

SQL Inventory Manager

SQL Inventory Manager 2.6.x

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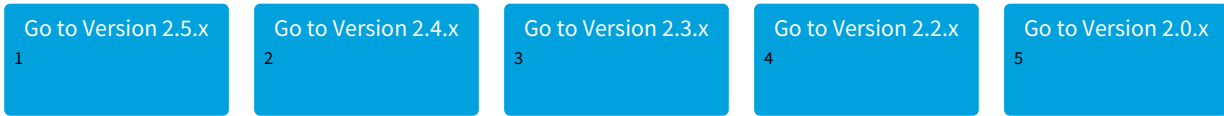
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1 <https://wiki.idera.com/display/SIM25>
2 <https://wiki.idera.com/display/SIM24>
3 <https://wiki.idera.com/display/SIM23>
4 <https://wiki.idera.com/display/SIM22>
5 <https://wiki.idera.com/display/SIM20>

1 Discover, track, and manage your SQL Server inventory using IDERA SQL Inventory Manager

- View your SQL Server inventory - know what you have where & who owns it
- Auto-discover any new servers installed, to better manage server sprawl
- Get alerts when a server goes down, or space is running low
- Set tags to better organize servers and databases across the enterprise
- Quickly deploy and access from anywhere via web-based and agentless UI

2 Release notes

IDERA SQL Inventory Manager provides fundamental information on your SQL Servers to help you keep track of and manage your database environment. It gives a broad enterprise-wide view of all your SQL Servers through automated discovery as well as simple, actionable information about the state of your environment. View key information such as how many databases exist, whether they are being backed up, get access to options like availability monitoring, and notification emails so you can take action as needed.

IDERA strives to ensure our products provide quality solutions for your SQL Server needs. If you need further assistance with any issue, please contact [Technical Support](#)⁶.

Before installing IDERA SQL Inventory Manager, you must install .NET Framework 4.6.1 or later in your computer. For more information you can review the [Software requirements](#)(see page 42) and the [Installing SQL Inventory Manager](#)(see page 53) pages.

To check the .NET Framework version you have installed in your computer, follow these steps:

- Open the Registry Editor
- Navigate to Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\NET Framework Setup\NDP\v4\Full
- Check the Value for key Release
- Compare the release value with the information on [How to determine which .NET versions are installed](#)⁷

2.1 New features and fixed issues

Upgrading from versions 2.2 and lower

Because of the addition of roles, all user accounts in versions 2.2 and previous are added to the IDERA Dashboard but are not assigned a role and cannot access IDERA SQL Inventory Manager until the administrator changes the account permissions. Note that the administrator is the account specified during the IDERA Dashboard installation.

To change user account permissions, go to **IDERA Dashboard > Administration > Manage Users**. Edit a user account. Select the IDERA SQL Inventory Manager product, and then assign a role of **Product Administrator, Product User, or Product Guest**. Click **Save**, and then repeat these steps for each user account.

Now grant the user accounts access to the instances in your environment. Go to **SQL Inventory Manager > Administration > Manage Users**. Click the link for the name of the user account. In the **Access to SQL Server Instances** section of the Edit Users window, select whether you want to grant the user account access to all instances or a selection of instances. If you want to grant access to only selected instances, choose those instances using either the tag or instance name. Click **Save**.

For more information about user accounts and roles, see [Managing users in the IDERA Dashboard](#)(see page 172).

2.1.1 2.6.3 New features

There are no New Features for IDERA SQL Inventory Manager 2.6.3.

⁶ <http://www.idera.com/support/productsupport>

⁷ <https://docs.microsoft.com/en-us/dotnet/framework/migration-guide/how-to-determine-which-versions-are-installed>

2.1.2 2.6.2 New features

There are no New Features for IDERA SQL Inventory Manager 2.6.2.

2.1.3 2.6.1 New features

Cloud discovery

- IDERA SQL Inventory Manager 2.6 now allows you to discover cloud instances whether on Azure VM, Amazon EC2, Azure Database, or Amazon RDS.

Advanced filters

- Users can create advanced filters on Instances views .

Exclude drives from Volume at Risk threshold

- Users can now exclude drives from alerts on the Volume at Risk health check.

Support For SQL Server 2019

- IDERA SQL Inventory Manager 2.6 now supports SQL Server 2019 for monitored instances.

2.1.4 2.6 New features

Cloud discovery

- IDERA SQL Inventory Manager 2.6 now allows you to discover cloud instances whether on Azure VM, Amazon EC2, Azure Database or Amazon RDS.

Advanced filters

- Users can create advanced filters on Instances views.

Exclude drives from Volume at Risk threshold

- Users can now exclude drives from alerts on the Volume at Risk health check.

Support For SQL Server 2019

- IDERA SQL Inventory Manager 2.6 now supports SQL Server 2019 for monitored instances.

2.1.5 2.6.3 Fixed issues

- The IDERA Dashboard no longer generates AD warnings for authentication failures, therefore, the CWF Service account does not lock anymore.
- When a server alias is registered with a name matching another actual physical server's name, both servers are properly registered and functional.
- The Server details screen displays the data properly for **Clustered** instances.
- Alert messages are generated correctly when selecting non supported drives for instances.
- Case-sensitive instances are getting connected properly.

2.1.6 2.6.2 Fixed issues

- **User Account Control** window displays **SQLInventoryManager** properly when installing SIM 2.6.2.

- SIM 2.6.2 adds any unreachable instance correctly, and displays the proper informational message.
- **User Account Control** window displays IDERA as the SQL Inventory Manager publisher.
- SIM 2.6.2 registers successfully SQL Server instances, and cloud instances with SQL credentials only.
- SIM 2.6.2 gets registered successfully, and all the navigation screens work properly after being installed to CWF 4.6.0.40 with FIPS compliant for hashing, and signing, enabled.
- The Web Application logs do not show the password details in plain text anymore.
- SIM 2.6.2 discovers SQL Instances hosted in other domains properly.
- The **SQL Server is Down** alert is properly described in Manage Health Checks.
- In the **Explorer** view, the data now displays correctly, ordered by size, sorted in descending order, and with proper values till two decimal places.
- The **Instance is Down** email alerts work as expected after upgrading SIM.
- The **Repository** is installed/upgraded correctly, even when the database name is changed from the default settings.
- After entering the **vCenter** information in the **Manage VM Configuration**, the settings for VM configuration are saved and work properly.
- When reports to **SSRS** are deployed, these reports share data source configured with appropriate value and custom data source as empty.
- SIM 2.6.2 is successfully installed on Windows Server 2012 with SQL Server 2014 Standard.
- Databases on the secondary node of an **Availability Group** do not raise *Databases Without a Backup* health checks anymore.
- Dropped databases do not show up in the Databases list displayed under the **Instance Details** page.
- Custom field value from the **Instance Summary** view, now fully displays.
- The comments added to the **Database Details** screen for a monitored database are properly displayed when the p_InsertUpdateDatabase stored procedure runs as part of a data refresh.
- The **Data Space at Risk** alert works properly when Autogrowth is either disabled, enabled with limited file size, and enabled with unlimited file size.

2.1.7 2.6.1 Fixed issues

- SIM **Charge Back Reports** now runs properly.
- When the user is modified, SQL Inventory Manager 2.6.1 restarts **collector Service** after completing the save operation.
- SQL Inventory Manager 2.6.1 displays correct time stamp for database backups (full, differential, and log) in database details.
- Users can set a range for ports input in **Manage Discovery** options.
- SQL Inventory Manager 2.6.1 displays the appropriate core factor for each SQL Server version under **SQL Licensing by Instances** view.
- Users can add a **New Virtualization Host Servers** in the **Manage VM Configuration** window.
- E-mail shows alert with Alert Level, Instance Name, and the explanation of the alert.
- All passwords are encrypted when stored and when transmitted.
- The **Administrator** tab visibility is now invisible for Product User.
- SQL Inventory Manager 2.6.1 disables the **Display Name** text field while upgrading SIM.
- The **Explorer** tab displays only the tags associated with instances under **Instance Tags** section, and tags associated with databases under **Database Tags** section.
- The **Dashboard > Administration Tab > Manage Tags** window shows all the tags to edit or view their properties correctly.
- Loading and refreshing pages run faster than older versions.
- SQL Inventory Manager 2.6.1 imports instances configured with custom instance tags that already exist, without duplication issues.
- User Account configured for monitoring and discovering instances from a different domain, now authenticates properly on the server hosting SIM.
- The console does not display dropped databases, and they are not shown Online.

- SQL Inventory Manager 2.6.1 performs Health Checks for databases on secondary nodes of Availability Groups properly.
- The SSIS version displays correctly.
- The **User Account Control** window displays IDERA as the SQL Inventory Manager 2.6.1 Verified Publisher in the installation folder.
- After installing SQL Inventory Manager 2.6.1 using the default ports, the launch page now links to the correct URL.

2.1.8 2.6 Fixed issues

- IDERA SQL Inventory Manager locks the service account.
- SQL Inventory Manager 2.6 sends automatic email alerts properly.

2.2 Previous features and fixed issues

2.2.1 Previous new features on 2.5

Below is a list of features added and fixed issues in previous versions.

Server Hosts

- IDERA SQL Inventory Manager 2.5 now allows you to get information for server hosts for a registered SQL instance. The Explorer tab and the Instances tab contain new views that display server host information.

SQL Server 2017

- IDERA SQL Inventory Manager 2.5 provides support for discovering, monitoring, and displaying licensing information for SQL Server 2017 instances running on both Windows and Linux systems.
- IDERA SQL Inventory Manager 2.5 Repository can be installed on SQL Server 2017 for either Windows.

MS SQL Licensing

- An additional MS SQL Licensing view have been added to support licensing by physical hosts.
- For SQL Server 2016 and above IDERA SQL Inventory Manager updates MS SQL Licensing view to remove the usage of core factor, which is a change in Microsoft SQL Server Licensing Model.

TLS support

- IDERA SQL Inventory Manager 2.5 supports TLS 1.2

2.2.2 Previous Fixed issues on 2.5

- SQL Inventory Manager can be installed with TLS 1.0 disabled.
- Upgrading a 2.4.1 installation on AG to 2.5 works properly.
- Users can now groom ignored instances properly.
- Group Users Permissions have been updated to allow granular permissions.
- Server Licensing Report correctly displays the summary information for SQL Server Version and Edition when Edition is not available.
- Top Databases by Activity chart shows data properly. It was previously showing no data for certain instances.
- Now, Scheduled Discovery (Network Scan) runs properly.
- The discovery status log shows valid page counts.
- You can now save the number of instances per page on the Instances Grid on the Home Page.

- Adding Tags works properly.
- Discovery on Organizational Unit (OU) works properly when scheduled scan is disabled.
- Domain check validation works properly for an OU using the Multiple Accounts option.
- The Select All checkbox for "Available Databases" works properly on the Manage Health Checks ->Database backup is not current dialog.
- Grooming of repository database works as expected.
- Sort by name on a Custom Field List works properly.
- List of Tags created in SQL Inventory Manager now sort properly.
- You can now successfully upgrade SQL Inventory Manager hosted on an AG database.
- Now, SQL Inventory Manager displays properly health checks reported from SQL Server 2016 AlwaysOn Availability Group.
- Discovery Center Options works as expected when saving time changes.

2.3 Known issues

The following issues are known in this version of IDERA SQL Inventory Manager:

Upgrading from a previous version

Because of the addition of roles, all user accounts in a previous version of the product are added to the IDERA Dashboard but are not assigned a role and cannot access IDERA SQL Inventory Manager until the administrator changes the account permissions. Note that the administrator is the account specified during the IDERA Dashboard installation.

To change user account permissions, go to **IDERA Dashboard > Administration > Manage Users**. Edit a user account. Select the IDERA SQL Inventory Manager product, and then assign a role of **Product Administrator**, **Product User**, or **Product Guest**. Click **Save**, and then repeat these steps for each user account.

Now grant the user accounts access to the instances in your environment. Go to **SQL Inventory Manager > Administration > Manage Users**. Click the link for the name of the user account. In the **Access to SQL Server Instances** section of the Edit Users window, select whether you want to grant the user account access to all instances or a selection of instances. If you want to grant access to only selected instances, choose those instances using whether the tag or instance name. Click **Save**.

For more information about user accounts and roles, see [Managing users in the IDERA Dashboard](#)(see page 172).

2.3.1 Known issues in version 2.6.3

There are no known issues in version 2.6.3.

2.3.2 Known issues in version 2.6.2

There are no known issues in version 2.6.2.

2.3.3 Known issues in version 2.6.1

VM Configuration

After adding the connection credentials inside the **VM Configuration** window, an "**Error message is failed to connect. Check credentials and try again.**" warning triggers once you select the **Test** option. This feature is currently under development and a fix will be included in a future release.

2.3.4 Known issues in version 2.6

PDF reports

When you export information as PDF from the **Explorer** view, filtered by Instance Count, Database Count, Data Size (MB), Log Size (MB), Activity (trans/sec), DB on Availability Group, or Physical Servers, you will notice that it includes hidden columns. This happens because the PDF reports are exported directly through databases calls.

Advanced Filter options

When you create a filter with the **Advanced Filter** option, and edit this filter renaming it with an existing filter name, the UI will only display one. Any further editions performed will not be save nor reflected. To avoid this issue you must delete the edited filter and create a new one.

Edition information for Azure SQL Servers

The **Instances** tab does not display the **Edition** information of the Azure SQL Servers. To access the Edition details, you can go to the SQL Server Management Studio and run the query `select @@version` on the instance you choose.

Private type instances

When the **Instance Type** is Private on the **Discovered Instances** view, the **Instance Type** will change to Virtual on the **Managed by Instances** view, once you register it.

Missing Alert message in Health Checks

When you go to **Manage Health Checks** in the **Administration** view, use the **Configure** options to edit the **Volume at Risk** alerts, select an instance, and choose a drive from the **Excluded Drives** drop down which is not present in the selected instance, SIM 2.6 does not display the Alert message that should be generated.

Incorrect instance type for AWS EC2

When you add an AWS EC2 instance with DNS compute-.amazonaws.com⁸ for region **us-east-1**, SIM 2.6 displays the type of the instance as **Private**. To avoid this issue, please contact [Technical Support](http://www.idera.com/support/productsupport)⁹.

Dashboard error when visualizing SIM

The **Dashboard** may display a **500 Internal Server Error** type when trying to visualize the Inventory Manager tab. To prevent this issue, do not change the database name from the default setting during the installation process.

Previous known issues

Displaying highest SQL Version and edition

All instances on VM and Host need to be registered in order to display the highest version of SQL Server and edition.

Issue adding instances on an AG

Instances added after adding SQL Inventory Manager repository to AG show as N/A and no data shows at all.

Visual issues on Managed by Host View

Managed by Host view expand rows display anomaly.

⁸ <http://compute-.amazonaws.com>

⁹ <http://www.idera.com/support/productsupport>

3 Welcome to SQL Inventory Manager

Welcome to IDERA SQL Inventory Manager, previously known as IDERA SQL Elements! Our newest solution for **EVERY DBA!**

IDERA SQL Inventory Manager lets you discover, track, and manage your SQL Server environment from a simple, lightweight web interface and is designed to be quick to install and easy to use.

This wiki helps you understand IDERA SQL Inventory Manager characteristics and provides step-by-step help on how to use all its features.

The following topics are included in this section:

- [What is IDERA SQL Inventory Manager?\(see page 25\)](#)
- [How does SQL Inventory Manager help me?\(see page 25\)](#)
- [Searching SQL Inventory Manager\(see page 25\)](#)
- [Using SQL Inventory Manager Help\(see page 26\)](#)
- [Definition of terms\(see page 26\)](#)

3.1 What is IDERA SQL Inventory Manager?

IDERA SQL Inventory Manager provides fundamental information on your SQL Servers to help you keep track of and manage your database environment without having to be an expert in Microsoft SQL Server. It gives a broad, enterprise-wide view of all your SQL Servers through automated discovery as well as simple, actionable information about the state of your environment. View core information such as how many databases exist and whether they are being backed up, and get access to options like availability monitoring and notification emails so you can take action as needed.

IDERA SQL Inventory Manager provides the following features:

- An inventory of your instances and databases.
- Continuous instance discovery in your environment.
- Health Checks for availability, configuration, disaster recovery, and capacity of your instances and databases.
- Email alerts to inform you about important issues like SQL Server instance availability or low drive space.
- Export reports of your instances and health check recommendations.

3.2 How does SQL Inventory Manager help me?

IDERA SQL Inventory Manager allows you to define the scope of your monitored environment providing information for those instances that you choose to monitor and helps you to:

- Discover automated instances.
- Get an overview of your environment status in terms of performance and health.
- Visualize important changes made to configuration, computer and database details.
- Receive alert notifications of the most critical issues in your environment.
- Export reports of your instances and health check recommendations.

3.3 Searching SQL Inventory Manager

Finding a specific server, instance, database, listener, or application is easy with the search field located in the IDERA menu bar. Simply type all or part of the name within the product, and then click **Go**. The system displays a list of items matching your search criteria, sorted by name. The window also includes the type of item returned, such as

Instance, Database, or Application. Click the item name and you go to the appropriate view for that item. For example, click an instance name while using IDERA SQL Inventory Manager, and the Instance Details page for that instance appears. Click a database name, and the Database Details window for that database appears.

After you view the list of search results, click any other part of the window to close the search pop-up list.

3.4 Using SQL Inventory Manager Help

The IDERA Help wiki includes a comprehensive online help system as well as additional resources that support you as you install and use IDERA products.

Additionally, IDERA helps you by providing:

- 24/7 technical support for critical issues.
- Availability to report cases and access a web-based customer portal for update status.
- Access to our [SQL Products Customer Portal](#)¹⁰ where you can find FAQs, How To's, Best Practices, and Webcasts.

This wiki includes the following Web browser minimum requirements:

- Internet Explorer 9.0
- Mozilla Firefox 4
- Google Chrome 6

You can access the IDERA SQL Inventory Manager help system through the **HELP** option on the top right section of any tab or by clicking the question mark (?) on any dialog window.

You can print a help topic from the wiki using the Print function in your browser.

3.5 Definition of terms

Adhoc workloads

The option for optimizing adhoc workloads helps to improve the efficiency of the plan cache for workloads that contain many single user adhoc batches.

Auto shrink

Microsoft SQL Server automatically shrinks databases to remove unused space. In some cases shrinking databases may not be the best option for your environment since it may cause fragmentation.

IDERA SQL Inventory Manager provides a Health Check to let you know if the Auto Shrink option is enabled or disabled.

Availability data

Availability Data refers to the instance status (up or down), instance response time, and database status (normal, suspect, offline, inaccessible or emergency mode).

Capacity data

Capacity data refers to the storage capacity of your drives and databases in your environment. IDERA SQL Inventory Manager lets you know if your drives or databases are at risk of being full soon.

CHECKDB

¹⁰ <https://idera.secure.force.com/>

Checks the logical and physical integrity of all the objects in the specified database. If corruption has occurred for any reason, the DBCC CHECKDB command will find it, and tell you exactly where the problem is.

Computer

Refers to the server that hosts a SQL Server, this maybe a physical or virtual server. IDERA SQL Inventory Manager gathers configuration, capacity, and performance data for SQL Server instance host servers, also known as "Servers."

Configuration data

IDERA SQL Inventory Manager performs the following configuration data checks:

- Auto Shrink configuration
- Xp_cmdshell configuration
- Tempdb files configuration

Database

A database is a data structure that stores organized information. Most databases contain multiple tables, which may each include several different fields. For example, a company database may include tables for products, employees, and financial records. Each of these tables would have different fields that are relevant to the information stored in the table.

Disaster recovery

Disaster recovery is a process to help you recover information if disaster occurs. Disaster recovery planning refers to the preparation that must occur in response to a disaster. IDERA SQL Inventory Manager provides Health Checks that give you information of your latest backups, alerting you if any of your databases have not been backed up recently.

Health checks

Health checks include monitoring CPU utilization, database status, available disk space, database backup status, and other performance issues in general.

The purpose of performing Health Checks is to determine if settings are appropriate for your particular environment and if they allow you to have the highest performance and availability from your databases.

Instance

Also known as SQL Server or SQL server instance. SQL Server supports multiple “instances” or installations on the same host computer. Each instance runs independently from all others and has its own set of installation code, configuration parameters, system and user databases, memory allocation, and security configuration.

Location

The location refers to the physical or geographical location of an instance, such as Houston for example. IDERA SQL Inventory Manager allows you to add this information to the instance that you are registering so you can later filter and get details or graph views for the instances belonging to this location.

Owner

The owner refers to the user whom the instance belongs to. When you register an instance, IDERA recommends that you register the instance owner, so later you can easily get information from this owner and his/her respective instances.

Performance data

IDERA SQL Inventory Manager measures performance data such as CPU% usage, Memory % usage, Disk IO, and Network IO.

Service Control Manager SCM

SCM is a remote procedure call (RPC) server that allows the service configuration and service control programs to manipulate services on remote machines. The service control manager (SCM) is started when the system boots. One of the tasks performed by the SCM is enumerating installed services and driver services.

SQL Server Resolution Service

This method is used to direct client requests to the proper port when multiple instances of the SQL Server are running on the same system. When multiple instances of Microsoft SQL Server are installed, the default instance uses the standard and commonly associated TCP port of 1433. Once this port has been taken, the other installed instances of SQL Server must use an alternate, arbitrary port. This SQL Server Resolution Service instance checks UDP port 1434 to determine if any other instances of the Resolution Service are listening on this port; if there are no conflicting instances (which is the case if it is the first instance), then it binds to that port and becomes the SQL Server Resolution Service listener for all SQL Server instances on the server.

Tag

Tags help you group your instances for better management. For example, use a tag name such as "Business critical" to identify all your registered instances that are business critical to you, and have quick access to views and details from this group of instances.

A single instance can belong to one or more tags.

TCP Probe

TCP Probe is a module that attempts to connect to a TCP/IP address on specified ports and starts the SQL Server connection negotiation packet exchange. If the remote system responds to the initial packet correctly it records the address and port.

Tempdb files

It is important to configure the tempdb files with the same initial size and with the same growth settings so that Microsoft SQL Server can write the data across the files as evenly as possible. The data files for tempdb should all be the same size and large enough to handle workload for 24 hours. This configuration helps SQL Server distribute the work evenly across the tempdb data files.

IDERA SQL Inventory Manager provides a Health Check to let you know if tempdb files are the same size or not.

Windows Registry

The Windows Registry is a hierarchical database that stores configuration settings and options on Microsoft Windows operating systems. It contains settings for low-level operating system components and for applications running on the platform that have opted to use the registry. The kernel, device drivers, services, SAM, user interface, and third party applications can all make use of the registry. The registry also provides a means to access counters for profiling system performance.

WMI Enumeration

WMI allows to use a simple, consistent mechanism to query for information or configure settings on computers or enumerate objects on computers across an enterprise.

Xp_cmdshell

Xp_cmdshell is essentially a mechanism to execute arbitrary calls into the system using either the SQL Server context (i.e. the Windows account used to start the service) or a proxy account that can be configured to execute xp_cmdshell using different credentials.

When xp_cmdshell is enabled, the user could escalate his/her privileges to sysadmin. It is important to be aware which instances have the xp_cmdshell option enabled for security reasons.

IDERA SQL Inventory Manager provides a Health Check to let you know if the xp_cmdshell is enabled or disabled in an instance.

4 Getting started

To get started, learn the basics for installing IDERA SQL Inventory Manager, discovering and registering your instances, subscribing to alerts, managing your users, enabling automatic registration, managing licenses, and other key IDERA SQL Inventory Manager features.

The following topics are included in this section:

- [Upgrade to this release](#)(see page 29)
- [Upgrade to this release on an Availability Group](#)(see page 36)
- [Installation and deployment](#)(see page 37)
- [What login and password should you use to log in to SQL Inventory Manager?](#)(see page 92)
- [Permissions and Discovery](#)(see page 92)
- [What options do you have when you first install SQL Inventory Manager?](#)(see page 93)
- [Administering SQL Inventory Manager](#)(see page 99)
- [Manage Virtual Hosts](#)(see page 137)
- [Add SQL Server instances](#)(see page 139)
- [Discovering new instances](#)(see page 147)
- [Configuring email settings for alert notifications](#)(see page 151)
- [Subscribing to Alerts](#)(see page 153)
- [Managing tags](#)(see page 153)
- [Managing users in SQL Inventory Manager](#)(see page 160)
- [How to manage the Auto Registration Options](#)(see page 164)
- [Managing Licenses](#)(see page 165)

4.1 Upgrade to this release

This version of IDERA SQL Inventory Manager brings you new features that will help you improve the management of your environment. Upgrade to this new release so you can access and make the most of these features.

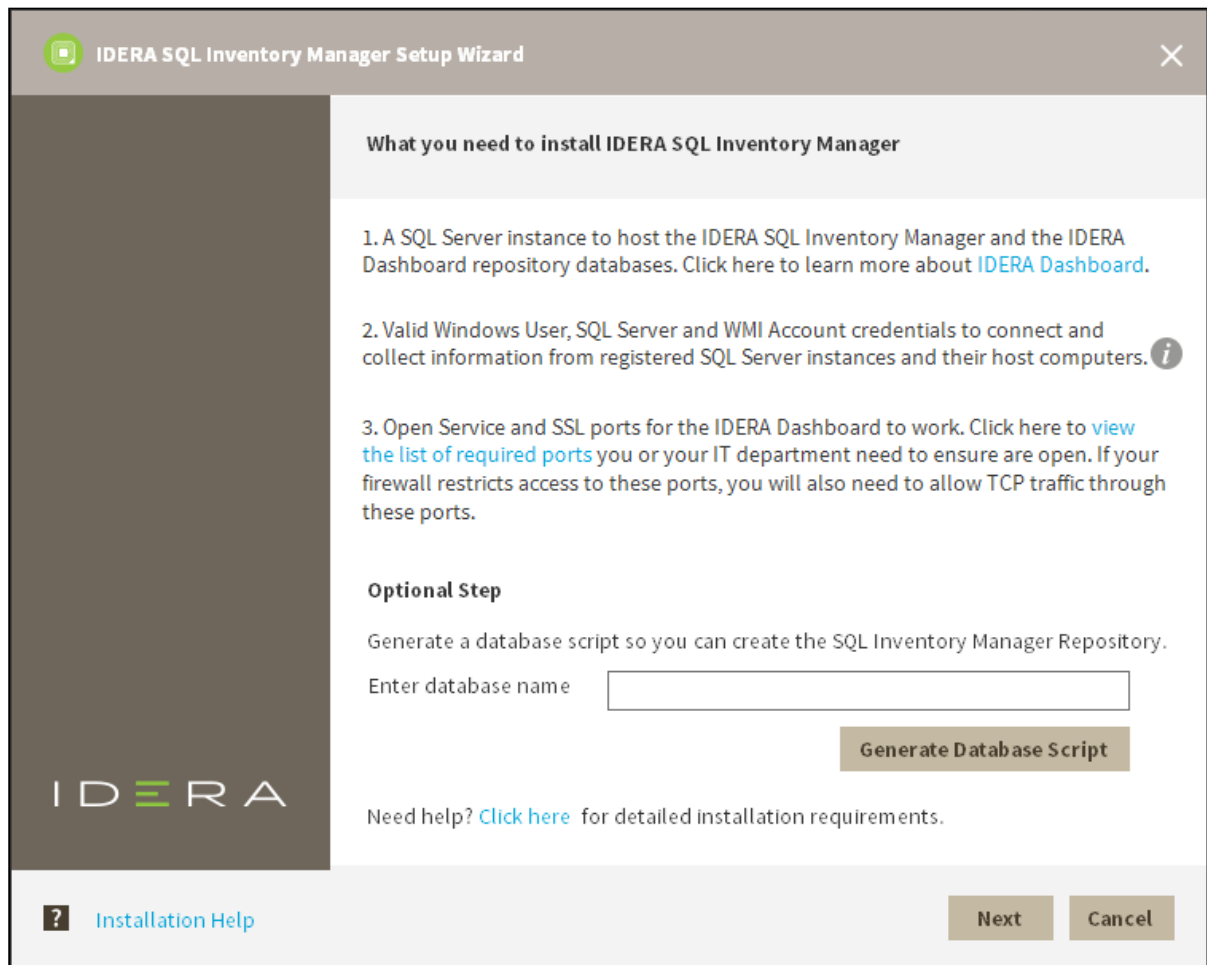
Click [here](#)(see page 19) to access the list of new features for this release.

Before upgrading, take into account the following checklist:

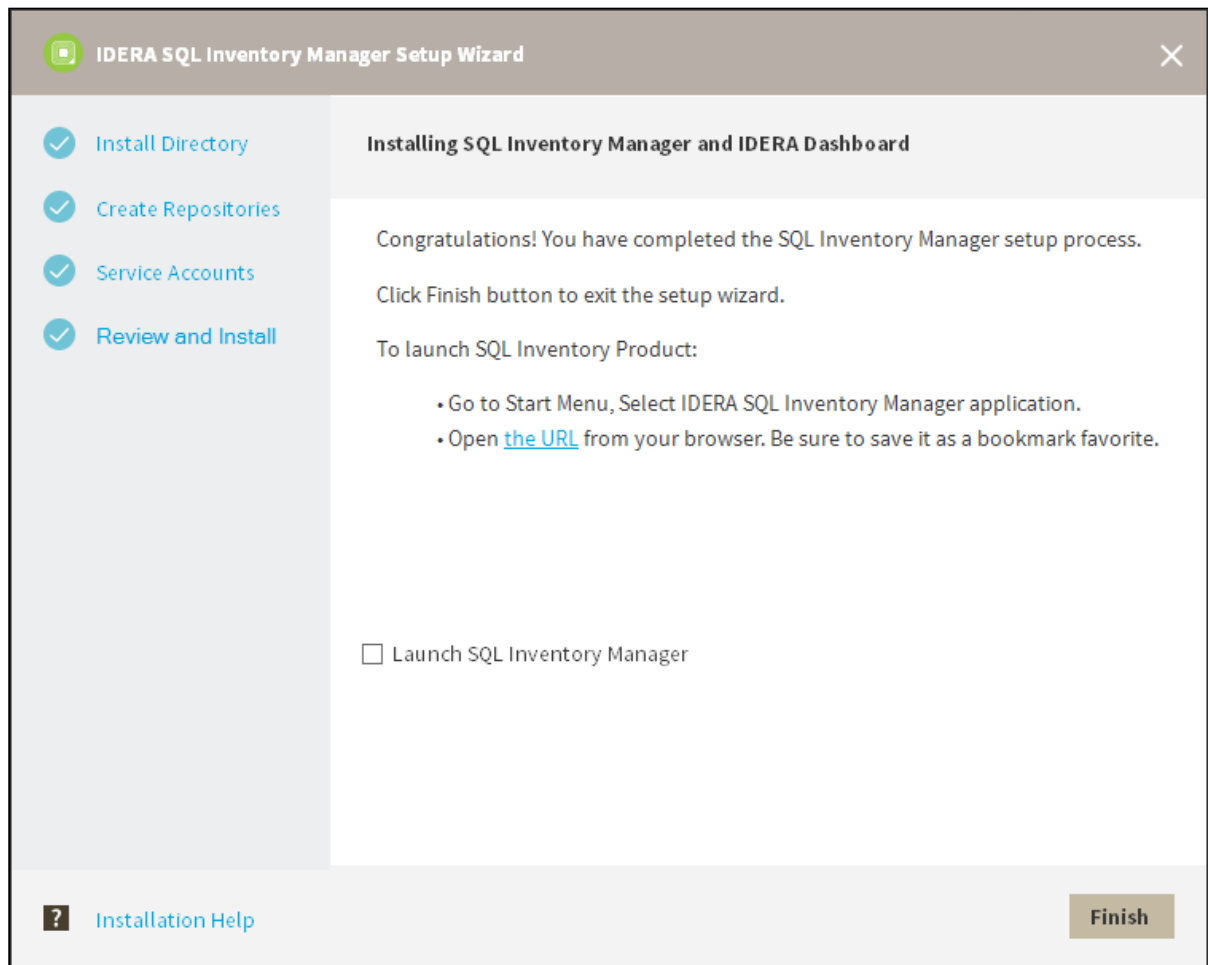
- Back up your IDERA SQL Inventory Manager and Repositories. The upgrade process will convert the repositories from the previous schema to the current schema. Once you finish the upgrade you cannot revert to previous repositories, be sure to take a backup in case you want to revert to a previous version of the schema.
- Make sure that your environment meets the [hardware](#)(see page 41) and [software requirements](#)(see page 42) for installing IDERA SQL Inventory Manager.
- Ensure you have the [required accounts and permissions](#)(see page 45).

To upgrade to this release:

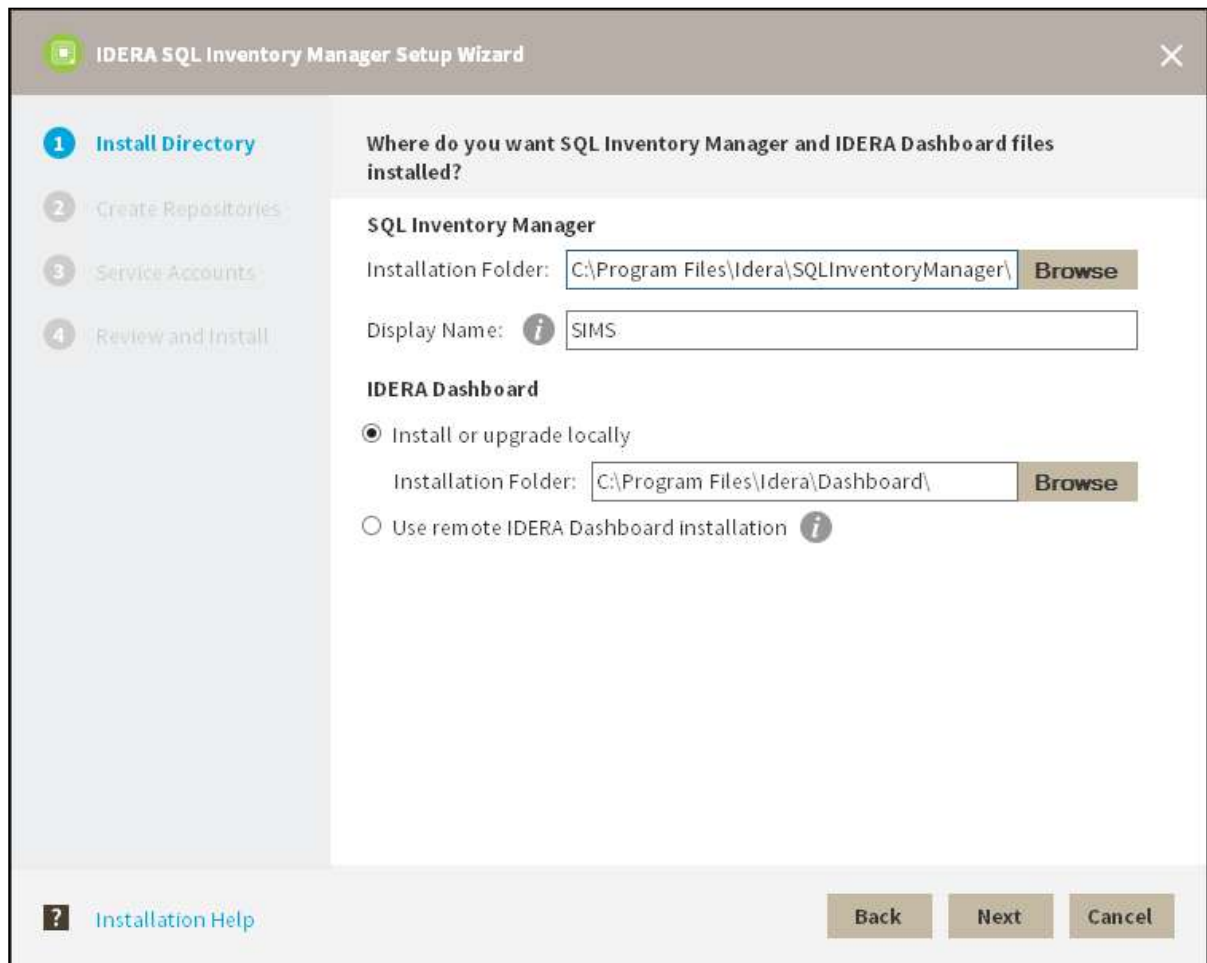
1. Open the installer, click **Next**.



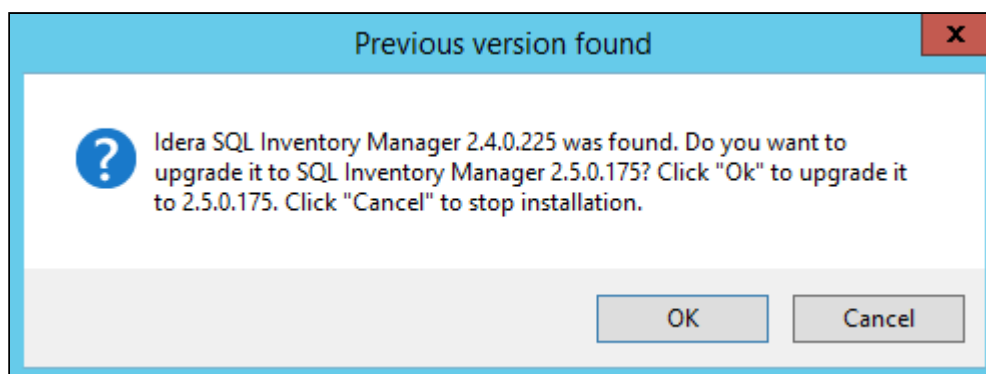
2. Read the License Agreement. If you agree, click **I accept the Terms and Conditions** and then click **Next**.



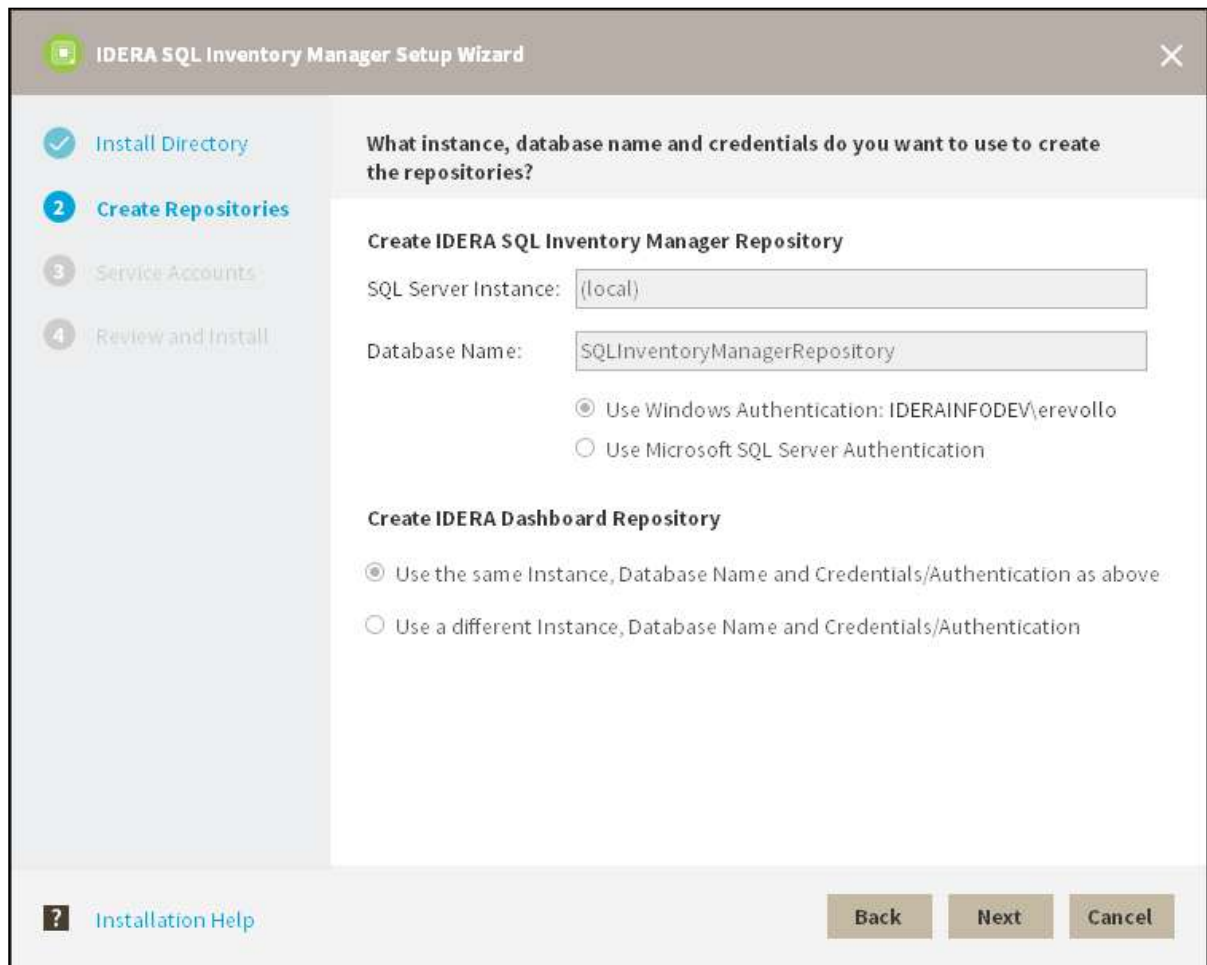
3. Select **Install or upgrade locally** and click **Next**.



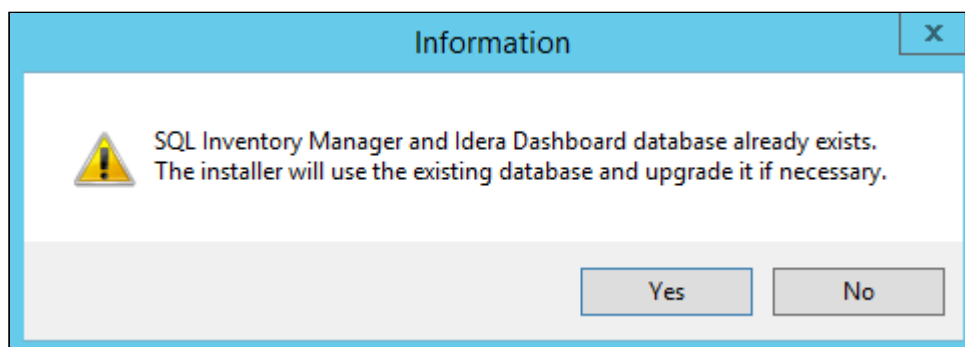
- The IDERA SQL Inventory Manager installer detects if you have any previous installation and prompts you if you want to upgrade. Click **OK** to continue.



- On the **Create Repository** section click **Next**.



- The IDERA SQL Inventory Manager installer detects if you have any previous Repositories and prompts you to upgrade. Click **Yes** to upgrade your previously existing repositories.



- Enter your service credentials and click **Next**. For more information you can refer to [Installing SQL Inventory Manager](#). (see page 53)

IDERA SQL Inventory Manager Setup Wizard

✓ Install Directory

✓ Create Repositories

3 Service Accounts

4 Review and Install

What service accounts do you want to use for SQL Inventory Manager and IEDRA Dashboard?

