux instances.

#### (i) Restore and Backup Repositories

For instructions on backup operations go here. For instructions on restore operations go here.

Based on the source and destination you have two possibilities to migrate IDERA Dashboard repositories:

### 1. 12.1 The source and destination instances are connected to each other over the network

You can use Windows SQL Server Management Studio for the entire migration process when the SQL Server Windows instance can connect to the SQL Server Linux instance.

Follow the steps below to migrate the IDERA Dashboard Repository from a SQL Server Linux instance to a SQL Server Windows instance. Apply the same steps the other way around as well.

- Stop Idera Core Services and Idera Web Application Services on Windows Services Manager.
- · Open SQL Server Management Studio.
- · Connect to the SQL Server Linux instance from SQL Server Management Studio on Windows and identify the IDERA Dashboard repository you want to migrate.
- Back up the IDERA Dashboard repository. This generates a .bak file in a specified folder.
- · Copy the .bak file from the Linux machine to the Windows machine where SQL Server Windows is installed.
- Open SQL Server Management Studio and connect to the SQL Server Windows instance.
- Perform a restore operation of the .bak file in the SQL Server Windows instance.
- Once successfully restored the repository, go to the **CoreService** folder (i.e. "C:\Program Files\Idera\Dashboard\CoreService").
- Open IderaDashboardCoreServices.exe, change the value of the setting RepositoryHost for the SQL Server Windows Instance name, and save the changes.
- Start Idera Dashboard Core Services and Idera Dashboard Web Application Services.

# 2. 12.2 The source and destination instances are not connected to each other over the network

When connecting to the Linux SQL Server instance from Windows SQL Server Management Studio is not possible, you need to perform the backup of the IDERA Dashboard Repository on the Linux machine and restore it on the Windows machine. To achieve this, Microsoft provides sqlcmd command line tools. Find command line tools installation instructions here.

Find the commands to backup and restore databases using sqlcmd here.

Follow the steps below to perform the repository migration:

- Stop Idera Core Services and Idera Web Application Services on Windows Services Manager.
- · Log into the Linux machine.
- · Connect to the SQL Server Linux instance.
- Identify and backup the IDERA Dashboard Repository using the sqlcmd commands.

- · Copy the .bak file.
- Log in to SQL Server Windows instance machine and paste the .bak file to any desired directory.
- Open SQL Server Management Studio and connect to the Windows instance.
- Perform the restore operation of the .bak file as mentioned here.
- After the restore operation is complete, go to the **CoreService** folder (i.e. "*C:\Program Files\Idera\Dashboard\CoreService"*).
- Open IderaDashboardCoreServices.exe, change the value of the setting RepositoryHost for the SQL Server Windows instance name and save the changes.
- Start Idera Dashboard Core Services and Idera Dashboard Web Application Services.

To restore the IDERA Dashboard Repository on Linux, you can use SQL Server Management Studio to create a backup of the IDERA Dashboard Repository, then copy the .bak file to the Linux machine, and perform a restore operation using sqlcmd commands.

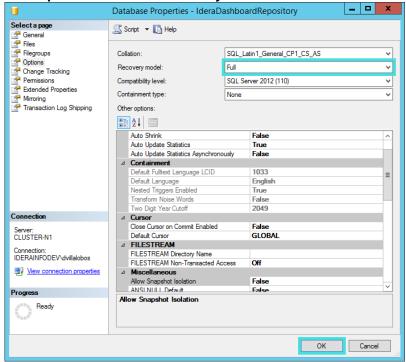
# 13 Configure IDERA Dashboard database for High Availability

To Install the IDERA Dashboard on any machine with the repository hosted on a High Availability SQL Server Instance, make sure you have set up a Windows Failover Cluster and a SQL Server Instance for High Availability. Find more information here.

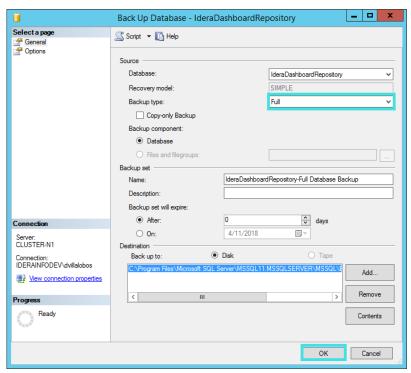
#### 13.1 Installation Steps for IDERA Dashboard on a High Availability Group

- 1. Install the IDERA Dashboard on your machine following the Installation Steps.
- 2. Go to **SQL Server Management Studio** and connect to the SQL Server Instance where you installed the IDERA Dashboard.