The Service Accounts will be used to collect information and will also be the default user to log into the application. You can log into the IDERA Dashboard to create additional users after installation.

Service Account for IDERA SQL Inventory Manager

Domain\UserName:

Password:

Service Account for IDERA Dashboard *i*

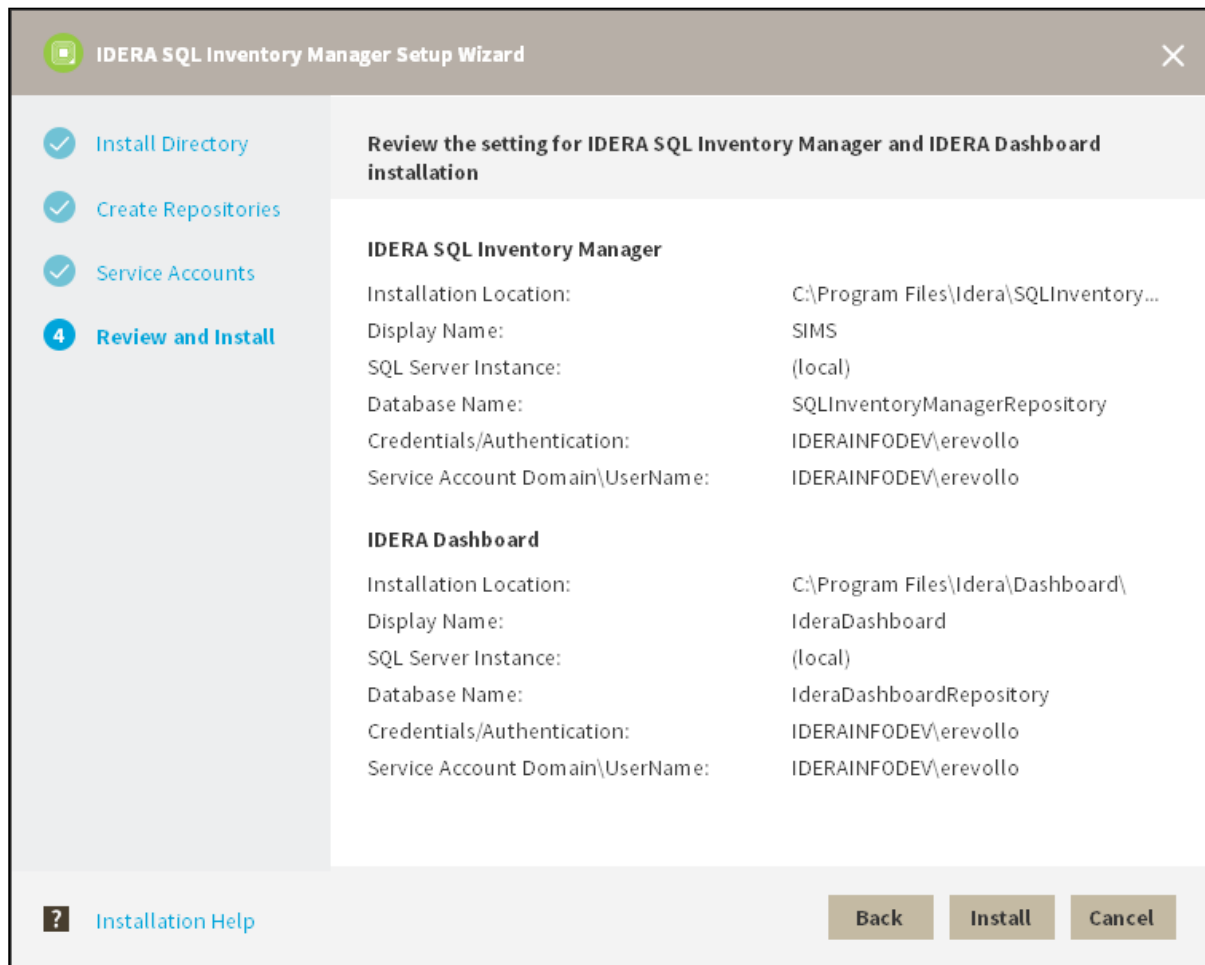
Use the same Credentials/Authentication as above

Use a different Credentials/Authentication

? [Installation Help](#)

Back **Next** **Cancel**

8. Review your settings and click **Install** to continue. If you want to change any of your settings click **Back**.



- After the installation is finished, you can choose to Launch IDERA SQL Inventory Manager immediately.

When IDERA SQL Inventory Manager launches on your browser, you should use your Windows user account with your respective password to log in to the product. Please take into account that IDERA SQL Inventory Manager does not store passwords

Keep in mind that with the upgrade to the latest version:

- You keep your previously registered instances and their respective data.
- Services continue to run on same port as before the upgrade.
- Home page Web URL does not change.

- ⚠** Take into account that if you install a new version of IDERA SQL Inventory Manager in a distributed environment where previous versions of repositories were installed, these repositories will be updated but will remain linked to previous services. To avoid this issue you can:
- Uninstall the previous IDERA SQL Inventory Manager version to unlink repositories from previous services
 - Upgrade to a new IDERA SQL Inventory Manager version, launching the installer from the server machine where the previous services were installed

4.2 Upgrade to this release on an Availability Group


This version of IDERA SQL Inventory Manager brings you new features that will help you improve the management of your environment. Upgrade to this new release so you can access and make the most of these features.

Click [here](#)(see page 19) to access the list of new features for this release.

Before upgrading, take into account the following checklist:

- Back up your IDERA SQL Inventory Manager and Core Repositories. The upgrade process will convert the repositories from the previous schema to the current schema. Once you finish the upgrade you cannot revert to previous repositories, be sure to take a backup in case you want to revert to a previous version of the schema.
- Make sure that your environment meets the [hardware](#)(see page 41) and [software requirements](#)(see page 42) for installing IDERA SQL Inventory Manager.
- Ensure you have the [required accounts and permissions](#)(see page 45).

To upgrade to this release:


 When upgrading from 2.4 or 2.4.1 you need to remove SQL Inventory Manager Repository from the AG before upgrading.

1. Make sure you removed SQL Inventory Manager Repository from the AG.
2. Open the installer, click **Next**.
3. Read the License Agreement. If you agree, click **I accept the Terms and Conditions** and then click **Next**.
4. Select **Install or upgrade locally** and click **Next**.
5. The IDERA SQL Inventory Manager installer detects if you have any previous installation and prompts you if you want to upgrade. Click **OK** to continue.
6. On the **Create Repositories** section click **Next**.
7. The IDERA SQL Inventory Manager installer detects if you have any previous Repositories and prompts you to upgrade. Click **Yes** to upgrade your previously existing repositories.
8. Enter your service credentials and click **Next**. For more information you can refer to [Installing SQL Inventory Manager](#). (see page 53)
9. Review your settings and click **Install** to continue. If you want to change any of your settings click **Back**.
10. After the installation is finished, close the wizard and don't launch SQL Inventory Manager.
11. Add SQL Inventory Manager Repository to the AG.
12. Restart SQL Inventory Manager Collection service.

When IDERA SQL Inventory Manager launches on your browser, you should use your Windows user account with your respective password to log in to the product. Please take into account that IDERA SQL Inventory Manager does not store passwords

Keep in mind that with the upgrade to the latest version:

- You keep your previously registered instances and their respective data.
- Services continue to run on same port as before the upgrade.
- Home page Web URL does not change.

 Take into account that if you install a new version of IDERA SQL Inventory Manager in a distributed environment where previous versions of repositories were installed, these repositories will be updated but will remain linked to previous services. To avoid this issue you can:

- Uninstall the previous IDERA SQL Inventory Manager version to unlink repositories from previous services

- Upgrade to a new IDERA SQL Inventory Manager version, launching the installer from the server machine where the previous services were installed

4.3 Installation and deployment

This section provides you step-by-step information for installing IDERA Dashboard and IDERA SQL Inventory Manager.

It is important that you learn about the product architecture and components, hardware and software requirements, and the required accounts and permissions you need to have before installing these products.

The following topics are included in this section:

- [Product components and architecture](#)(see page 37)
- [Product requirements](#)(see page 41)
- [Installation instructions](#)(see page 52)
- [Log in to the IDERA Dashboard](#)(see page 91)

4.3.1 Product components and architecture

IDERA Dashboard and IDERA SQL Inventory Manager consist of a light, unobtrusive architecture that easily runs in your SQL Server environment with minimal configuration. All components run outside and separate from SQL Server processes.

- **IDERA Dashboard.** Provides web and back-end services, shared across multiple IDERA products. To learn more about the IDERA Dashboard components and architecture, see [IDERA Dashboard components and architecture](#)(see page 39).
- **IDERA SQL Inventory Manager.** Offers a simple architecture which runs in your SQL Server environment with minimal configuration. The web-based interface allows you to easily access the status of your environment from any computer at any location without adding or modifying your native SQL Server files or services. This topic contains additional information about the IDERA SQL Inventory Manager components and architecture.

IDERA SQL Inventory Manager consists of the following components:

4.3.1.1 IDERA SQL Inventory Manager User Interface

IDERA SQL Inventory Manager provides a web-based user interface. This interface is used to view data about your monitored SQL Server instances, as well as to administer IDERA SQL Inventory Manager.

The web-based user interface does not require IIS or other internet servers. The user interface web service is self-hosting and through it you can find multiple views that help you to:


- Discover instances in the environment that you specify and register those you want to monitor.
- Monitor availability, capacity, configuration, and performance data from your monitored instances, their respective databases, and host computers.
- View health check recommendations and availability status for monitored instances and databases.
- Receive email alerts on availability and capacity issues.
- View instances information grouped by tags, owners, locations, and other filters.
- Export health checks recommendations and instance information from the different tabs.
- View information that will help you assess your SQL Server licensing requirements.

This Web Application can seamlessly be accessed through Internet Explorer 9 or later, Google Chrome, and Mozilla Firefox.

You can access IDERA SQL Inventory Manager web application through the following link:

http://<ServerName>:<web application port>

Where *ServerName* is the name of the machine on which you installed the IDERA SQL Inventory Manager services and the Web application port refers to the one you specified during installation, or by default port 9276.

 You must grant new users access to be able to login into IDERA SQL Inventory Manager web interface. For adding users go to [Managing users in SQL Inventory Manager](#) (see page 160).

4.3.1.2 IDERA SQL Inventory Manager services

IDERA SQL Inventory Manager uses the following windows services:

- IDERA Web Server
- IDERA Core Service
- IDERA SQL Inventory Manager Collection Service

IDERA SQL Inventory Manager uses the Collection Service account to gather information from monitored instances and their host computers. To change this default setting, go to [Editing instances properties](#).(see page 252)

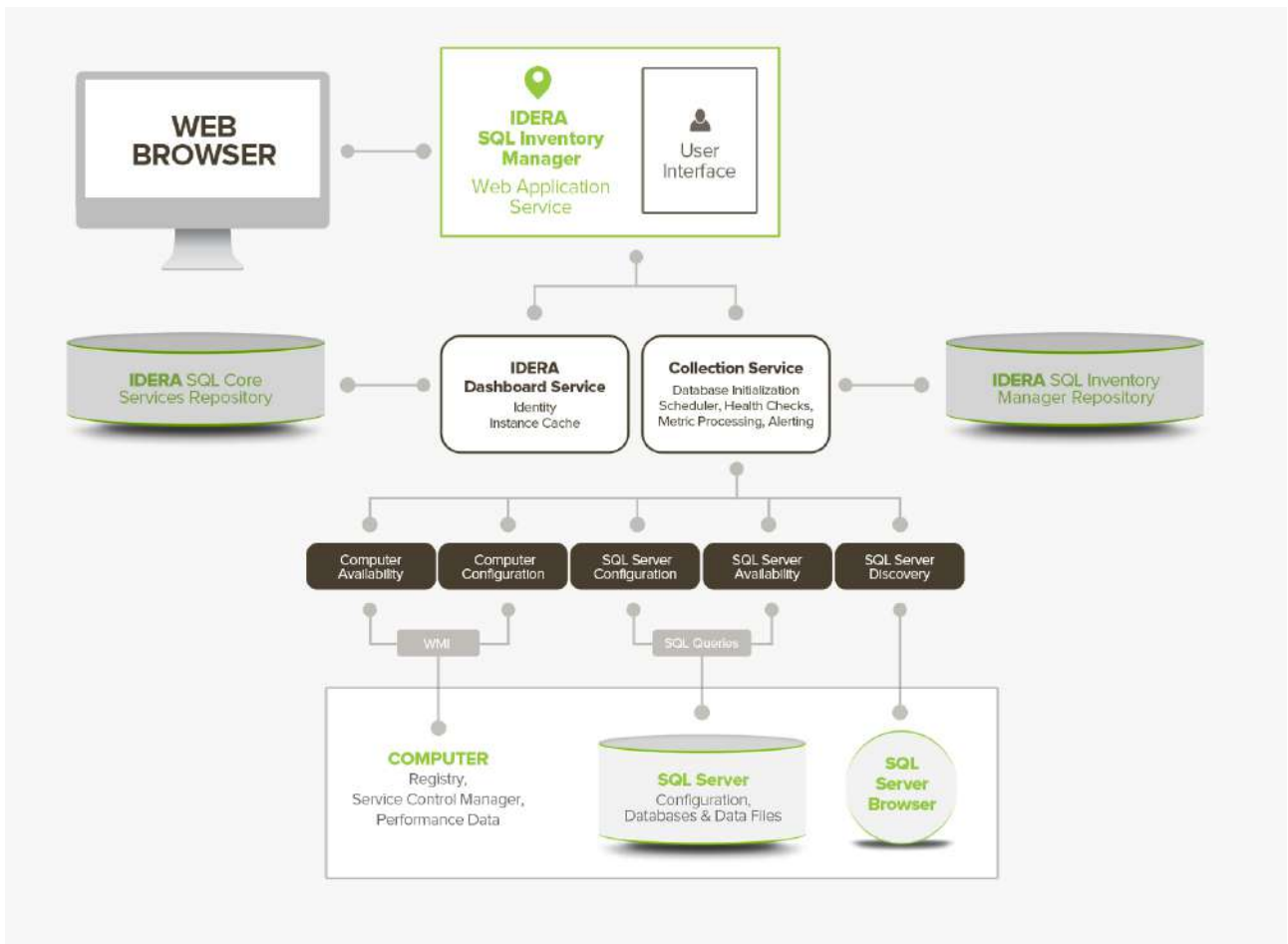
4.3.1.3 IDERA SQL Inventory Manager repositories

IDERA SQL Inventory Manager creates the two following databases on installation:

- IDERA SQL Inventory Manager Repository
- IDERA Core Services Repository

These databases store information related to application users, configuration information, and data gathered for the monitored instances.

The following diagram represents IDERA SQL Inventory Manager architecture:

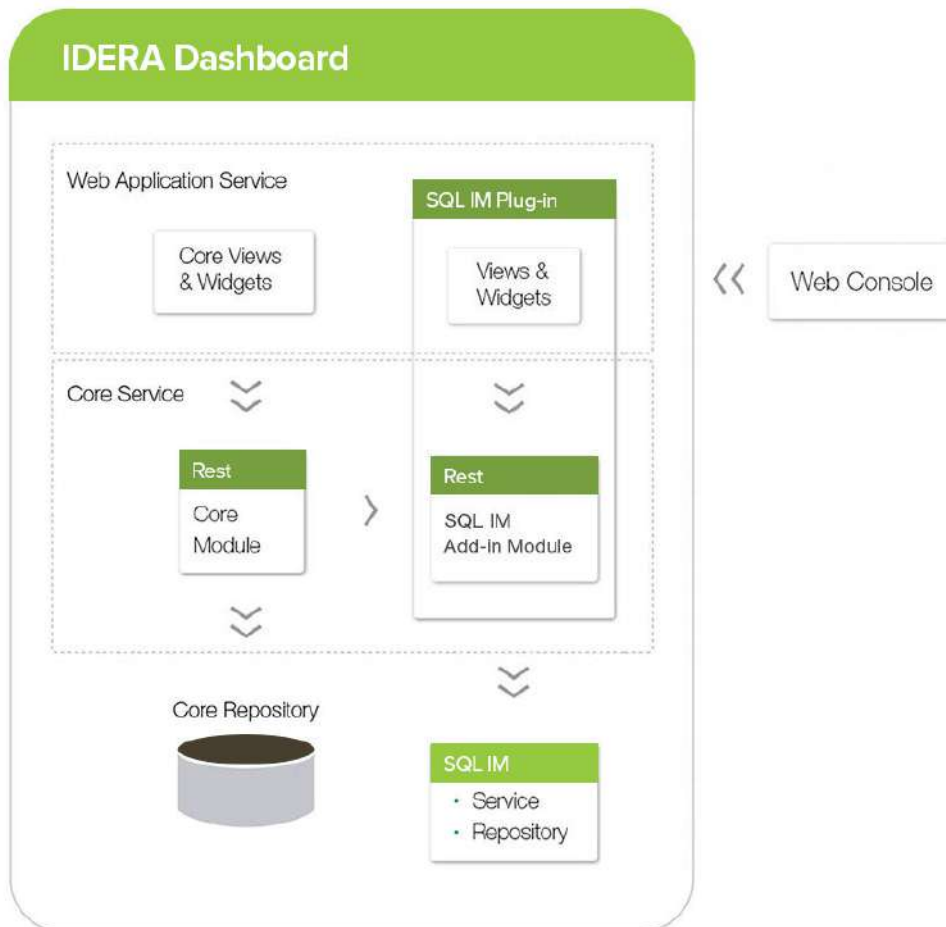


4.3.1.4 IDERA Dashboard components and architecture

The IDERA Dashboard provides web and back end services, shared across multiple IDERA products. To learn more about what the IDERA Dashboard is and how it works, see [Navigate the IDERA Dashboard web console](#) (see page 167).

The IDERA Dashboard consists of the following components:

- [Web Application Service](#) (see page 40)
- [Core Service](#) (see page 40)
- [Core Repository](#) (see page 41)



Web Application Service

The Web Application Service is a Windows service that wraps Apache Tomcat server. The Web Application Service serves up dashboard (IDERA Dashboard) and IDERA SQL Inventory Manager views and widgets that are displayed in the web console. The Web Application Service requires two ports:

- Standard HTTP port (by default 9290)
- SSL port (9291)

Core Service

The Core Service is a C# (.NET 4.0 Framework) based Windows service that hosts dashboard and IDERA SQL Inventory Manager REST APIs that are used by the Web Application Service to configure and retrieve data. In addition, the Core Service handles product registration, security, configuration, product data, and event aggregation.

The Core Service uses two ports, one for REST API and the other for .NET remoting:

- Core Service REST API port (by default 9292)
- .NET remoting port (by default 9293)

Core Repository

The Core Repository is a database where all dashboard configuration and aggregated data is stored. The Core Repository database is hosted on a SQL Server instance and is accessed by the Core Service to retrieve data.

4.3.2 Product requirements

Before installing the IDERA Dashboard and IDERA SQL Inventory Manager, be sure to review the system requirements.

- Learn about the [IDERA SQL Inventory Manager hardware requirements](#)(see page 41).
- Learn about the [IDERA Dashboard and IDERA SQL Inventory Manager software requirements](#)(see page 42).
- Learn about the [Required accounts and permissions](#)(see page 45).

4.3.2.1 Hardware requirements

IDERA SQL Inventory Manager collection services requirements

The following are the requirements for hosting IDERA SQL Inventory Manager collection services:

| Hardware type | Requirement |
|--------------------|--------------------|
| CPU | 1 GHz |
| Memory | 1 GB |
| Hard Drive Space | 128 MB |
| Monitor Resolution | 1024 by 768 pixels |

IDERA SQL Inventory Manager repository requirements

For IDERA SQL Inventory Manager repositories, you need 1GB to 3GB, for one year of data, per monitored SQL Server instance.

IDERA SQL Inventory Manager hardware sizing example

The following example provide an estimation of the hardware resources required to deploy IDERA SQL Inventory Manager depending on the number of servers you want to manage.

Example IDERA SQL Inventory Manager requirements for up to 1100 monitored instances

| Type | Requirement |
|------------------|---|
| Operating System | Microsoft Windows Server 2012 R2 Standard |

| Type | Requirement |
|------------|--|
| CPU | Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz, 2400 Mhz, 2 Core(s), 4 Logical Processor(s) |
| Memory | 16 GB |
| SQL Server | Microsoft SQL Server 2014 Standard (64-bit) |

4.3.2.2 Software requirements

IDERA Dashboard and IDERA SQL Inventory Manager services requirements

You need to comply with the following requirements to install the IDERA Dashboard and IDERA SQL Inventory Manager collection services:

| Type | Requirement | Suggestions |
|----------------------------------|--------------|---|
| Windows Data Access Components | 6.0 or later | |
| Microsoft .NET Framework version | 4.6.1 | <p>If this software is not already installed on your computer, you must install it prior to the installation of IDERA SQL Inventory Manager.</p> <p>For more information about the .NET Framework, see the MSDN article .NET Framework Versions and Dependencies¹¹.</p> <p>To check the .NET Framework version you have installed in your computer, follow these steps:</p> <ul style="list-style-type: none"> • Open the Registry Editor • Navigate to Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\NET Framework Setup\NDP\v4\Full • Check the Value for key Release • Compare the release value with the information on How to determine which .NET versions are installed¹² |

¹¹ <https://msdn.microsoft.com/en-us/library/bb822049.aspx>

¹² <https://docs.microsoft.com/en-us/dotnet/framework/migration-guide/how-to-determine-which-versions-are-installed>

| Type | Requirement | Suggestions |
|------------------|--|-------------|
| Operating System | <ul style="list-style-type: none"> Windows 10 Windows 2012 Windows 2016 Windows 2019 SQL Server 2017 on Windows & Linux SQL Server 2019 on Windows & Linux | |

IDERA Dashboard and IDERA SQL Inventory Manager repository requirements

The IDERA Dashboard and IDERA SQL Inventory Manager support any of the following versions for hosting the repositories:

| Type | Requirement |
|---|---|
| SQL Server Express, Standard, or Enterprise/Datacenter Editions | <ul style="list-style-type: none"> SQL Server 2012 SQL Server 2014 SQL Server 2016 SQL Server 2017 on Windows & Linux SQL Server 2019 on Windows & Linux |

Monitored SQL Server instances requirements

All SQL Server instances that you wish to monitor should comply with the following requirements:

| Type | Requirement |
|---|---|
| SQL Server Express, Standard, or Enterprise Edition | <ul style="list-style-type: none"> • Windows 10 • Windows 2012 • Windows 2016 • Windows 2019 • SQL Server 2012 • SQL Server 2014 • SQL Server 2016 • SQL Server 2017 on Windows & Linux • SQL Server 2019 on Windows & Linux • Azure DB <ul style="list-style-type: none"> •Single •Elastic Pool •Managed Instance • Amazon RDS SQL <ul style="list-style-type: none"> •SQL Server 2012 •SQL Server 2016 •SQL Server 2017 •SQL Server 2019 • Azure VM Windows (All SQL Version) • Azure VM Linux (SQL Server 2017 and 2019) |

Browser requirements

The IDERA Dashboard and IDERA SQL Inventory Manager user interfaces can be accessed via web with the following browsers:

- Internet Explorer IE 11.x+
- Google Chrome
- Mozilla Firefox
- Microsoft Edge
- Safari


Port requirements

The IDERA Dashboard uses the following ports:

- Web Application Service: **9290** (Standard HTTP port) and **9291** (SSL port)
- Core Service: **9292** (REST API port) and **9293** (.NET remoting port)

IDERA SQL Inventory Manager uses the following port:

- Collection service port: **9275**

 The IDERA Dashboard Web Application service comes with SSL already set up. For more information on running the IDERA Dashboard over SSL, see [Run IDERA Dashboard over TLS \(HTTPS\)](#)¹³.

¹³ <https://wiki.idera.com/pages/viewpage.action?pageId=6065194057>

4.3.2.3 Required accounts and permissions

IDERA SQL Inventory Manager connects to registered SQL Server instances and their host computers to collect information.

Depending on the level of access and actions you want IDERA SQL Inventory Manager to perform on your environment, you should check you have the following permissions in each account:

| Account | Action | Permissions required |
|--------------------------|---|---|
| Windows User Account | To install IDERA SQL Inventory Manager components | Windows Administrator permission on the Target computer |
| | To create and access the IDERA SQL Inventory Manager repository databases | <ul style="list-style-type: none"> • Create Database Rights on the target SQL Server Instance • Read and write privileges on the IDERA SQL Inventory Manager Repository Databases |
| SQL Server login account | For most SQL queries | VIEW SERVER STATE VIEW ANY DATABASE VIEW ANY DEFINITION |
| | To monitor database information | ALTER ANY DATABASE server level permission or CREATE DATABASE in the master database |
| | For DBCC CHECKDB | sysadmin server roles |
| Linux | To install SQL Inventory Manager Repository on a Linux SQL Server | <ul style="list-style-type: none"> • The Linux server must be a domain member. • A domain user with SQL permissions on the target SQL Linux. |
| | To query Linux Server Info | <ul style="list-style-type: none"> • a Linux user. • a domain user with Linux login rights. |




IDERA suggests that you provide SQL connection credentials with "sysadmin" server roles if you want to be able to collect all information from your environment.

4.3.2.4 Certificate Issues

To access SQL Inventory Manager over HTTPS with a self signed certificate you may need to enable SSL on SQL Inventory Manager 2.6 REST service, and add a certificate.

Using a self-signed certificate

 Using a self-signed certificate only works with both IDERA Dashboard and SQL Inventory Manager installed on a local machine.

Creating a self-signed certificate

Before binding a certificate to Inventory Manager 2.6, you need to first add a certificate for IDERA Dashboard. For information on how to create a self signed certificate for Dashboard refer to [Resolving the certificate error message](#)¹⁴.

Important

Make sure that the self-signed certificate created with the steps described above, and the keystore keypair are created to have each server listed as the common name.

Binding a certificate to Inventory Manager 2.6

Before you begin

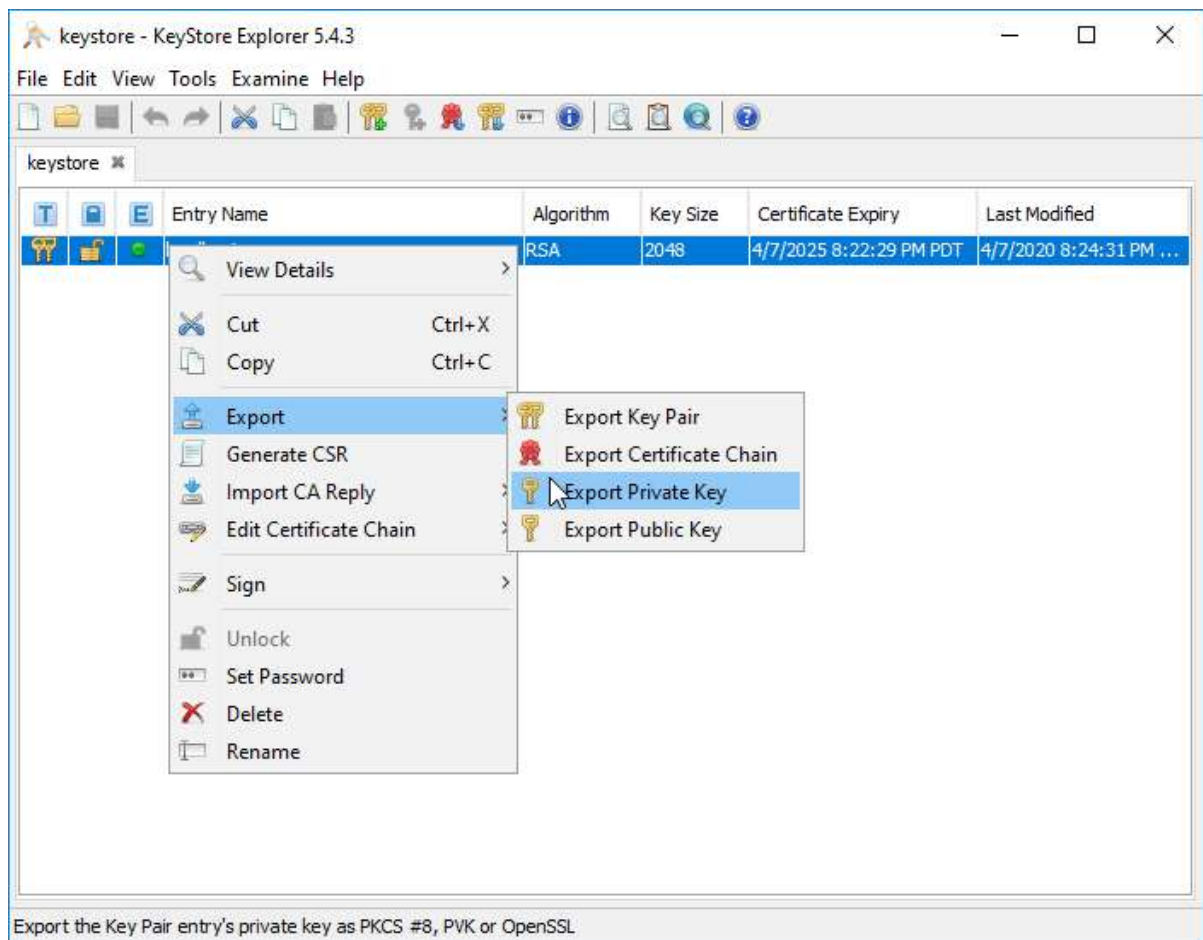
Make sure you perform the instructions in [Resolving the certificate error message](#)¹⁵.

To bind a certificate follow the instructions below:

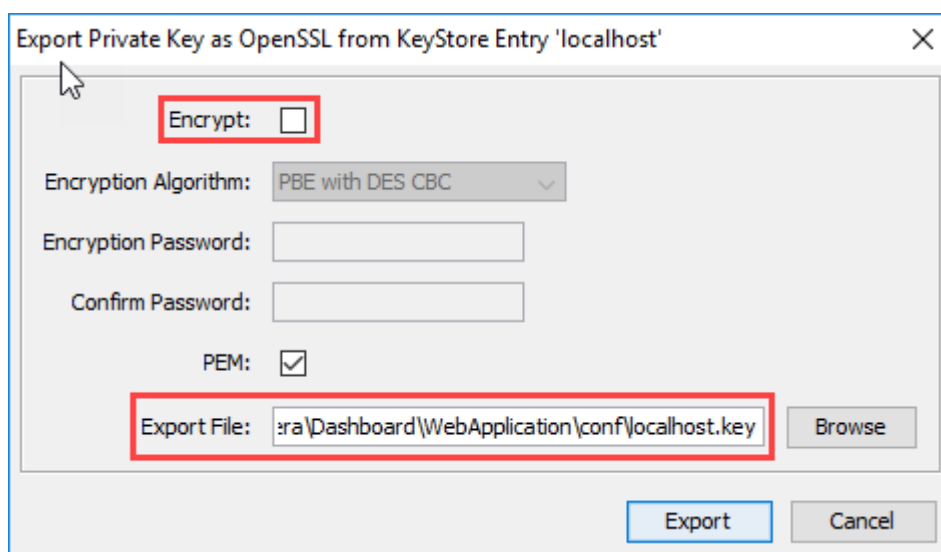
1. Launch the keyStore Explorer application as an Administrator.
2. Open the keystore file used for the IDERA Dashboard. When prompted for a password, enter *password*, and click **OK**.
3. Right-click on the keypair and select *Export> Export Private Key*.

¹⁴ <http://wiki.idera.com/display/Dashboard/Resolving+the+certificate+error+message>

¹⁵ <http://wiki.idera.com/display/Dashboard/Resolving+the+certificate+error+message>



4. On the **Export Private Key Type** window, select *OpenSSL*, and click **OK**.
5. On the **Export Private Key as OpenSSL from KeyStore Entry** window, deselect the *Encrypt* option, update the *Export File* if needed, and click **OK**.



⚠ Steps 6 - 9 can be performed on a different computer. These steps are related to the OpenSSL tool, which is not required to be installed on the server hosting the IDERA products.

6. Install OpenSSL.

i You can find a few options available to obtain the software at <https://wiki.openssl.org/index.php/Binaries>.

7. Once you complete the installation of OpenSSL, run the Command Prompt as Administrator.
 8. Change the directory to the bin folder within the installation directory of OpenSSL. Enter the following command:

```
cd "C:\Program Files\OpenSSL-Win64\bin"
```

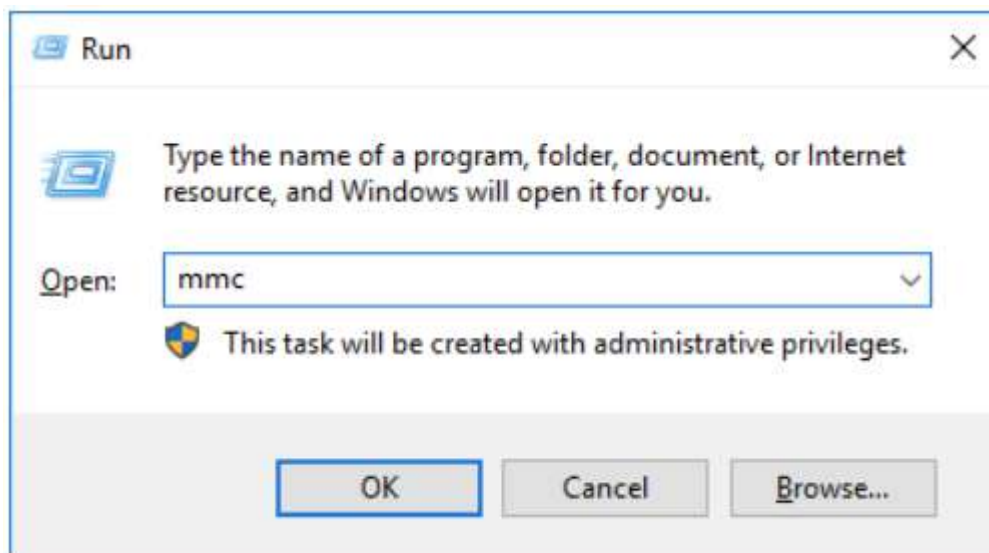
9. Use the following command as an example to generate the PFX key using the private key and certificate that was previously created.

```
openssl pkcs12 -export -out <file path to the new personal information exchange file>.pfx -inkey <file path path to private key>.key -in <file path to certificate>.cer
```

Execute the command, and when prompted for a password, enter *password* for both the export password and the verification password. You will be able to see the newly created PFX key.

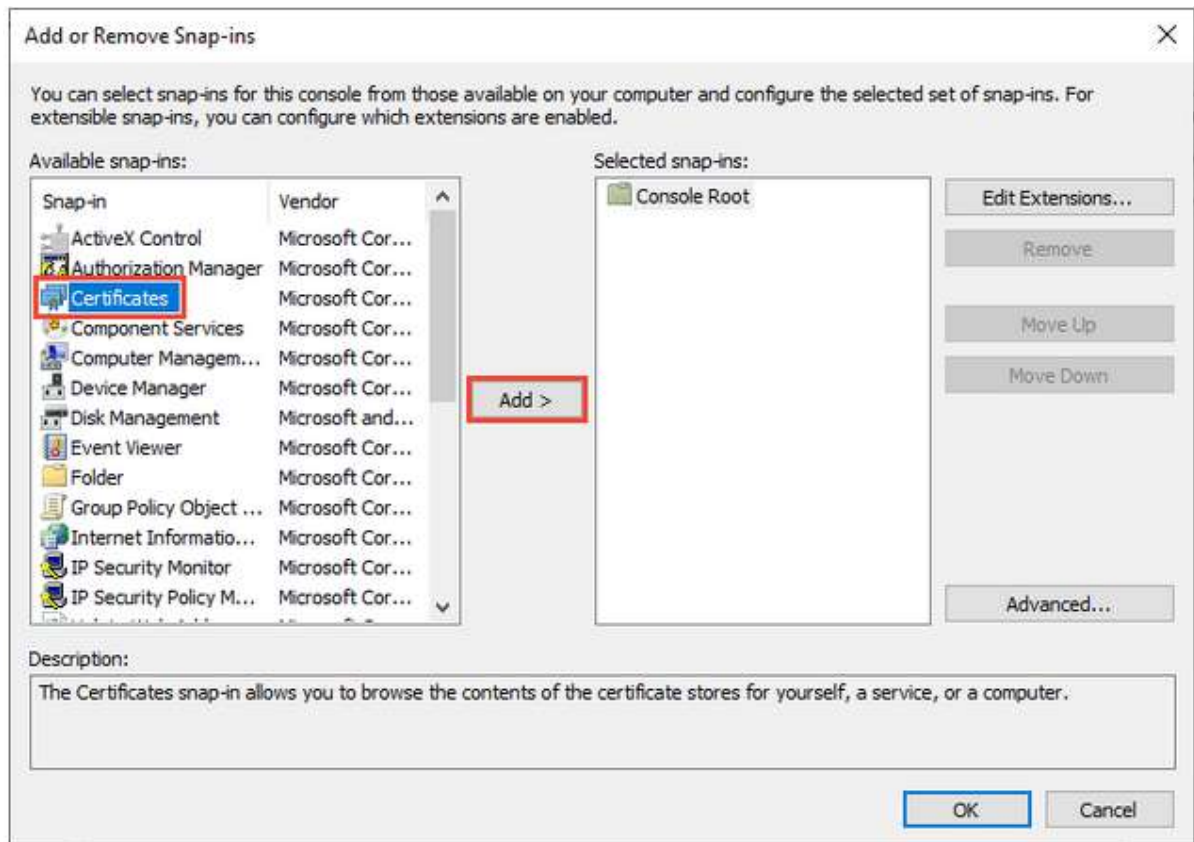
⚠ The following steps must be performed on the server hosting the IDERA Dashboard and the IDERA SQL Inventory Manager.

10. Open the Microsoft Management Console (MMC) and load the Certificates snap-in.
 a. Select **Run** from the **Start** menu, enter *mmc*, and click **OK**.



- b. On the **MMC** window, from the File menu, select *Add/Remove Snap-in*. The Add or Remove Snap-in windows displays.

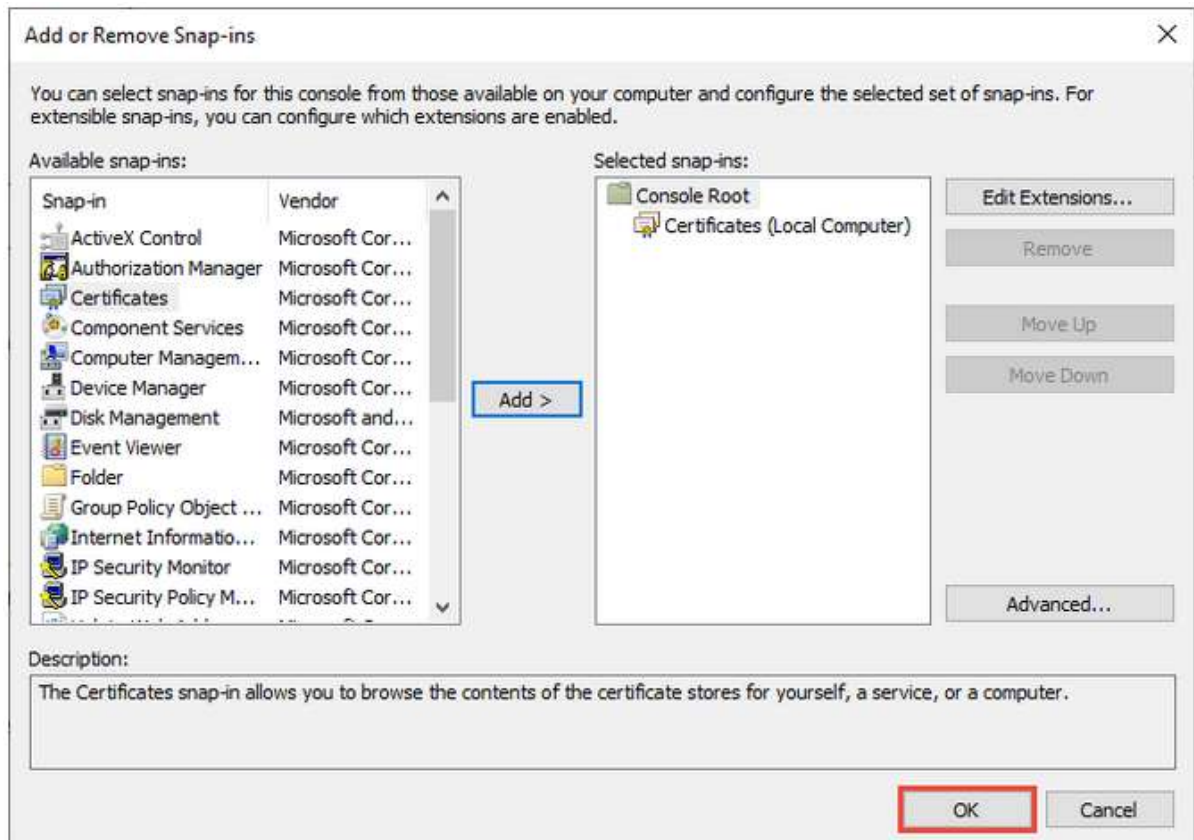
c. From the *Available snap-ins* list, choose **Certificates**, then select **Add**.



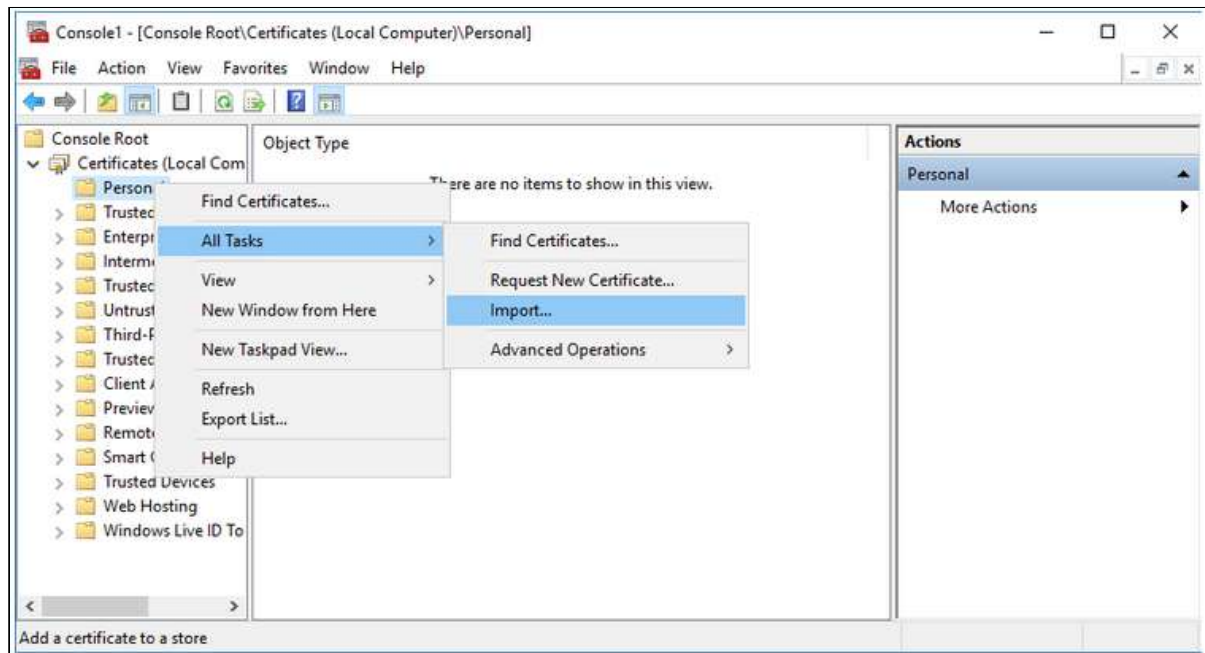
d. In the **Certificate snap-in** window, select **Computer Account**, and click **Next**.

e. In the **Select Computer** window, leave **Local computer** selected, and click **Finish**.


f. In the **Add or Remove Snap-in** window, select **Ok**.