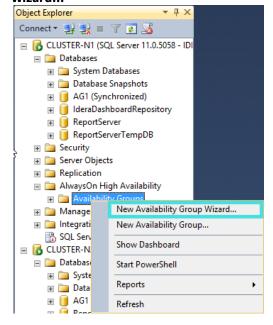
3. Under Databases, right-click on the **IderaDashboardRepository** and select **properties**. On the wizard, select **Options** and run a **Full Recovery model**.



4. Right click on IderaDashboardRepository, select Tasks, and run a Full Back up.



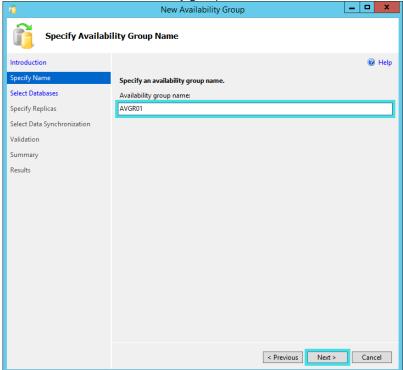
5. To configure your Availability Group, right-click on **Availability Groups** and select **New Availability Group Wizard...** 

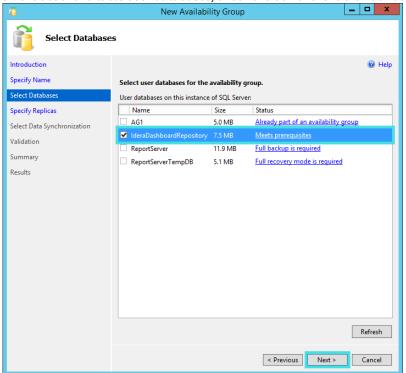


6. On the Introduction wizard click Next.



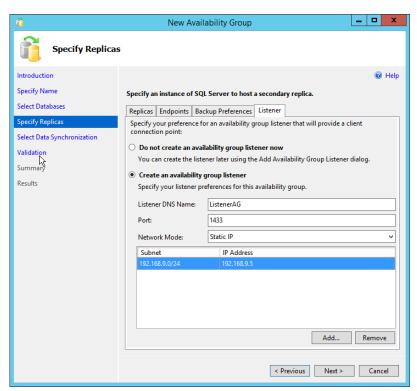
7. Provide a name to the availability group. Click Next.



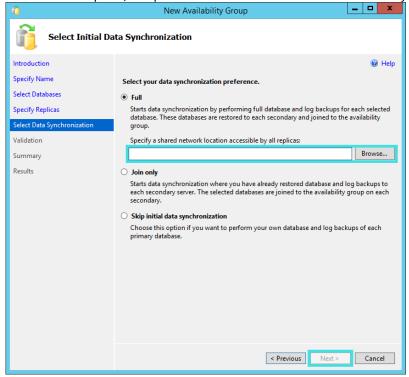


8. On the list of available user databases, check the box of the IderaDashboardRepository database.

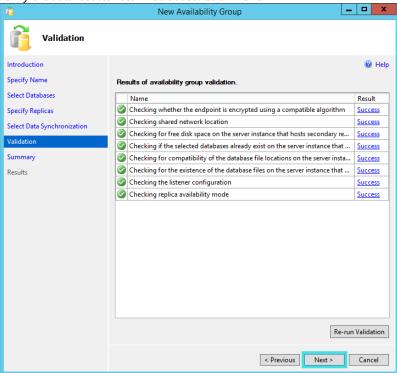
- 9. The **Specify Replicas** page, displays as default the server where you are configuring your High Availability Group, click **Add Replica...**, and browse the servers to be included on the Availability Group.
- 10. Check the boxes of **Automatic Failover (Up to 2), Synchronous Commit (up to 3)**, and select **No** on the **Readable Secondary** option, on all your replicas.
- 11. On the **Endpoints** tab, make sure that the port number value is **5022**.
- 12. On the **Listener** tab, provide a **Listener DNS Name** with the port number **1433** and click **Add...**, in the **Add IP Address** dialog box, enter your preferred virtual IP address in the **IPv4 Address** field. Click **OK**. Click **Next**.