11. Expand *Certificates* and locate the **Personal** folder.
12. Right-click on the **Personal** folder and select *All Tasks> Import*.



13. Use the *Certificate Import Wizard* to import the PFX file that was previously created.
14. Retrieve the thumbprint of the imported PFX key.
 - a. Double-click on the imported PFX key.
 - b. On the **Certificate** window, go to the *Details* tab.
 - c. Scroll through the list of fields and click **Thumbprint**.
 - d. Copy the hexadecimal characters from the box. If this thumbprint is used in code for the `x509FindType`, remove the spaces between the hexadecimal numbers.

 The GUID for the IDERA SQL Inventory Manager is "{af5a4e5f-435c-4333-ab2b-cac62e140248}".

15. Run the Command Prompt as an Administrator and delete existing bindings to the IDEA SQL Inventory Manager Rest Service port 9276, executing the following command:

```
netsh http delete ssl 0.0.0.0:9276
```

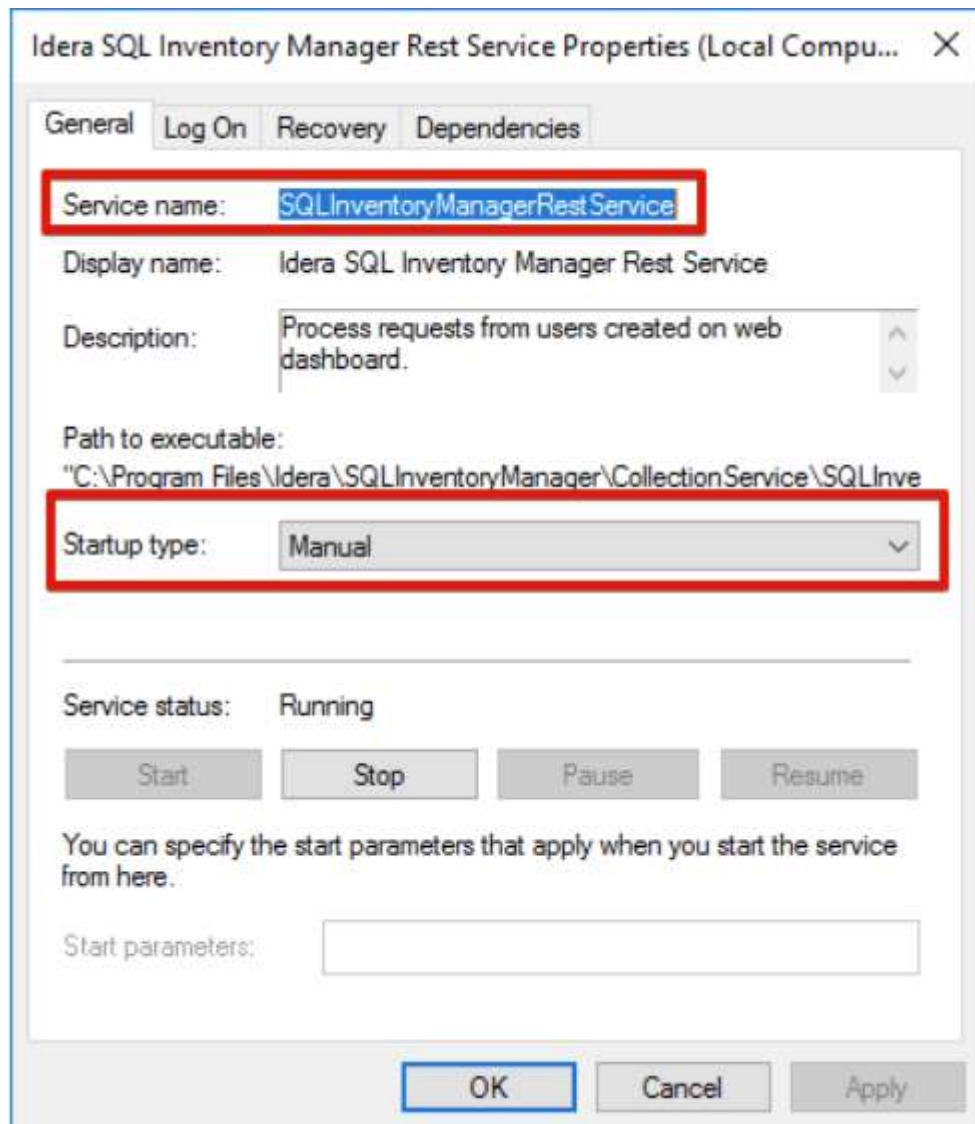
16. Run the Command Prompt as an Administrator and bind the new PFX key by using the commands below.

```
netsh
http
add ssl ipport=0.0.0.0:9276 certhash=<thumbprint of the PFX key (with spaces
removed)> appid="{af5a4e5f-435c-4333-ab2b-cac62e140248}"
clientcertnegotiation=enable
```

17. You may create a BAT file to run on startup of Windows, and make sure the certificate is applied when the server starts up, if the service is restarted. The content of the BAT file is the following:


```
NET START SQLInventoryManagerRestService
TIMEOUT /T 2
netsh http delete ssl 0.0.0.0:9276
netsh http add sslcert ipport=0.0.0.0:9276
certhash=<thumbprint of the PFX key (with spaces removed)>
appid="{af5a4e5f-435c-4333-ab2b-cac62e140248}"
```

Configure the service to have a *Manual* start up so the BAT file will start the service.



To add a certificate to the Trusted Root Certification Authorities store in Windows, refer to [Manage Trusted Root Certificates](#)¹⁶.

4.3.3 Installation instructions

This procedure guides you through a typical install of IDERA SQL Inventory Manager integrated with the IDERA Dashboard.

- The IDERA SQL Inventory Manager setup provides users the following components: IDERA SQL Inventory Manager and IDERA Dashboard.
- For step by step instructions, see [Installing SQL Inventory Manager](#)(see page 53).
- For upgrading your installation to the latest version, see [Upgrade to this release](#)(see page 29).
- To register IDERA SQL Inventory Manager with a remote IDERA Dashboard, see [Installing using a remote Dashboard](#)(see page 71).


¹⁶ [https://technet.microsoft.com/en-us/library/cc754841\(v=ws.11\).aspx](https://technet.microsoft.com/en-us/library/cc754841(v=ws.11).aspx)


4.3.3.1 Installing SQL Inventory Manager


This section guides you through the installation of IDERA SQL Inventory Manager. You can install IDERA SQL Inventory Manager on any computer that meets or exceeds the [product requirements](#).(see page 41)

Before you install IDERA SQL Inventory Manager, be sure to have:

- A local administrator account on the machine you are installing the product.
- A host machine for SQL Inventory Manager services.
- A host SQL Server for the product databases.
- A service account with permissions to read/write and create databases and update their schemas.
- .NET framework 4.6.1 or later version installed.

-  To check the .NET Framework version you have installed in your computer, follow these steps:
- Open the Registry Editor
 - Navigate to Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\NET Framework Setup\NDP\v4\Full
 - Check the Value for key Release
 - Compare the release value with the information on [How to determine which .NET versions are installed](#)¹⁷

-  Please note that in order to install SQL Inventory Manager you must use one of the following operating systems: Windows Server 2008 SP2+, Windows 8, Windows 10, Windows 2012 or Windows 2016.

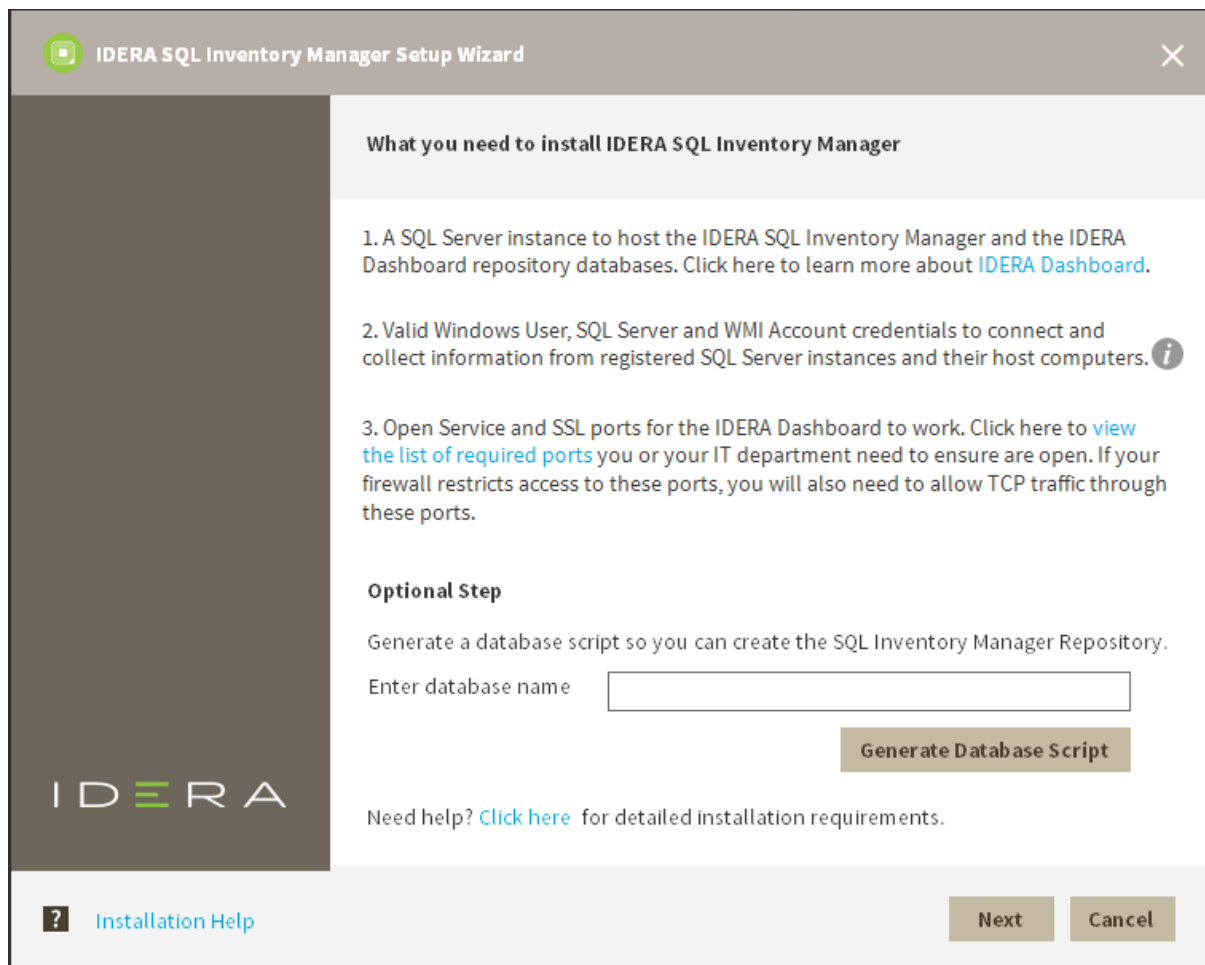
-  You can also grant IDERA SQL Inventory Manager Product Administrator permissions in the IDERA Dashboard. For more information, see [Managing users in the IDERA Dashboard](#)(see page 172).

Installing IDERA SQL Inventory Manager

Before you install IDERA SQL Inventory Manager, be sure to meet the requirements mentioned before. Open the installer and follow these steps:

1. On the **IDERA SQL Inventory Manager Setup** window, click **Next** to continue with the installation. You can optionally generate a script for generating the SQL Inventory Manager Repository database.

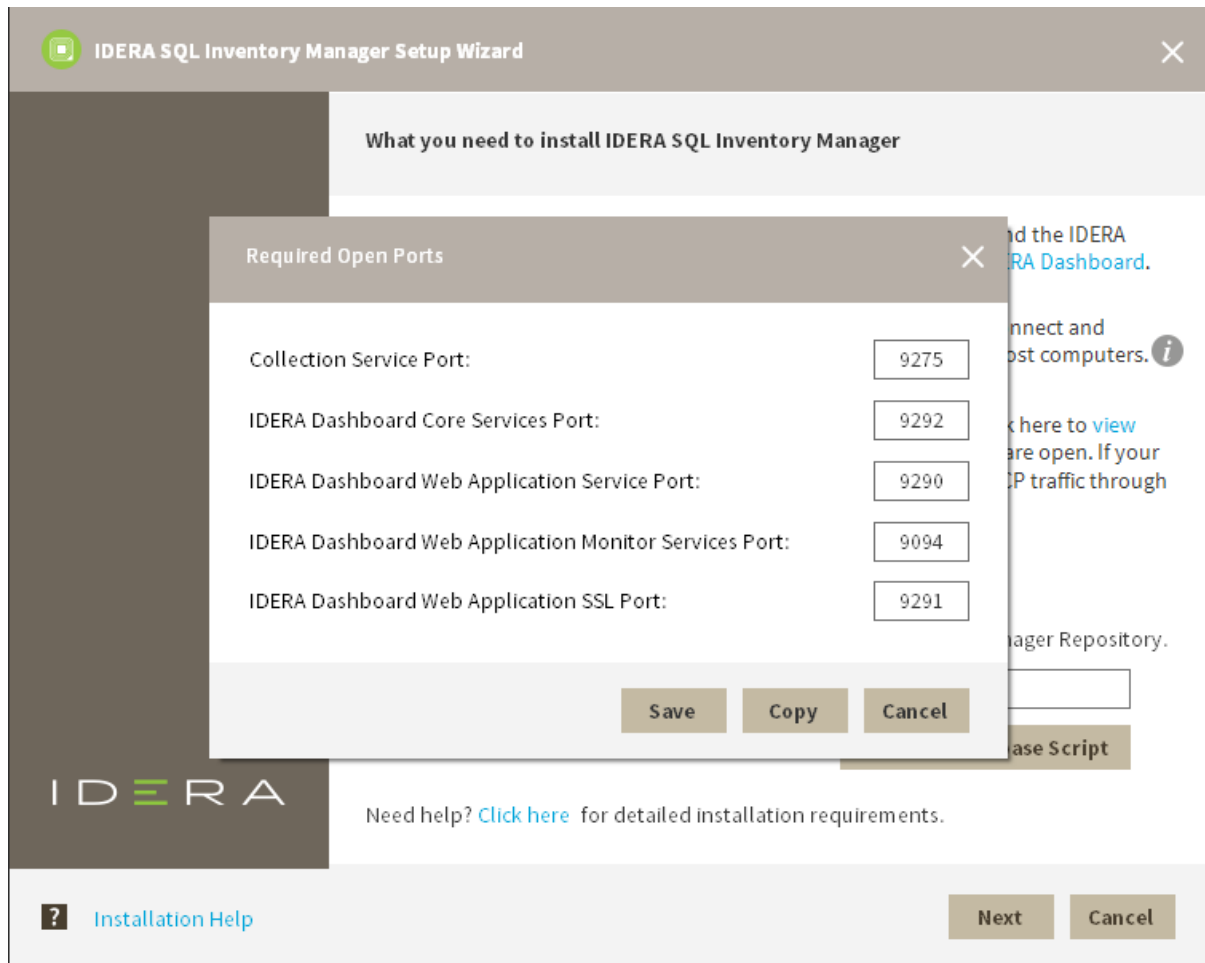
¹⁷ <https://docs.microsoft.com/en-us/dotnet/framework/migration-guide/how-to-determine-which-versions-are-installed>



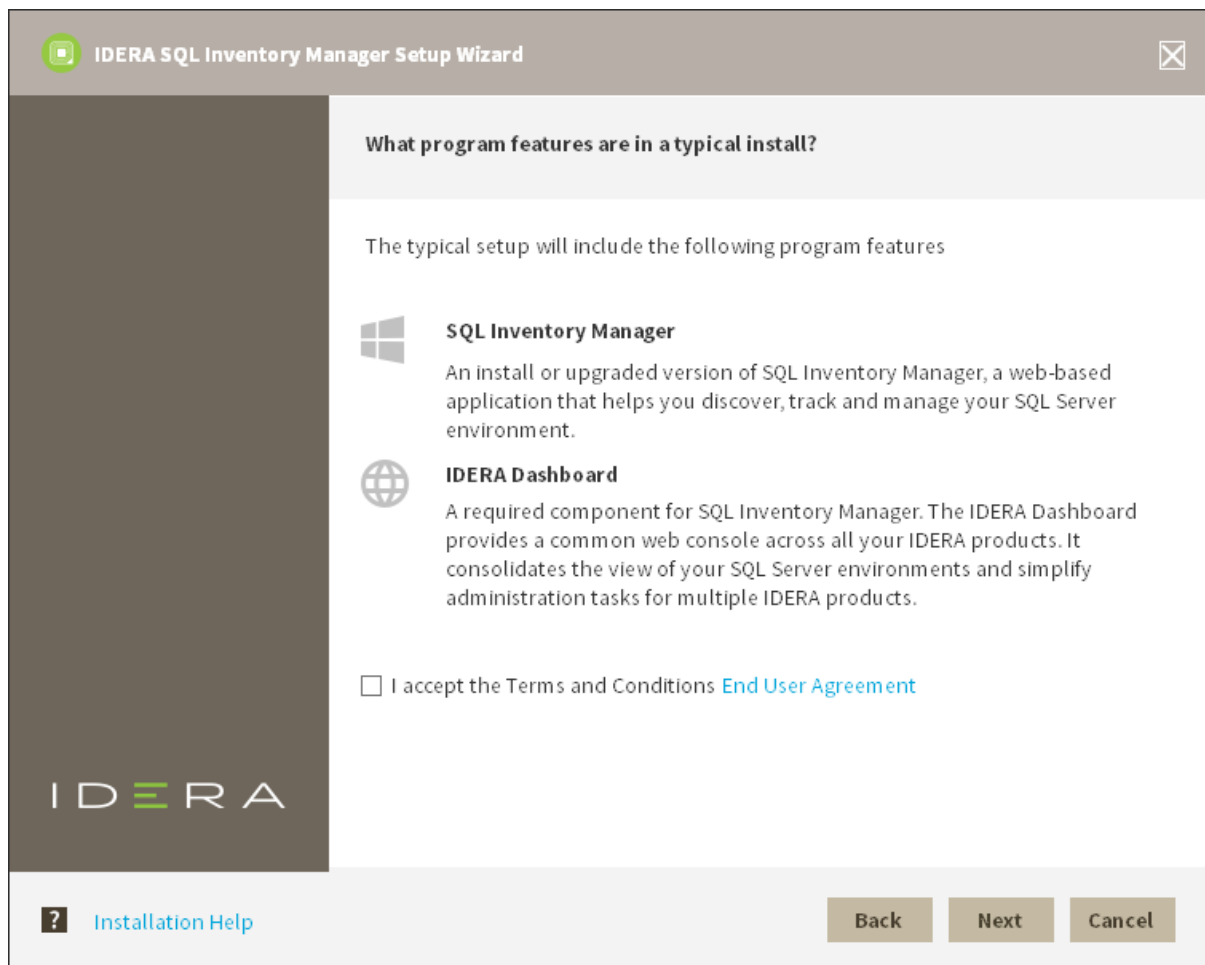
2. You must verify that the Firewall allows TCP (Transmission Control Protocol) traffic through **The ports you want to use**. By default, IDERA SQL Inventory Manager uses ports 9275 and 9291 for the Collection and Web Application services respectively. To see or edit the default ports SQL Inventory Manager uses click **view the list of required ports**.

i Port values should be between 1 and 65535. Keep in mind, that browsers may block some specific ports. To check a list of all blocked ports on Mozilla Firefox, see [Mozilla Port Blocking](#)¹⁸.

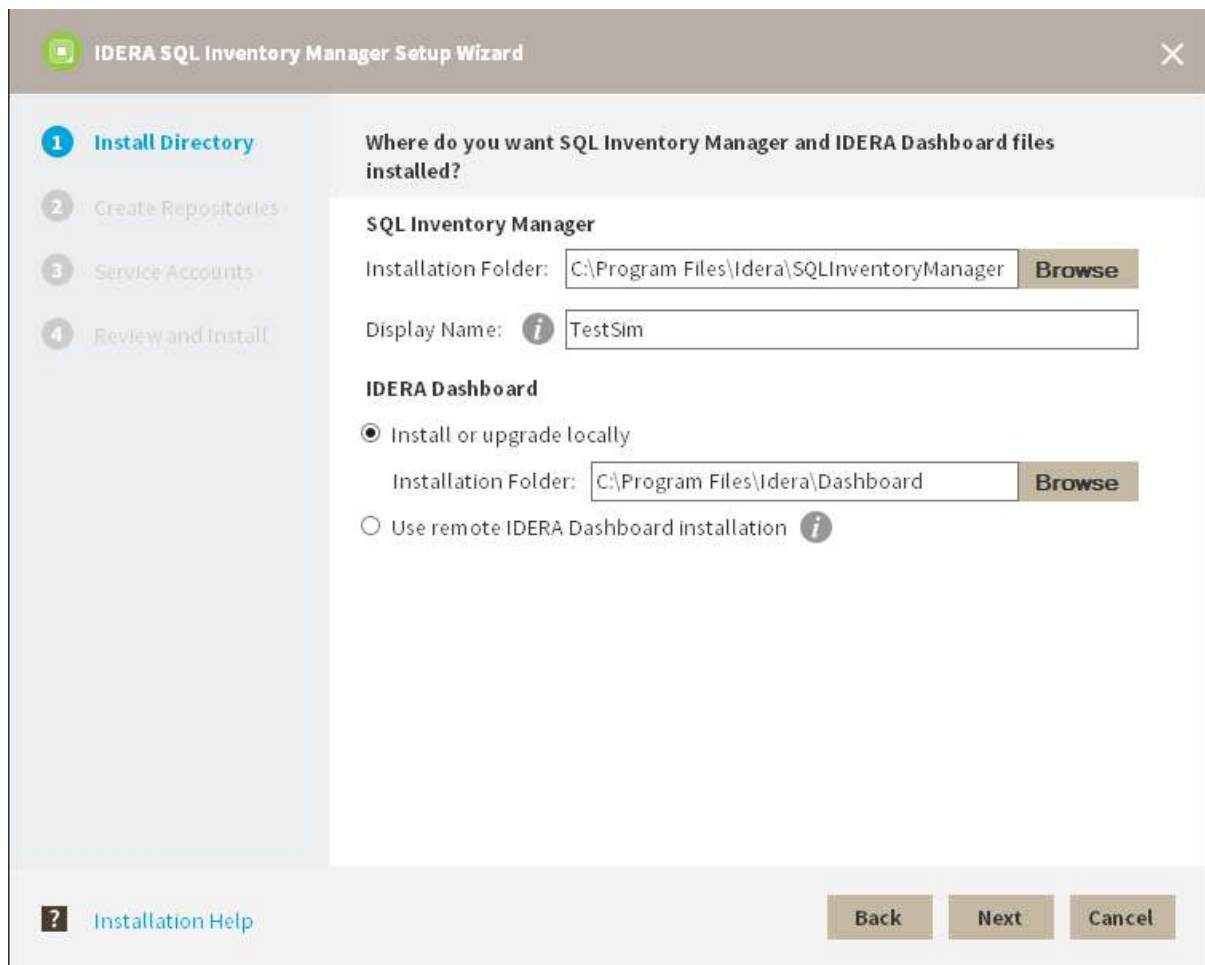
¹⁸ <http://www-archive.mozilla.org/projects/netlib/PortBanning.html>



3. Read the License Agreement. If you agree, click **I accept the Terms and Conditions** and then click **Next**.



4. On this section you can specify a Display Name for your SQL Inventory Manager installation and the location of both SQL Inventory Manager and IDERA Dashboard.



- a. If you want to change SQL Inventory Manager default path, click **Browse**.
 - b. On the **Display Name** box, type a unique name for this instance of IDERA SQL Inventory Manager. A Display Name allows you to identify each instance of IDERA SQL Inventory Manager or other IDERA products when you have more than one installation of the same product. IDERA recommends that you use a name based on a location or function, such as **SIM-Prod** or **SIM-West**. Note that this field accepts only alphanumeric characters (A-Z, a-z, 0-9) and dashes (-).
 - c. Choose **Install or upgrade locally** to install IDERA Dashboard on the default installation path. If you want to change IDERA Dashboard default path, click **Browse**. If you want to register SQL Inventory Manager with an existing remote IDERA Dashboard installation, choose **Use remote IDERA Dashboard Installation** and follow [these steps](#)¹⁹.
5. Specify a SQL Server Instance host and database names for the creation of the SQL Inventory Manager Repository database and the IDERA Dashboard Repository database respectively.

By default, the setup program uses your Windows logon account to create and access the Repository databases. If you want to use Microsoft SQL Server connection credentials, select **Use Microsoft SQL Server Authentication** and enter your credentials on the Microsoft SQL Server credentials dialog.

¹⁹ <http://wiki.idera.com/x/WoAUB>

IDERA SQL Inventory Manager Setup Wizard

1 Install Directory

2 **Create Repositories**

3 Service Accounts

4 Review and Install

What instance, database name and credentials do you want to use to create the repositories?

Create IDERA SQL Inventory Manager Repository

SQL Server Instance:

Database Name:

Use Windows Authentication: IDERAINFODEV\erevollo

Use Microsoft SQL Server Authentication

Create IDERA Dashboard Repository

Use the same Instance, Database Name and Credentials/Authentication as above

Use a different Instance, Database Name and Credentials/Authentication

[? Installation Help](#)

Back **Next** **Cancel**

- Specify a **User Name** and a **Password** for the Service Account for IDERA SQL Inventory Manager. Use the format `<Domain Name>\<User Name>`. IDERA SQL Inventory Manager uses this account to connect, discover, and gather configuration information from SQL Servers. The installer grants the "Log on as a Service" right to the account that you specify. Click **Next** to continue.

If you want to use different credentials for the Service Account for IDERA Dashboard, choose **Use different Credentials/Authentication**, and type your credentials. IDERA Dashboard uses this account when accessing the IDERA Dashboard to share data.

IDERA SQL Inventory Manager Setup Wizard

✓ Install Directory

✓ Create Repositories

3 Service Accounts

4 Review and Install

What service accounts do you want to use for SQL Inventory Manager and IEDRA Dashboard?

The Service Accounts will be used to collect information and will also be the default user to log into the application. You can log into the IDERA Dashboard to create additional users after installation.

Service Account for IDERA SQL Inventory Manager

Domain\UserName:

Password:

Service Account for IDERA Dashboard *i*

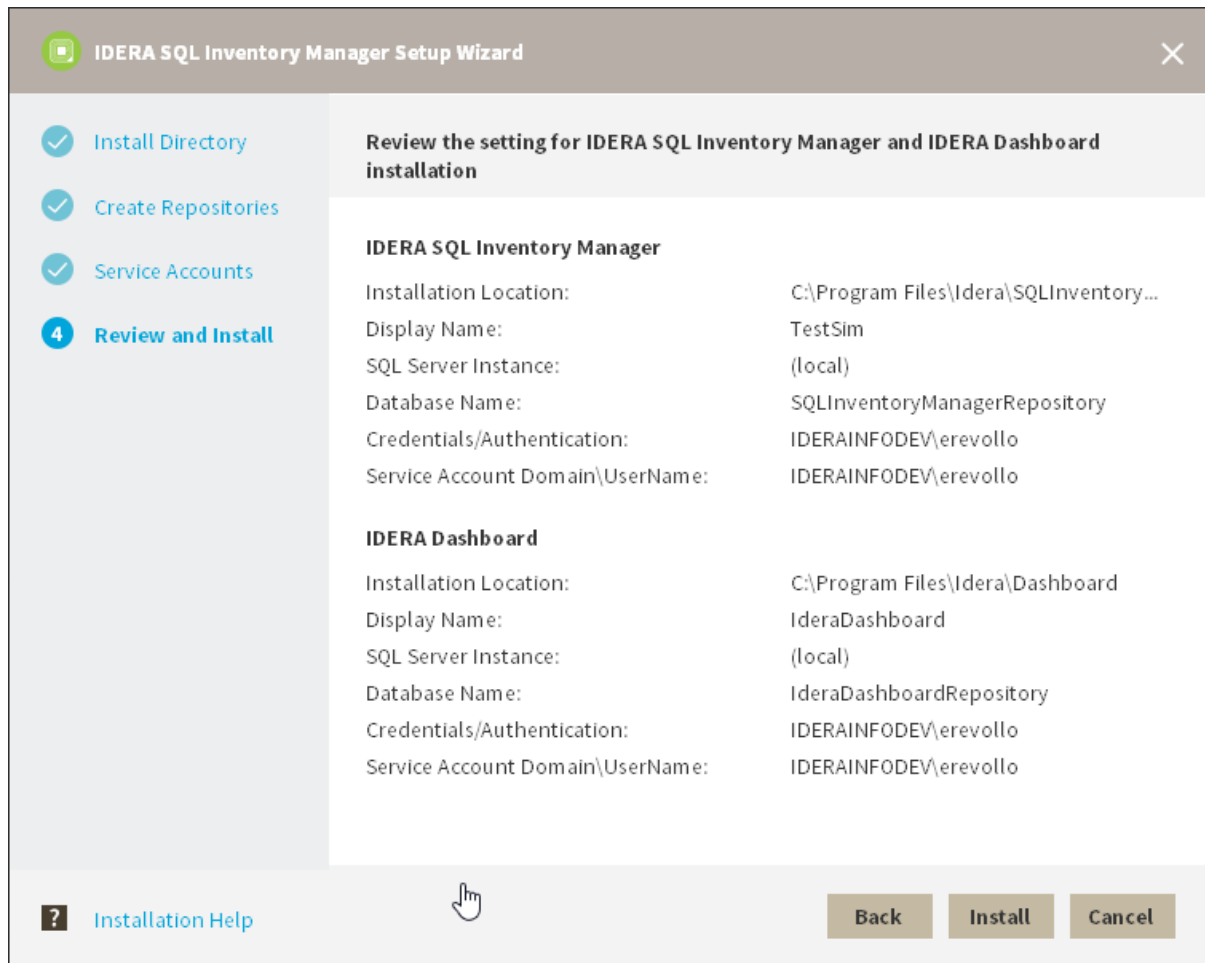
Use the same Credentials/Authentication as above

Use a different Credentials/Authentication

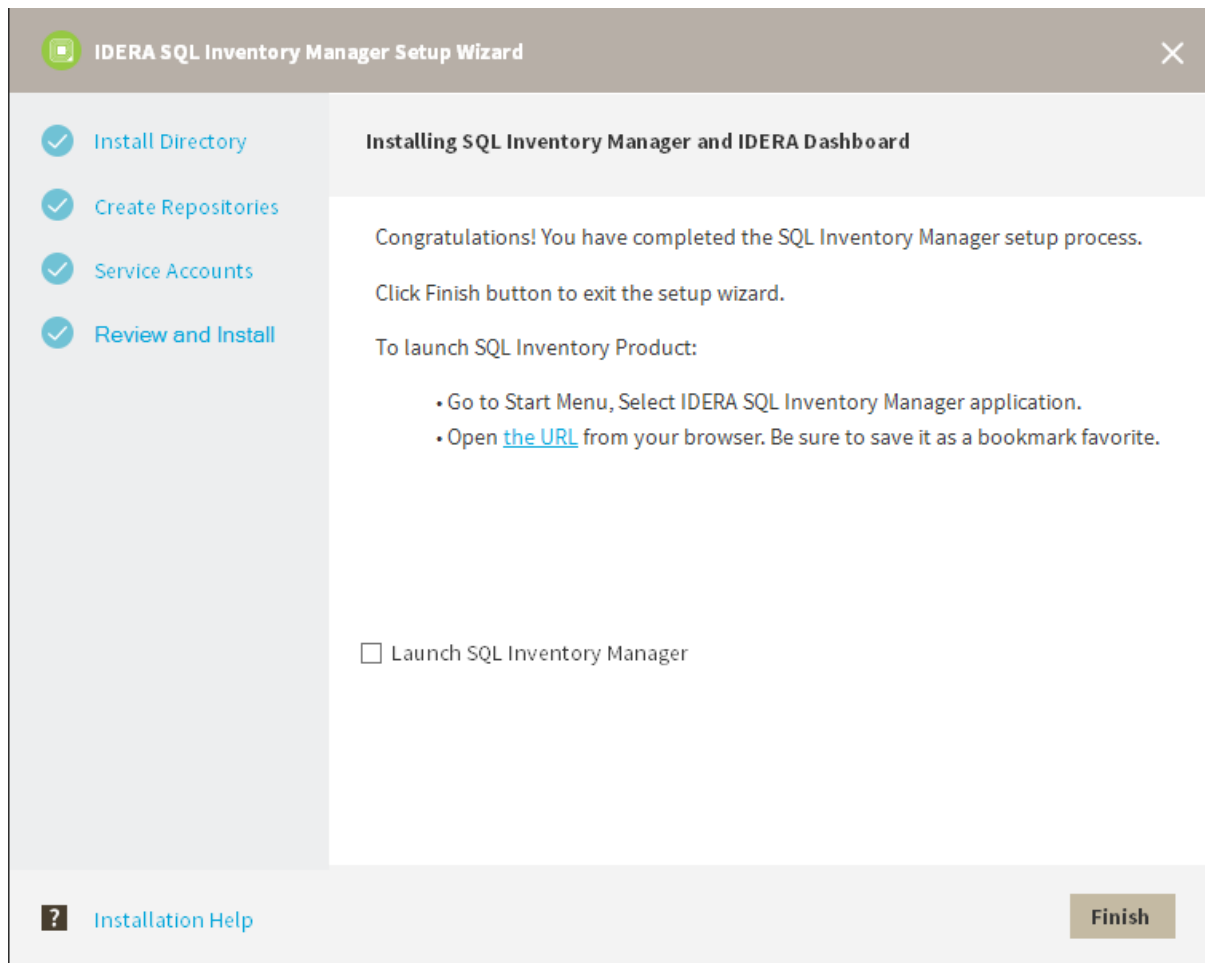
? Installation Help

Back Next Cancel

7. Click **Install** if you are ready to start the installation. If you want to review or change any of your installation settings, click **Back**.



- After the installation is complete, you can select **Launch IDERA SQL Inventory Manager** to launch SQL Inventory Manager immediately after the installation window closes. Alternatively, you can access IDERA SQL Inventory Manager web application through the following link: **http://<ServerName>:9291** where ServerName is the name of the machine on which you installed the IDERA SQL Inventory Manager services.



When IDERA SQL Inventory Manager launches on your browser, you should use your Windows user account with your respective password to log in to the product. Please take into account that IDERA SQL Inventory Manager does not store passwords.

4.3.3.2 Installing the IDERA Dashboard

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 SSL \(HTTPS\)](#)²⁰.

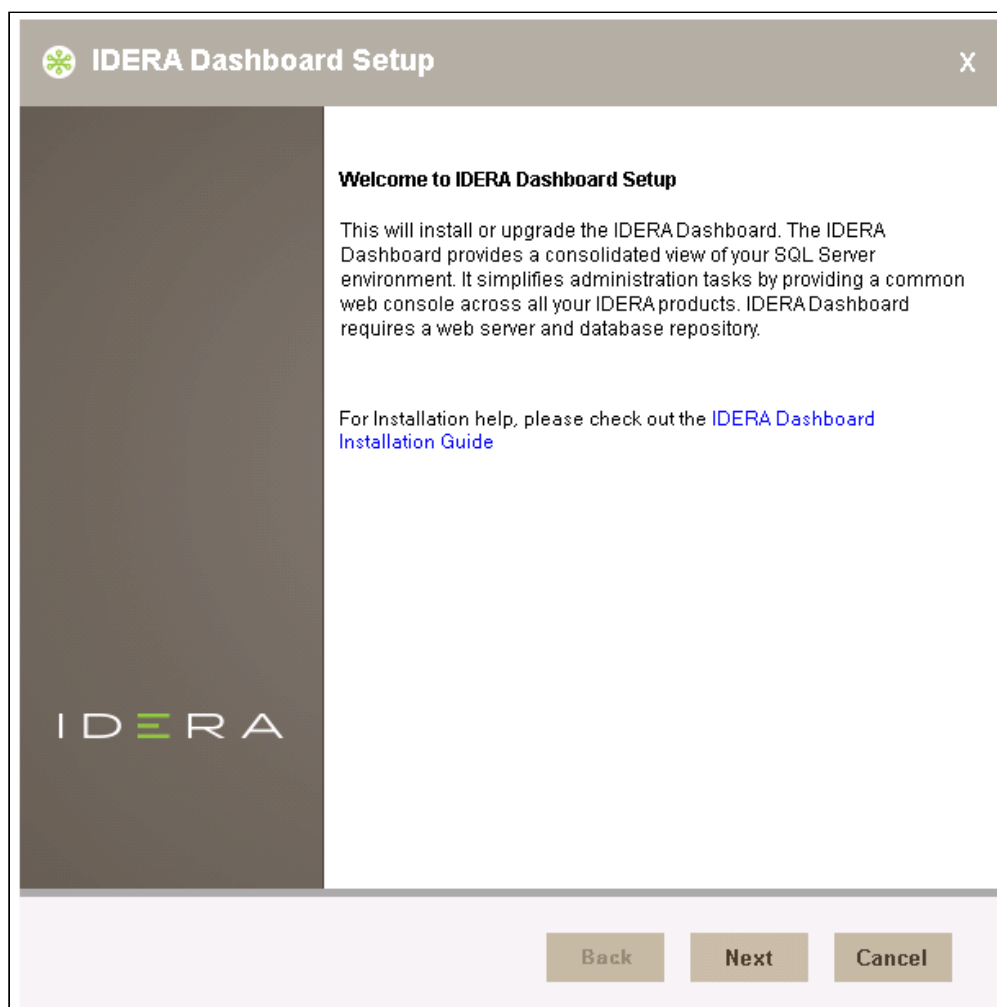
⚠ Please note that in order to install the IDERA Dashboard you must use one of the following operating systems: Windows Server 2008R2, Windows Server 2012R2, Windows Server 2016 or Windows 10.

Start your installation

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

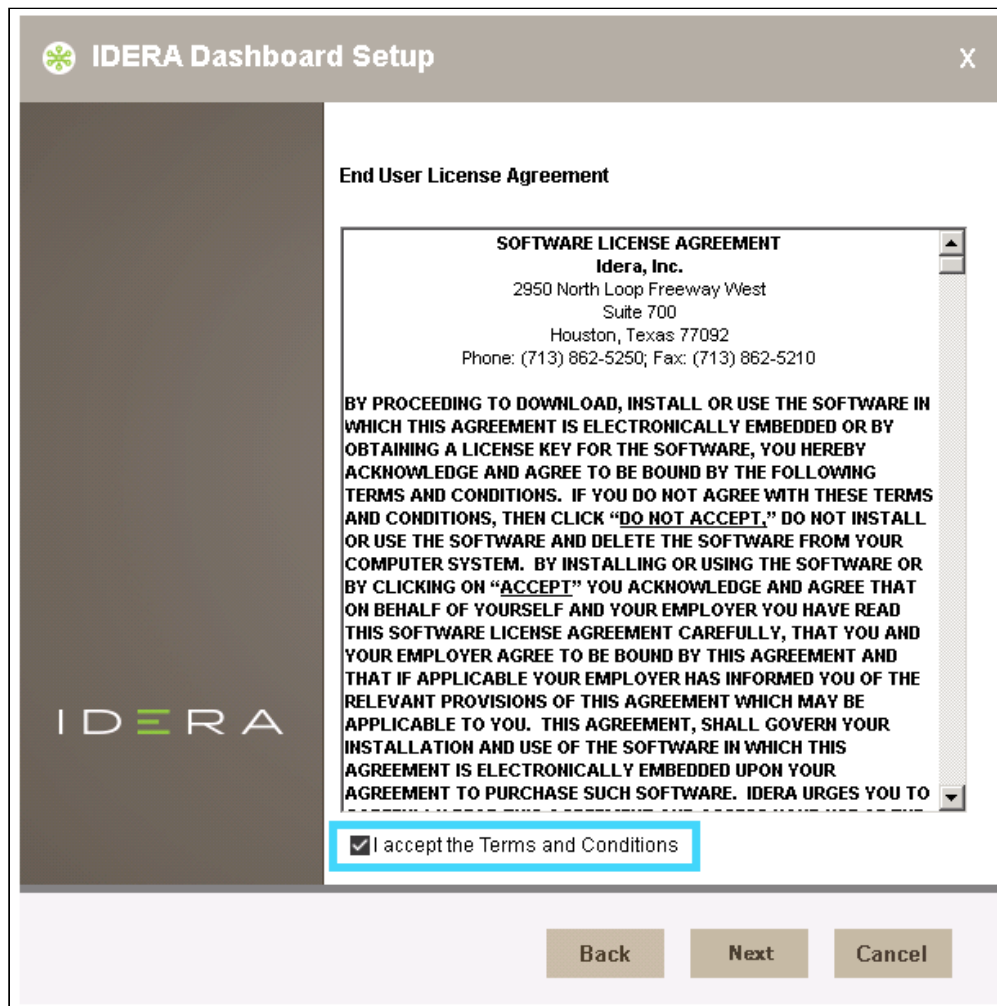
To start installing the IDERA Dashboard:

- Run `IderaDashboard` in the root of the installation kit.
- On the **Welcome to the IDERA Dashboard Setup Wizard**, click **Next** to continue with installation.

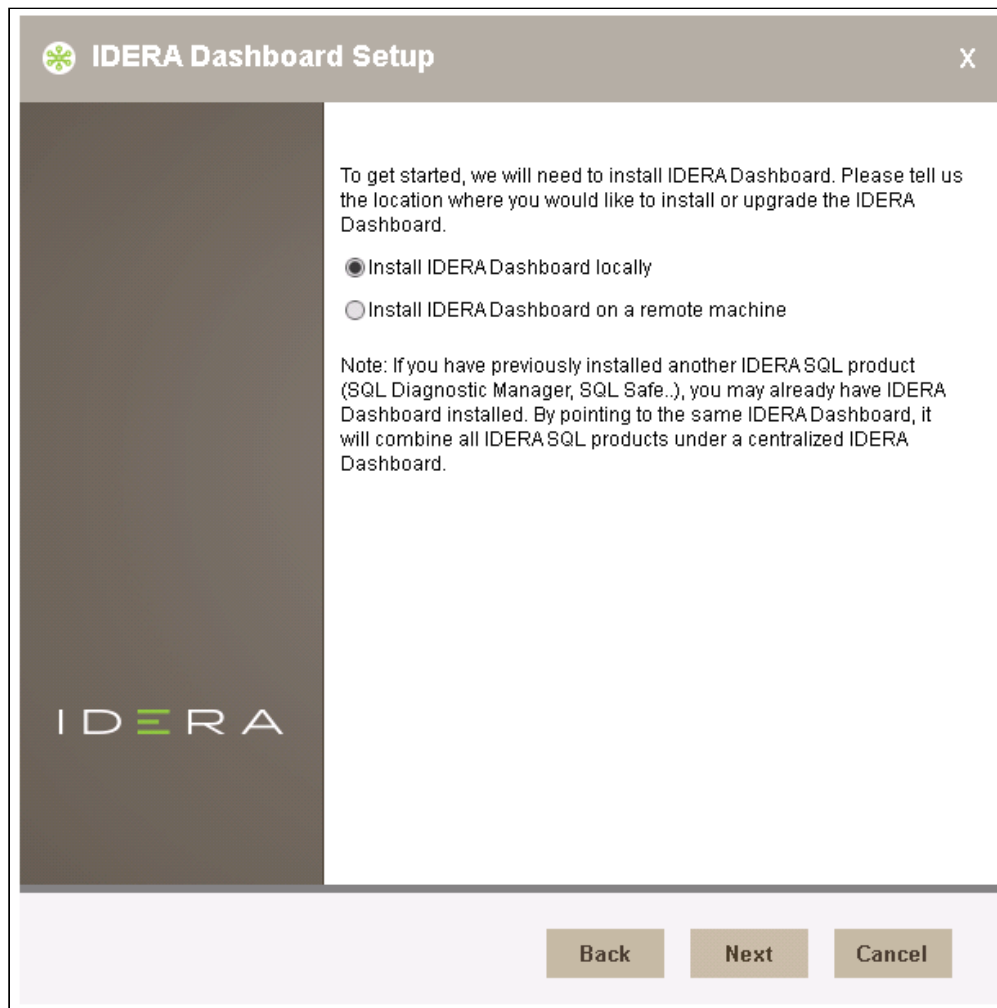


²⁰ <http://wiki.idera.com/x/SgRJAg>

- Review the license agreement. To accept this license agreement, click **I accept the terms in the License Agreement**, and then click **Next**.



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



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

IDERA Dashboard Setup X

To get started, we will need to install IDERA Dashboard. Please tell us the location where you would like to install or upgrade the IDERA Dashboard.

Install IDERA Dashboard locally

Install IDERA Dashboard on a remote machine

Note: If you have previously installed another IDERA SQL product (SQL Diagnostic Manager, SQL Safe.), you may already have IDERA Dashboard installed. By pointing to the same IDERA Dashboard, it will combine all IDERA SQL products under a centralized IDERA Dashboard.

Please provide IDERA Dashboard URL, admin info and hostname for existing Dashboard.

Enter Dashboard URL:

Enter Dashboard Administrator Credentials

Domain \UserName:

Password:

Hostname:

Back Next Cancel

Select an installation location

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



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:

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

- Click **Next**.



Service Account

The IDERA Dashboard service will run under this account

Specify the service account:

Domain \ UserName:

Password:

Back Next Cancel

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:

- On the Service Ports window, specify the ports you want the web application and dashboard services to use.

IDERA Dashboard Ports X

IDERA Dashboard offers encrypted and non-encrypted communications. Specify the ports to be used by IDERA Dashboard. If a firewall is enabled, make sure it allows TCP traffic through these ports

IDERA Dashboard Web Application Ports

HTTPS Port (Encrypted Transmission) ⓘ

HTTP Port (Non-Encrypted Transmission) ⓘ

IDERA Dashboard Service Ports

Core Service Port ⓘ

Web Application Service Port ⓘ

Back Next Cancel

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

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

The IDERA Dashboard Repository database is where the collected data, alert information, and alert configuration settings are stored.

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

- On the Repository Database screen, specify the host SQL Server instance you want to use for the IDERA Dashboard Repository database.
- Type the name 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:

Database Name:

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

Back Next Cancel

- **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.
- **If you use Microsoft SQL Server Authentication**, a new window displays where you can type the respective SQL Server login and password.
- Click **Next**.

Complete the installation

- Click **Install** to indicate that you are ready to complete your installation with the configurations you specified. **If you want to review or change any of your settings**, click **Back**.



- Click **Finish** to exit the IDERA Dashboard Setup Wizard.




The IDERA Dashboard installation is complete.


4.3.3.3 Installing using a remote Dashboard

This section guides you through the installation of IDERA SQL Inventory Manager using a remote Dashboard. You can install IDERA SQL Inventory Manager on any computer that meets or exceeds the [product requirements](#). (see page 41)

Before you install IDERA SQL Inventory Manager, be sure to have:

- The path to a remote IDERA Dashboard installation. IDERA SQL Inventory Manager integrates with the IDERA Dashboard.
- A local administrator account on the machine you are installing the product.
- A host machine for SQL Inventory Manager services.
- A host SQL Server for the product databases.
- A service account with permissions to read/write and create databases and update their schemas.

 A remote installation only registers IDERA SQL Inventory Manager with a remote IDERA Dashboard, IDERA SQL Inventory Manager is installed in the local computer.

 You can also grant IDERA SQL Inventory Manager Product Administrator permissions in the IDERA Dashboard. For more information, see [Managing users in the IDERA Dashboard](#)(see page 172).

Installing IDERA SQL Inventory Manager with a remote IDERA Dashboard

Before you install IDERA SQL Inventory Manager, be sure to meet the requirements mentioned before. Open the installer and follow these steps:

1. On the **IDERA SQL Inventory Manager Setup** window, click **Next** to continue with the installation. You can optionally generate a script for generating the SQL Inventory Manager Repository database.
2. You must verify that the Firewall allows TCP (Transmission Control Protocol) traffic through **The ports you want to use**. By default, IDERA SQL Inventory Manager uses ports 9275 and 9291 for the Collection and Web Application services respectively.
To see or edit the default ports SQL Inventory Manager uses click **view the list of required ports**.
3. Read the License Agreement. If you agree, click **I accept the Terms and Conditions** and then click **Next**.
4. If you want to change SQL Inventory Manager default installation path, click **Browse**.
5. Set a display name for SQL Inventory Manager.
6. Select **Use remote IDERA Dashboard installation** and provide a Dashboard URL using the format **http://<location of IDERA Dashboard>:9292**. PORT 9292 is the port for REST services.
7. Enter the administrator credentials for accessing the remote IDERA Dashboard installation.
8. Click **Next**.

IDERA SQL Inventory Manager Setup Wizard

1 **Install Directory**

2 Create Repositories

3 Service Accounts

4 Review and Install

Where do you want SQL Inventory Manager and IDERA Dashboard files installed?

SQL Inventory Manager

Installation Folder: C:\Program Files\Idera\SQLInventoryManager **Browse**

Display Name: *i*

IDERA Dashboard

Install or upgrade locally

Installation Folder:

Use remote IDERA Dashboard installation *i*

Enter existing IDERA Dashboard URL *i*

Dashboard Administration Credentials

Domain\UserName:

Password:

? Installation Help **Back** **Next** **Cancel**

- Specify a SQL Server Instance host and a database name for creating the SQL Inventory Manager Repository database.

By default, the setup program uses your Windows logon account to create and access the Repository database. If you want to use Microsoft SQL Server connection credentials, select **Use Microsoft SQL Server Authentication** and enter your SQL Server credentials.

IDERA SQL Inventory Manager Setup Wizard

1 Install Directory

2 **Create Repositories**

3 Service Accounts

4 Review and Install

What instance, database name and credentials do you want to use to create the repositories?

Create IDERA SQL Inventory Manager Repository

SQL Server Instance:

Database Name:

Use Windows Authentication: IDERAINFODEV\erevollo

Use Microsoft SQL Server Authentication

Create IDERA Dashboard Repository

Use the same Instance, Database Name and Credentials/Authentication as above

Use a different Instance, Database Name and Credentials/Authentication

[? Installation Help](#)

Back **Next** **Cancel**

- Specify the **User Name** and **Password** under which the IDERA SQL Inventory Manager services will run and click **Next**. Use the format `<Domain Name>\<User Name>` when typing the User Name. IDERA SQL Inventory Manager uses this account for SQL Server connections.

IDERA SQL Inventory Manager Setup Wizard

✓ Install Directory

✓ Create Repositories

3 Service Accounts

4 Review and Install

What service accounts do you want to use for SQL Inventory Manager and IEDRA Dashboard?

The Service Accounts will be used to collect information and will also be the default user to log into the application. You can log into the IDERA Dashboard to create additional users after installation.

Service Account for IDERA SQL Inventory Manager

Domain\UserName:

Password:

Service Account for IDERA Dashboard *i*

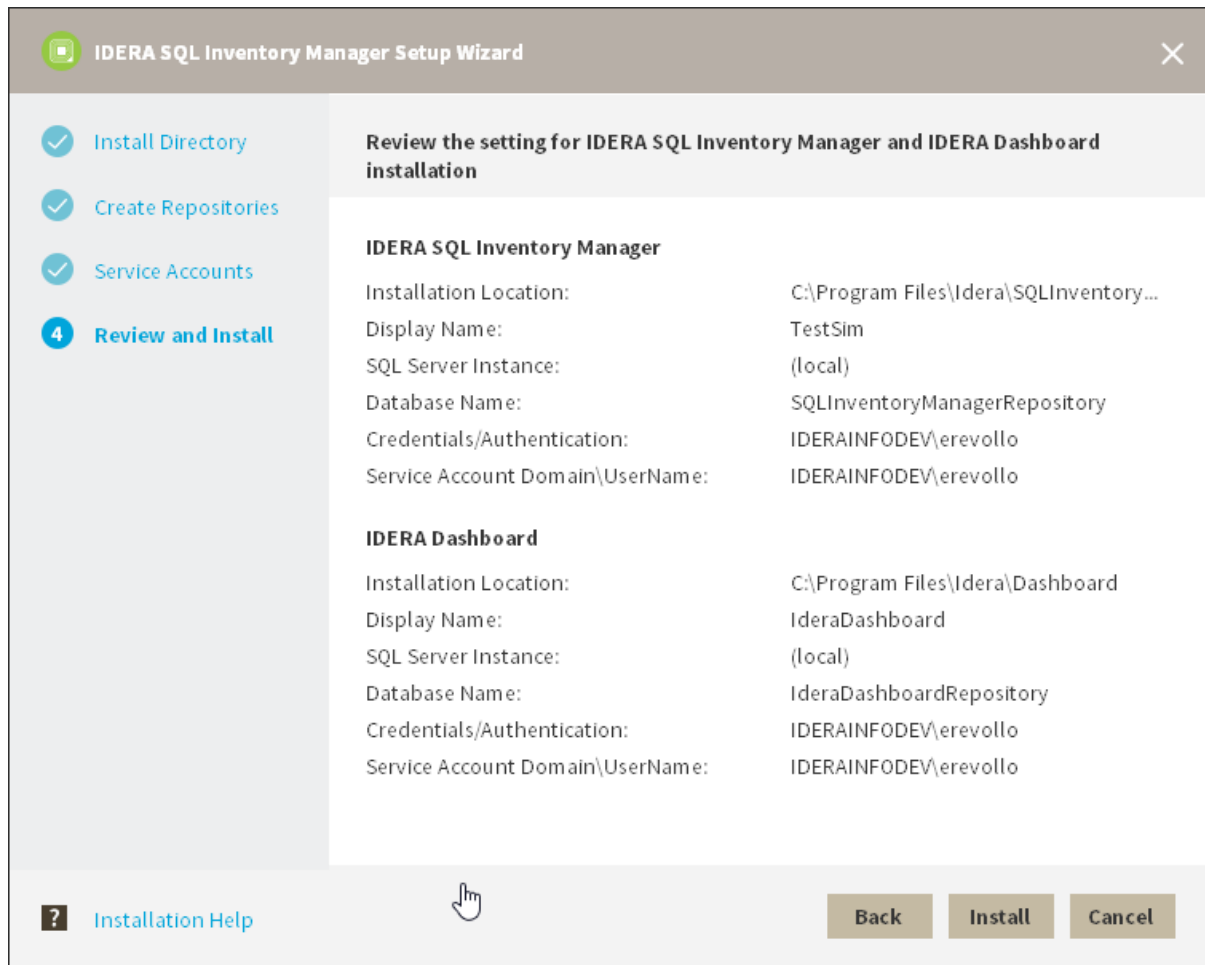
Use the same Credentials/Authentication as above

Use a different Credentials/Authentication

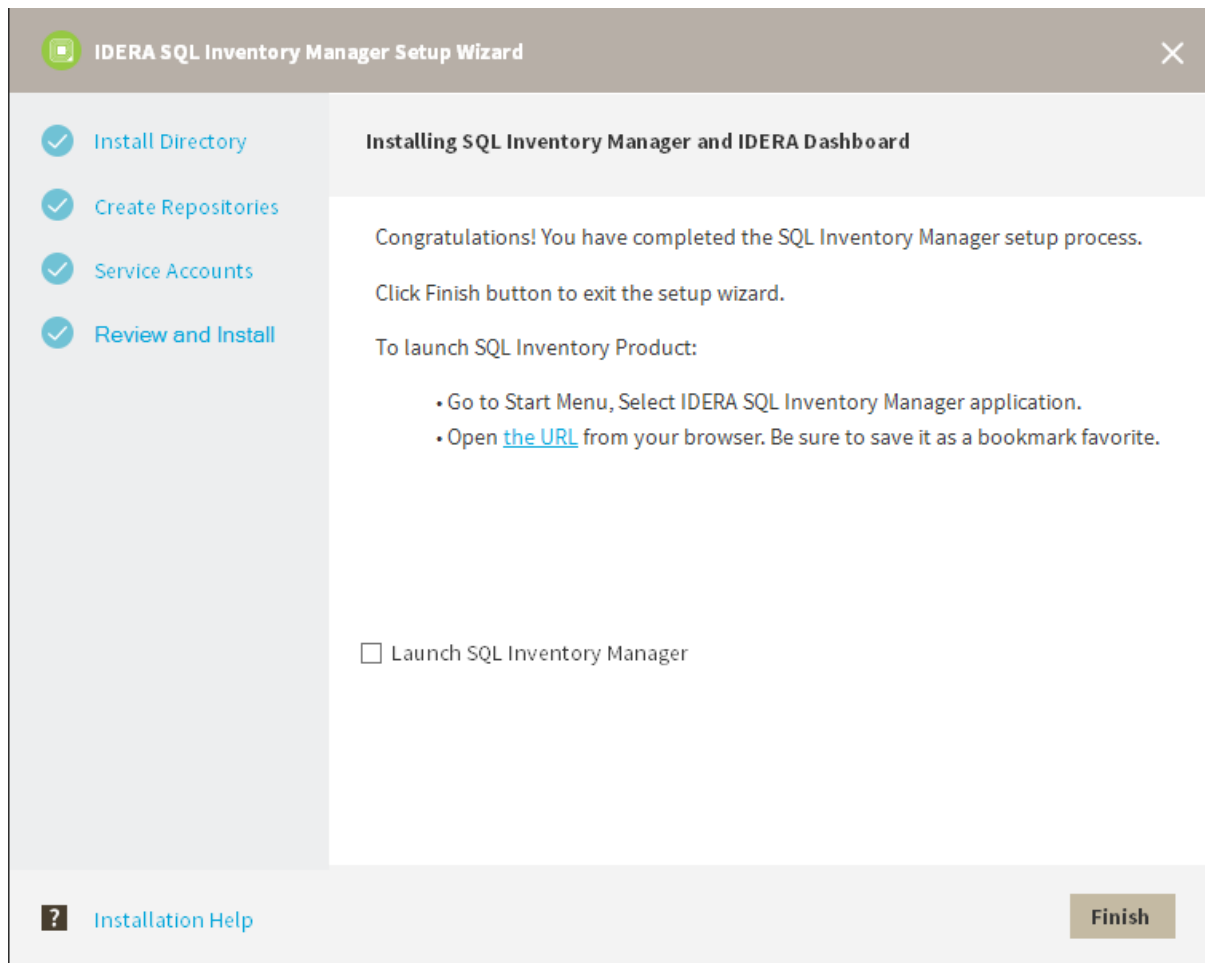
? [Installation Help](#)

Back **Next** **Cancel**

11. Click **Install** if you are ready to start the installation. If you want to review or change any of your installation settings, click **Back**.



- After the installation is complete, you can select **Launch IDERA SQL Inventory Manager** to launch SQL Inventory Manager immediately after the installation window closes. Alternatively, you can access IDERA SQL Inventory Manager web application through the following link: **http://<ServerName>:9291** where ServerName is the name of the machine hosting the remote IDERA Dashboard.



When IDERA SQL Inventory Manager launches on your browser, you should use your Windows user account with your respective password to log in to the product. Please take into account that IDERA SQL Inventory Manager does not store passwords

4.3.3.4 Installing SQL Inventory Manager on an Availability Group

This section guides you through the installation of IDERA SQL Inventory Manager on an availability group. You can install IDERA SQL Inventory Manager on any system that meets or exceeds the [product requirements](#).(see page 41)

Before you install IDERA SQL Inventory Manager, be sure to have:

- A local administrator account on the machine you are installing the product.
- A host machine for SQL Inventory Manager services.
- A Clustered environment and an available SQL Server instance in the fail over cluster. For more information on configuring a fail over cluster refer to Microsoft Documentation.
- An account with permissions to read/write and create databases and update their schemas.

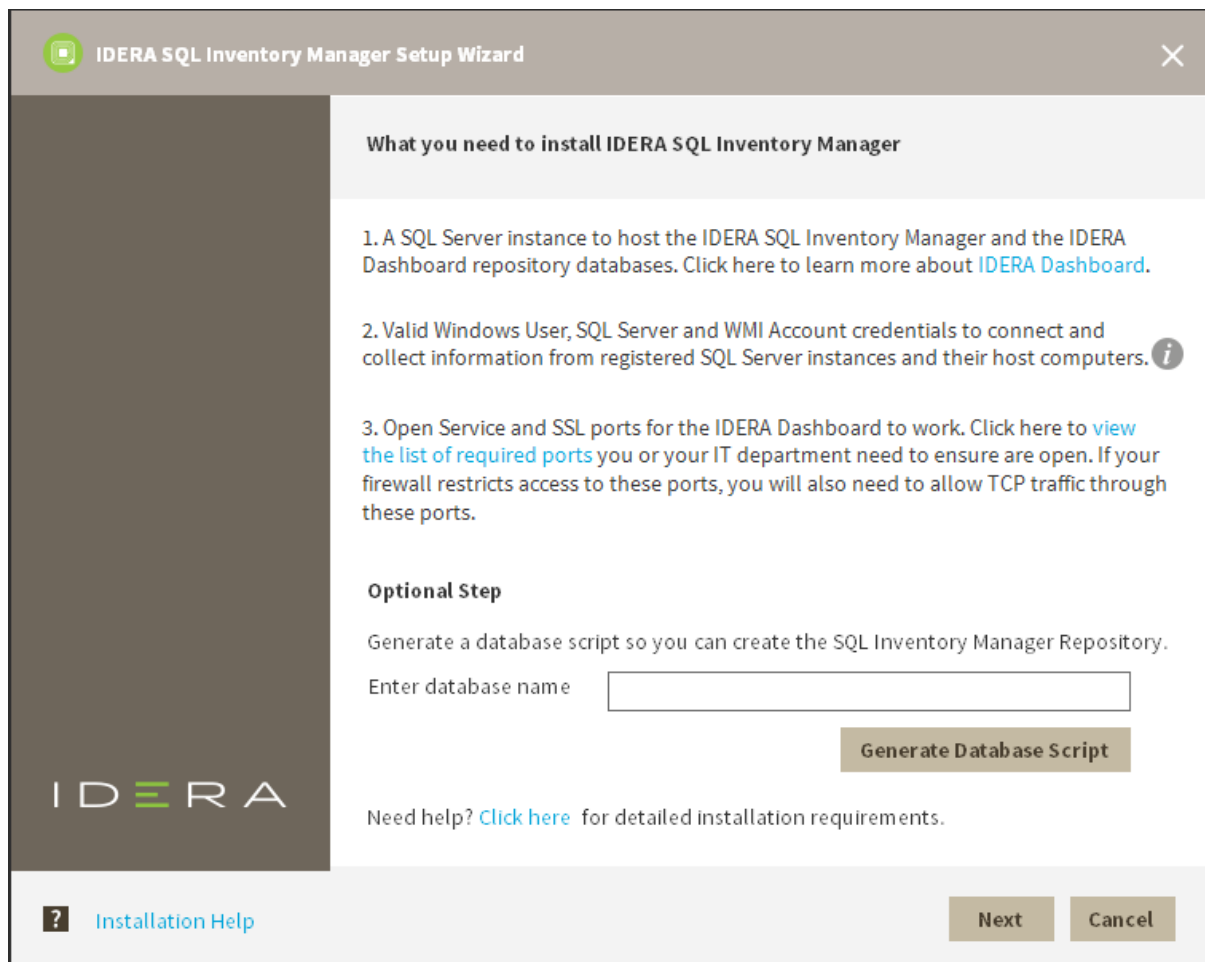
i You can also grant IDERA SQL Inventory Manager Product Administrator permissions in the IDERA Dashboard. For more information, see [Managing users in the IDERA Dashboard](#)(see page 172).

- [Installing IDERA SQL Inventory Manager](#)(see page 78)
 - [Configuring SQL Server](#)(see page 84)

Installing IDERA SQL Inventory Manager

Before you install IDERA SQL Inventory Manager, be sure to meet the requirements mentioned before. Open the installer and follow these steps:

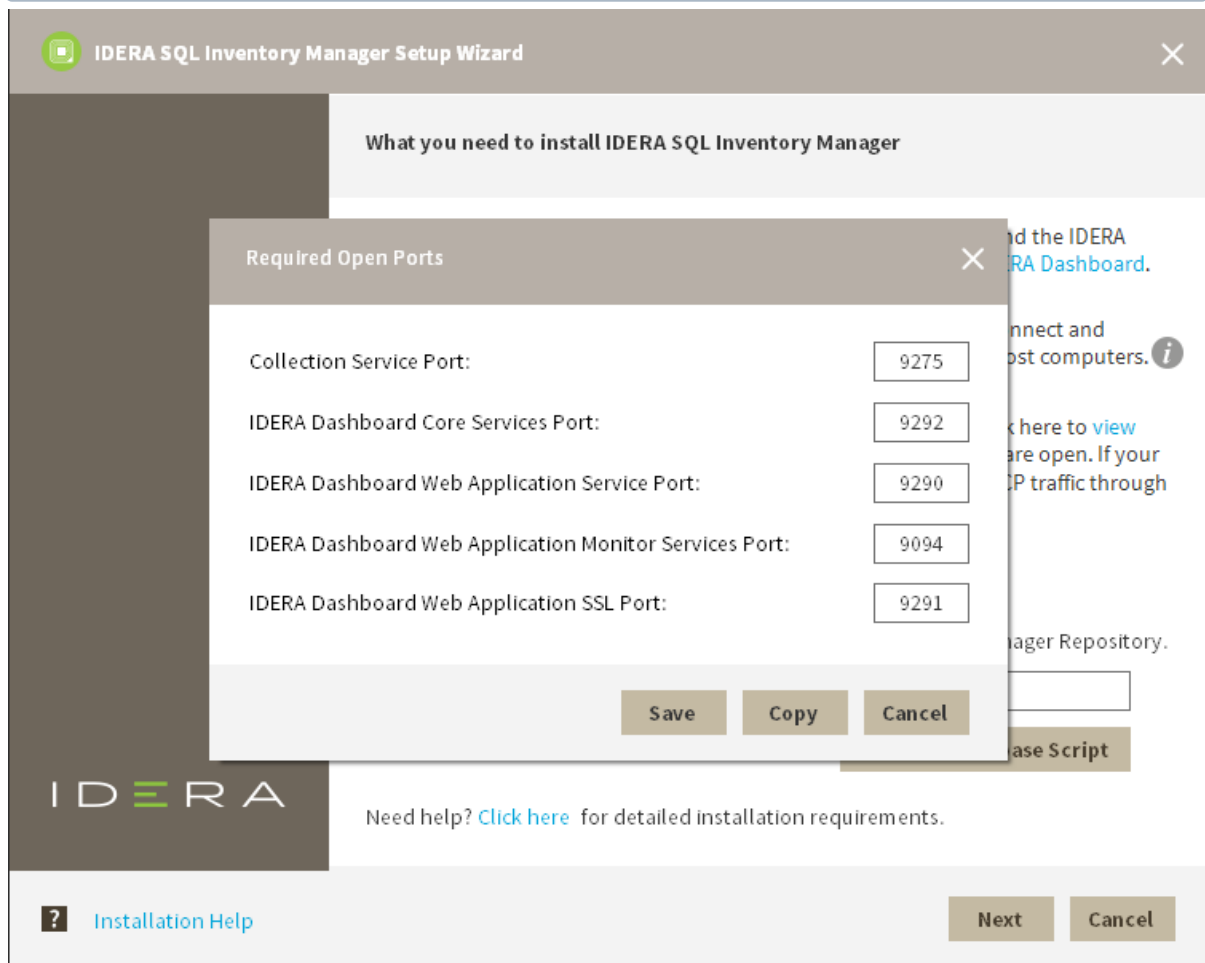
1. On the **IDERA SQL Inventory Manager Setup** window, click **Next** to continue with the installation. You can optionally generate a script for generating the SQL Inventory Manager Repository database.



2. You must verify that the Firewall allows TCP (Transmission Control Protocol) traffic through **The ports you want to use**. By default, IDERA SQL Inventory Manager uses ports 9275 and 9291 for the Collection and Web Application services respectively. To see or edit the default ports SQL Inventory Manager uses click **view the list of required ports**.

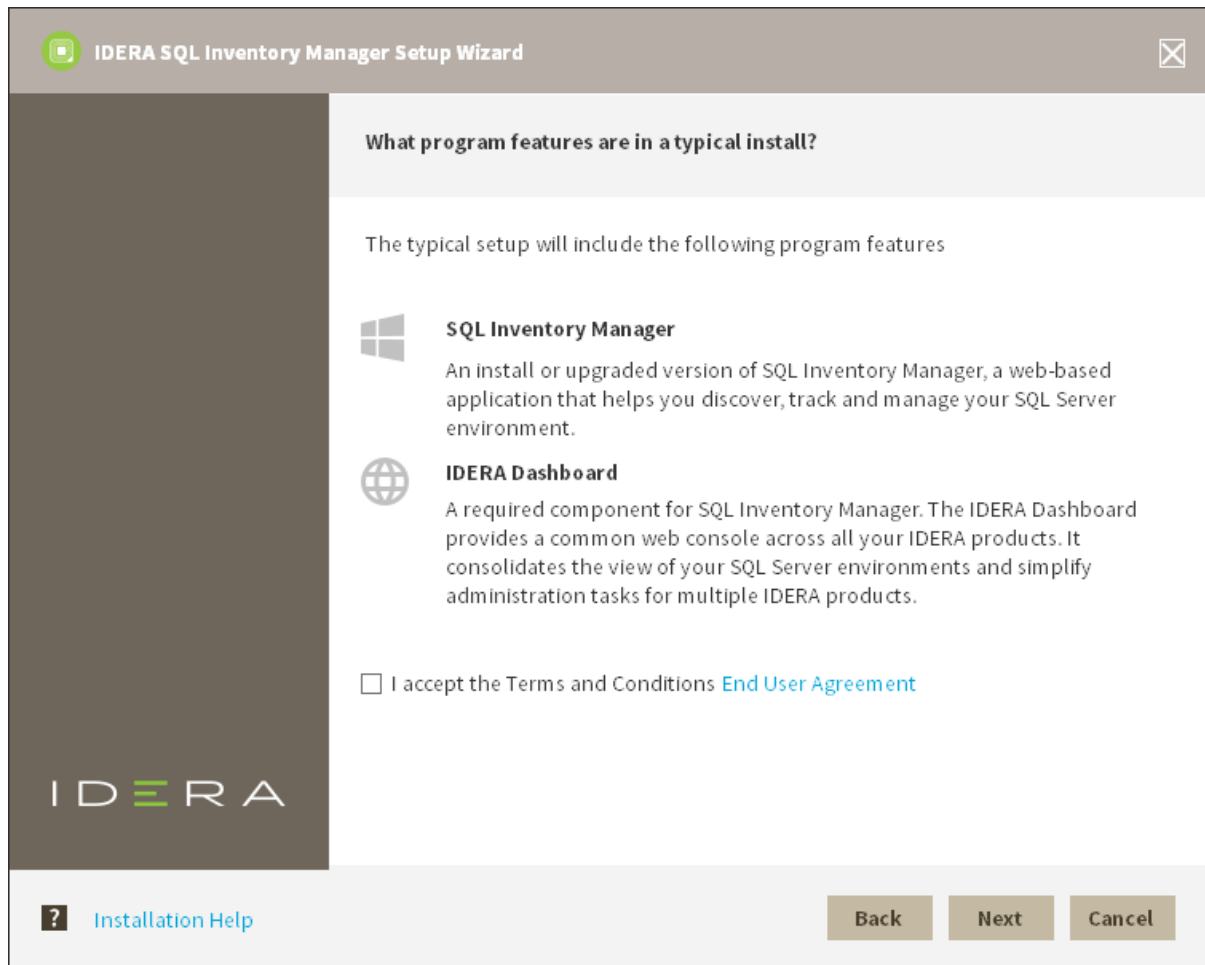
[i](#) Port values should be between 1 and 65535.

Keep in mind, that browsers may block some specific ports. To check a list of all blocked ports on Mozilla Firefox, see [Mozilla Port Blocking](#)²¹.

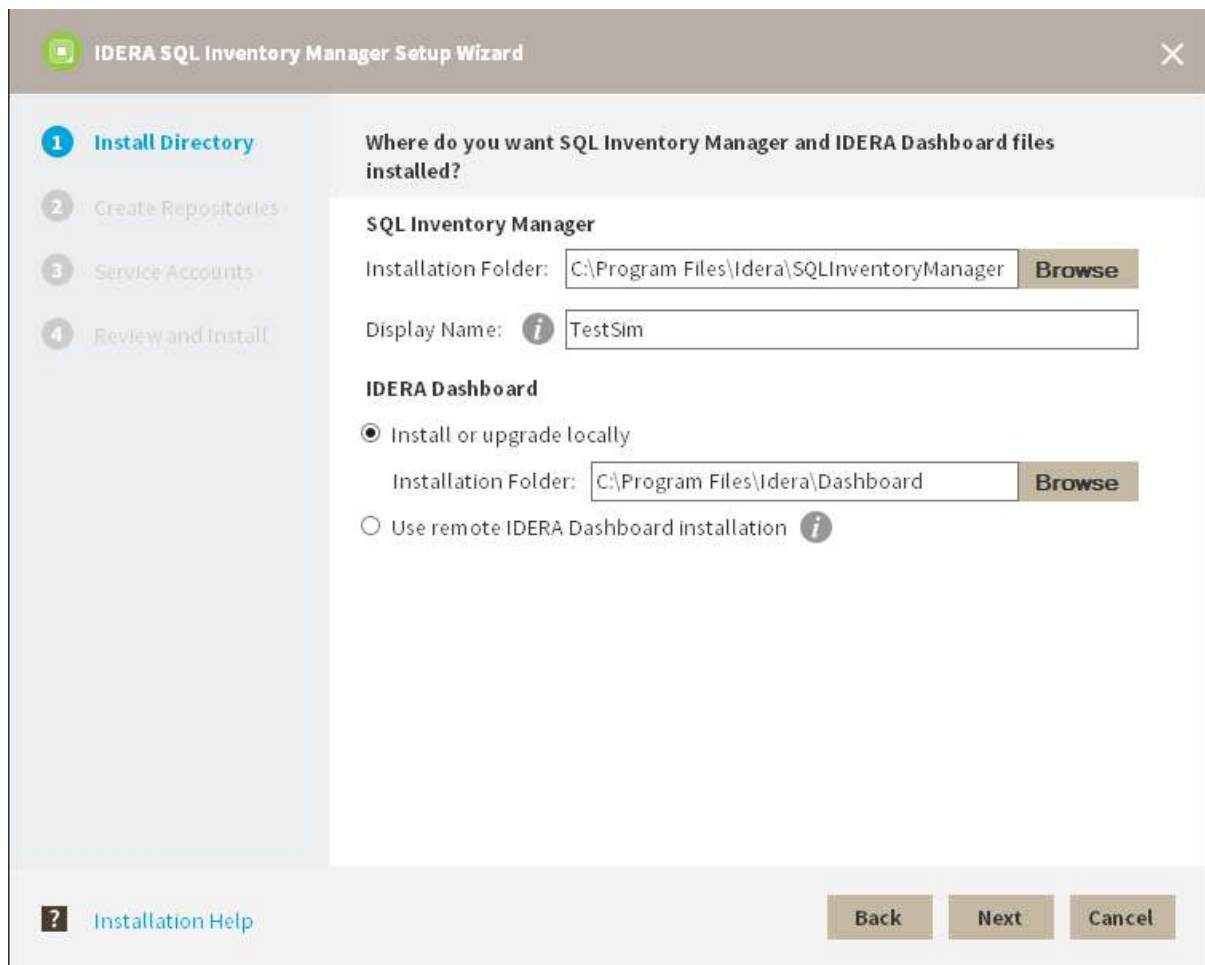


3. Read the License Agreement. If you agree, click **I accept the Terms and Conditions** and then click **Next**.

²¹ <http://www-archive.mozilla.org/projects/netlib/PortBanning.html>



4. On this section you can specify a Display Name for your SQL Inventory Manager installation and the location of both SQL Inventory Manager and IDERA Dashboard.



- a. If you want to change SQL Inventory Manager default path, click **Browse**.
 - b. On the **Display Name** box, type a unique name for this instance of IDERA SQL Inventory Manager. A Display Name allows you to identify each instance of IDERA SQL Inventory Manager or other IDERA products when you have more than one installation of the same product. IDERA recommends that you use a name based on a location or function, such as **SIM-Prod** or **SIM-West**. Note that this field accepts only alphanumeric characters (A-Z, a-z, 0-9) and dashes (-).
 - c. Choose **Install or upgrade locally** to install IDERA Dashboard on the default installation path. If you want to change IDERA Dashboard default path, click **Browse**. If you want to register SQL Inventory Manager with an existing remote IDERA Dashboard installation, choose **Use remote IDERA Dashboard Installation** and follow [these steps](#)²².
5. Specify a SQL Server cluster node and database name for the creation of the SQL Inventory Manager Repository database and the IDERA Dashboard Repository database respectively.

By default, the setup program uses your Windows logon account to create and access the Repository databases. Use Microsoft SQL Server connection credentials to install on an Availability Group, select **Use Microsoft SQL Server Authentication** and enter your credentials on the Microsoft SQL Server credentials dialog.

²² <http://wiki.idera.com/x/WoAUB>

IDERA SQL Inventory Manager Setup Wizard

1 Install Directory

2 **Create Repositories**

3 Service Accounts

4 Review and Install

What instance, database name and credentials do you want to use to create the repositories?

Create IDERA SQL Inventory Manager Repository

SQL Server Instance:

Database Name:

Use Windows Authentication: IDERAINFODEV\erevollo

Use Microsoft SQL Server Authentication

Create IDERA Dashboard Repository

Use the same Instance, Database Name and Credentials/Authentication as above

Use a different Instance, Database Name and Credentials/Authentication

[? Installation Help](#)

Back **Next** **Cancel**

- Specify a **User Name** and a **Password** for the Service Account for IDERA SQL Inventory Manager. Use the format `<Domain Name>\<User Name>`. IDERA SQL Inventory Manager uses this account to connect, discover, and gather configuration information from SQL Servers. The installer grants the "Log on as a Service" right to the account that you specify. Click **Next** to continue.

If you want to use different credentials for the Service Account for IDERA Dashboard, choose **Use different Credentials/Authentication**, and type your credentials. IDERA Dashboard uses this account when accessing the IDERA Dashboard to share data.

IDERA SQL Inventory Manager Setup Wizard

✓ Install Directory

✓ Create Repositories

3 Service Accounts

4 Review and Install

What service accounts do you want to use for SQL Inventory Manager and IEDRA Dashboard?

The Service Accounts will be used to collect information and will also be the default user to log into the application. You can log into the IDERA Dashboard to create additional users after installation.

Service Account for IDERA SQL Inventory Manager

Domain\UserName:

Password:

Service Account for IDERA Dashboard *i*

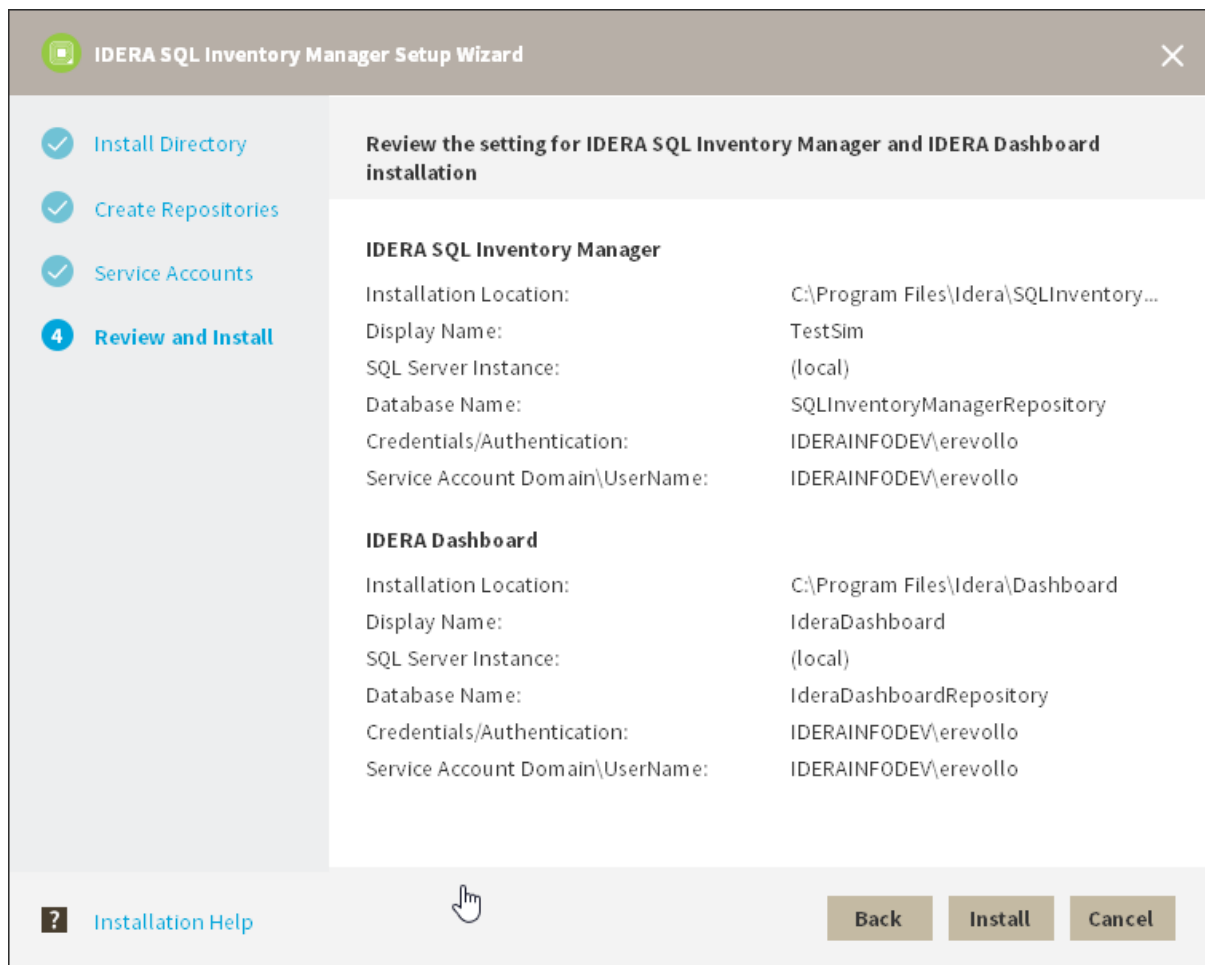
Use the same Credentials/Authentication as above

Use a different Credentials/Authentication

[? Installation Help](#)

Back **Next** **Cancel**

7. Click **Install** if you are ready to start the installation. If you want to review or change any of your installation settings, click **Back**.



- After the installation is complete, you can select **Launch IDERA SQL Inventory Manager** to launch SQL Inventory Manager immediately after the installation window closes. Alternatively, you can access IDERA SQL Inventory Manager web application through the following link: **http://<ServerName>:9291** where ServerName is the name of the machine on which you installed the IDERA SQL Inventory Manager services.

When IDERA SQL Inventory Manager launches on your browser, you should use your Windows user account with your respective password to log in to the product. Please take into account that IDERA SQL Inventory Manager does not store passwords.

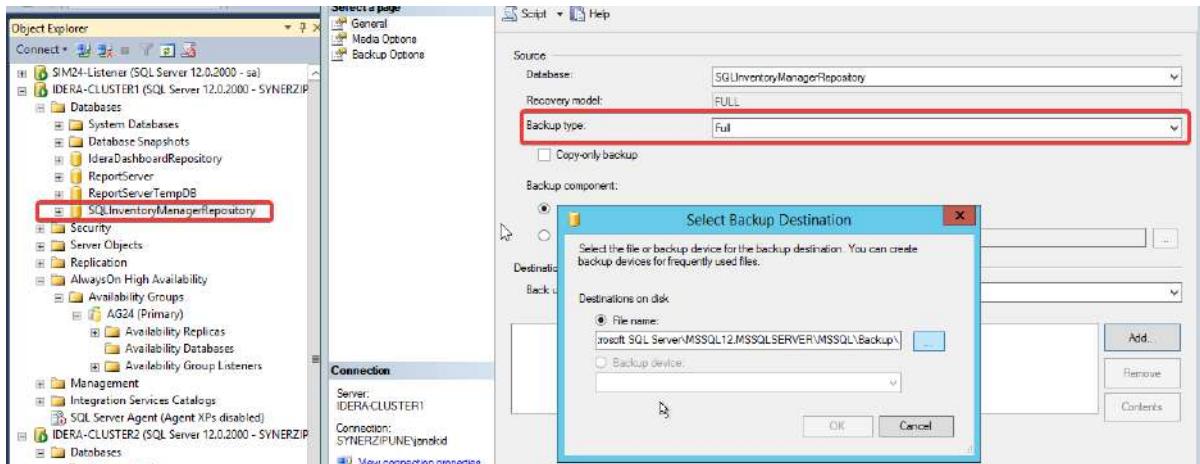
Configuring SQL Server

Once the SQL Inventory Manager installation completes, I launch SQL Server Management Studio and connect to the cluster environment's SQL Server Instance where you installed the SQL Inventory Manager Repository.