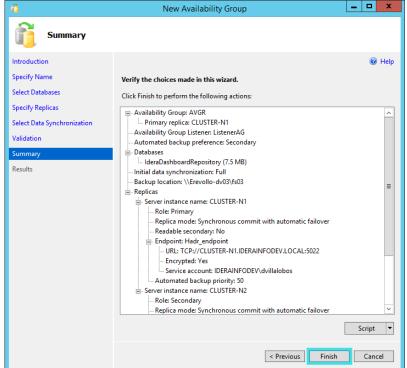
13. Select the Full option, and provide a shared folder location accessible by all replicas. Click Next.



14. Verify that all results return Success. Click Next.



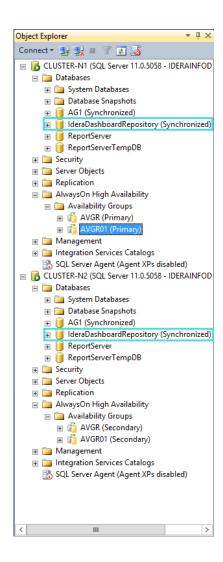
15. The Summary page displays all the actions to be performed. Click **Finish** when ready.



\_ 0 New Availability Group Results W Help The wizard completed successfully. Select Databases Summary: Specify Replicas Name
Configuring endpoints. Result Select Data Synchronization Validation Starting the 'AlwaysOn\_health' XEvent session on 'CLUSTER-N1'. Success Summary Starting the 'AlwaysOn\_health' XEvent session on 'CLUSTER-N2'. Success Creating availability group 'AVGR1'. Results Success Waiting for availability group 'AVGR1' to come online. Create Availability Group Listener 'Listener1'. Success Joining secondary replicas to availability group 'AVGR1'. Validating WSFC quorum vote configuration. Success Creating a full backup for 'IderaDashboardRepository'. Success Restoring 'IderaDashboardRepository' on 'CLUSTER-N2'. Success Backing up log for 'IderaDashboardRepository'. Success Restoring 'IderaDashboardRepository' log on 'CLUSTER-N2'. Success Joining 'IderaDashboardRepository' to availability group 'AVGR1' on 'CLUST... Success < Previous Next > Close

16. Verify that all results return Success. Click Close.

17. On **SQL Server Management Studio**, you can verify that the **IderaDashboardRepository** database is **Synchronized** on the configured Replicas.



# 14 Upgrade Java 8 manually

The IDERA Dashboard comes with a Java SE Runtime Environment 7 already set up.

To manually update the Java SE Runtime Environment 8 perform the steps below:

- 1. Open Windows Services Manager and stop the Idera Dashboard Core Service and the Idera Dashboard Web Application Service.
- 2. Go to the official ORACLE website (http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html), accept the License Agreement, and download the JRE patch.
- 3. Extract the JRE files and review that they contain a bin and a lib folder along with other individual files.
- 4. Replace the JRE files in the IDERA Dashboard JRE folder (i.e. "C:\Program Files\Idera\Dashboard\WebApplication\JRE").
- 5. Open Windows Services Manager and start the **Idera Dashboard Core Service** and the **Idera Dashboard Web Application Service**.
- 6. To validate the Java version, on the JRE folder open the **release** file with a notepad editor.

# 15 Advanced Filtering Grid

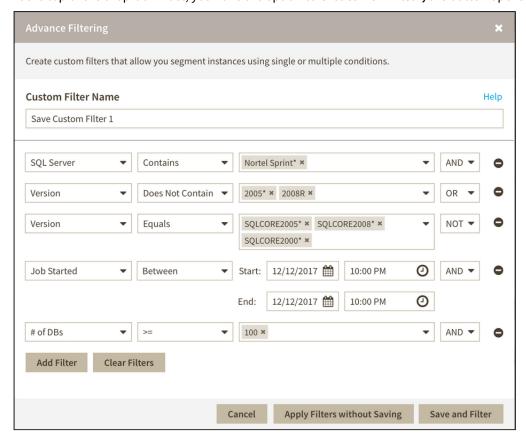
The advanced filtering allows you to apply multiple filters using conditional statements such as AND, OR, or NOT, and operators like Does not contain, Contains, Equals, Does not equal.