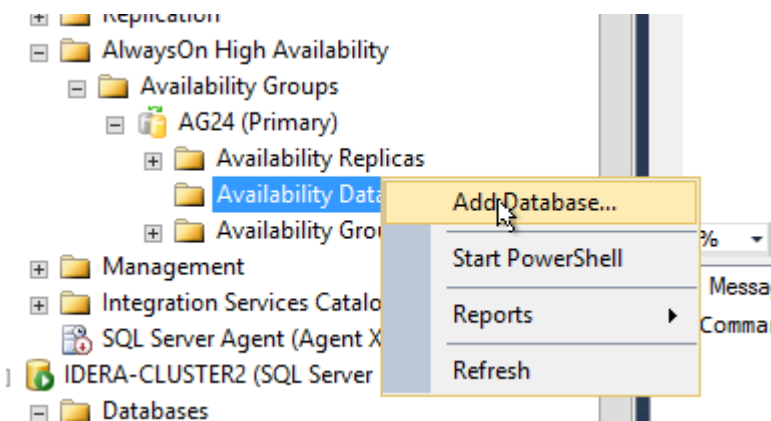
- For the **SQLInventoryManager** database set its recovery model to "full".

```
USE master ;
ALTER DATABASE SQLInventoryManagerRepository SET RECOVERY FULL ;
```

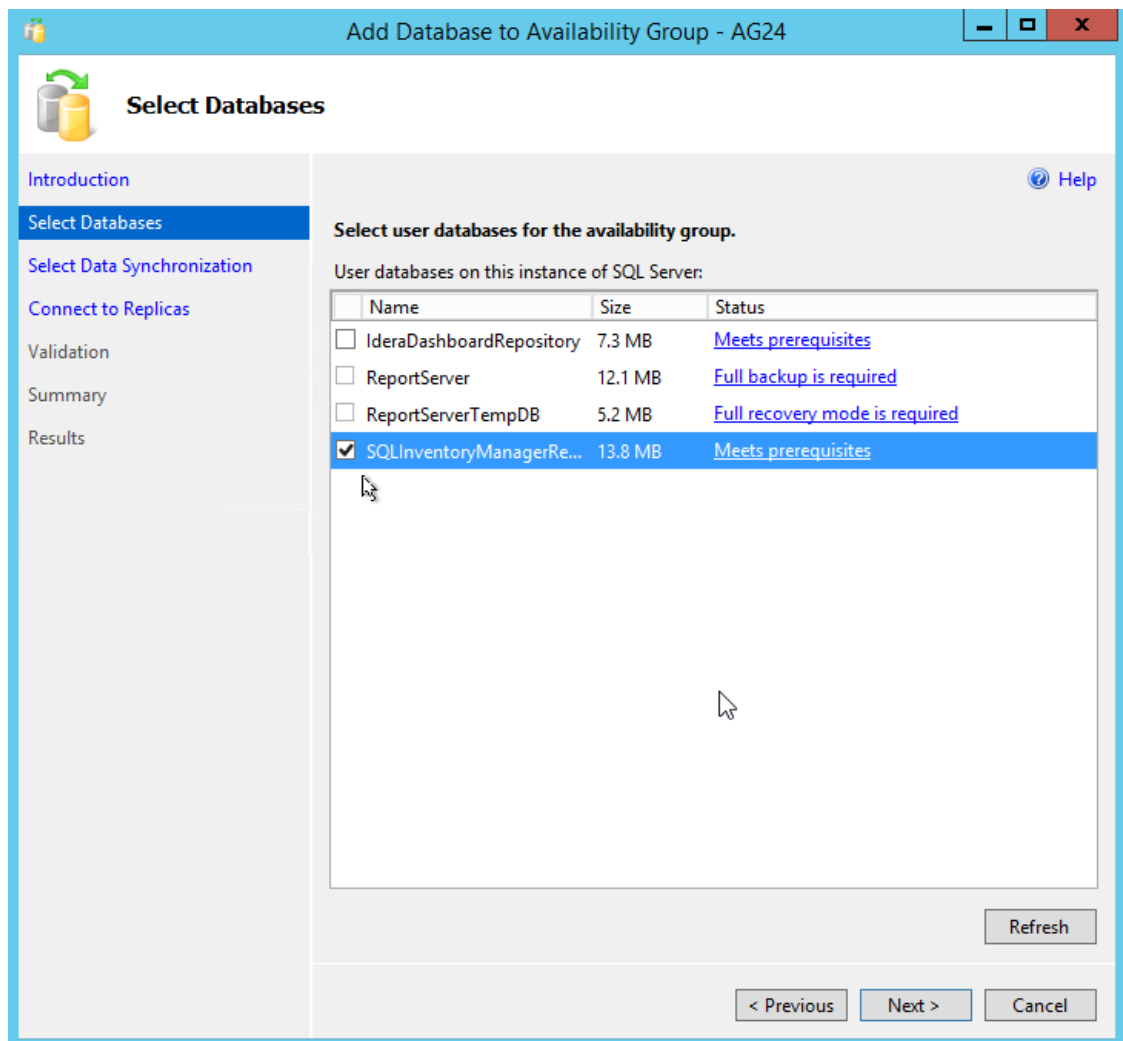
2. Create a Full backup for the **SQLInventoryManager** database.



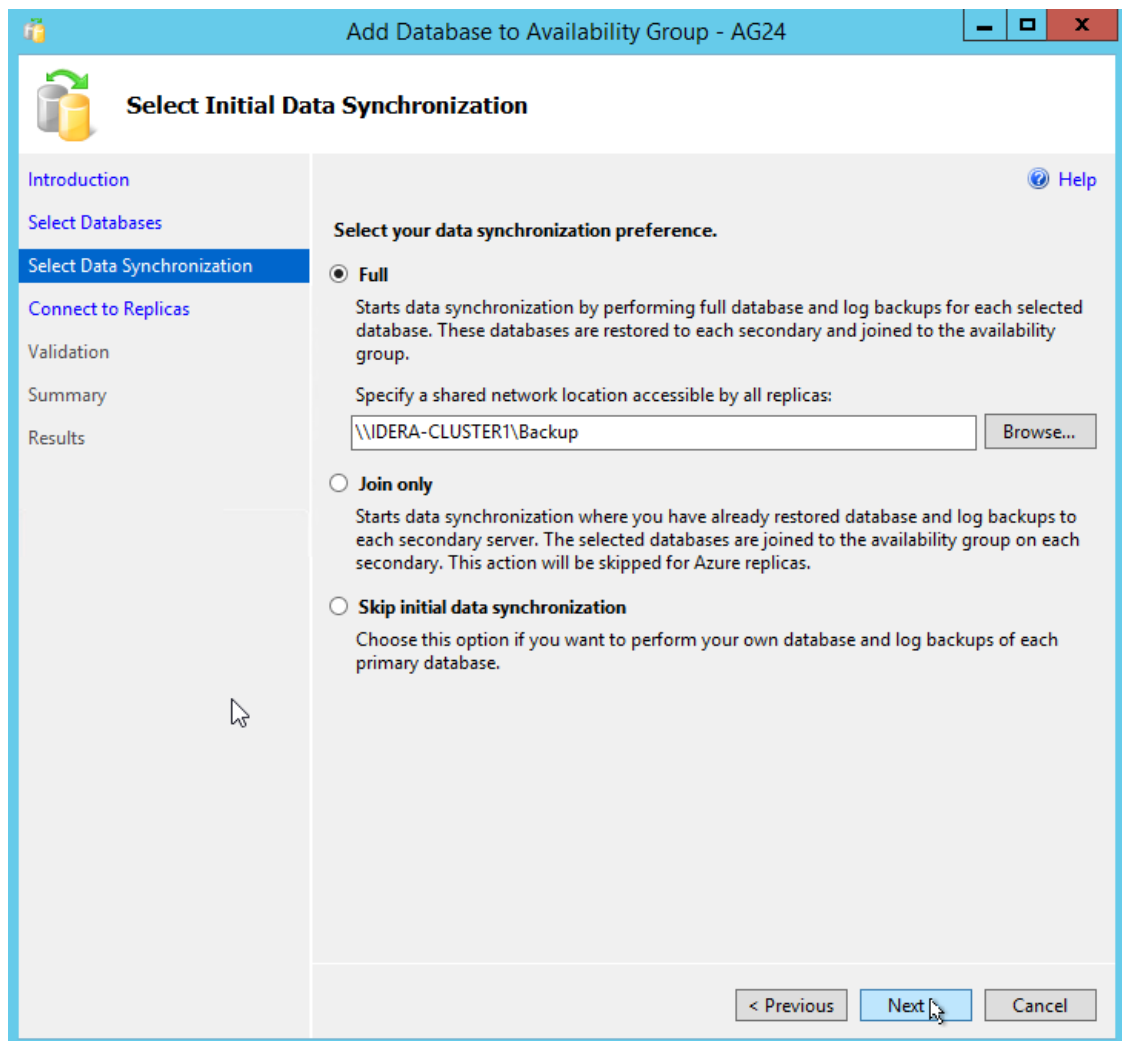
3. Under 'Always ON High Availability' go to the availability group you want to use and select **Add Database**



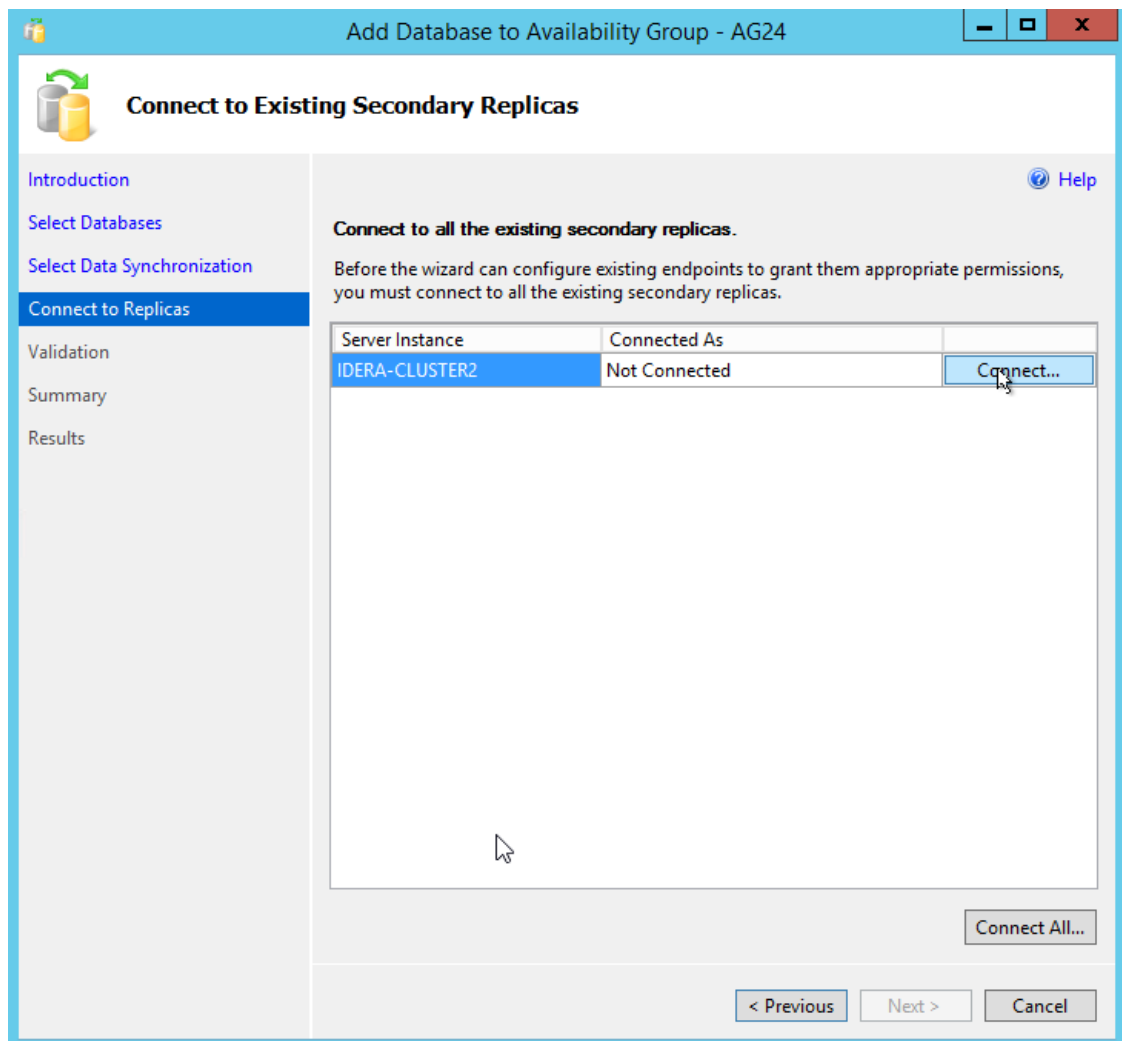
4. On the **Add Database to Availability Group** dialog click **Next** and follow these steps:
 1. Select the **SQLInventoryManager** repository database and click **Next**.



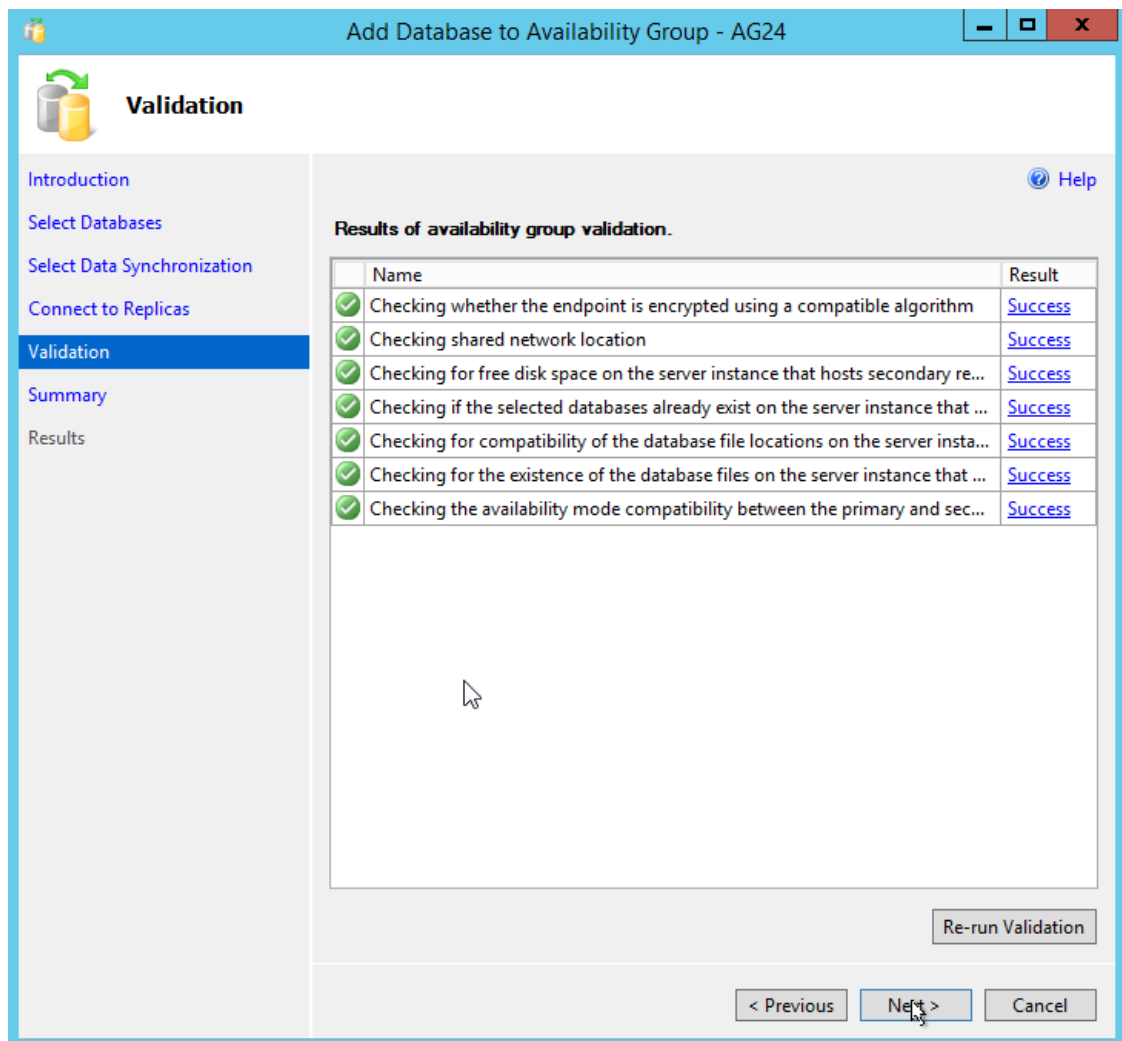
2. Select **Full** data synchronization and click **Next**.



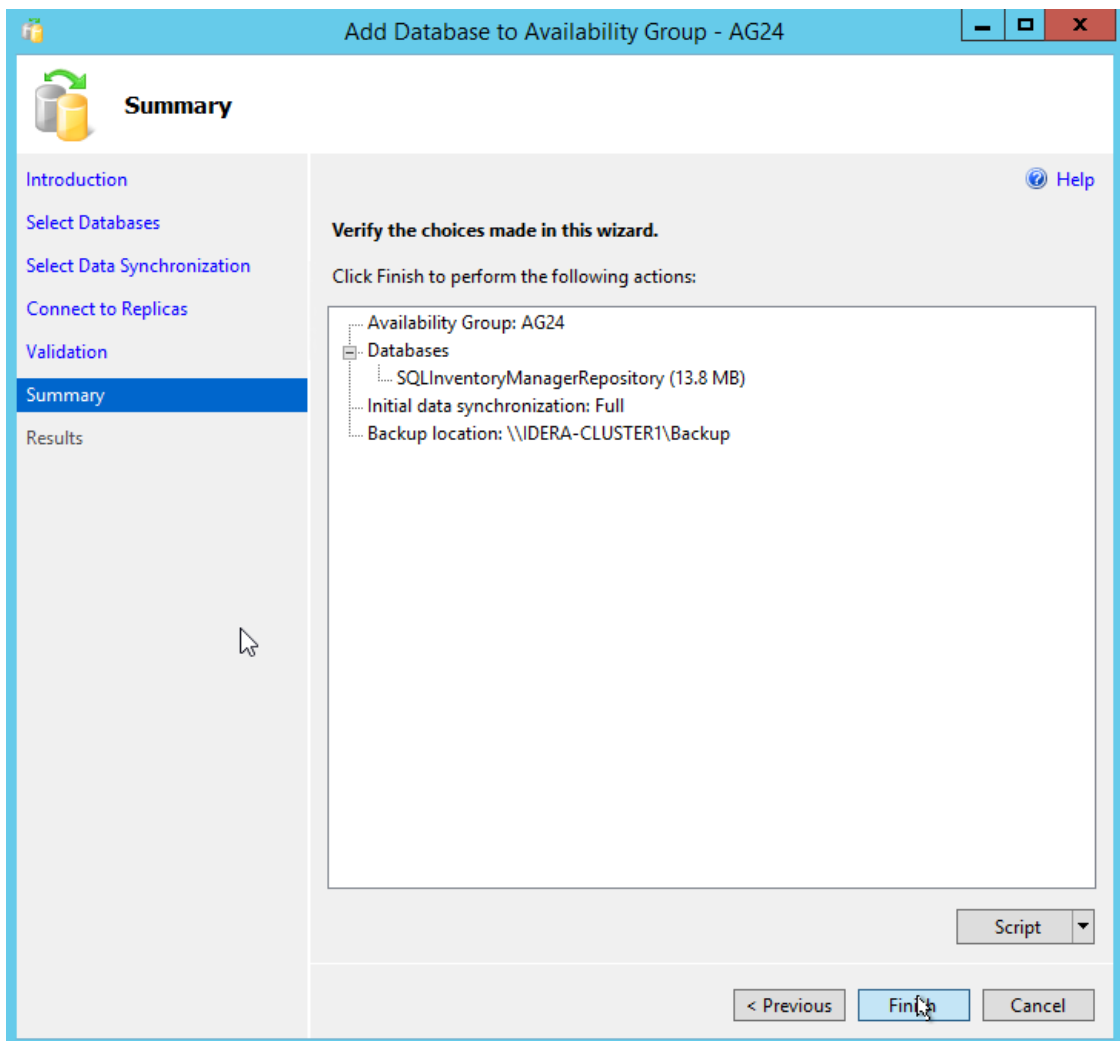
3. Connect to all secondary nodes and click **Next**.



4. Once validation finishes successfully click **Next**.



5. Check your settings on the **Summary** section and click **Finish** to continue.



6. Once the wizard completes click **Close**.

7. Go to the **Administration** tab of SQL Inventory Manager and [apply your license](#)(see page 165).

Manage License
✕

Current License

| | |
|-----------------------------------|--------------------------------|
| Type: | Trial License |
| Status: | OK |
| Expiration Date: | Apr 11, 2017 |
| Total Licensed Servers: | 0 |
| Monitored Servers: | 1 |
| Key: | AWQT6-H5WN7-YY882-5BWGS-4DJQB6 |
| SQL Inventory Manager Repository: | AG16-Listener |


New License

[Click here to buy more SQL Inventory Manager licenses](#)


4.3.4 Log in to the IDERA Dashboard

Once you have installed and configured your IDERA Dashboard and SQL Inventory Management deployments, you can log in to the web console by doing the following:


1. Open your selected Browser, make sure it is compatible with the IDERA Dashboard console requirements.
2. Type the IDERA Dashboard product URL: **http://<machinename>:<port>** where **<machinename>** is the name of your host or machine, and **<port>** is the port specified during installation. The default URL is **http://<localhost>:9290** or **http://<machinename>:9290**.
3. When the IDERA Dashboard web console launches on your browser, use your Windows user account **<domain\user>** with the respective password to log into the product.

 The IDERA Dashboard Web Application service comes with SSL already set up. For more information on running the IDERA Dashboard over SSL, see [Run IDERA Dashboard over TLS \(HTTPS\)](#)²³.

4.4 What login and password should you use to log in to SQL Inventory Manager?

 The IDERA Dashboard Web Application service comes with SSL already set up. By default, SSL works with a self-signed certificate. **This certificate is available 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 for use only in testing purposes. When a user attempts to open the SSL version of the IDERA Dashboard web console, the browser displays a warning message. For more information about running IDERA Dashboard over SSL, see [Run IDERA Dashboard over SSL \(HTTPS\)](#)²⁴.

When IDERA SQL Inventory Manager launches on your browser, log in using your Windows user account with the respective password. Type the Windows user account in the following format: `<domain\username>`.

 Although IDERA SQL Inventory Manager uses Windows authentication when users log in, IDERA SQL Inventory Manager does not store passwords.

4.4.1 Session timeout

IDERA SQL Inventory Manager sessions do time out after a period of rest. Note that:

- Sessions do not expire if you remain on the application.
- If you leave the application for more than 30 minutes, the session times out and you must log in to regain access.

4.5 Permissions and Discovery

SQL Inventory Manager now requires less permissions for data collection. Users can collect basic information from machines without the need of sysadmin privileges. The minimum credentials required are a valid user name and a password to connect to a machine.

Discovery without login

You can choose not to log in to instances during the discovery process, with this method Inventory Manager only collects basic information about discovered instances and it doesn't provide information on the version or edition of discovered SQL Instances.

Log In to Instances

²³ <https://wiki.idera.com/pages/viewpage.action?pagelD=6065194057>


²⁴ <http://wiki.idera.com/x/SgRJAg>

When you choose to log in to instances during the discovery process, you can get extra information like version and edition. You need to provide valid credentials for the discovered instances.

4.6 What options do you have when you first install SQL Inventory Manager?

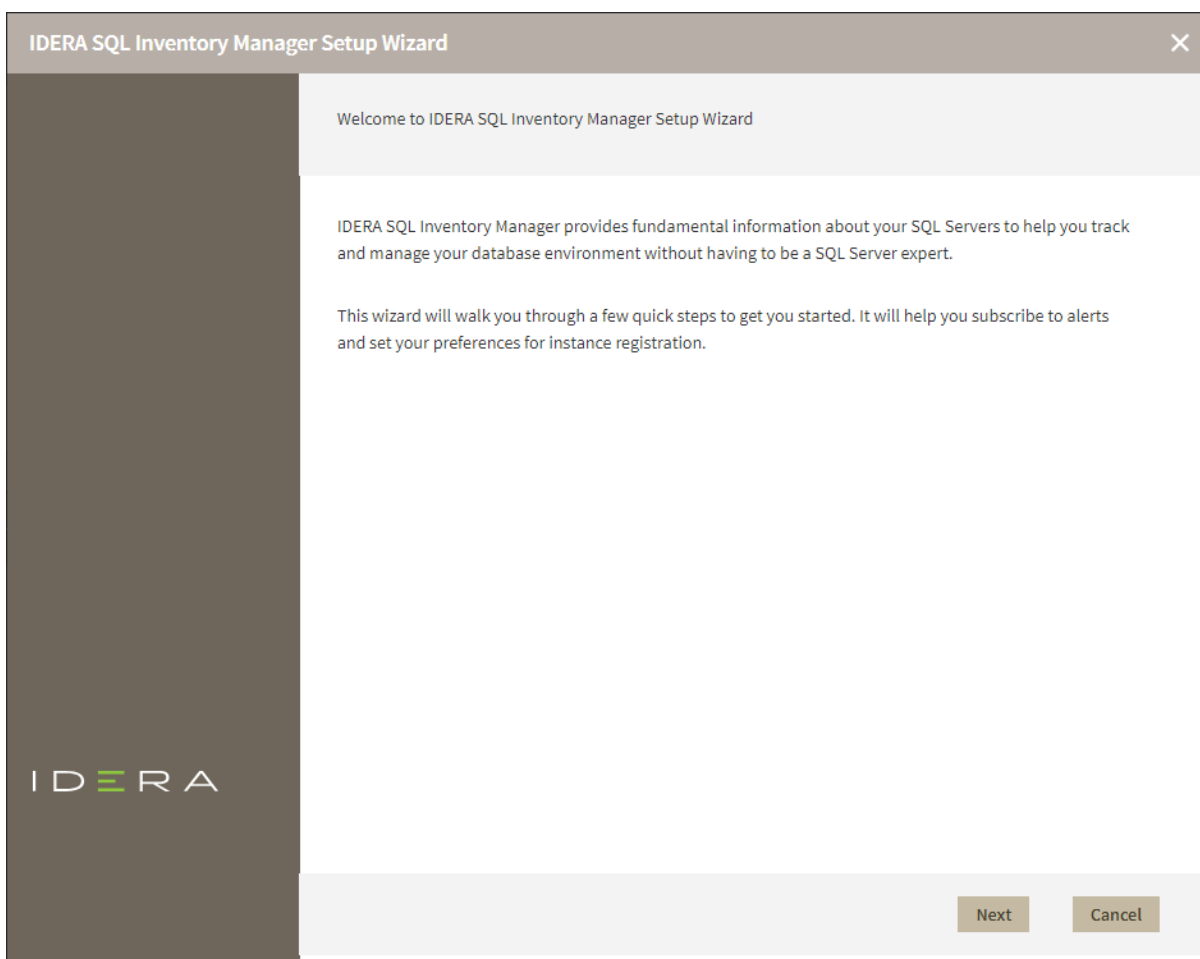
When you first install the product and log into the product for the first time, IDERA SQL Inventory Manager displays a welcome screen that guides you through some initial steps that help you to:

- Enter an email for receiving notification alerts
- Choose if you want to have automatic registration enabled
- Select the first place from where you will select the instances you want to register

 You need to walk-through this wizard to turn on Discovery.

4.6.1 Welcome

On the Welcome section click **Next** to start with the Alerts section.



4.6.2 Alerts

The **Alerts** section allows you to configure your email settings and enter an email address for subscribing to alerts. When you subscribe to alerts, IDERA SQL Inventory Manager sends you alert emails for critical issues on your environment. These alerts are a result of a set of health checks performed by IDERA SQL Inventory Manager on your SQL Server instances.

If you want to configure alert emails, this section requires that you follow two steps:

Step 1 lets you configure your email (SMTP) settings. You must go through this step first if you want to receive alerts. For more information about configuring your email settings, refer to [Configure email \(SMTP\) settings](#).(see page 151)

Step 2 lets you decide if you want to receive alert notifications and specify the email address where you would like to receive these alerts.

IDERA SQL Inventory Manager Setup Wizard X

- ✓ Alerts
- ✓ Discovery
- 3 Manage Discovery
- 4 Add Instance
- 5 Finish

SQL Inventory Manager scans your environment to discover SQL Server instances to help keep you informed of newly installed instances. When you enable the auto-registration option, SQL Inventory Manager automatically registers new instances as it finds them. Note that SQL Inventory Manager performs an initial scan of your environment, then auto-registration will begin for future discovered instances.

No, I will manually enter the instances I want to manage with SQL Inventory Manager.

Yes, automatically register future discovered instances.

Back Next Cancel

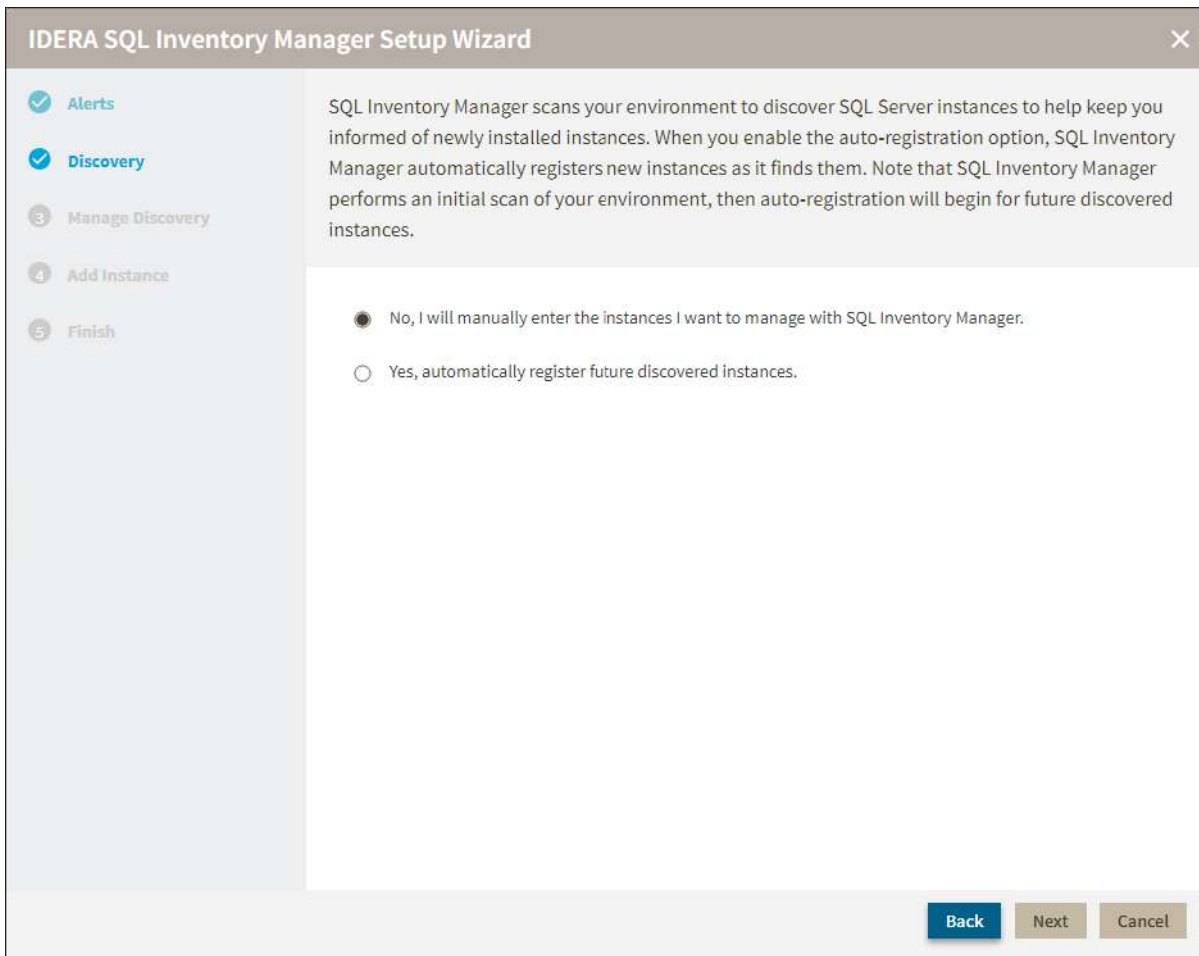
4.6.3 Discovery

On the **Discovery** section, you can choose if you want to enable or disable automatic registration for your instances.

IDERA SQL Inventory Manager continuously scans your environment to discover SQL Server instances and keeps you informed of newly installed instances.

When you enable the auto-registration option, IDERA SQL Inventory Manager automatically registers instances as it finds them. Note that IDERA SQL Inventory Manager performs first an initial scan of your environment, then auto-registration will begin for future discovered instances.

You can later change these settings on the **Administration** tab and access the **Auto registration options** for specifying which SQL Server versions you want to exclude from auto registration. For more information about making changes to auto registration, see [Auto registration options](#)(see page 130).



4.6.4 Manage Discovery

The next section, **Manage Discovery**, allows you to configure options for discovering instances. You can specify those computers where you want IDERA SQL Inventory Manager to discover SQL Server instances and choose which methods you want to use to search in each computer. To find more information about these settings, go to [How to Manage Discovery Options](#).(see page 125)

IDERA SQL Inventory Manager Setup Wizard

- Alerts
- Discovery
- Manage Discovery**
- Add Instance
- Finish

Run Browser Service Scan
 Daily at 9PM

Run Computer Scan
 Off

IP Address Ranges

Add Edit Remove Run Scan

| IP Range | User |
|----------|------|
| | |

0 Total 4 per page 1 / 1

Domains

Add Edit Remove Run Scan

| Domain | User | Discovery Scan Type | Excluded |
|--------|------|---------------------|----------|
| | | | |

0 Total 4 per page 1 / 1

Check computers using the following scans

- SQL Server Resolution Service
- Service Control Manager
- WMI
- Windows Registry
- TCP Probe *1433,2433*

Configure BI Services

- Include Discovery of BI Services in Scans

FQDN

- Enabled FQDN comparison for Discovered Instances

4.6.5 Add Instances

The next section, **Add Instances**, allows you to determine how you would like to initially choose the instances you want to monitor. You need to register SQL Server instances in order to monitor them with IDERA SQL Inventory Manager.

This section lets you choose to:

- use the **Add Instance wizard**, which takes you to a wizard where you can manually pick those instances you want to monitor, specify which connection credentials IDERA SQL Inventory Manager will use to connect to them, add owner, location, comments, and tags. For more information about the Add Instance wizard, see [Add SQL Server instances](#)(see page 139).
- select from a list of discovered instances. This option takes you directly to the **Discovered** section on the **Instances** view. From this section, you can pick which instances you wish to monitor and which ones you wish to ignore. For more information about selecting instances from the Instances view, see [Discovered Instances](#)(see page 215).
- monitor all discovered instances. This option lets you easily register all discovered instances.

IDERA SQL Inventory Manager Setup Wizard [X]

✓ Alerts
✓ Discovery
✓ Manage Discovery
✓ **Add Instance**
5 Finish

To get started managing your SQL Server environment, you need to register with SQL Inventory Manager. You can manually browse the instances to manage, select the from a list of discovered instances, or choose to register them all.

Use the Add Instance wizard to specify the instances you want to monitor.
 Select the instances you want to monitor from the list of discovered instances.
 Monitor all discovered instances.

Back Next Cancel

4.6.6 Finish

Finally, the last section provides you with a summary of other key features available on IDERA SQL Inventory Manager such as:

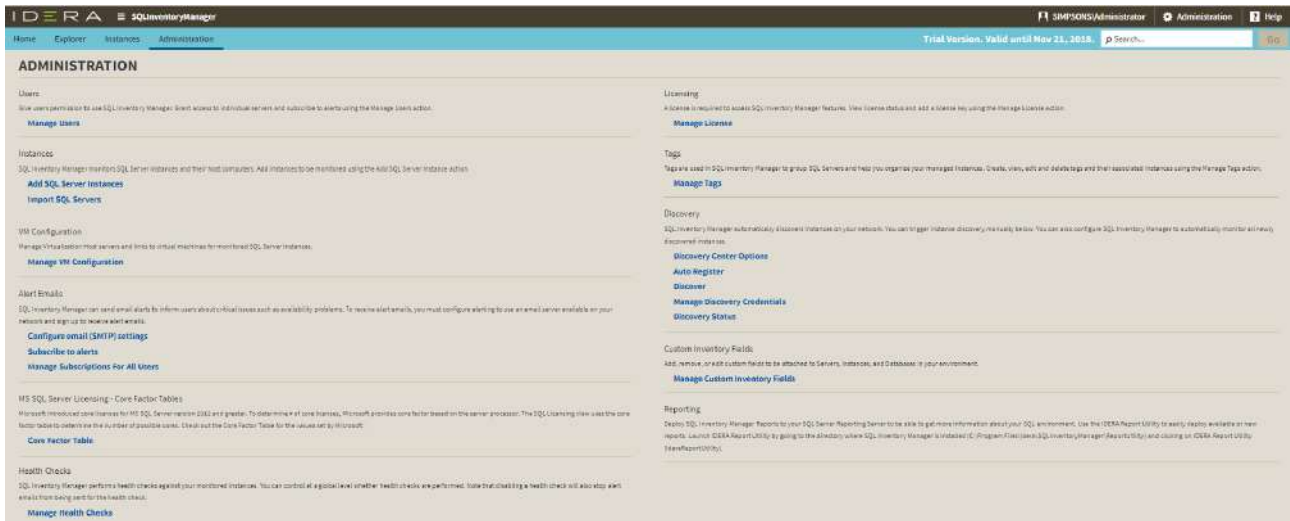
- **Run Initial Discovery Now.** Select this option to start the discovery process after you close the dialog. The discovery process runs by the set schedule and/or run on demand by the user.
- **Tags.** You can use tags to organize or group your instances for better management. Tags also help you filter views and explore your instances.
- **Health Check Recommendations.** IDERA SQL Inventory Manager performs a set of health checks on you environment to alert you from critical issues. These health checks also ensure that basic configuration and disaster recovery recommendations are followed. You can access knowledge base articles in each health check recommendation to get more information.
- **Invite other users.** You can grant other users access to IDERA SQL Inventory Manager or enter their email addresses to receive alert notifications.

The screenshot shows the 'IDERA SQL Inventory Manager Setup Wizard' dialog box. On the left, a sidebar lists five steps: Alerts, Discovery, Manage Discovery, Add Instance, and Finish. The 'Finish' step is currently selected and highlighted. The main content area of the wizard is titled 'Run Initial Discovery Now' with a checked checkbox. Below this is a section titled 'Other Product Features' which contains three sub-sections: 'Tags', 'Health Check Recommendations', and 'Invite Other Users', each with a brief description of the feature. At the bottom right of the dialog, there are three buttons: 'Back' (highlighted in blue), 'Submit', and 'Cancel'.

You can change any of these initial settings by clicking **Back**. When you complete this process, click **FINISH**. Click **CANCEL** at any point to skip these initial settings.

4.7 Administering SQL Inventory Manager

The **Administration** tab gives you easy access to manage IDERA SQL Inventory Manager options such as users, licenses, instances, tags, alert emails, discovery, and health checks.



For more information about each option and what configuration settings are available for you, go to each respective section.

- [How to manage users](#)(see page 99)
- [How to add SQL Server instances](#)(see page 101)
- [Import SQL Servers](#)(see page 110)
- [How to configure alert emails](#)(see page 113)
- [How to manage SQL Server licensing](#)(see page 118)
- [Manage Health Checks](#)(see page 120)
- [How to manage licenses](#)(see page 121)
- [How to manage tags](#)(see page 122)
- [How to manage instance discovery](#)(see page 124)
- [How to manage custom inventory fields](#)(see page 134)

4.7.1 How to manage users

In order for users to access IDERA SQL Inventory Manager, you need to grant them access. Additionally, if they want to receive alert emails, you have to enable this option for each user and type the email addresses where they will receive these notifications.

- ✓ To **add** or **delete** user accounts, go to the Administration view of the IDERA Dashboard, and then click **Manage Users**. For more information about adding a new user account, see [Managing users in the IDERA Dashboard](#)(see page 172).

To edit user details (name, subscription, or email address), go to the following options on the **Administration** tab:

- **Users > Manage Users**
- **Alert Emails > Manage Subscriptions For All Users**

After you select the user(s) you want to manage, the Edit User window opens. On this window, you can see a list of all registered users with their respective email addresses and whether they are subscribed to alerts.

4.7.1.1 Edit User

This option allows you to edit the user name, change the role, modify the user's alert subscriptions, and change the email address to where they receive alerts.

To edit a user account:

1. Either click the user account name, or check the appropriate box for the user account you want to edit, and then click **Edit User**. IDERA SQL Inventory Manager displays the Edit User dialog.

Edit User [X]

User Name:
 Note: Enter user's Windows account using the form "domain\username".

Product: * Role: *

Alert Subscriptions

Receive SQL Inventory Manager alert emails for critical issues such as availability problems.

Email address


Email settings have not been configured yet. [Click here to configure sending alert emails.](#)

Access to SQL Server Instances

All Instances Select Specific Instance

| Per Instance Tag | | Per Instance | |
|-------------------|--------------------------|-----------------|--------------------------|
| Instance Tag | Access | Instance | Access |
| 24x7 | <input type="checkbox"/> | SIDROCID01 | <input type="checkbox"/> |
| Business Critical | <input type="checkbox"/> | WIN-90GCKKJIPTJ | <input type="checkbox"/> |
| Business Hours | <input type="checkbox"/> | | |
| Development | <input type="checkbox"/> | | |
| Disaster Recovery | <input type="checkbox"/> | | |
| Integration | <input type="checkbox"/> | | |

2. Make the appropriate changes.
3. **If you assign the User or Guest role**, IDERA SQL Inventory Manager allows you to select which SQL Server instances you want this user to have access. Select **All Instances** to allow this account to access all instances including any new instances in your environment. Select **Select Specific Instance**, and IDERA SQL Inventory Manager displays lists of tags and instances available to assign to this user account. Select the items you want to include.
4. Click **SAVE**.

 If you have not configured your email server settings yet, IDERA SQL Inventory Manager displays the message **Email settings have not been configured yet. Click here to configure sending alert emails.** Click this option to configure your settings. For more information, go to [Configuring your email settings for alert notifications](#)(see page 151).

4.7.2 How to add SQL Server instances

In order to manage an instance, access its details, and add it to your monitored environment, you need to register it with IDERA SQL Inventory Manager. This section helps you register one or more instances with IDERA SQL Inventory Manager.


You can find the **Add SQL Server Instance** option on the following views:

- **Overview** tab - The **Add SQL Server Instance** option is located on the top right section of the instances table.
- **Instances** tab - The **Add SQL Server Instance** option is located on the action items bar of the Managed, Discovered, Ignored, and SQL Licensing sections respectively.
- **Administration** tab - The **Add SQL Server Instance** option is located in the instances section.

The Add Instance Wizard contains the following four sections:

4.7.2.1 1. Instance

1. Type the name of instance or instances you want to register in the **SQL Server Instance** box. Use a semicolon to separate instances.

 When you select instances on the **Discovered** or **Ignored** Instances views, the wizard already adds them to this box.

Add Instance Wizard

1 **Instance**

2 Credentials

3 Information

4 Finish

Register Instances

Specify the SQL Server instances you want to register with SQL Inventory Manager for monitoring. Separate multiple instances with a semicolon.

SQL Server Instance ⓘ

Browse

Cloud Instance

Cloud instance ⓘ

Back **Cancel** **Next**

You can use the **Browse** button to access a list of discovered instances that have not been registered yet with IDERA SQL Inventory Manager.

2. Check the box next to the instances you want to add, and click **Apply**.

Add Instance Wizard

Register Instances

Specify the SQL Server instances you want to register with monitoring. Separate multiple instances with a semicolon.

SQL Server Instance ⓘ

Cloud Instance

Cloud instance ⓘ

AMERCADOT-DH01

ARIVEROC-DH01

ASALVATIEH-DH02

ASALVATIEH-DV01

DVILLALLOBE-DH01

EREVOLLOA-DH01

JAREVILLCT-DH02

JAREVILLCT-DV01

APPLY

Back Cancel Next

3. Click **Next** to go to the next section.

Add Instance Wizard

Register Instances

Specify the SQL Server instances you want to register with SQL Inventory Manager for monitoring. Separate multiple instances with a semicolon.

SQL Server Instance ⓘ

SIDROCID02;ARIVEROC-DH01;WIN-90GCKKJIPTJ\SERVER012;ASALVATIEH-DV01; Browse

Cloud Instance

Cloud instance ⓘ

Back Cancel Next

4.7.2.2 2. Credentials

IDERA SQL Inventory Manager connects to registered SQL Server instances and their host computers to collect information. The collection service requires permissions to connect and gather information using the following types of connections:

- SQL connection credentials to perform queries against registered instances
- WMI connection credentials to gather data from the host computers

✓ Tip

For more information on what are the minimum required permissions for these accounts, click [here](#).(see page 45)

ⓘ Authorize WMI users and set permissions

If you want to know how to authorize WMI users and set permissions, click [here](#)²⁵.

²⁵ <http://technet.microsoft.com/en-us/library/cc787533%28v=ws.10%29.aspx>

By default, IDERA SQL Inventory Manager connects using the IDERA SQL Inventory Manager service account. However, if you need to provide alternative credentials for any of these two connections, you can choose from the respective options on each section.

SQL Connection Credentials

- Specify the type of account that you want to use to access your SQL Server instance and collect its information. If you do not want to use the **SQL Inventory Manager service account**, you can choose to use a **Windows user account** or a **SQL Server login account** from the **Account Type** list.

The screenshot shows the 'Add Instance Wizard' dialog box. The 'Credentials' step is selected. The 'SQL Connection Credentials' section is active, with a dropdown menu for 'Account Type' set to 'SQL Inventory Manager service account'. Below it, the 'WMI Connection Credentials' section is also active, with a similar dropdown menu. At the bottom, there is a 'Test Credentials' section with a 'Test credentials now' button. Navigation buttons 'Back', 'Cancel', and 'Next' are at the bottom right.

- If you select a **Windows user account** or **SQL Server login account**, type the respective user name and password. IDERA SQL Inventory Manager uses this account for SQL queries to gather availability and

configuration data.

Add Instance Wizard

1 Instance
2 **Credentials**
3 Information
4 Finish

Specify Connection Credentials

SQL Connection Credentials
Specify the account to be used to connect to the SQL Server instance to collect availability, capacity and configuration data.

Account Type ⓘ
Windows user account ▼

User name Password

WMI Connection Credentials
Specify the account to be used to connect to the computers that host the SQL Server instance to collect performance and configuration data.

Account Type ⓘ
SQL Inventory Manager service account ▼

Test Credentials ⓘ

Test credentials now

Back Cancel Next

- You can test the correctness of your credentials by clicking **Test Credentials**.

WMI Connection Credentials

- On this section, you can choose to use the **SQL Inventory Manager service account** or a **Windows user account** by selecting either of them from the **Account Type** list.

Add Instance Wizard

1 Instance
 2 **Credentials**
 3 Information
 4 Finish

Specify Connection Credentials

SQL Connection Credentials
 Specify the account to be used to connect to the SQL Server instance to collect availability, capacity and configuration data.

Account Type ⓘ
 Windows user account ▼

User name Password

WMI Connection Credentials
 Specify the account to be used to connect to the computers that host the SQL Server instance to collect performance and configuration data.

Account Type ⓘ
 SQL Inventory Manager service account ▲
 SQL Inventory Manager service account
 Windows user account

Test credentials now

Back Cancel Next

- If you choose to use a **Windows user account**, type the respective user name and password. This account allows you to access Windows configuration data of the computer that hosts the registered instance.

✓ Tip

IDERA recommends that you use the **Test Credentials** option to verify that IDERA SQL Inventory Manager can successfully monitor the newly registered instances.

Active Directory

- On this section you can set the Active Directory account to connect to Azure or Amazon.

4.7.2.3 3. Information

On this section you can specify additional information for your instances like **Owner**, **Location**, **Comments** and **Tags**.

Although none of these fields are required, Owner, Location, Comments and Tags provide a powerful method for grouping instances and help you organize your managed instances. You can use these options to view information such as database counts, size, or activity, grouped by these fields.

Use the **Owner** and **Location** drop down lists to access all available options.

To add tags, you can do one of the following:

- Click any of the suggested **Popular Tags** on the right side of the window. The tag appears now on **Current Tags** on the left.
- You can click **See All Tags** on the top right section to display all available tags.
- If you want to **Add a New Tag**, type the name in the bottom box, and click **ADD**. Your new tag will be added to the **Current Tags** list.

Warning

- The tag name must begin with an upper or lowercase alphanumerical character.
- Your tag name must have a maximum length of 20 characters.
- Only the following special characters are valid for tags: ! # @ () ' . : - _ and embedded spaces.

Tip

Refer to the [Managing tags](#)(see page 153) section for more guidance on how to add, view, edit, or delete tags.

4.7.2.4 4. Finish

On this section, you can review your Instance Registration Details such as: instance name, SQL Connection Credentials, WMI Connection Credentials, Owner, Location, Comments, and Tags.

To change any of these registration details you can do one of the following:

- You can click any of the title sections (INSTANCE, CREDENTIALS or INFORMATION) and go directly to the place where you need to make the changes.
- You can click **PREV** to go back to the previous sections until you find the place where you need to make changes.

Add Instance Wizard

1 Instance

2 Credentials

3 Information

4 **Finish**

Review Instance Details

Review all the details of the SQL Server instances that you are registering. You can go back to previous steps if you want to change some information.

Instance: **SIDROCID02;ARIVEROC-DH01;WIN-90GCKKJIPTJ\SERVER012;ASALVATIEH-DV01;**

SQL Connection Credentials: **SQL Inventory Manager service account**

WMI Connection Credentials: **SQL Inventory Manager service account**

Owner:

Location:

Comments:

Tags:

Back Cancel Submit

After you review your registration details click **FINISH**. IDERA SQL Inventory Manager begins to collect instances information after a few minutes of their registration and will continuously collect availability, performance, and configuration information from them and their host computers.

✓ Tip

After registration, you can still change credentials, tags, and information settings on the **Edit Properties** option. Refer to [Editing instance properties](#)(see page 252) for more information.

4.7.2.5 About collection intervals

Collection intervals are predefined. You can see more information about collection frequency on the [What Health Checks are available in SQL Inventory Manager?](#) (see page 296) section.

You can also force data collection for an instance by selecting **Refresh Data** on the **Instance details** view. For more information, refer to [Viewing instance details](#) (see page 245).

4.7.3 Import SQL Servers

IDERA SQL Inventory Manager constantly discovers SQL Server instances so you can select the ones that you want to monitor. When you open the **Add SQL Server Instance** wizard, you can choose those ones you want to register with IDERA SQL Inventory Manager; however, you can also import a list of instances from your computer. Go to the **Administration** tab, on the **Instances** section you can find the option **Import SQL Servers**. Use this option to import a .csv file from your computer.

4.7.3.1 Acceptable .csv format

You must use a properly-formatted .csv for each kind of instance you want to import. There are no limits on the number of rows included in the file, but note that if a row is incorrectly formatted, IDERA SQL Inventory Manager imports all rows above the incorrect row but does not import the incorrect row or any of the rows below that row.

i For users who must use a fully qualified domain name (FQDN) instead of the Windows Internet Naming Service (WINS), IDERA SQL Inventory Manager accepts the FQDN name for import and will collect information for that SQL Server instance. However, if you also add this instance as WINS, then realize that you have two records pointing to the same instance. IDERA SQL Inventory Manager does allow you to connect to the same instance using FQDN or WINS. If you don't want to have WINS instances, set the instances to **Ignore**. You can view ignored instances on the Instances > Ignored tab.

On-Premise instances

For importing On-premises SQL Server instances, please use the [on-premises template](#) (see page 110) or use the following general rules and .csv file format.

- **Enter or Browse SQL Server Instances** cannot be null.
- **Owner** should be unique across an instance.
- **Location** should be unique across an instance.
- The next time the user uploads a record for the same instances, the **Instance Tags / Database Name / Database Tags** should be added to the existing IDERA SQL Inventory Manager data. But the **Instance Owner** and **Instance Location** should be updated with the new values.
- **Comments**
- **Current Tags**
- **Add New Tag**

| Enter or Browse SQL Server Instances | Owner | Location | Comments | Current Tags | Add New Tag |
|--------------------------------------|-------|----------|----------|--------------|-------------|
| | | | | | |

| Enter or Browse SQL Server Instances | Owner | Location | Comments | Current Tags | Add New Tag |
|--------------------------------------|-------|----------|----------|--------------|-------------|
| | | | | | |
| | | | | | |

Amazon instances

For importing amazon SQL Server instances, please use the SQL Inventory Manager [import template for AWS](#)(see [page 110](#)) instances or use the following general rules and .csv file format.

- **Enter or Browse Amazon SQL Server Instances**
- **Owner**
- **Location**
- **Comments**
- **Current Tags**
- **DataBase Name**
- **Add New Tag**
- **AWS Account Name**
- **AWS Access Key**
- **AWS Secret Key**
- **AWS Region Endpoint**

| Enter or Browse Amazon SQL Server Instances | Owner | Location | Comments | Current Tags | DataBase Name | Add New Tag | AWS Account Name | AWS Access Key | AWS Secret Key | AWS Region Endpoint |
|---|-------|----------|----------|--------------|---------------|-------------|------------------|----------------|----------------|---------------------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Azure instances

For importing On-premises SQL Server instances, please use the SQL Inventory Manager [import template for Azure](#)(see [page 110](#)) instances or use the following general rules and .csv file format.

- **Enter or Browse Azure SQL Server Instances**
- **Owner**
- **Location**
- **Comments**
- **Current Tags**
- **DataBase Name**
- **Add New Tag**
- **Azure Account Name**
- **Azure Tenant ID**

- **Azure Client ID**
- **Azure Client Secret Key**
- **Azure Subscription ID**
- **Account Type**

| Enter or Browse Azure SQL Server Instances | Owner | Location | Comments | Current Tags | Data Base Name | Add New Tag | Azure Account Name | Azure Tenant ID | Azure Client ID | Azure Client Secret Key | Azure Subscription ID | Account Type |
|--|----------------------------|------------------|----------|--------------------------------|----------------|-------------|-------------------------------|-----------------|-----------------|-------------------------|-----------------------|--------------|
| ABC_1 | G r o u p 1 | W e s t | | "InstProd, Production, 24Hour" | | Test | "X, A, C" | | | | | |
| ABC_1 | G r o u p 1 | W e s t | | "InstProd, Production, 24Hour" | | DB2 | "DBA, Production DB, TEST DB" | | | | | |
| XYZ | O w n e r | , | | , | | , | , | | | | | |

4.7.3.2 Importing a .csv file

To import a file:

1. Select what type of instances you want to import, either **Private/On-Premise** , **Amazon** , or **Azure**.
2. Click **Browse** to choose a properly formatted .csv file from your computer.
3. Go to **C:> Program Files> Idera> SQLInventoryManager> CollectionService**, either **OnPremise** , **Amazon** , or **Azure**. IDERA SQL Inventory Manager displays the instances from your uploaded .csv file.
4. Select or clear those instances that you want to import, and then click **Import**.

 **CSV files**

Keep in mind that the .csv files you use to import must have only the names of the instances.

4.7.3.3 Making bulk changes after importing instances

After importing the instances, you can use the bulk options available on the Managed Instances view to set the credentials for monitoring them, as well as editing their owners, locations, comments, and tags.

- i** In the .csv file format, there is no separate column for credentials. However, after importing, you can update these instances using a bulk action to edit the credentials for all affected instances.
For example:
- In the .csv file, add a Instance Tag called something such as "SQL creds" to all instances where SQL Server credentials should be used.
 - Import the .csv file.
 - Once the instances are imported, view your instances on the Managed Instances tab.
 - Filter the list of instances using the Instance Tag you added, i.e. "SQL creds".
 - Select all of the instances, and then use the bulk action Edit Credentials to set the SQL Server credentials on all of the instances.

4.7.4 How to configure alert emails

IDERA SQL Inventory Manager can send email alerts to inform users about critical issues from your environment such as availability problems. To receive alert emails, you must configure an available email server on your network and sign up to receive alert emails. On this section, you can select those users that will receive alerts and type their respective email addresses.

This section consists of:

- [Configure email \(SMTP\) settings](#)(see page 113)
- [Subscribe to alerts](#)(see page 115)
- [Manage Subscriptions For All Users](#)(see page 116)

4.7.4.1 How to configure email settings for alert notifications

IDERA SQL Inventory Manager can send email notifications for warning or critical conditions from your environment, but before subscribing to these email notifications; you must first configure your email (SMTP) settings.

You can access this option by going to the **Administration** tab.

In the **Alert Emails** section, click **Configure email (SMTP) settings**. A dialog box opens with three main sections:

- Email Information
- Outgoing Mail Server Information
- Test Email Settings

Email Settings

Email Information

Sender Address:

Reply To Address:

Message Footer:

Outgoing Mail Server Information

SMTP Server Address:

SMTP Server Port: Use an SSL encrypted connection

SMTP Server requires authentication

User name:

Password:

Test Email Settings

Recipient of test email:

Email Information

Sender Address

Enter the email address that SQL Inventory Manager will use as the sender of the emails notifications.

Reply To Address

You must specify a reply-to email address to receive replies from emails.

Message Footer

Enter the text that you want to appear in the footer of notifications.

Outgoing Mail Server Information

In order to send email notifications, you must specify the settings of an email server you want to use. You need to provide the following information:

SMTP Server Address

Enter the name or Internet Protocol (IP) address of your SMTP mail server.

SMTP Server Port

Enter the IP port that the SMTP mail server uses. The default SMTP port is 25.

Use an SSL encrypted connection

Select this check box to use an SSL encrypted connection to connect to the email server.

SMTP Server authentication

Select this checkbox if your SMTP server requires authentication, specify then a valid user name and password to access the email server.

Test Email Settings

You can use this section to test your email settings. For this purpose, enter the **Recipient of the test email** and click **SEND TEST EMAIL**. SQL Inventory Manager sends a test email to the recipient you specify. You can verify this test email in the respective recipient account.

After you configure your email settings, you can subscribe to alerts. For more information on how to subscribe to alerts, go to [Subscribing to Alerts](#)(see page 153).

Manage users

From the **Administration** tab, you can decide which users receive alerts or not. For more information, refer to [Managing subscriptions for all users](#).(see page 116)

4.7.4.2 How to subscribe to alert emails

IDERA SQL Inventory Manager can send email notifications for warning or critical conditions from your environment, in order to receive these notifications you have to subscribe to alerts.


To subscribe, go to the **Administration** tab, in the **Alert Emails** section, click **Subscribe to alerts**.

On the **Subscribe to Alerts** window, check the respective box and type the email address where you want to receive these notifications.

Subscribe to Alerts ✕

Receive SQL Inventory Manager alert emails for critical issues such as availability problems.

Email address:

 Email settings have not been configured yet. [Click here to configure sending alert emails.](#)

Note

If you have not configured your email settings, IDERA SQL Inventory Manager displays **Email settings have not been configured yet. Click here to configure sending alert emails**, click this option and fill the required fields, for more information go to [Configuring email settings for alert notifications](#)(see page 151).


Manage users

You can also manage your subscriptions from the following sections:

- [Managing users](#).(see page 160)
- [Managing subscriptions for all users](#). (see page 116)

4.7.4.3 Managing users and their subscriptions

In order for users to access IDERA SQL Inventory Manager, you need to grant them access. Additionally, if they want to receive alert emails, you have to enable this option for each user and type the email addresses where they will receive these notifications.

-  To **add** or **delete** user accounts, go to the Administration view of the IDERA Dashboard, and then click **Manage Users**. For more information about adding a new user account, see [Managing users in the IDERA Dashboard](#)(see page 172).

To edit user details (name, subscription, or email address), go to the following options on the **Administration** tab:

- **Users > Manage Users**
- **Alert Emails > Manage Subscriptions For All Users**

After you select the user(s) you want to manage, the Edit User window opens. On this window, you can see a list of all registered users with their respective email addresses and whether they are subscribed to alerts.

Edit User

This option allows you to edit the user name, change the role, modify the user's alert subscriptions (User and Guest roles only), and change the email address to where they receive alerts. To edit a user account:

1. Either click the user account name, or check the appropriate box for the user account you want to edit, and then click **Edit User**. IDERA SQL Inventory Manager displays the Edit User dialog.

Edit User [X]

User Name:
 Note: Enter user's Windows account using the form "domain\username".

Product: * Role: *

Alert Subscriptions

Receive SQL Inventory Manager alert emails for critical issues such as availability problems.

Email address

Email settings have not been configured yet. [Click here to configure sending alert emails.](#)

Access to SQL Server Instances

All Instances Select Specific Instance

| Per Instance Tag | | Per Instance | |
|-------------------|--------------------------|---------------------------|--------------------------|
| Instance Tag | Access | Instance | Access |
| 24x7 | <input type="checkbox"/> | SIDROCID01 | <input type="checkbox"/> |
| Business Critical | <input type="checkbox"/> | WIN-90GCKKJIPTJ | <input type="checkbox"/> |
| Business Hours | <input type="checkbox"/> | WIN-90GCKKJIPTJ\SERVER012 | <input type="checkbox"/> |
| Development | <input type="checkbox"/> | | |
| Disaster Recovery | <input type="checkbox"/> | | |
| Integration | <input type="checkbox"/> | | |
| ... | <input type="checkbox"/> | | |

2. Make the appropriate changes.
3. **If you assign the User or Guest role**, IDERA SQL Inventory Manager allows you to select which SQL Server instances you want this user to have access. Select **All Instances** to allow this account to access all instances including any new instances in your environment. Select **Select Specific Instance**, and IDERA SQL Inventory Manager displays lists of tags and instances available to assign to this user account. Select the items you want to include.
4. Click **SAVE**.

If you have not configured your email server settings yet, IDERA SQL Inventory Manager displays the message **Email settings have not been configured yet. Click here to configure sending alert emails.** Click this option to configure your settings. For more information, go to [Configuring your email settings for alert notifications](#)(see page 151).

4.7.5 How to manage SQL Server licensing

Microsoft introduced a new server core-based licensing model with the release of SQL Server 2012. Instead of licensing based on physical processors, the new core-based model offers a more accurate measure and better metrics based on computing power for your physical or virtual servers.

IDERA SQL Inventory Manager supports the per-core licensing model using the [core factor table](#) (see page 118), allowing you to override core information for multiple records by editing the processor details.

For more information about using the core-related fields in the Instances SQL Server Licensing view, see [SQL Licensing by Instance](#) (see page 207).

4.7.5.1 Using the Core Factor Table

You can find the **Core Factor Table** option on the following views:

- **Instances > SQL Licensing by Instances** - The **Core Factor Table** option is located on the action items bar of the SQL Licensing by Instance section.
- **Instances > SQL Licensing by Server** - The **Core Factor Table** option is located on the action items bar of the SQL Licensing by Server section.
- **Administration** tab - The **Core Factor Table** option is located in the **MS SQL Server Licensing - Core Factors Tables** section.

Note that Core Factor Table values are set by Microsoft. However, privileged administrators can make changes when necessary. This window provides these values to help calculate the number of possible core licenses for your physical servers.

Core Factor Table
✕

Core Factor Table values are set by Microsoft and provided here to help calculate the number of possible core licenses for physical servers. You can view the data here to check and see if there are any updates.

| SQL Server Version | Processor Type | Core Factor ▲ |
|---------------------------|--|---------------|
| 2008 R2, 2012, 2014, 2016 | AMD 31XX, 32XX, 33XX, 41XX, 42XX, 43XX, 61XX, 62XX, 63XX Series Processors with 6 or more cores | 0.75 |
| 2008 R2, 2012, 2014, 2016 | All processors not mentioned below | 1.0 |
| 2008 R2, 2012, 2014, 2016 | Dual Core Processors | 2.0 |
| 2008 R2, 2012, 2014, 2016 | Single Core Processors | 4.0 |

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Last updated: From Idera Community

Check for updates
Close

The Core Factor Table displays the following information:

- **SQL Server Version.** Displays the versions of SQL Server associated with the processor types and core factors.
- **Processor Type.** Displays a group or description of processor types.
- **Core Factor.** Displays the numerical value provided by Microsoft based on the CPU. This value helps determine the number of core licenses necessary.
- **Last updated.** Displays a timestamp for the most recent change to the information displayed in this table.

You can view the data in the Core Factor Table, and then click **Check for updates** to check to see if there are any updates. IDERA SQL Inventory Manager displays a confirmation window if updates do exist for your Core Factor Table. Click **Yes** to confirm the update.

4.7.6 Manage Health Checks

Individual health checks can be enabled and disabled at a global level to prevent email notifications and health check warnings. To access your managed health checks, go to the **Administration** tab, and click **Manage Health Checks** on the **Health Checks** section.

The **Manage Health Checks** window opens and displays all available health checks. Please keep in mind that not all health checks send email alert notifications, the envelope icon next to the health check title tells you which health checks send email notifications.

If you do not want IDERA SQL Inventory Manager to perform any of these health checks, you can click **Disable** on the respective health check. After you disable a health check, IDERA SQL Inventory Manager no longer perform this health check and you will not receive email notifications from this health check either.

The screenshot shows the 'Manage Health Checks' window with a list of health checks. Each check includes a title, a description, a status, and action buttons. The first check, 'Database at risk (Data)', has an envelope icon and its 'Disable' and 'Configure' buttons are highlighted with a green box. The 'Status: Enabled' text is also highlighted with a green box. A vertical scrollbar is visible on the right side of the list.

| Health Check Title | Description | Status | Actions |
|--|--|---------|--------------------|
| Database at risk (Data) | Database data files at risk of running out of space | Enabled | Disable, Configure |
| Database at risk (Logs) | Database log files at risk of running out of space | Enabled | Disable, Configure |
| Database backup is not current | Indicated database does not have a current backup | Enabled | Disable, Configure |
| Database consistency has never been checked | Indicated database has never been checked with DBCC CHECKDB | Enabled | Disable |
| Database consistency has not been checked recently | Indicated database has not been checked with DBCC CHECKDB recently | Enabled | Disable |
| Database does not have a backup | Indicated database has never been backed up | Enabled | Disable |
| Database has autoshrink enabled | Indicated database has autoshrink enabled | Enabled | Disable |
| Database is not in a usable state | The state of the database is not OK | Enabled | Disable |

Close

4.7.6.1 Configure health checks

IDERA SQL Inventory Manager allows users with the appropriate permissions to configure some health checks to let you customize for specific environments. To open the appropriate customization window, click **Configure** for the appropriate health check on the Manage Health Checks window. For more information about a specific health check configuration, see the following topics:

- [Database at risk \(Data\)](#)(see page 299)
- [Database at risk \(Logs\)](#)(see page 301)
- [Database backup is not current](#)(see page 303)
- [SQL Server instance is down](#)(see page 307)
- [SQL Server is slow](#)(see page 308)
- [Volume at risk](#)(see page 313)

Available Health Checks

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#)(see page 296)

4.7.7 How to manage licenses

A license key is required to access all IDERA SQL Inventory Manager features and determines the number of SQL Server instances that you can monitor.

View your license status, add, or buy a new license key using the Manage License action.

To access this option, go to the **Administration** tab, and then click **Manage License** on the **Licensing** section.

IDERA SQL Inventory Manager opens a new window that displays information relevant to your current license such as type of license, status, expiration date, total licensed servers, monitored servers, license key, and IDERA SQL Inventory Manager repository.

If you want to add a new license key, type this key under the **New License** section, and then click **Apply**.

If you need to buy another license, go to the [IDERA store](#)²⁶.

²⁶ <https://www.idera.com/buynow/onlinestore>

Manage License ✕

Current License

Type: Trial License

Status: OK

Expiration Date: May 17, 2017

Total Licensed Servers: Unlimited

Monitored Servers: 3

Key: AZL7P-X3ND6-GA6NB-SENTU-GJ3EEW

SQL Inventory Manager Repository: WIN-90GCKKJIPTJ

New License

[Click here to buy more SQL Inventory Manager licenses](#)

4.7.8 How to manage tags

Tags help you group or organize your instances and databases for better management. For example, use a tag name such as "Disaster Recovery" to identify all your registered instances and databases that are vital to your disaster recovery plan, and have quick access to views and details from this group.

When you register an instance, IDERA SQL Inventory Manager gives you the option to associate that instance to an existing tag, or to create a new tag. For more information on how to add tags when registering an instance, see [Add your SQL Server Instances section](#) (see page 139). You cannot assign tags to databases when adding an instance, but you can make this association when viewing Instance Details or Database Details.

The **Manage Tags** section on the **Administration view** allows you to manage the complete list of tags for all your environment.

- ✔ You can also access the Manage Tags window on the Overview by clicking the pencil icon of the Tags section on the status right sidebar.

In the Manage Tags window you can:

- View the number of instances and databases associated with a tag
- Add new tags

- Edit the list of instances and databases associated with a tag
- Delete tags

Manage Tags
✕

Add
Edit
Delete

| | Tag Name | # Of Instances | # Of Databases | Global |
|--------------------------|--------------------------|----------------|----------------|--------|
| <input type="checkbox"/> | 24x7 | 2 | 0 | No |
| <input type="checkbox"/> | Business Critical | 0 | 0 | No |
| <input type="checkbox"/> | Business Hours | 0 | 0 | No |
| <input type="checkbox"/> | Development | 3 | 0 | No |

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Close



Tip

On the Manage Tags window, click the tag name to quickly access the Edit Tag dialog for that tag.

4.7.8.1 Add a new tag

In the Manage Tags window, click **Add** and IDERA SQL Inventory Manager opens the Add Tag window.

Type the name of the new tag you wish to add, or type several names separating them with a semicolon.

Below the **Tag** field, IDERA SQL Inventory Manager displays a list of registered instances and databases in your environment. Select the checkbox(es) for each instance and database you want to add to this tag, and then click **SAVE**.



Warning

- The tag name must begin with an upper or lowercase alphanumeric character
- Your tag name must have a maximum length of 20 characters

4.7.8.2 Edit a tag

Editing a tag lets you rename the tag or change which instances or databases are associated with the tag.


To edit a tag, select the checkbox next to the tag you want to edit, and then click **Edit**. You can also access this option by clicking directly on the tag name. Note that you can only edit one tag at a time.

Make the appropriate changes, and then click **SAVE**.

4.7.8.3 Delete Tags

To delete one or more tags:

1. In the Manage Tags window, select the checkbox next to the tag(s) you want to delete, and then click **Delete**. IDERA SQL Inventory Manager displays a warning message that requires a confirmation whether you want to delete the selection. Click **Yes**. IDERA SQL Inventory Manager deletes the tag(s) and users can no longer use those tags. **If you did not mean to delete the selected tags**, click **No**.

 When an instance is deleted, the mappings to its tags are also deleted, but not the tags because they may be used for other instances

4.7.8.4 Managing tags for a single or several instances

IDERA SQL Inventory Manager allows you to manage tags for a specific instance. When you access this option you can choose which tags you want to add or delete for the selected instance. For more information on how to edit tags for single instance, see [Manage tags for a single instance](#)(see page 157).

You can also edit tags for several instances at a time (bulk editing). You can choose to apply a new tag to a group of instances, for example, or delete a tag from selected instances. For more information on how to bulk edit tags on several instances, see [Bulk edit tags for several instances](#)(see page 158).

4.7.9 How to manage instance discovery

IDERA SQL Inventory Manager automatically discovers on-premises and cloud instances. You can trigger instance discovery manually using the options in the Discovery section of the Administration view. You can also configure IDERA SQL Inventory Manager to automatically monitor all newly-discovered instances and specify what credentials to use when attempting to connect to an instance.

This section consists of:

- [Discovery Center options](#)²⁷
- [Auto Registration Options](#)(see page 164)

²⁷ <https://wiki.idera.com/x/IQC2AQE>

- [Discover Database Instances](#)²⁸
- [Manage Discovery Credentials](#)(see page 132)
- [Discovery Status](#)(see page 133)

4.7.9.1 How to manage Discovery Center options

The **Discovery Center Options** allow you to discover both on premises and cloud instances. To configure these options, go to **Discovery Center Options** on the **Administration** tab.

On-premises Discovery

These options allow you to configure the discovery of instances on your network. For more information on how to access these options refer to [Discovering On-premises Instances](#)(see page 126) .

Cloud Discovery

These options allow you to configure the discovery of cloud instances on Azure VM, Amazon EC2, Azure Database, Amazon RDS. For more information on how to access these options refer to [Discovering Cloud Instances](#)(see page 125).


Discovering Cloud Instances

To access the cloud instances discovery options click **Cloud** on the left pane of the **Discovery Center Options** view. SQL Inventory Manager retrieves the majority of the metrics using SQL Scripts but retrieving performance metrics require the use of API calls.

There are two scenarios when discovering instances:

Scenario 1: Instance is discovered using cloud account. In this case, the account is already associated with this instance so API calls will be using this account

Scenario 2: Instance is not discovered, but added directly from add instance screen in this case, API calls will be using account details added via add instance wizard

 Sql server login is mandatory when registering an instance

For more information on how to discover **Amazon Instances** refer to [AWS Setup](#)²⁹.

For more information on how to discover **Azure Instances** refer to [Azure Setup](#)³⁰.

²⁸ <https://wiki.idera.com/x/HgC2AQE>

²⁹ <https://wiki.idera.com/display/SQLInventoryManager/AWS+Setup>

³⁰ <https://wiki.idera.com/display/SQLInventoryManager/Azure+Setup>

Discovering On-premises Instances

Setting Computer Scan discovery options

The Private Network tab on the Discovery Center Options section allows you to use the Computer scan to obtain a list of machines based on IP ranges or domains. You can set your preferred schedule for a Computer scan daily or weekly. If you choose a Daily schedule, then set the specific time for the discovery job. If you set a Weekly schedule, specify the days of the week and the time when the scan will be performed.

The screenshot shows the 'Private Network Discovery Center Settings' window. At the top, there are tabs for 'Computer Scan' and 'Browser and ODBC Scan'. Below this is the 'Schedule Computer Scan' section, where the 'Computer Scan' is set to 'Run' and the frequency is 'Off'. A dropdown menu allows selecting a method: 'IP Ranges or Domain'. Two tables are provided for specifying computers: 'IP Range' and 'Domain'. The 'IP Range' table has columns for 'IP Range' and 'User', and contains one entry: '10.220.201.1-10.220.201.253'. The 'Domain' table has columns for 'Domain', 'User', 'Discovery Scan Type', and 'Excluded', and is currently empty. Below the tables are 'Run Scan' buttons. The 'Check computers using the following scans' section includes checkboxes for 'SQL Server Resolution Service', 'Service Control Manager', 'WMI' (checked), and 'Windows Registry'. There is also a 'TCP Probe' checkbox and a text input field for 'Ports to use during TCP Probes (for SQL Discovery Only - does not include BI)' with the value '1433,2432'. The 'Configure BI Services' section has a checked checkbox for 'Include Discovery of BI Services in Scans'. The 'All scan types' section includes a 'Scan configuration for all scan types' section with a link to 'Manage Discovery Credentials', and checkboxes for 'Enabled FQDN comparison for Discovered Instances', 'Log into SQL instances' (checked), 'Only show instances whose SQL Server version can be validated', and 'Only show instances discovered by at least two methods'. 'Cancel' and 'Save' buttons are at the bottom right.

Add IP address ranges for discovery

Use this section to specify those IP address ranges where IDERA SQL Inventory Manager will run scheduled discovery jobs. Users with large environments may choose to exclude certain domains for ad hoc or scheduled scans. These domains are excluded from all scans, whether computer, browser, ODBC, or BI Services.

On this section you can:

- Click **Add** and enter the IP address ranges that you want IDERA SQL Inventory Manager to take into account for discovery jobs. You need to specify the type of account that IDERA SQL Inventory Manager will use to gather host computer information. Select **Enable** on those IP address ranges where IDERA SQL Inventory Manager will run the scheduled jobs.
- Click **Edit** to change the IP address ranges you entered before to edit their credentials, the IP range information, or enable/disable them for scheduled jobs.
- Click **Remove** to delete any available IP address ranges.
- Additionally, you can select those IP addresses where you want to run an immediate scan. After selecting your IP addresses, click **Run scan Now**.

Add Domains for discovery

You can **Edit/Remove** the domains you entered before. You can also select those domains that you want to scan immediately by clicking **Run scan now**. To add a domain click **Add** on the Domain section.

The Discovery Center Options allows you to add domains for discovering SQL Server instances. Go to the Domain section, click **Add**, and specify DNS Name, the domain name with the account that will be used to connect to this domain (User and Password). Select **Enable this rule/scan as part of the scheduled computer scan** if you want IDERA SQL Inventory Manager to use the domain for running scheduled jobs.

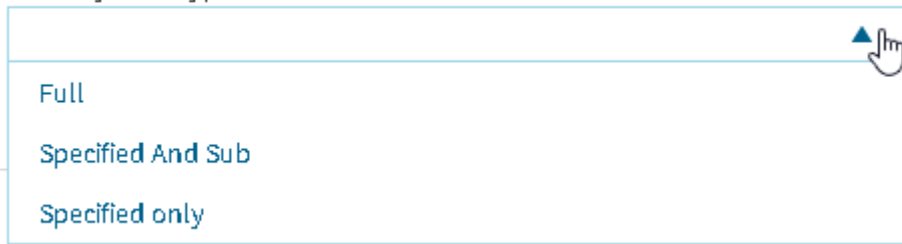
Exclude

If you exclude a parent domain then all its children are also excluded from scan.

If you exclude a domain which is a subdomain of an included domain, then all the excluded domain's children are excluded from scan.

Discovery Scan type

Discovery Scan Type



There are three types of scan available:

Full

The scan runs through all domains, sub-domain, and other trusted domains.

Specified And Sub

The scan runs through the specified domain and its sub-domains.

Specified only

The scan only runs through the specified domain.

Specify alternate credentials to use during the scan

IDERA SQL Inventory Manager allows you to specify multiple sets of credentials to attempt to use during instance discovery. Click **Manage Discovery Credentials** to add one or more user accounts to attempt to connect to an instance. List the credentials in the order in which you want IDERA SQL Inventory Manager to use.

Configure BI Services

When this option is enabled SQL Inventory Manager discovers both instances and BI services, the discovery of BI services is only possible when there's an specified IP range or domain and a scan type.

Enable FQDN

Enable this option to use FQDN as part of the discovery process.

Specify scan methods and display options

Choose the methods you want to use when scanning each computer for SQL Server instances. IDERA SQL Inventory Manager allows you to choose from:

- SQL Server Resolution Service
- Service Control Manager
- WMI
- Windows Registry
- TCP Ports

You can select more than one scan method.

When you select TCP Probe, you have to specify the ports that IDERA SQL Inventory Manager will use to scan. Not that TCP ports are only used for SQL Server instances discovery and does not include BI Services discovery.

If you want to include BI Services in scans, check **Include Discovery of BI Services in Scans**. This checkbox is selected by default. For more information about BI Services, see [Viewing BI Services](#)(see page 200).

Discovered Instances Options

Choose whether to Log into instances or not and the way you want IDERA SQL Inventory Manager to display the results

- **Log into SQL Instances**

When this option is enabled, SQL Inventory Manager attempts to connect to discovered SQL Server

Instances to gather information such as Version and Edition. Go to Manage Discovery Credentials to make sure valid credentials are present.

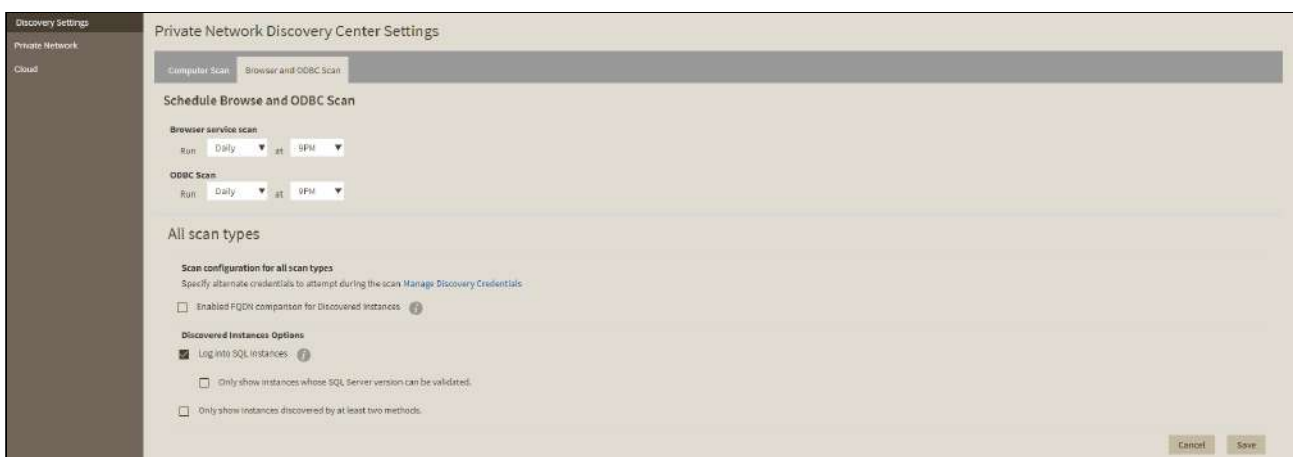
- **Only shows instances whose SQL Server version can be validated**
When this option is enabled, SQL Inventory Manager only displays Instances that can be validated.
- **Only show instances discovered by at least two methods**
When this option is enabled, SQL Inventory Manager only displays instances discovered with two different methods

✔ Take into account that when executing WMI scans on large IP ranges, a No buffer Available Space exception may occur. For more information about this, click [here](#). (see page 322)

Setting Browser and ODBC Scan discovery options

You can set your preferred schedule for Browser service and ODBC scans. IDERA SQL Inventory Manager uses the Browser service scan to run the general discovery of SQL Server instances.

You can set the schedule of your preference (Daily, Weekly) for any of the mentioned scans. If you choose a Daily schedule, then set the specific time for the discovery job. if you set a Weekly schedule, specify the days of the week and the time when the scan will be performed.



Specify alternate credentials to use during the scan

IDERA SQL Inventory Manager allows you to specify multiple sets of credentials to attempt to use during instance discovery. Click **Manage Discovery Credentials** to add one or more user accounts to attempt to connect to an instance. List the credentials in the order in which you want IDERA SQL Inventory Manager to use.

Discovered Instances Options

Choose whether to Log into instances or not and the way you want IDERA SQL Inventory Manager to display the results


- **Log into SQL Instances**
When this option is enabled, SQL Inventory Manager attempts to connect to discovered SQL Server Instances to gather information such as Version and Edition. Go to Manage Discovery Credentials to make sure valid credentials are present.
- **Only shows instances whose SQL Server version can be validated**
When this option is enabled, SQL Inventory Manager only displays Instances that can be validated.

- **Only show instances discovered by at least two methods**

When this option is enabled, SQL Inventory Manager only displays instances discovered with two different methods


4.7.9.2 How to manage auto registration options

If you want to register all SQL Server instances every time new ones are discovered, IDERA SQL Inventory Manager allows you to automatically register them as they are continuously discovered. This option also lets you to choose which SQL Server editions you want to exclude from auto registration.

 Auto Registration doesn't register cloud instances or databases automatically. You need to register cloud instances or databases manually through the **Add Instance Wizard**.

You can find the Auto Registration Options in the following sections:

- **Overview.** Click **Auto-Registration** on the Status sidebar.
- **Instances > Discovered** view. Click **Auto Registration Options** on the actions items bar.
- **Administration.** Click Auto Registration Options in the Discovery section.

 IDERA SQL Inventory Manager does not register instances that were discovered before turning on this option and does not register more instances than the number available for your license.

The Auto Registration Options window opens. Select **Enable Automatic Registration of newly discovered SQL Server instances**. On this window IDERA SQL Inventory Manager allows you to exclude the following editions:

- Enterprise
- Business Intelligence
- Standard
- Web
- Developer
- Express

Auto Registration Options ✕

Enable Automatic Registration of newly discovered SQL Server instances

Exclude instances running the following editions from auto registration

Enterprise Business Intelligence Standard

Web Developer Express

Any other version

Unknown editions (usually means we couldn't connect to SQL Server)

Cancel
Save

Additionally, you can select **Any other version** when you only want the previous options to be taken into account for registration and you want to exclude any other editions.

Choose **Unknown editions** to exclude registering those SQL Server instances that IDERA SQL Inventory Manager cannot connect to.

When you enable Auto Registration, IDERA SQL Inventory Manager automatically registers newly discovered instances but it does not assign them owner, location, or any other tags; additionally, they are all registered using IDERA SQL Inventory Manager service credentials. You can later add or change this information individually from the [Editing properties](#)(see page 271) window or by editing several instances at once from the **Instances** view (Managed and SQL Licensing views), for more information refer to [Managed instances](#).(see page 203)

 **Warning**

Take into account that unsupported SQL Server versions are not auto registered.

 **Tip**

If you want to get the latest discovered instances, you can trigger the instance discovery job by clicking **Discover Database Instances** on the same section.

4.7.9.3 How to manage discovery of new database instances

If you want to get the latest discovered instances, you can trigger the instance discovery job by clicking **Discover** located on the **Discovery** section of the **Administration** view. You have the following available options for discovery.

On-Premises

- **Discover Instances Browser Service** - Lets you discover instances by using "System.Data.Sql.SqlDataSourceEnumerator" which enumerates all available SQL Server instances within the local network.
- **Discover Instances Odbc** - Lets you discover instances using "odbc32.dll" which gets the instances list from the system's registry data.

Cloud

- **Discover Cloud Instances/Databases** - Lets you discover instances/databases hosted on Amazon or Azure.