The principal function of this filtering option is the **Advanced Filter** button.

#### 15.1 Advance Filter

When you select the Advanced Filter button, a drop-down menu opens with a list of configured filters.

At the top of the drop-down list, you have the option to **Create New Filter,** the button opens a new wizard:



On the **Custom Filter Name** define a name for the filter.

The **Add Filter** button adds a row of parameters to define the filter, according to the order, on each raw field you can select:

First Column	Second Column	Third Column	Fourth Column
<ul> <li>SQL Server</li> <li>Status</li> <li>Edition</li> <li># of DBs</li> <li>Size (MB)</li> <li>Owner</li> <li>Location</li> <li>Clustered</li> <li>Discovery methods</li> </ul>	<ul> <li>Contains</li> <li>Between</li> <li>After</li> <li>Before</li> <li>&gt;=</li> <li>&lt;=</li> <li>Equals</li> </ul>	<ul> <li>List of instances</li> <li>Instances status (UP, DOWN).</li> <li>Edition (PRO, ULTIMATE, Enterprise)</li> <li>Number of databases (10, 20, 30)</li> <li>Size (MB) (100 MB, 200 MB, 600 MB)</li> <li>Owner (Product Manager, Developer)</li> <li>Location (CA, Austin)</li> <li>Clustered (No, Yes)</li> <li>Discovery methods (Browser, Service, Service 1)</li> <li>Range of date and time</li> </ul>	• AND • OR • NOT

A

The third column varies according to the first and second columns.

You can add as many rows as you require in your filter.

After configuring your filter you can **Apply Filters without Saving** and the filter will be available in the principal drop-down list with an **Unsaved Filter** name.

Or **Save and Filter** and the filter will be saved with the name you assigned to it. After saving a tag will be placed above the grid.

Pointing to the filter name, the **Edit** and **Delete** options will display. The **Save** option will only be available for Unsaved filters.

The **Edit** opens the advanced filtering wizard again, you can change parameters and Apply or Save your filter.

The **Delete** option deletes the filter permanently.



# 15.2 Export Filter

You can export the filtered results in three different formats:

- Excel
- CSV
- HTML

#### 15.3 Clear Filters

When there are no filters applied this button is disabled.

With this option enabled, you can remove the tag filters placed above the grid. If only one filter is selected before clicking the **Clear Filters** button, only that filter is deleted.

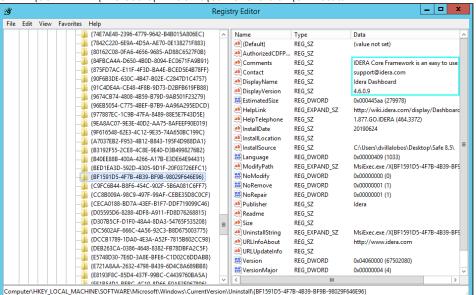
## 16 Unistalling the IDERA Dashboard

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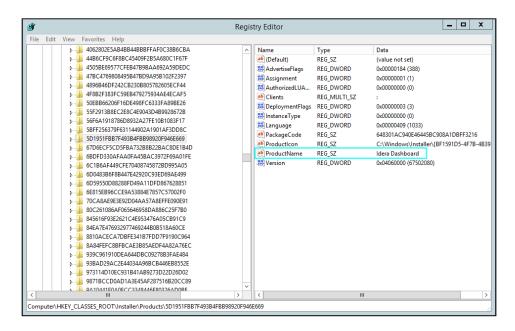
At the end of the process, you need to reboot the server.