From the moment you enable one or all of these options, IDERA SQL Inventory Manager begins registering newly discovered instances.



Registration limited by license

IDERA SQL Inventory Manager does not register more instances than the number available for your license.

When you enable this option, IDERA SQL Inventory Manager automatically registers newly discovered instances but it does not assign them owner, location, or any other tags; additionally, they are all registered using IDERA SQL Inventory Manager service credentials. You can later add or change this information individually from the [Editing properties](#) (see page 271) window or by editing several instances at once from the Instances view, for more information refer to [Managed instances](#). (see page 203)

4.7.9.4 How to manage discovery credentials

IDERA SQL Inventory Manager allows you to specify alternate credentials to use during the discovery process in case the original credentials are not valid. **Manage Discovery Credentials** lets you enter multiple discovery credentials and specify the order in which you want IDERA SQL Inventory Manager to attempt to use when connecting to a server.

To configure these options, go to **Manage Discovery Credentials** on the **Administration** tab.

The **Manage Discovery Credentials** window opens and displays a list of credentials that IDERA SQL Inventory Manager should use during discovery when attempting to connect to an instance. Credentials are used in the order in which they display, so make sure that the credentials appear in the proper order. To move a set of credentials, check that line, and then click **Move Up** or **Move Down** from the action menu.

Manage Discovery Credentials ✕

Specify multiple credentials to attempt during discovery. Use Move Up or Move Down to adjust the order in which the credentials will be attempted. Be sure to select Multiple Credentials in Discovery Settings in order to use this list.

Add Change Password Remove Move Up Move Down

| <input type="checkbox"/> Login Name |
|---|
| <input type="checkbox"/> DevLab01\Admin |
| <input type="checkbox"/> DevLab02\Admin |

2 Total 4 per page |<< 1 / 1 >>|

Cancel Save

Add credentials for discovery

The Manage Discovery Credentials window allows you to add credentials for discovering SQL Server instances. Click **Add** and IDERA SQL Inventory Manager displays the Add Discovery Credentials dialog box. Type the user name and password, confirm the password, and then click **Save**.

Change credentials password

Select one or more sets of credentials when you need to change a password. IDERA SQL Inventory Manager changes the password for all checked credentials. Click **Change Password** in the action menu, and IDERA SQL Inventory Manager displays the Change Password dialog box. Make the appropriate changes, and then click **Save**.

Remove credentials

If you want to remove a set of credentials from IDERA SQL Inventory Manager, select the appropriate set or sets of credentials, and then click **Remove**. Verify that the correct credentials are displayed in the confirmation message, and then click **Yes**.

4.7.9.5 Viewing discovery status

The IDERA SQL Inventory Manager displays a read-only log of all the actions and events occurring during the instance discovery process. These events include:

- Discovery started, including type of scan
- Discovery completed, including type of scan and the total number of systems scanned
- Status message for each 100 systems scanned
- Status message when a new SQL Server instance is discovered, including the instance name, discovery method, and user account name used
- Any errors encountered during discovery
- Any password failures encountered during discovery
- All auto-registration activity

To view this log, go to **Discovery Status** on the **Administration** tab.

For each activity, IDERA SQL Inventory Manager displays a timestamp of the event as well as a message corresponding to the type of event that occurred. The Discovery Status log displays only the last 7 days of activity.

| Date | Message |
|-----------------------|--|
| Apr 21, 2017 12:16 PM | Discovery Started (Network Scan) |
| Apr 21, 2017 12:16 PM | Discovery Started (Active Directory) |
| Apr 21, 2017 12:16 PM | Discovery Completed (Network Scan) – 0 Systems Scanned |
| Apr 21, 2017 12:16 PM | Discovery Started (Browser Service) |
| Apr 21, 2017 12:16 PM | Discovery Started (Odbc) |
| Apr 21, 2017 12:16 PM | Discovery Completed (Active Directory) – 0 Systems Scanned |
| Apr 21, 2017 12:16 PM | Discovery (Odbc) Error: Failed To Discover Default Instances. An Item With The Same Key Has Already Been Added. For User SIMPSONS\Administrator. |
| | SQL Server Instance AHT-2012R2-002\SQL2014_CS Discovered On Server AHT |

3816 total rows 50 per page 1 / 77

Close

4.7.10 How to manage custom inventory fields

IDERA SQL Inventory Manager includes a feature that lets you add custom inventory fields to your servers, instances, and databases to allow for easier identification. When applied to an instance, this information appears in the Instance Summary section of the Instance Details view. For more information about changing the value(s) of a custom field, see [Information available on Instance Details](#) (see page 245). When applied to a database, this information appears in the Database Details window.

i Users who create or manage these fields must be administrators within IDERA SQL Inventory Manager. Product Users can edit the values of the custom inventory fields for the instances to which they have access.

The Custom Inventory fields section on the Administration view allows you to manage the complete list of custom fields for all your environment.

Manage Custom Inventory Fields ✕

Specify custom inventory fields to attach to SQL Server instances, databases and servers.
Inventory fields may be one of three types: Open Ended, Yes/No or Picklist.

Add
Remove
Edit

| | Level | Field Name | Type | Properties |
|--------------------------|--------|---------------|------------|------------------|
| <input type="checkbox"/> | Server | TestDB | Yes/No | Default: Yes |
| <input type="checkbox"/> | Server | Special Notes | Open Ended | Default: (Empty) |
| | | | | |

2 Total per page

⏪ ⏩ 1 / 1 ⏪ ⏩

Close

4.7.10.1 Add a new custom inventory field

1. In IDERA SQL Inventory Manager Administration, click **Manage Custom Inventory Fields**. IDERA SQL Inventory Manager displays the Manage Custom Inventory Fields window.
2. Click **Add**. IDERA SQL Inventory Manager displays the Add Inventory Field dialog box.
3. Type the name for the new inventory field. Names must be less than 30 characters and this field cannot be empty.
4. Select the element level, whether **Server**, **Instance**, or **Database**.
5. Select the data type, whether **Open Ended**, **Yes/No**, **Picklist**, or **Date**.

- **If you select *Open Ended***, use the **Default Contents** field to type the information that you want to appear by default on all the instances, servers, or databases until a user changes the value through editing. If the default is a null or blank string, the Properties column of the Manage Custom Inventory Fields window displays **Default: (empty)** once you save this inventory item. The default value on the field level is empty until a user enters a value. This field is limited to 250 characters.
- **If you select *Yes/No***, select whether you want **Yes** or **No** to appear as the default value.
- **If you select *Picklist***, use the **Options** field to list the items you want available to the user when they select this inventory item. Add only one option per line. This field is limited to 100 characters. Note that the first line is the default option which displays **(Default)** next to the item in the **Properties** column once you save this inventory item. Note that the default value is populated for the field for all servers, instances, or database depending on the field level that was selected.
- **If you select *Date***, use the **Date Picker control** to choose a date.

6. Click **Save**.

4.7.10.2 Edit a custom inventory field

Editing a custom inventory field lets you rename the field or change the options for the selected data type.

To edit a custom inventory field, select the checkbox next to the field you want to edit, and then click **Edit**. Note that you can only edit one custom inventory field at a time.

If you attempt to delete an item in the Options field and that item is assigned to a server, instance, or database, you can only change the option name and cannot delete the data. If you still want to delete that option, remove the assignment of that option from the server, instance, or database in use, and then re-attempt to delete that option.

You can edit the inventory field name and value, but cannot change the level and type. If you change the default value, the value is not updated for existing fields unless you cleared the value before making the update. From this point on, the default content is populated with the new value for new instances, servers, or databases depending on what field level is selected.

Make the appropriate changes, and then click **SAVE**.

4.7.10.3 Remove a custom inventory field

To remove one or more custom inventory fields:

1. In the Manage Custom Inventory Fields window, select the checkbox next to the field(s) you want to delete, and then click **Remove**. IDERA SQL Inventory Manager displays a warning message that requires a confirmation whether you want to remove the selection. Click **Yes**. IDERA SQL Inventory Manager deletes the field(s) and users can no longer use those fields. **If you did not mean to delete the selected fields**, click **No**.

4.7.10.4 Change a custom inventory field value on an instance

Your custom inventory fields are applied to the servers, instances, and databases automatically.

4.8 Manage Virtual Hosts

4.8.1 Managing Host Servers

The **VM Configuration** dialog allows you to Manage Host servers and link instances. You can access the **VM Configuration** dialog on the **Administration** tab under the **VM Configuration** section.

You can view the following information on the **Host Server** section:

Connected: Indicates whether the host server is connected or not.

User Added: The user account used to connect to and gather information from host servers.

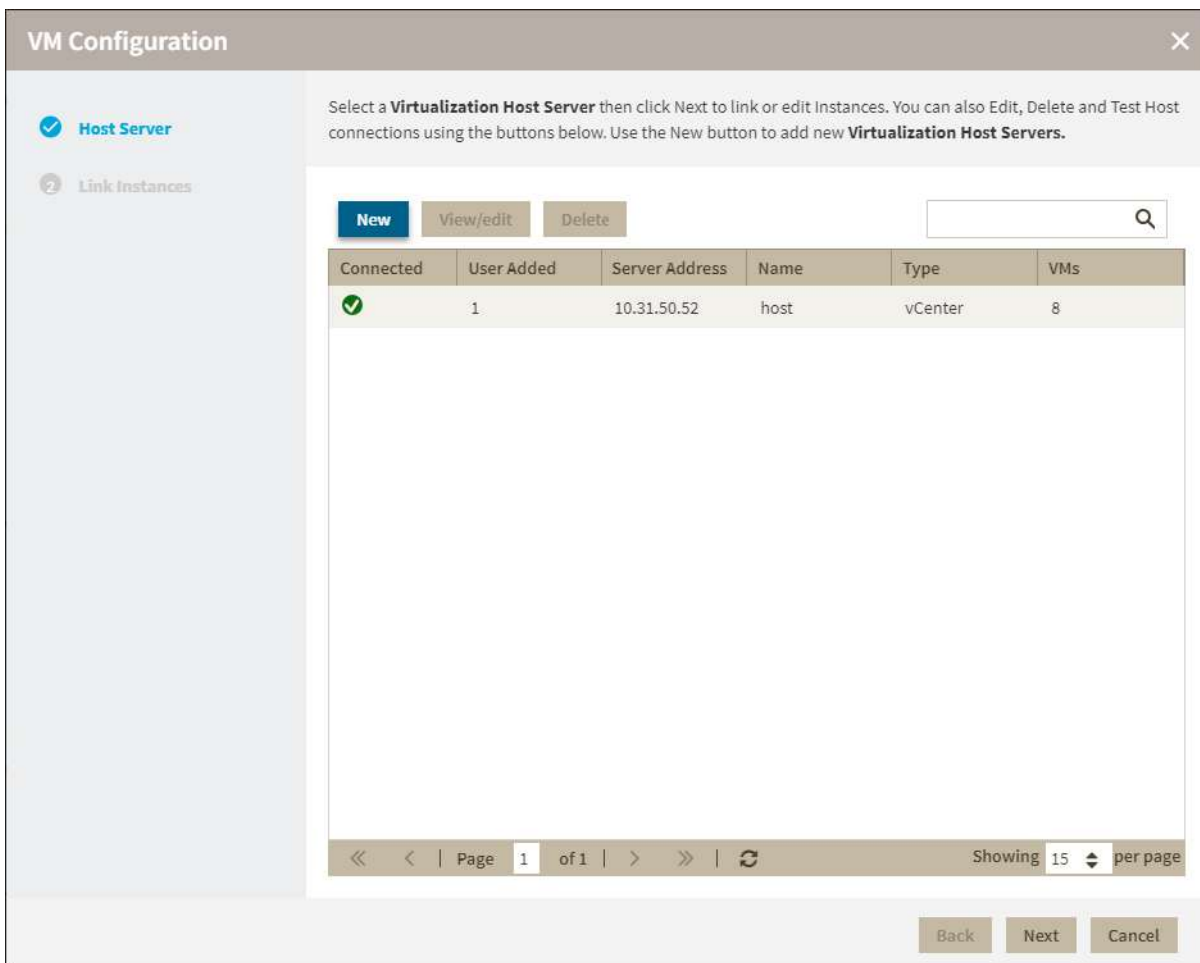
Server Address: The address of the Host Server

Name: The name of the host server.

Type: The type of host server

VMs: The number of Virtual Machines hosted on the server.

Select a Host server then click Next to Link or Edit Instances



The screenshot shows the 'VM Configuration' dialog box. On the left, there are two tabs: 'Host Server' (selected) and 'Link Instances'. The main area contains a table of host servers. Above the table are buttons for 'New', 'View/edit', and 'Delete', along with a search box. Below the table is a pagination bar showing 'Page 1 of 1' and 'Showing 15 per page'. At the bottom right, there are 'Back', 'Next', and 'Cancel' buttons.

| Connected | User Added | Server Address | Name | Type | VMs |
|-----------|------------|----------------|------|---------|-----|
| ✓ | 1 | 10.31.50.52 | host | vCenter | 8 |

4.8.1.1 Adding a New Host Server

1. Click **New**.
2. On the **Host Server Configuration** dialog, fill the required fields:
 - **Server Address:** The address of the host server you want to register.
 - **Name:** A name for the host server you want to register.
 - **User:** A user account with enough privileges to monitor and query system information.
 - **Password:** A valid password for the specified user.
 - **Type:** Choose if the host is either vCenter or Hyper-V.
3. Click **Test** to validate the information you entered.

The screenshot shows a dialog box titled "Virtualization Host Server Configuration". It contains the following fields and values:

- Server Address: 10.31.50.52
- Server Name: Vhost
- User: admin
- Password: *****
- Type: vCenter

At the bottom of the dialog, there are three buttons: "Test", "Cancel", and "Save".

4.8.1.2 Editing and viewing a Host Server details

1. Select the host server.
2. Click **View/Edit**.
3. On the **Virtualization Host Server Configuration**, you can view or edit the following fields:
 - **Server Address:** The address of the host server you want to register.
 - **Name:** A name for the host server you want to register.
 - **User:** A user account with enough privileges to monitor and query system information.
 - **Password:** A valid password for the specified user.
 - **Type:** Choose if the host is either vCenter or Hyper-V.

4.8.1.3 Deleting a Host Server

- Select the host server you want to delete from the list of managed host servers.
- Click **Delete**.

4.8.2 Linking or editing instances

To link or edit instances, select a Host server on the **Host Server** section and click **Next**.

You can view the following information on the **Linking Instances** section:

Linked: Whether an instance is linked or not to a host server.

Instance Name: The instance's name.

Virtualization: A name assigned to a host server on SIM.

Virtual Machine: The name of a virtual host.

User Added: The number of users added.

Type: The type of virtualization either v-Center or Hyper-V.

Computer Name: The host server name

The screenshot shows the 'VM Configuration' window with the 'Link Instances' section active. The interface includes a search bar and a table of instances. The table has columns for 'Linked', 'Instance Name', 'Virtualiz...', 'Virtual M...', 'User Add...', 'Type', and 'Compute...'. Each row represents an instance with a checkbox for linking, a green link icon, and an edit icon.

| <input type="checkbox"/> | Linked | Instance Name | Virtualiz... | Virtual M... | User Add... | Type | Compute... | |
|--------------------------|--------|-------------------|--------------|--------------|-------------|---------|------------|--|
| <input type="checkbox"/> | | AUT-SQLBI-110 | host | AUT-SQL... | 1 | vCenter | AUT-SQL... | |
| <input type="checkbox"/> | | MB-VISTA | host | MB-VISTA | 1 | vCenter | MB-VISTA | |
| <input type="checkbox"/> | | PUL-HT-W7X86 | host | PUL-HT-... | 1 | vCenter | PUL-HT-... | |
| <input type="checkbox"/> | | SF-TEDDY | host | SF-TEDDY | 1 | vCenter | SF-TEDDY | |
| <input type="checkbox"/> | | WIN10SQL17 | | WIN10S... | | | WIN10S... | |
| <input type="checkbox"/> | | AUT-SQLBI-110\... | host | AUT-SQL... | 1 | vCenter | AUT-SQL... | |
| <input type="checkbox"/> | | AUT-SQLBI-110\... | host | AUT-SQL... | 1 | vCenter | AUT-SQL... | |
| <input type="checkbox"/> | | DMSQL10\DBS1 | host | DMSQL10 | 1 | vCenter | DMSQL10 | |
| <input type="checkbox"/> | | DMSQL10\DBS10 | host | DMSQL10 | 1 | vCenter | DMSQL10 | |
| <input type="checkbox"/> | | JS-XW7S8\SQL2... | host | JS-XW7S8 | 1 | vCenter | JS-XW7S8 | |
| <input type="checkbox"/> | | T-MSSQL-11\BI_... | | T-MSSQ... | | | T-MSSQ... | |
| <input type="checkbox"/> | | WIN2012-QA-VM... | host | WIN201... | 1 | vCenter | WIN201... | |
| <input type="checkbox"/> | | AUT-SQLCLUSTE... | host | AUT-SQL... | 1 | vCenter | AUT-SQL... | |

Navigation: Page 1 of 1, Showing 15 per page. Buttons: Back, Submit, Cancel.

4.9 Add SQL Server instances

In order to manage an instance, access its details, and add it to your monitored environment, you need to register it with IDERA SQL Inventory Manager. This section helps you register one or more instances with IDERA SQL Inventory Manager.

You can find the **Add SQL Server Instance** option on the following views:


- **Overview.** Located in the top-right section of the Instances table.
- **Instances.** Located in the action items bar in each of the Managed, SQL Licensing, Decommissioned, Discovered, Ignored, and Ignored tabs.
- **Administration.** Located in the Instances section.

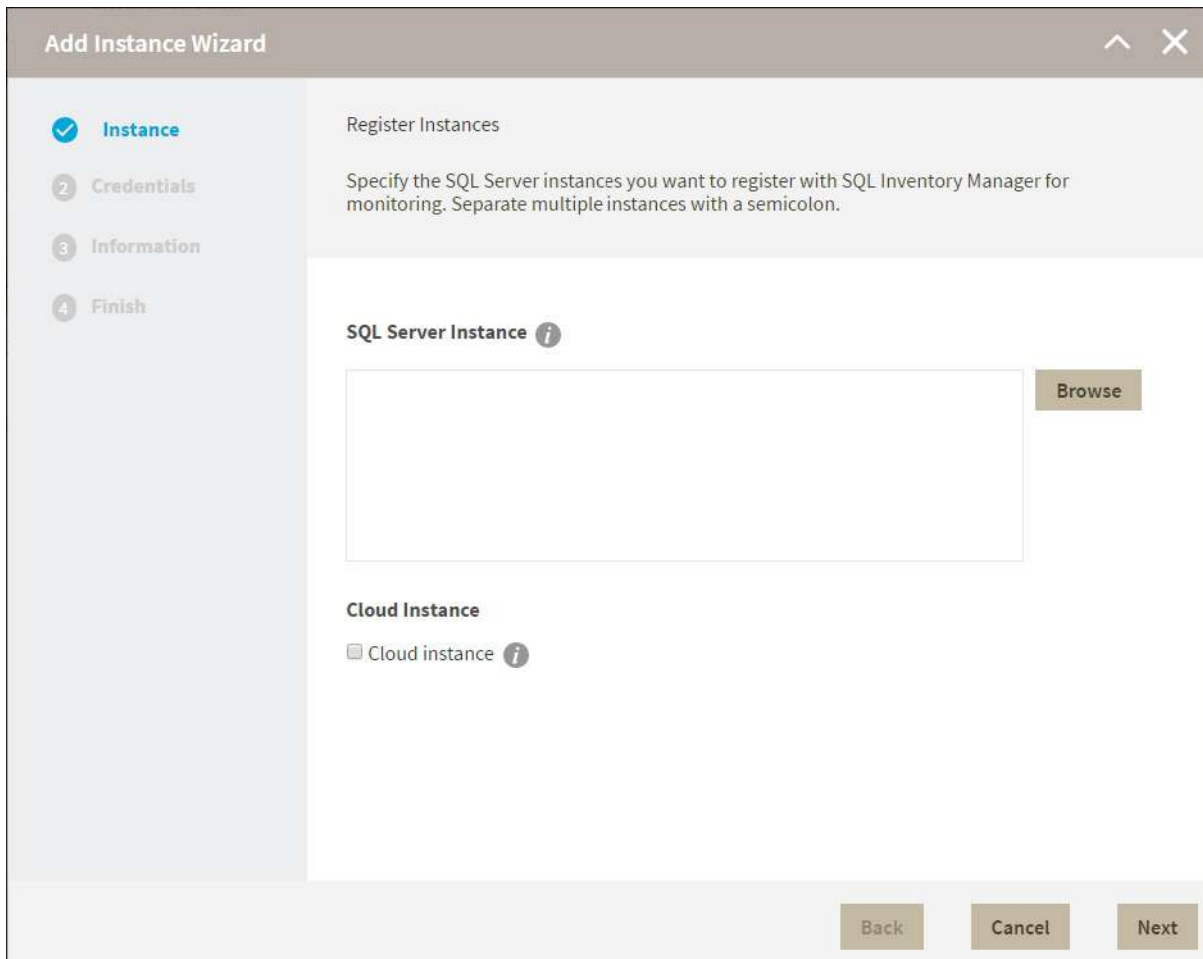
The Add Instance Wizard contains the following four sections:

4.9.1 1. Instance

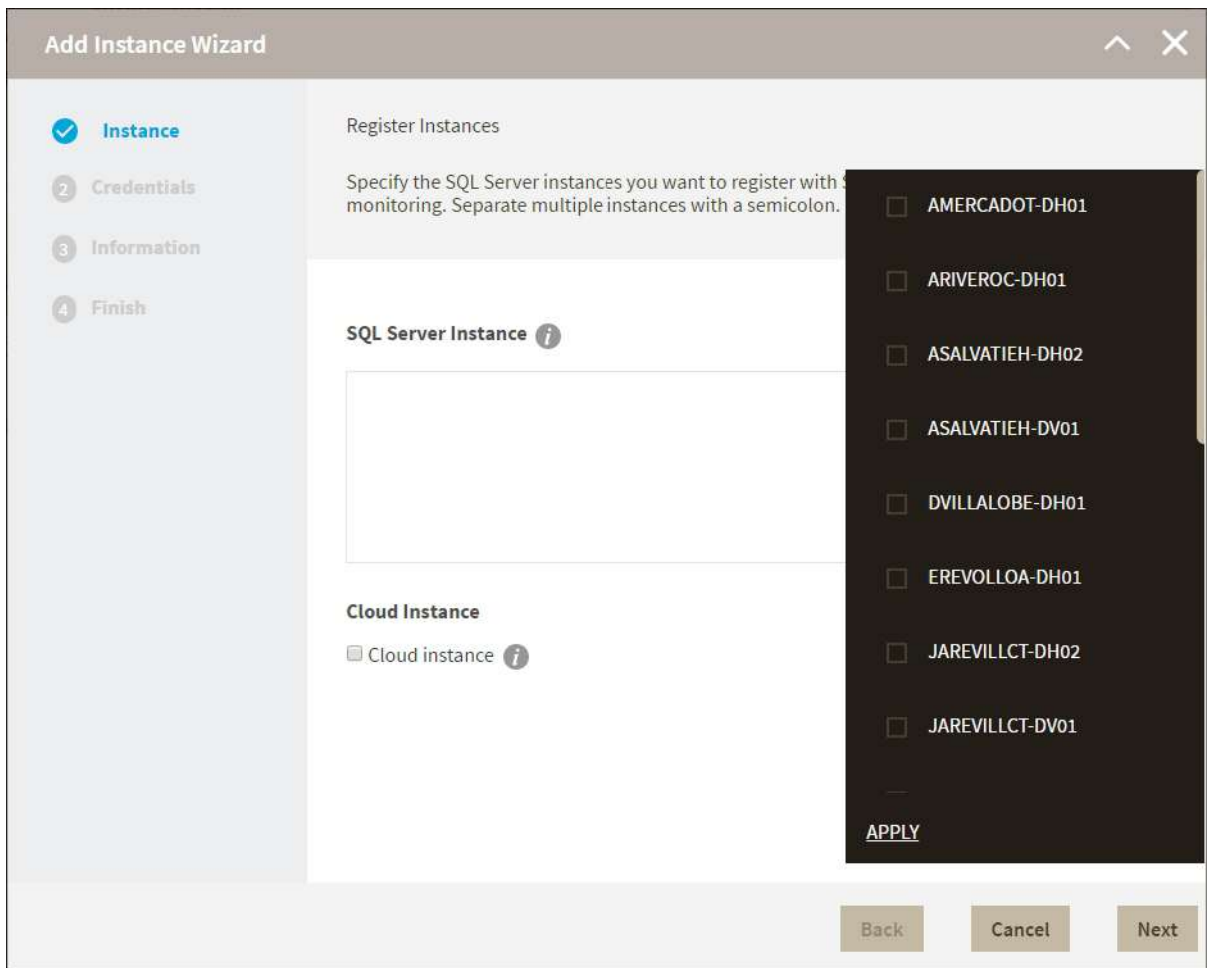
To add an instance

1. Type the name of instance or instances you want to register in the **SQL Server Instance** box. Use a semicolon to separate multiple instances. Check **Cloud Instance** if you want to search for Cloud-based instances.

 When you select instances on the **Discovered** or **Ignored** Instances views, the wizard already adds them to this box.



Use the **Browse** button to access a list of discovered instances that are not yet registered with SQL Inventory Manager. Check the box next to the instances you want to add, and then click **Apply**.



- Click **Next** to go to the next section.

4.9.2 2. Credentials

SQL Inventory Manager connects to registered SQL Server instances and their host computers to collect information. The collection service requires permissions to connect and gather information using the following types of connections:

- SQL connection credentials to perform queries against registered instances
- WMI connection credentials to gather data from the host computers



Tip

For more information about the minimum required permissions for these accounts, see [Required accounts and permissions](#)(see page 45).



Authorize WMI users and set permissions

If you want to know how to authorize WMI users and set permissions, see the Microsoft TechNet article, [Authorize WMI users and set permissions](#)³¹.

By default, SQL Inventory Manager connects using the SQL Inventory Manager Service Account. However, if you need to provide alternative credentials for any of these two connections, you can choose from the respective options on each section.

4.9.2.1 SQL Connection Credentials

- Specify the type of account that you want to use to access your SQL Server instance and collect information. If you do not want to use the **SQL Inventory Manager service account**, select a **Windows user account** or **SQL Server login account** from the **Account Type** list.

Add Instance Wizard

1 Instance
 2 **Credentials**
 3 Information
 4 Finish

Specify Connection Credentials

SQL Connection Credentials
 Specify the account to be used to connect to the SQL Server instance to collect availability, capacity and configuration data.

Account Type ⓘ
 SQL Inventory Manager service account ▼

WMI Connection Credentials
 Specify the account to be used to connect to the computers that host the SQL Server instance to collect performance and configuration data.

Account Type ⓘ
 SQL Inventory Manager service account ▼

Test Credentials ⓘ

Test credentials now

Back Cancel Next

- If you select a Windows user account or SQL Server login account**, type the associated user name and password. SQL Inventory Manager uses this account for SQL queries to gather availability and configuration data.

³¹ <https://technet.microsoft.com/en-us/library/cc787533%28v=ws.10%29.aspx>

Add Instance Wizard

1 Instance
2 **Credentials**
3 Information
4 Finish

Specify Connection Credentials

SQL Connection Credentials
Specify the account to be used to connect to the SQL Server instance to collect availability, capacity and configuration data.

Account Type ⓘ
Windows user account ▼

User name Password

WMI Connection Credentials
Specify the account to be used to connect to the computers that host the SQL Server instance to collect performance and configuration data.

Account Type ⓘ
SQL Inventory Manager service account ▼

Test Credentials ⓘ

Test credentials now

Back Cancel Next

- You can test the correctness of your credentials by clicking **Test Credentials**.

4.9.2.2 WMI Connection Credentials

- On this section, you can choose to use the **SQL Inventory Manager service account** or a **Windows user account** by selecting either from the **Account Type** list.

- If you choose to use a **Windows user account**, type the respective user name and password. This account allows you to access Windows configuration data of the computer that hosts the registered instance.

i IDERA recommends that you use the **Test Credentials** option to verify that SQL Inventory Manager can successfully monitor the newly registered instances.

4.9.3 3. Information

On this section you can specify additional information for your instances like **Owner**, **Location**, **Comments**, and **Tags**.

Although none of these fields are required, Owner, Location, Comments, and Tags provide a powerful method for grouping instances and databases to help you organize your resources. Use these options to view information such as database counts, size, or activity, grouped by these fields.

Use the **Owner** and **Location** drop-down lists to access the available options.

To add tags to an instance, you can do one of the following:

- Click any of the suggested **Popular Tags** on the right side of the window. The tag appears now on **Current Tags** on the left.
- You can click **See All Tags** on the top right section to display all available tags.

- If you want to **Add a New Tag**, type the name in the bottom box, and then click **ADD**. The new tag is added to the **Current Tags** list.



- The tag name must begin with an upper or lowercase alphanumerical character.
- Your tag name must have a maximum length of 20 characters.
- Only the following special characters are valid for tags: ! # @ () ' . : - _ and embedded spaces.



Refer to the [Managing tags](#)(see page 153) section for more guidance on how to add, view, edit, or delete tags.

4.9.4 4. Finish

On this section, you can review your Instance Registration Details such as: instance name, SQL Connection Credentials, WMI Connection Credentials, Owner, Location, Comments, and Tags.

To change any of these registration details you can do one of the following:

- You can click any of the title sections (INSTANCE, CREDENTIALS or INFORMATION) and go directly to the place where you need to make the changes.

- You can click **PREV** to go back to the previous sections until you find the place where you need to make changes.

After you review your registration details click **FINISH**. IDERA SQL Inventory Manager begins to collect instances information after a few minutes of their registration and will continuously collect availability, performance, and configuration information from them and their host computers.

**Tip**

After registration, you can still change credentials, tags, and information settings on the **Edit Properties** option. Refer to [Editing instance properties](#)(see page 252) for more information.

4.9.5 About collection intervals

Collection intervals are predefined. You can see more information about collection frequency on the [What Health Checks are available in SQL Inventory Manager?](#) (see page 296)section.

You can also force data collection for an instance by selecting **Refresh Data** on the **Instance details** view. For more information, refer to [Viewing instance details](#)(see page 245).

4.10 Discovering new instances

IDERA SQL Inventory Manager continuously searches your network to find new SQL Server instances. To see newly discovered instances, go to the **Discovered** view on the **Instances** tab. IDERA SQL Inventory Manager shows you a list of those instances not yet monitored in your environment. From this view you can add or ignore instances.

**Note**

If you have the auto-registration option enabled, newly discovered instances will be automatically registered according to your settings in the [Auto registration options](#)(see page 130). Those instances that were discovered before this option was enabled will remain on the Discovered view.



IDERA SQL Inventory Manager does not discover instances hosted on Amazon Web Services or Azure. You must manually add these instances.

4.10.1 Actions available on the Discovered instances view

4.10.1.1 Ignoring instances

You can choose to ignore any of these discovered instances. For this purpose, mark the checkbox next to the instance you want to ignore, and click **Ignore** on the action items bar.

IDERA SQL Inventory Manager no longer shows the ignored instances on the Discovered view but adds them to the Ignored view.

4.10.1.2 Auto registration options

Use these options to automatically register SQL Server instances as they are discovered. On this dialog window you can choose which SQL Server editions you want to exclude from auto registration.

4.10.1.3 Discover instances

Use this option to start a job to discover instances. Take into account that this process may take some time to complete. When you select to discover instances, IDERA SQL Inventory Manager displays two options:

- **Discover Instances Browser Service** - lets you discover instances by using "System.Data.Sql.SqlDataSourceEnumerator" which enumerates all available SQL Server instances within the local network.
- **Discover Instances Odbc** - lets you discover instances using "odbc32.dll" which gets the instances list from the system's registry data.

4.10.1.4 Adding instances

If you want to register some of these instances, select the respective checkboxes of the instances you want to add, and then click **Add SQL Server Instance** on the action items bar.

IDERA SQL Inventory Manager opens the wizard for adding new SQL Server instances, and automatically adds the names of the instances you selected before. For more information on how to register SQL Server instances, go to [Adding SQL Server instances](#).(see page 139)



Tip

On the Discovered view, you can find the Microsoft SQL version and edition next to the instances status to help you decide which instances you want to add or ignore.

4.10.1.5 Login to SQL Instance

Log into SQL Instances to collect additional information such as version and edition. For this, mark the checkbox next to the instance you want to log into and click **Log Into Instances** on the action items bar. In the Log in Dialog enter a valid User Name and Password for the selected SQL Instance.

4.10.1.6 Export reports

If you want to export the information displayed on the Discovered Instances view, go to the **Export** option, located on the action items bar, and select your preferred format (**PDF**, **XLS**, or **XML**) for exporting.

The screenshot shows the IDERA SQL Inventory Manager interface. The main view is 'INSTANCES', displaying a table of discovered database instances. The table columns are: SQL Server, Version, Edition, Discovered, and Discovery Methods. The table lists various instances, including DM-W2012-N1-HV, DM-W2012-N2-HV, DM_INSTALLTEST, and DNGUYENM. The interface includes a sidebar for filtering by Major Version and Minor Version, a 'Filtering' section with 'Load favorite' and 'Save as favorite' options, a 'View By' dropdown set to 'Discovered (262)', and a toolbar with 'Auto Register', 'Discover', 'Add', and 'Export' buttons. The bottom of the table shows '262 total instances' and '100 items per page'.

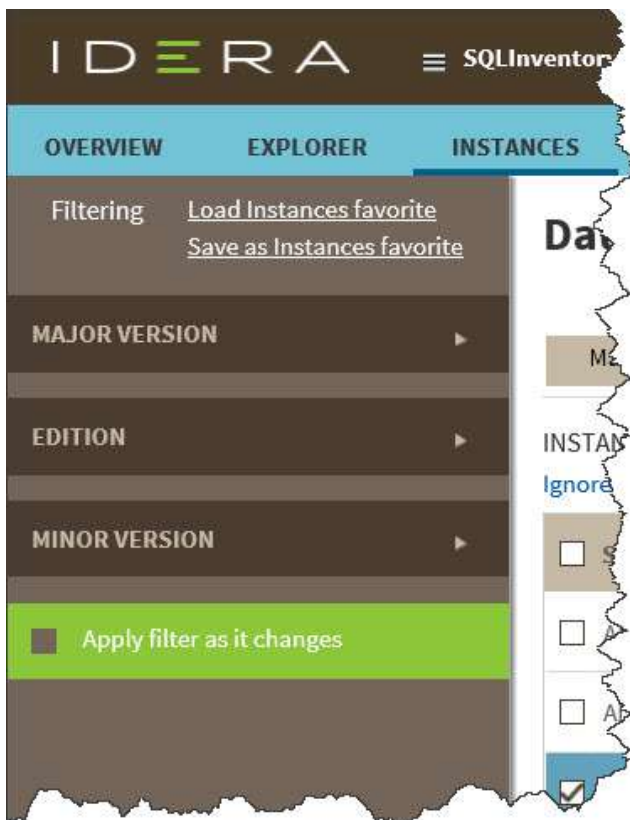
| SQL Server | Version | Edition | Discovered | Discovery Methods |
|-----------------------------|--|-----------------------------|-----------------------|-----------------------|
| DM-W2012-N1-HV,SQL2014_CS | SQL Server 2014 RTM (12.0.2000.8) | N/A | Apr 21, 2017 12:17 PM | Browser Service, Odbc |
| DM-W2012-N2-HV,SQL2014_CS | SQL Server 2014 RTM (12.0.2000.8) | Enterprise Edition (64-Bit) | Apr 21, 2017 12:16 PM | Browser Service, Odbc |
| DM_INSTALLTEST | SQL Server 2008 R2 RTM (10.50.1600.1) | Standard Edition (64-Bit) | Apr 21, 2017 7:00 PM | Odbc |
| DM_INSTALLTEST,MSSQLSERVER1 | SQL Server 2012 RTM (11.0.2100.80) | Enterprise Edition (64-Bit) | Apr 21, 2017 7:00 PM | Browser Service, Odbc |
| DNGUYENM | N/A | N/A | Apr 21, 2017 12:18 PM | Odbc |
| DNGUYENM10,SQL2014 | SQL Server 2014 SP2 (12.0.5000.0) | N/A | Apr 21, 2017 12:17 PM | Browser Service, Odbc |
| DNGUYENM10,SQL_SERVER_2016 | SQL Server 2016 RTM (13.0.1601.5) | N/A | Apr 21, 2017 12:17 PM | Browser Service, Odbc |
| DNGUYENM2012,SQL2012 | SQL Server 2012 SP2 (11.0.5058.0) | N/A | Apr 21, 2017 12:16 PM | Browser Service, Odbc |
| DNGUYENM2012,SQL2014 | SQL Server 2014 SP1 + Hotfix (12.0.4487.0) | Enterprise Edition (64-Bit) | Apr 21, 2017 12:16 PM | Browser Service, Odbc |
| DNGUYENM2012,SQL2016 | SQL Server 2016 RTM (13.0.1601.5) | N/A | Apr 21, 2017 12:16 PM | Browser Service, Odbc |
| DNGUYENM,DNGUYENM | SQL Server 2008 R2 RTM (10.50.1600.1) | Enterprise Edition (64-Bit) | Apr 21, 2017 12:17 PM | Browser Service, Odbc |
| DNGUYENM,SQL2005 | SQL Server 2005 SP3 (9.0.4035.0) | Enterprise Edition (64-Bit) | Apr 21, 2017 12:17 PM | Browser Service, Odbc |

4.10.2 Available options on the Discovered Instances view

On the left side of the Discovered Instances view you have the option for filtering instances by **Minor Version** or **Major Version**. If you want to filter by specific versions, select them from this section.

Creating a useful filter to "weed out" unnecessary information takes time but is important when managing large environments. As a result, you may want to save that filter for future use. IDERA SQL Inventory Manager now allows you to save filters for use in the Explorer and Instances views. Simply create the filter, and then click **Save as Explorer favorite** or click **Save as Instances favorite**, depending on which view you are in when creating the filter. To use that filter, click **Load Explorer favorite** or click **Load Instances favorite**.

Enable or disable the option **Apply filter as it changes** depending if you want to see the changes as you apply the filters, or if you prefer to select your filters first and see the results when you finish.



✓ **Tip**

IDERA SQL Inventory Manager displays the filters you select on the top section of your Discovered instances view under **Filtered by**. You can remove filters from this section too.

✓ **Tip**

You can set the number of instances you want IDERA SQL Inventory Manager to show per page, go to the **Display** option at the bottom of this view, type the number you want, and click **Refresh**.

4.10.3 Manage your discovery options

If you want to configure the discovery job, go to the Administration tab and click **Manage Discovery Options** on the Discovery section. On this dialog window you can specify not only those IP address ranges and domains where you want IDERA SQL Inventory Manager to perform the discovery job, but also you can choose which methods you want to use to search in each computer. You can schedule your discovery jobs, add IP address ranges and those domains that IDERA SQL Inventory Manager will use in discovery.

For more information on how to configure your manage discovery options, click [here](#).(see page 125)

i Access from the Dashboard

You can also access the **Discovered** instances section by clicking **New Instances** on the right sidebar of the overview. For more information, go to [Viewing information on the SQL Inventory Manager Overview](#). (see page 188)

4.11 Configuring email settings for alert notifications

IDERA SQL Inventory Manager can send email notifications for warning or critical conditions from your environment. To access this option, go to the **Administration** tab, and then click **Configure email (SMTP) settings**.

The Email Settings dialog box offers:

- Email Information
- Outgoing Mail Server Information
- Test Email Settings

Email Settings [X]

Email Information

Sender Address:

Reply To Address:

Message Footer:

Outgoing Mail Server Information

SMTP Server Address:

SMTP Server Port: Use an SSL encrypted connection

SMTP Server requires authentication

User name:

Password:

Test Email Settings

Recipient of test email:

4.11.1 Email Information

4.11.1.1 Sender Address

Enter the email address that IDERA SQL Inventory Manager will use as the sender of the emails notifications.

Reply To Address

You must specify a reply-to email address to receive replies from emails.

Message Footer

Enter the text that you want to appear in the footer of notifications.

4.11.2 Outgoing Mail Server Information

In order to send email notifications, you must specify the settings of an email server you want to use. You need to provide the following information:

4.11.2.1 SMTP Server Address

Enter the name or Internet Protocol (IP) address of your SMTP mail server.

4.11.2.2 SMTP Server Port

Enter the IP port that the SMTP mail server uses. The default SMTP port is 25.

4.11.2.3 Use an SSL encrypted connection

Select this check box to use an SSL encrypted connection to connect to the email server.

SMTP Server authentication

Select this checkbox if your SMTP server requires authentication, specify then a valid user name and password to access the email server.

4.11.3 Test Email Settings

You can use this section to test your email settings. For this purpose, enter the **Recipient of the test email**, and then click **Send test email**. IDERA SQL Inventory Manager sends a test email to the recipient you specify. You can verify this test email in the respective recipient account.

After you configure your email settings, you can subscribe to alerts. For more information about subscribing to alerts, see [Subscribing to Alerts](#)(see page 153).



Manage users

From the **Administration** tab, you can decide which users receive alerts. For more information about this feature, see [Managing subscriptions for all users](#).(see page 116)

4.12 Subscribing to Alerts

IDERA SQL Inventory Manager can send email notifications for warning or critical conditions from your environment, in order to receive these notifications you have to subscribe to alerts.

To subscribe, go to the **Administration** tab, and in the **Alert Emails** section, click **Subscribe to alerts**.

On the **Subscribe to Alerts** window, check the respective box and type the email address where you want to receive these notifications.

Note

If your email settings are not configured, IDERA SQL Inventory Manager displays **Email settings have not been configured yet. Click here to configure sending alert emails**. Click this option and fill the required fields. For more information about configuring settings, go to [Configuring email settings for alert notifications](#)(see page 151).

Manage users

You can also manage your subscriptions from the following sections:

- [Manage Users](#).(see page 116)
- [Manage Subscriptions For All Users](#). (see page 116)

4.13 Managing tags

Tags help you group or organize your instances and databases for better management. Create and apply a tag such as "Disaster Recovery" to identify all your registered instances and databases that are vital to your disaster recovery plan, and have quick access to views and details from this group.

The following types of tags are available in this product:

- **Global tags.** Allow you to use the same tag across all IDERA SQL products integrated with IDERA Dashboard. Global tags are created in IDERA Dashboard or are imported from another IDERA product and made into a global tag through IDERA Dashboard.
- **Local tags.** Available only in the product in which they are created unless imported into IDERA Dashboard and converted to a global tag.

When you register an instance in an IDERA SQL product, you are given the option to associate that instance to an existing tag, or to create a new tag. You cannot assign tags to databases when adding an instance, but you can make this association when viewing instance details or database details.

Options available for tags include:

- Managing tags in IDERA Dashboard
- [Manage tags for a single instance](#)(see page 157)
- [Bulk edit tags for several instances](#)(see page 158)

4.13.1 Managing local tags

Local tags, available within a single IDERA product, are available by using one of the following paths to access the Manage Tags window:

- **Overview.** Click the pencil icon in the Tags section of the right sidebar.
- **Administration > Manage Tags.**

Below you can see the respective tabs and sections where you can find the **Manage Tags** option. Click the image to view full size.