The uninstallation process requires a list of steps to delete all services:

- 1. Back up the Windows Registry as a safety measure.
- Stop the Idera Dashboard Core Service and the Idera Dashboard Web Application Service at the Services window.
- 3. Open the Command Prompt and execute:
  - a. sc delete IderaDashboardCoreService
  - b. sc delete IderaDashboardWebAppService
- 4. Open the Registry Editor and delete the following registry keys:
  - a. Delete CWF from: KEY\_LOCAL\_MACHINE\SOFTWARE\Idera
  - b. Locate and Delete the IDERA Dashboard GUID from: HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall



c. Locate and Delete the Dashboard GUID from: KEY\_CLASSES\_ROOT\Installer\Products



- 5. Reboot the server.
- 6. Delete the entire Dashboard folder from: C:\Program Files\Idera
- 7. Run the Command Prompt as Administrator and execute: msiexec /i "C:\Program Files\Idera\SQLdm x64 Installation Kit\x64\IderaDashboard.msi" /L\*v %USERPROFILE%\Desktop\DashboardInstall.txt

### 17 IDERA Dashboard PDF

This page contains a direct link to the IDERA Dashboard help in PDF format. This format is suitable for printing and for saving on your local PC for further reference. The PDF includes all pages from the relevant help published on wiki.idera.com.

- IDERA Dashboard 4.8 PDF
- IDERA Dashboard 4.8.1 PDF

#### 18 Copy of Run IDERA Dashboard over TLS

note The IDERA Dashboard Web Application service comes with TLS1.2 already set up. By default, TLS works with a self-signed certificate. This certificate can be used for encryption only and does not prove the identity of the server.

That default certificate is not signed by any well-known Certification Authority (CA) and is intended only for use in testing purposes. When a user attempts to open the TLS version of the IDERA Dashboard Web interface, a warning appears in the browser window.

If you decide to continue working with this self-signed certificate, you must perform several steps to "accept" the certificate before you can access the site. This step usually occurs only the first time you access the site. Then the self-signed certificate is stored in the browser database marked as trusted. This scenario is suitable for testing purposes.

If you want to obtain a CA-signed certificate, use the steps below to obtain a certificate signed by a well-known CA. The role of a CA is to verify that the IDERA Dashboard Web Application you are trying to access actually has the name you are trying to access it by and that this server actually belongs to your organization.

### 18.1 Obtaining a CA-signed certificate

Certificates are issued by trusted third-party Certification Authorities (CAs). Many CAs simply verify the domain name and issue the certificate, whereas others (VeriSign, etc.) verify the existence of your business, the ownership of your domain name, and your authority to apply for the certificate, providing a higher standard of authentication.

Every browser comes with a pre-defined list of well-known CAs.

Along with the name of your organization and the name of your server, a CA-signed certificate contains the public key of the server. This public key is used by the browser to encrypt data sent to the server. There is a private key on the server. The server uses the private key to decrypt the data encrypted by the public key. The private key should be kept secure on the server to prevent unauthorized access.

For more information about public key cryptography, see http://en.wikipedia.org/wiki/Public-key\_cryptography. To learn more about certificates and the steps to buy a certificate, refer to a CA website such as:

- VeriSign
- Thawte
- CAcert
- GoDaddy

#### 18.2 Generating a certificate request

Before the CA can issue you the certificate, you should generate a private key and the certificate request and send it to the CA for signing. The certificate request and the private key should be generated using the openssl command unless otherwise instructed by the CA.



① While generating the private key and certificate request, replace the openssl command with the full path to binary, for example, C:\Openssl\bin\openssl.

#### 18.3 Importing the certificate into the Trust-Store

The following steps show you how to install an SSL certificate purchased from a Certification Authority. Your SSL vendor may have different instructions, please check with them for proper certificate installation. The following examples refer to GoDaddy and VeriSign.

- Copy your private Key file (wildcard.idera.com.key) and Certificate file
   (wildcard.idera.com.crt) in PEM format, on the root directory where IDERA Dashboard Services
   host (i.e. "C:\Program Files\Idera\Dashboard").
- 3. Start a Windows Command Prompt by clicking **Start > Command Prompt** (right-click on Command Prompt to run as Administrator). Alternatively, you can go to **Start > Run** and then type **cmd** without quotes and press <Enter>.
- 4. Use the cd C:\ command to go to the root directory of the disk C:\, where you copied the Key and Certificate files.
- 5. Run the following commands to convert the key and the certificate from PEM to DER format.

```
"C:\OpenSSL\bin\openssl"
pkcs8 -topk8 -nocrypt -in wildcard.idera.com.key -inform PEM -out
wildcard.idera.com.key.der -outform DER

"C:\OpenSSL\bin\openssl" x509 -in wildcard.idera.com.crt -inform PEM -out
wildcard.idera.com.crt.der -outform DER
```

6. Use the cd command to go to the directory where the keytool is located:

```
cd "C:\Program Files\Idera\Dashboard\WebApplication\JRE\bin\"
```

- 7. To create the new keystore file, you have to download the ImportKey utility https://discourse.igniterealtime.org/uploads/default/original/2X/2/2638b26131247f7d11132bd2e3fba0e1ec87156b.zip.
- 8. Access IDERA's FTP server by navigating to the path ftp://downloads.idera.com/ in Internet Explorer (then follow the instructions on that page to log in), or by using the link in Windows File Explorer. Use the following credentials:

Username: ImportKeyDownload

Password: 03gXm6tv

- Unzip the ImportKey utility to C:\Program Files\ Idera\Dashboard\WebApplication\JRE\b in\ directory.
- 10. In your Command Promp window, run the following command. It will launch the ImportKey utility and create the keystore file (default name is keystore. ImportKey) in your home directory (in Windows 2008 it is usually C:\Users\<your username>). The private key and the certificate will be placed there.

```
java ImportKey c:\wildcard.idera.com.key.der c:\wildcard.idera.com.crt.der
```

- (i) The keystore and key passwords both must be set to **password**. To do this, proceed with the next step.
- 11. The following command allows you to set the password for your keystore file. The default password is **importkey**. Enter it when prompted, in your Command Promp window, and then type the new password,

which must be set to **password**.

```
keytool -storepasswd -keystore c:\Users\Administrator\keystore.ImportKey
```

12. This command will allow you to set the password for the key file in the keystore. The default password is **importkey**. Enter it when prompted, and then type the new password, which must be set to **password**.

```
keytool -keypasswd -alias importkey -keystore c:
```

```
\Users\Administrator\keystore.ImportKey
```

- 13. Use Internet Explorer to download the intermediate certificate chain for the Certification Authority (CA). For example, point Internet Explorer to https://certificates.godaddy.com/repository/.
- 14. Save the intermediate certificate chain to the root directory of the disk C:\ on the server hosting the IDERA Dashboard services.
- 15. Import the received trusted certificate into your keystore file, by running the following command in your Command Promp window:

```
keytool -import -alias intermed -file c:\sf_issuing.crt -keystore c:
\Users\Administrator\keystore.ImportKey -trustcacerts
```

- (i) Internet Explorer may change the file extension. If the command above does not work, try sf\_issuing.cer instead of sf\_issuing.crt.
- 16. Open Windows File Explorer on the machine hosting the IDERA Dashboard services. Navigate to the following directory C:\Program Files\Idera\Dashboard\WebApplication\
- 17. Rename the file keystore to keystore.old.
- 18. Then rename the file C:\Users\<your username>\keystore.ImportKey to C:\Program
  Files\Idera\Dashboard\WebApplication\conf\keystore, and move that file into "C:
  \Program Files\Idera\Dashboard\WebApplication\conf".
- 19. Finally, restart the IDERA Dashboard Web Application service to complete the setup, and log into the IDERA Dashboard to verify that the certificate has been successfully applied.

#### **keytool Options**

- alias. All keystore entries are accessed via unique aliases. Aliases are case-insensitive. An alias is specified
  when you add an entity to the keystore using the -import command. Subsequent keytool commands
  must use this same alias to refer to the entity.
- **file**. Define absolute or relative path to your certificate file. If you define only the file name, it means, that the file is located in the root directory.
- **keystore**. Each keytool command has a —keystore option for specifying the name and location of the persistent keystore file for the keystore managed by keytool. A keystore is created when you use —import command to add data to a keystore that does not already exist. If you do not specify a —keystore option, the default keystore is a file named .keystore in your home directory (as determined by the "user.home" system property). If that file does not already exist, it will be created.

Read more about Java keytool for Windows:

http://java.sun.com/javase/6/docs/technotes/tools/windows/keytool.html