In the Manage Tags window you can:

- View the number of instances and databases associated with a tag
- Add new tags
- Edit the list of instances and databases associated with a tag
- Delete tags



Tip

On the Manage Tags window, click the tag name to quickly access the Edit Tag dialog for that tag.

4.13.2 Add a new tag

Use the following steps to add a new tag.

1. In the Manage Tags window, click **Add**. IDERA SQL Inventory Manager opens the Add Tag window.
2. Type the name of the new tag you wish to add, or type several names separating them with a semicolon. Below the **Tag** field, IDERA SQL Inventory Manager displays a list of registered instances and databases in your environment.
3. Select the checkbox(es) for each instance and database you want to add to this tag, and then click **SAVE**.

✕
Add Tag

Tag:

Separate multiple tags with a semi-colon, for example tag1; tag2.

Instance Tags

| | SQL Server | Comments |
|--------------------------|-------------------------|----------|
| <input type="checkbox"/> | AUT-SQL-DEV-001 | |
| <input type="checkbox"/> | CMWIN2012R2-S5 | |
| <input type="checkbox"/> | ID1SQLMAUD0120\SQL2... | |
| <input type="checkbox"/> | PUL-CT-W7X64\SQL2012_CS | |
| <input type="checkbox"/> | SIM-WIN8X86 | |
| <input type="checkbox"/> | SMM- | |

Database Tags

| | SQL Server | Database | Comments |
|--------------------------|---------------|-----------------------|----------|
| <input type="checkbox"/> | AUT-SQLBI-110 | 70IderaDashboardRe... | |
| <input type="checkbox"/> | AUT-SQLBI-110 | IderaDashboardRepo... | |
| <input type="checkbox"/> | AUT-SQLBI-110 | IderaDashboardRepo... | |
| <input type="checkbox"/> | AUT-SQLBI-110 | IderaDashboardRepo... | |

204 total rows 4 per page 1 / 51

Cancel
Save

Warning

- The tag name must begin with an upper or lowercase alphanumeric character.
- Your tag name must have a maximum length of 20 characters.

4.13.3 Edit a tag

Editing a tag lets you rename the tag or change which instances or databases are associated with the tag.

To edit a tag, select the checkbox next to the tag you want to edit, and then click **Edit**. You can also access this option by clicking directly on the tag name. Note that you can only edit one tag at a time.

Make the appropriate changes, and then click **SAVE**.

✕
Edit Tag

Tag:

Instance Tags

| SQL Server | Comments |
|--|----------|
| <input checked="" type="checkbox"/> AUT-SQL-DEV-001 | |
| <input checked="" type="checkbox"/> ID1SQLMAUD0120\SQL2... | |
| <input type="checkbox"/> CMWIN2012R2-S5 | |
| <input type="checkbox"/> PUL-CT-W7X64\SQL2012_CS | |
| <input type="checkbox"/> SIM-WIN8X86 | |
| <input type="checkbox"/> SMM- | |

Database Tags

| SQL Server | Database | Comments |
|--|-----------------------|----------|
| <input type="checkbox"/> AUT-SQLBI-110 | 70IderaDashboardRe... | |
| <input type="checkbox"/> AUT-SQLBI-110 | IderaDashboardRepo... | |
| <input type="checkbox"/> AUT-SQLBI-110 | IderaDashboardRepo... | |
| <input type="checkbox"/> AUT-SQLBI-110 | IderaDashboardRepo... | |

204 total rows 4 per page
 ⏪ ⏩ 1 / 51 ⏪ ⏩

Cancel
Save

4.13.4 Delete Tags

Use the following steps to delete one or more tags.

1. In the Manage Tags window, select the checkbox next to the tag(s) you want to delete, and then click **Delete**. IDERA SQL Inventory Manager displays a warning message that requires a confirmation whether you want to delete the selection.
2. Click **Yes**. IDERA SQL Inventory Manager deletes the tag(s) and users can no longer use those tags. **If you did not mean to delete the selected tags**, click **No**.

When an instance is deleted, the mappings to its tags are also deleted, but not the tags because they may be used for other instances

4.13.5 Manage tags for a single instance

IDERA SQL Inventory Manager allows you to manage tags for a specific instance. When you access this option you can choose which tags you want to add or delete for the respective instance.

If you want to edit tags for a single instance, use one of the following options in IDERA SQL Inventory Manager:

- **Overview.** In the Instances section, click the name of the instance you want to tag. In the Instance Details view, click the pencil icon on the Tags section of the right sidebar.
- **Instances > Managed** view. Select your instance, and then click **Edit Tags** on the action items bar *OR* click the gear icon next to the instance, and then select **Edit Tags**.
- **Instances > SQL Licensing** view. Select your instance, and then click **Edit Tags** on the action items bar *OR* click the gear icon next to the instance, and then select **Edit Tags**.

IDERA SQL Inventory Manager opens a window for managing the instance tags. On this window you can:

- Type the name of a new tag, and then click **ADD**. SQL Inventory Manager adds the new tag to the list. You can add several tags at once by separating each name with a semicolon (;).
- Check or uncheck those tags you want to add or remove for this instance. Previously-added and newly-added tags are checked by default.

When you finish making your edits, click **APPLY**.

**Tip**

You can also remove tags by clicking the tag name on the sidebar without opening the Manage Tags window.

**Warning**

- The tag name must begin with an upper or lowercase alphanumeric character.
- Your tag name must have a maximum length of 20 characters.

4.13.6 Bulk edit tags for several instances

IDERA SQL Inventory Manager allows you to bulk edit several properties on your registered instances so you can easily apply changes on your environment. Editing tags is one of the options for performing bulk actions on your instances. You can choose to apply a new tag to a group of instances, for example, or delete a tag from selected instances.

If you want to bulk edit tags for more than one instance, use one of the following options in IDERA SQL Inventory Manager:

- **Instances > Managed** view. Select the instances, and then click **Edit Tags** on the action items bar *OR* click the gear icon next to any of the selected instances, and then select **Edit Tags**.
- **Instances > SQL Licensing** view. Select the instances, and then click **Edit Tags** on the action items bar *OR* click the gear icon next to any of the selected instances, and then select **Edit Tags**.

IDERA SQL Inventory Manager opens a window for bulk managing the tags. Tags that are common for all selected instances include a checked box. Tags that belong to any or several selected instances include a shadowed box.

On this window you can:

- Type the name of a new tag, and then click **ADD**. IDERA SQL Inventory Manager adds the new tag to the list. You can add several tags at once by separating each name with a semicolon (;).
- Check or uncheck those tags you want to add or remove for all of the instances in this edit.

When you finish making your edits, click **APPLY**.



Warning

- The tag name must begin with an upper or lowercase alphanumeric character.
- Your tag name must have a maximum length of 20 characters.

4.14 Managing users in SQL Inventory Manager

In order for users to access IDERA SQL Inventory Manager, you need to grant them access. Additionally, if they want to receive alert emails, you have to enable this option for each user and type the email addresses where they will receive these notifications.

To edit user details, such as the account name, product access, account role, alert subscriptions, email address, or instance permissions, go to either of the following options on the IDERA SQL Inventory Manager Administration tab:

- **Users > Manage Users**
- **Alert Emails > Manage Subscriptions For All Users**

On this window you can see a list of all registered users, their respective email addresses, and whether they are subscribed to alerts.

4.14.1 Edit User

This option allows you to edit the user name, change the role, modify the user's alert subscriptions, and change the email address to where they receive alerts. To edit a user account:

1. Either click the user account name, or check the appropriate box for the user account you want to edit, and then click **Edit User**. IDERA SQL Inventory Manager displays the Edit User dialog.

Edit User
✕

User Name:

Note: Enter user's Windows account using the form "domain\username".

Product: * Role: *

Alert Subscriptions

Receive SQL Inventory Manager alert emails for critical issues such as availability problems.

Email address


⚠ Email settings have not been configured yet. [Click here to configure sending alert emails.](#)

Access to SQL Server Instances

All Instances Select Specific Instance

| Per Instance Tag | Per Instance |
|-------------------|-------------------------|
| Instance Tag | Instance |
| 24x7 | AUT-SQL-DEV-001 |
| Business Critical | CMWIN2012R2-S5 |
| Business Hours | ID1SQLMAUD0120\SQL2012 |
| Development | PUL-CT-W7X64\SQL2012_CS |
| Disaster Recovery | SIM-WIN8X86 |
| Integration | SMM-ASTER\NAMEDCS_2008 |
| | SMM-PL-HEP-1\SQL2008SP2 |

2. Make the appropriate changes.
3. In the **Access to SQL Server Instances** area, select **All Instances** to allow this account to access all instances including any new instances in your environment. Select **Select Specific Instance**, and IDERA SQL Inventory Manager displays lists of tags and instances available to assign to this user account. Select the items you want to include.
4. Click **SAVE**.

 If you have not yet configured your email server settings, IDERA SQL Inventory Manager displays the message **Email settings have not been configured yet. Click here to configure sending alert emails.** Click this option to configure your settings. For more information, go to [Configuring your email settings for alert notifications](#)(see page 151).

4.14.2 Understanding user roles

IDERA common framework provides the functionality to add, edit, and delete users and groups while also managing their roles. SQL Inventory Manager leverages this user role functionality to allow you to easily manage the instance permissions associated with your accounts.


Topics that include steps on managing user accounts and their roles include:

- [How to manage users](#)(see page 99)
- [Managing users in the IDERA Dashboard](#)(see page 172)
- [Managing users in SQL Inventory Manager](#)(see page 160)
- [Managing users and their subscriptions](#)(see page 116)
- [User role permissions](#)(see page 161)

There are three roles available:

- Administrator
- User
- Guest

The Administrator role has privileges to access all instances. **If you assign the User or Guest role to a user account** , IDERA allows you to select whether you want to allow the user to access all SQL Server instances or a select few. Choose the Select Specific Instance option, and SQL Inventory Manager displays the **Per Instance Tag** and **Per Instance** lists, as shown in the following image. Select a tag, and the user has access to view all instances under that tag. Note that you can select a combination of tags and individual instances. Click the tag name to view a list of all instances under that tag.

 Granting permissions through tags applies to instance tags only. A database tag does not grant Guest users access to the host server unless that server also has that tag.

4.14.3 User role permissions

Use the following table as a guide to the available user roles and their permissions.

| IDERA SQL Inventory Manager View | Administrator role | User role | Guest role |
|----------------------------------|--------------------|-----------|------------|
| Overview | | | |

| IDERA SQL Inventory Manager View | Administrator role | User role | Guest role |
|--|---------------------------|--|--|
| Overview (View) | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Health Check Recommendations (View, export, hide, show details, refresh) | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Health Check Recommendations (Dismiss) | All instances | Only those instances to which the user has access | NOT ALLOWED |
| SQL Server instances (Add) | ALLOWED | ALLOWED | NOT ALLOWED |
| Tags displayed in sidebar | All tags | All tags applied to at least one instance to which the user has access | All tags applied to at least one instance to which the user has access |
| Instance Details view | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Explorer view | | | |
| Explorer (View) | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Filtering attributes (Tag/ Location/Owner/Version/ etc.) | ALLOWED | All tags applied to at least one instance to which the user has access | All tags applied to at least one instance to which the user has access |
| Instances view | | | |
| Instances list | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Filtering attributes (Tag/ Location/Owner/Version/ etc.) | ALLOWED | All tags applied to at least one instance to which the user has access | All tags applied to at least one instance to which the user has access |
| Instances > Managed or SQL Licensing tab | | | |

| IDERA SQL Inventory Manager View | Administrator role | User role | Guest role |
|---|---------------------------|---|---|
| SQL Server instances (Add) | ALLOWED | ALLOWED | NOT ALLOWED |
| Details (View) | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Refresh Data | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| Edit Properties | All instances | Only those instances to which the user has access | NOT ALLOWED |
| Edit Tags | All instances | Only those instances to which the user has access | NOT ALLOWED |
| Export | All instances | Only those instances to which the user has access | Only those instances to which the user has access |
| More Actions > Remove | All instances | Only those instances to which the user has access | NOT ALLOWED |
| More Actions > Disable Monitoring | All instances | Only those instances to which the user has access | NOT ALLOWED |
| Instances > Discovered tab | | | |
| Ignore | ALLOWED | Only those instances to which the user has access | NOT ALLOWED |
| Auto Registration Options | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Discover Instances | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Instances > Ignored tab | | | |
| Move to Discovered | ALLOWED | Only those instances to which the user has access | NOT ALLOWED |
| Administration view | | | |
| Manage Users | ALLOWED | | |

| IDERA SQL Inventory Manager View | Administrator role | User role | Guest role |
|------------------------------------|--------------------|-------------|-------------|
| Add SQL Server Instance | ALLOWED | ALLOWED | NOT ALLOWED |
| Import SQL Servers | ALLOWED | ALLOWED | NOT ALLOWED |
| Configure Email (SMTP) Settings | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Subscribe to Alerts | ALLOWED | ALLOWED | NOT ALLOWED |
| Manage Subscriptions for All Users | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Manage Health Checks | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Manage License | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Manage Tags | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Manage Discovery Options | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Auto Registration Options | ALLOWED | NOT ALLOWED | NOT ALLOWED |
| Discover Instances | ALLOWED | ALLOWED | NOT ALLOWED |

4.15 How to manage the Auto Registration Options

If you want to register all SQL Server instances every time new ones are discovered, IDERA SQL Inventory Manager allows you to automatically register them as they are continuously discovered. This option also lets you to choose which SQL Server editions you want to exclude from auto registration.

You can access the Auto Registration Options from the following views:

- **Overview.** Click **Auto-Registration** on the Status sidebar.
- **Instances** view > **Discovered.** Click **Auto Registration Options** on the actions items bar.
- **Administration** view. Click **Auto Registration Options** located on the **Discovery** section.



IDERA SQL Inventory Manager does not register instances that were discovered before turning on the **Automatic Instance registration** option and does not register more instances than the number available for your license.

The Auto Registration Options window opens. Select **Enable Automatic Registration of newly discovered SQL Server instances**. On this window IDERA SQL Inventory Manager allows you to exclude the following editions:

- Enterprise
- Web
- Business Intelligence
- Developer
- Standard
- Express

Additionally, you can select **Any other version** when you only want the previous options to be taken into account for registration and you want to exclude any other editions.

Choose **Unknown editions** to exclude registering those SQL Server instances that IDERA SQL Inventory Manager cannot connect to.

When you enable this option, IDERA SQL Inventory Manager automatically registers newly discovered instances but it does not assign them owner, location, or any other tags; additionally, they are all registered using IDERA SQL Inventory Manager service credentials. You can later add or change this information individually from the [Editing properties](#) (see page 271) window or by editing several instances at once on the **Instances** view (Managed and SQL Licensing views), for more information refer to [Managed instances](#). (see page 203)

✓ Tip

If you want to get the latest discovered instances, you can trigger the instance discovery job by clicking **Discover instances** on the same section

4.16 Managing Licenses

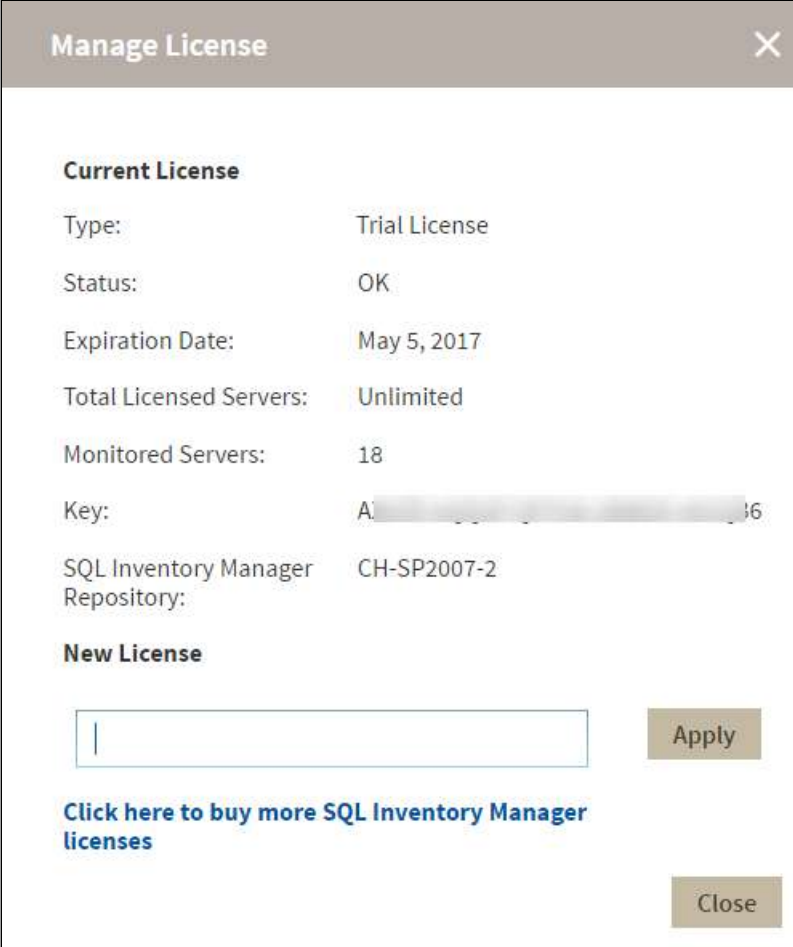
A license key is required to access all IDERA SQL Inventory Manager features. This license determines the number of SQL Server instances that you can monitor.

View your license status, add, or buy a new license key using the Manage License action. To access this option, go to the **Administration** tab, and click **Manage License** on the **Licensing** section.

IDERA SQL Inventory Manager opens a new window that displays information relevant to your current license such as type of license, status, expiration date, total licensed servers, license key, and IDERA SQL Inventory Manager repository.

If you want to add a new license key, type the key under the **New License** section, and click **Apply**.

If you need to buy another license, go to the [IDERA store](https://www.idera.com/buynow/onlinestore)³².



Manage License [X]

Current License

| | |
|-----------------------------------|------------------|
| Type: | Trial License |
| Status: | OK |
| Expiration Date: | May 5, 2017 |
| Total Licensed Servers: | Unlimited |
| Monitored Servers: | 18 |
| Key: | A: [REDACTED] ;6 |
| SQL Inventory Manager Repository: | CH-SP2007-2 |

New License

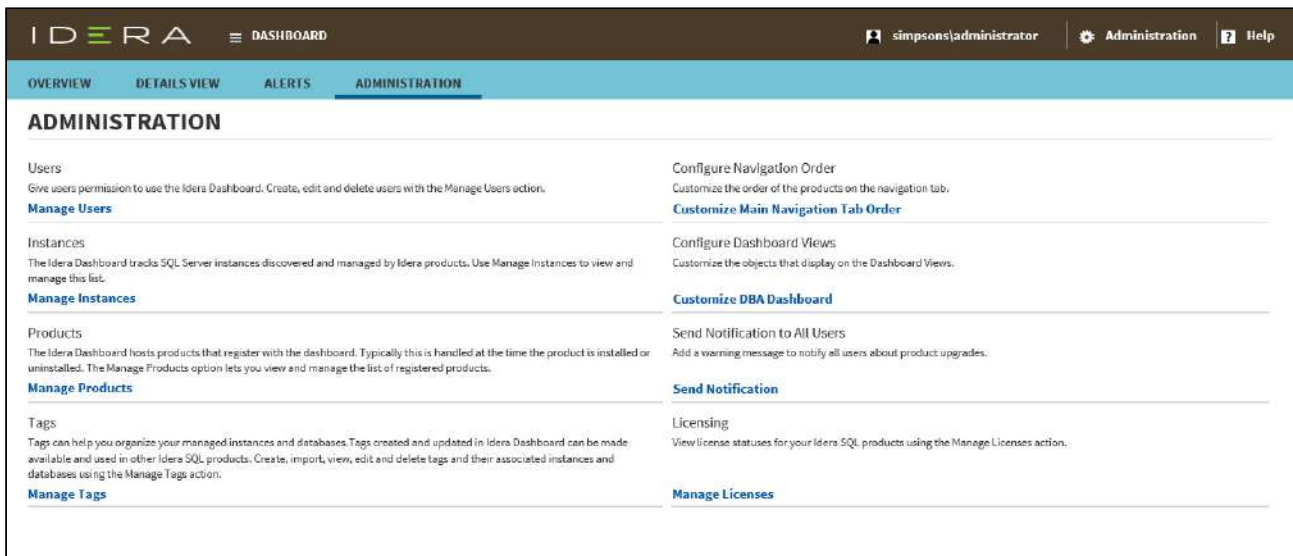
[Click here to buy more SQL Inventory Manager licenses](#)

³² <https://www.idera.com/buynow/onlinestore>

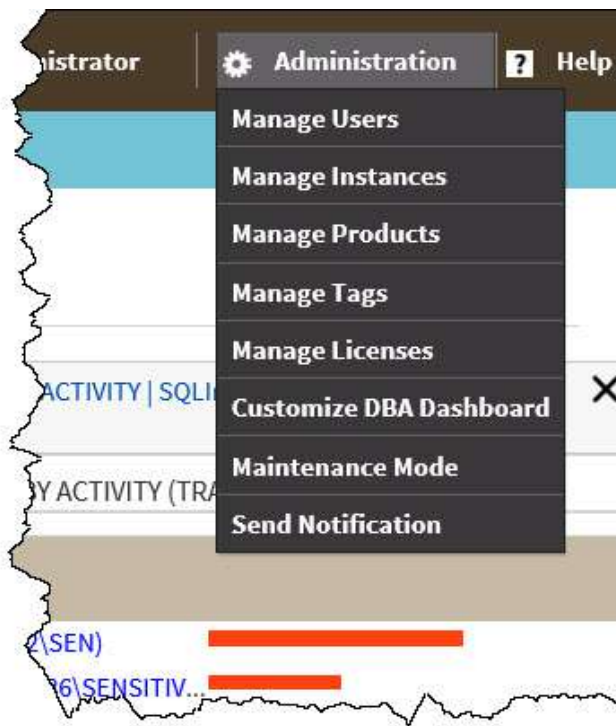
5 Navigate the IDERA Dashboard web console

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 Server instances and hosted databases all in a consolidated view, while providing users the means to drill into individual product overviews for details. The IDERA Dashboard supports multiple copies of each product installation. Click image to view full size.

In the IDERA Dashboard, all products show a common Administration tab, granted the logged-in user has administrator privileges. Selecting this tab displays the Administration view which hosts a range of options for performing administration-related actions.



The Administration menu item, available at all times while using IDERA Dashboard-associated products, also accesses the same features as the Administration view except for customizing the main navigation tab order. In addition, you can manage Maintenance Mode from the menu.



5.1 Available actions in the Administration view of the IDERA Dashboard

The Administration view of the IDERA Dashboard provides a central set of services related to specific actions such as:

- [User management](#)(see page 172)
- [Instance management](#)(see page 176)
- [Product registry](#)(see page 177)
- Product licensing
- Global tag management

For more information on each service and what configuration settings are available, visit each respective section.

5.1.1 [Learn more](#)³³ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ³⁴ | Products ³⁵ | Purchase ³⁶ | Support ³⁷ | Community ³⁸ | About Us ³⁹ | Resources ⁴⁰ | Legal (see page 167) |
|---|--|--|---------------------------------------|---|--|---|---|

³³ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

³⁴ <http://www.idera.com>

³⁵ <http://www.idera.com/productssolutions/sqlserver>

³⁶ <https://www.idera.com/buynow/onlinestore>

³⁷ <https://idera.secure.force.com>

³⁸ <http://community.idera.com>

³⁹ <http://www.idera.com/about/aboutus>

⁴⁰ <http://www.idera.com/resourcecentral>

5.2 Using the SQL Inventory Manager widgets in the IDERA Dashboard

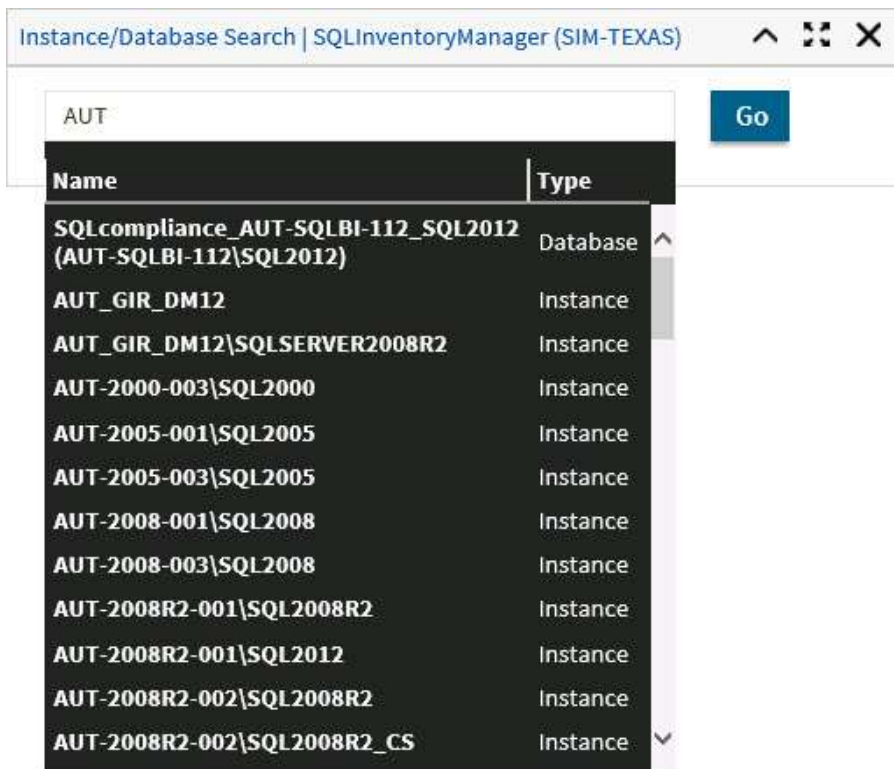
The IDERA Dashboard Overview provides an area for users to quickly view top metrics regarding their monitored SQL Server instances.

By default, the following IDERA SQL Inventory Manager widgets appear on the IDERA Dashboard Overview:

- [Instance/Database Search](#)(see page 169)
- [SQL Server Licensing](#)(see page 169)
- [Tags Cloud](#)(see page 170)
- [Top Databases by Activity](#)(see page 170)
- [Top Databases by Size](#)(see page 171)

5.2.1 Instance / Database Search

The Instance / Database Search widget allows you to quickly locate an instance or database by typing one or more characters, and then clicking **Go**. IDERA SQL Inventory Manager returns a list of all instances and databases containing the search string. Click the name of the appropriate instance to access the Instance Details page.



5.2.2 SQL Server Licensing widget

The SQL Server Licensing widget is read-only and displays data similar to the SQL Licensing tab of the Instances view.

SQL Server Licensing | SQLInventoryManager (SIM-TEXAS)

SQL Server Licensing

INSTANCES (418 instances)

Export

| <input type="checkbox"/> SQL Server | Version | Edition | Host | CPU Name | # Of Sockets | # Of Logical Processors | # Of Cores | Core Factor | Possible Core Licenses | Virtual | Fully Licensed With SA | Last Changed |
|--|---------------------------------------|-----------------------------|-------------|--------------------------------------|--------------|-------------------------|------------|-------------|------------------------|---------|------------------------|------------------------------|
| <input type="checkbox"/> 2012R2\SQL2012 | SQL Server 2012 SP2 (11.0.5038.6) | N/A | N/A | N/A | N/A | N/A | N/A | | | N/A | False | Tue Sep 20 18:37:15 GMT 2016 |
| <input type="checkbox"/> ALANPRECISE01\SQL2008 | SQL Server 2008 SP1 (10.0.2531.6) | N/A | N/A | N/A | N/A | N/A | N/A | | | N/A | False | Tue Sep 20 18:37:15 GMT 2016 |
| <input type="checkbox"/> AUT-2008R2-002\SQL2008R2 | SQL Server 2008 R2 SP1 (10.50.2500.0) | N/A | N/A | N/A | N/A | N/A | N/A | | | N/A | False | Tue Sep 20 18:37:15 GMT 2016 |
| <input type="checkbox"/> AUT-2008R2-002\SQL2008R2_CS | SQL Server 2008 R2 RTM (10.50.1800.1) | N/A | N/A | N/A | N/A | N/A | N/A | | | N/A | False | Tue Sep 20 18:37:15 GMT 2016 |
| <input type="checkbox"/> AUT-SQL2003\SQL2003 | 9.0.1309.6 (9.0.1309.6) | Enterprise Edition (64-bit) | AUT-SQL2605 | Intel(R) Xeon(R) CPU E5520 @ 2.40GHz | 1 | 2 | 2 | | 4.0 | Yes | False | Tue Sep 20 18:37:15 GMT 2016 |

Display: 5 per page: Refresh 1 / 84


On the action items bar of the SQL Server Licensing widget, you can find the **Export** option which allows you to choose your preferred format for exporting the information available on this widget. You can export as a **PDF**, **XLS**, or **XML** file.

5.2.3 Tags Cloud widget

The Tags Cloud widget is similar to the Tags section found in the IDERA SQL Inventory Manager Overview sidebar.

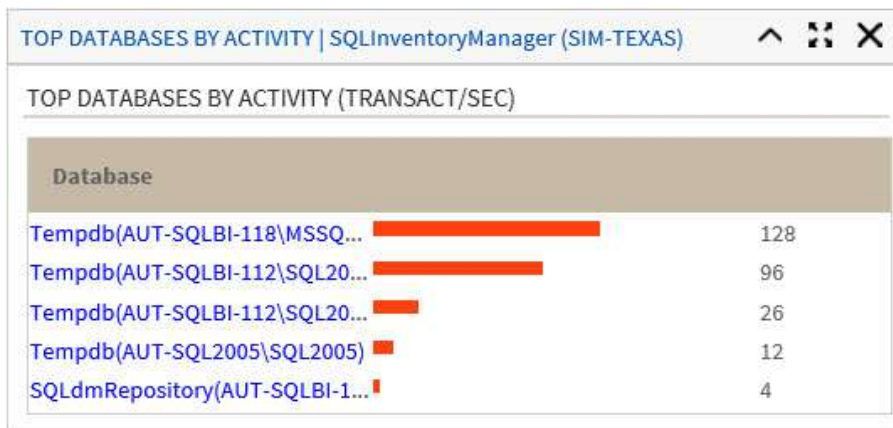


The only tags appearing in the widget have at least one instance to which the logged-in user account has access. When you click a tag in the widget, the system redirects to the Explorer view filtered by the selected tag.

 The pencil icon used to access manage tags functionality appears only to users who are logged in as an IDERA SQL Inventory Manager Administrator.

5.2.4 Top Databases by Activity widget

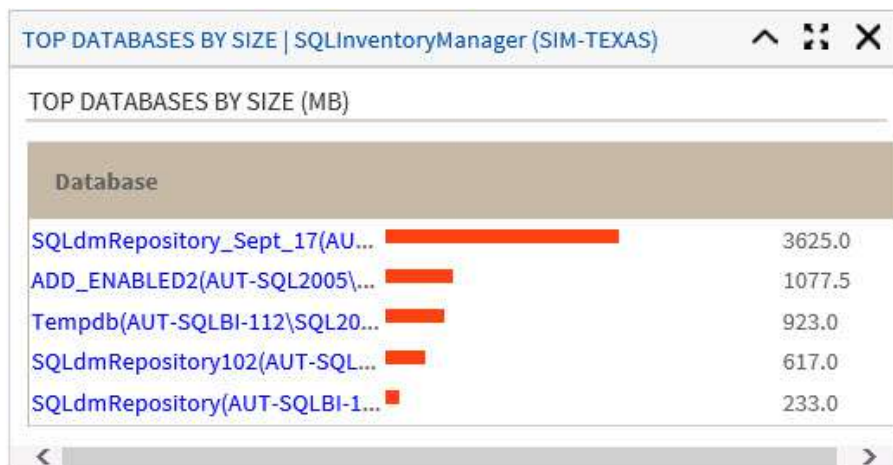
The Top Databases by Activity widget is similar to the Top Databases by Activity graph found in the IDERA SQL Inventory Manager Overview.



When you click an instance name in the widget, the system redirects to the Instance Details view for the selected instance.

5.2.5 Top Databases by Size widget

The Top Databases by Size widget is similar to the Top Databases by Size graph found in the IDERA SQL Inventory Manager Overview.



When you click a database name in the widget, the system redirects to the Instance Details view for the instance on which the selected database resides.

5.2.5.1 [Learn more](#)⁴¹ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ⁴² | Products ⁴³ | Purchase ⁴⁴ | Support ⁴⁵ | Community ⁴⁶ | About Us ⁴⁷ | Resources ⁴⁸ | Legal (see page 169) |
|---|--|--|---------------------------------------|---|--|---|---|

5.3 Managing users in the IDERA Dashboard

The Users section of the IDERA Dashboard Administration view allows you to add users and groups, grant access to other team members or groups, and manage roles. For more information about user roles, see [Understanding user roles](#)(see page 161). Users with administrative privileges are divided into two groups:

- **Dashboard Administrator.** Allows the user to manage access over Dashboard functions as well as individual product functions.
- **Product Administrator.** Allows the user to grant access to individual products for which they have administrative rights.



Users must be existing **Active Directory** users. Newly-added users must use their Windows user account and password to log in to your IDERA products.

To access user management in IDERA Dashboard, either select **Manage Users** from the Administration menu or click **Manage Users** on the Administration view of IDERA Dashboard.

⁴¹ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁴² <http://www.idera.com>

⁴³ <http://www.idera.com/productssolutions/sqlserver>

⁴⁴ <https://www.idera.com/buynow/onlinestore>

⁴⁵ <https://idera.secure.force.com>

⁴⁶ <http://community.idera.com>

⁴⁷ <http://www.idera.com/about/aboutus>

⁴⁸ <http://www.idera.com/resourcecentral>

The screenshot shows the IDERA Dashboard interface. At the top, the logo 'IDERA' and 'DASHBOARD' are visible. The user is logged in as 'simpsons\administrator'. The navigation menu includes 'OVERVIEW', 'DETAILS VIEW', 'ALERTS', and 'ADMINISTRATION'. The main content area is titled 'MANAGE USERS' and contains a table with the following data:

| Enabled | Display name | Account | Type |
|---------|----------------|------------------------|------|
| | | simpsons\administrator | USER |
| | Sarah Ann Umya | simpsons\saumya | USER |

A 'User/Group Details' dialog is open, showing the following fields and values:

- Account name: simpsons\saumya
- Display name: Sarah Ann Umya
- Account Enabled:
- Product: SQLInventoryMana... Role: ProductUser
- Product: IderaDashboard Role: DashboardAdministrator

Buttons at the bottom of the dialog include 'Delete', 'Save', and 'Discard changes'.

5.3.1 Adding a user in the IDERA Dashboard

In the IDERA Dashboard, you can grant access to Windows users or groups. Use the following steps to add a user account:

1. In the Manage Users view, click **Add User / Group**. IDERA Dashboard displays the User/Group Details dialog.

User/Group Details

Account name: *
Windows user account in form "domain\accountname".

Display name:

Account Type: User Group

Do not timeout the browser session for this account.

Product: * ▼ Role: * ▼

Save Discard changes

2. Type the account name of the user to which you want to grant access. Enter a Windows user name in the format `<domain\accountname>`.
3. *Optional.* In the **Display name** field, type the common name you want to appear when in use.
4. In the **Account Type** field, select **User** or **Group**.
5. *Optional.* Check **Do not timeout the browser session for this account** if you want the user to be able to remain logged in to your IDERA products even after a period of inactivity.
6. In the **Product** field, select the IDERA product name to which you want to add this new user account.
If you select IDERA Dashboard in the Product field, the **Role** field allows you to select from the Dashboard Administrator and Dashboard Guest roles.
If you select a different IDERA product in the Product field, the **Role** field allows you to select from the Product Administrator, Product User, and Product Guest roles.
7. In the **Role** field, select the role you want to assign to this new user account. For more information about the permissions available to each user role, see [User role permissions](#)(see page 161).
If you want to add more roles to this user account or group, click **Add More**. IDERA Dashboard displays additional **Product** and **Role** fields for you to add another role.
8. Click **SAVE**.

5.3.2 Editing a user in the IDERA Dashboard

Simply selecting the row of an existing user account allows you to edit the account name, display name, enable or disable the user account, and add new permissions. Use the following steps to edit a user or group:

1. In the Manage Users view, click the row of the account you want to edit. IDERA Dashboard displays the User/Group Details dialog, populated with the known detail for that account.

User/Group Details

Account name: * simpsons\saumya
Windows user account in form "domain\accountname".

Display name: Sarah Ann Umya

Account Enabled:

| | | | |
|----------|---------------------|------------------------------|---|
| Product: | SQLInventoryMana... | Role: ProductUser | ✕ |
| Product: | IderaDashboard | Role: DashboardAdministrator | ✕ |

Add new permission

Delete **Save** **Discard changes**

2. Make the necessary changes. **If you want to add more roles to this user account or group**, click **Add New Permission**. IDERA Dashboard displays additional **Product** and **Role** fields for you to add another role.
3. Click **SAVE**.

5.3.3 Removing a user from the IDERA Dashboard

Clicking **Delete** for an existing user account or group allows you to remove that account from access to the IDERA Dashboard. Use the following steps to delete a user or group.

1. In the Manage Users view, click the row of the user account or group that you want to delete. IDERA Dashboard displays the User/Group Details dialog.

User/Group Details

Account name: * simpsons\saumya
Windows user account in form "domain\accountname".

Display name: Sarah Ann Umya

Account Enabled:

Product: SQLInventoryMana... Role: ProductUser ✕

Product: IderaDashboard Role: DashboardAdministrator ✕

[Add new permission](#)

Delete Save Discard changes

2. Click **Delete**. IDERA Dashboard displays a warning message that requires a confirmation whether you want to delete that selection.
3. Click **Yes**. IDERA Dashboard removes the user account or group and they can no longer access the IDERA Dashboard using the account. **If you did not mean to delete the selected account**, click **No**.

5.3.3.1 [Learn more](#)⁴⁹ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ⁵⁰ | Products ⁵¹ | Purchase ⁵² | Support ⁵³ | Community ⁵⁴ | About Us ⁵⁵ | Resources ⁵⁶ | Legal (see page 172) |
|---|--|--|---------------------------------------|---|--|---|---|

5.4 Managing instances in the IDERA Dashboard

The IDERA Dashboard tracks SQL Server instances, discovered and managed by different IDERA products. The Instances section of the Administration view allows users to view and delete registered instances.

⁴⁹ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁵⁰ <http://www.idera.com>

⁵¹ <http://www.idera.com/productssolutions/sqlserver>

⁵² <https://www.idera.com/buynow/onlinestore>

⁵³ <https://idera.secure.force.com>

⁵⁴ <http://community.idera.com>

⁵⁵ <http://www.idera.com/about/aboutus>

⁵⁶ <http://www.idera.com/resourcecentral>

To view coverage or remove registered instances that no longer exist in your SQL Server environment, either select **Manage Instances** from the Administration menu or click **Manage Instances** on the Administration view, and the Managed Instances window displays. The View filter allows you to select from:

- **All** - Lists all instances discovered in your SQL Server environment and network.
- **Managed** - Lists only those managed instances in various IDERA products.
- **Unmanaged** - Lists instances discovered on the network but not registered.

5.4.1 Removing an instance from the IDERA Dashboard

Clicking the Delete icon for an existing instance allows you to remove instances that no longer exist in your environment. Use the following steps to delete an instance.

1. In the list of instances, click the **Delete** icon for the instance that you want to delete. IDERA Dashboard displays a warning message that requires a confirmation whether you want to delete that selection.
2. Click **Yes**. IDERA Dashboard removes that instance and users can no longer access that instance through the Dashboard. **If you did not mean to delete the selected instance, click No.**

5.4.1.1 [Learn more](#)⁵⁷ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
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|---|--|--|---------------------------------------|---|--|---|---|

5.5 Managing products in the IDERA Dashboard

The IDERA Dashboard hosts IDERA products that register with the dashboard. You must register a product for the associated features to function with IDERA Dashboard. While the product is registered during installation, there may be an occasion when you must manually register the product after installation.

To access product management in IDERA Dashboard, either select **Manage Products** from the Administration menu or click **Manage Products** on the Administration view of IDERA Dashboard.

⁵⁷ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁵⁸ <http://www.idera.com>

⁵⁹ <http://www.idera.com/productssolutions/sqlserver>

⁶⁰ <https://www.idera.com/buynow/onlinestore>

⁶¹ <https://idera.secure.force.com>

⁶² <http://community.idera.com>

⁶³ <http://www.idera.com/about/aboutus>

⁶⁴ <http://www.idera.com/resourcecentral>

The screenshot displays the IDERA Dashboard interface. At the top, the logo 'IDERA' and 'DASHBOARD' are visible. The user is logged in as 'simpsons\administrator'. The navigation menu includes 'OVERVIEW', 'DETAILS VIEW', 'ALERTS', and 'ADMINISTRATION'. The main section is titled 'MANAGE PRODUCTS' and features a search bar and a 'Register a Product' link. Below this is a table of registered products:

| Product | Version | Registered | Location | Credentials |
|-------------------|----------|----------------------|--------------------------|--------------------|
| IderaDashboard | 3.0.3.70 | Sep 01, 2016 02:0... | CA-SQL2012 | simpsons\admini... |
| SQLInventoryMa... | 2.3.0.1 | Sep 01, 2016 02:0... | http://CA-SQL2012:927... | simpsons\admini... |

An 'Edit Product' dialog box is open for the selected product. It contains the following fields:

- Product Name: SQLInventoryManager(sim-texas)
- Instance Name: sim-texas
- Version: 2.3.0.1
- Registered: Sep 01, 2016 02:01 PM
- Location: http://CA-SQL2012:9275/SQLInventoryM...
- Connection User: simpsons\administrator
- Connection Password: (empty field)

At the bottom of the dialog box are four buttons: Cancel, Save, Delete, and Migrate product.

5.5.1 Registering a product in IDERA Dashboard

Typically, registration is handled at the time the product is installed or uninstalled. The Manage Products feature lets you register, view, and manage the list of registered products.

Use the following steps to register a product.

1. In the Manage Products view, click **Register a Product**. IDERA Dashboard displays the Add a Product to IDERA Dashboard dialog.

Add a Product to Idera Dashboard

Product :

Display Name :

Unique display name helps you distinguish different instances of the same product, if you have multiple installs. We recommend display name using location or function. "DiagnosticManagerWest" or "DiagnosticManagerProd".

Host :

Port :

Product Administrator

User Name :

Password:

2. Select the product you want to register from the available list.
3. Type a unique display name to help distinguish this instance from another instance if you have multiple installations of the same product. IDERA recommends a display name using the location or function, such as "DiagnosticManagerWest" or "DiagnosticManagerProd."
4. Type the name of the host instance where this product resides.
5. In the **Product Administrator** section, type the user name and password for the administrator account using the *domain\username* format.
6. Click **Register**. A confirmation message appears warning you that the system logs out your session upon continuing.
7. Click **Yes**. Log in to begin using the newly-registered product.

5.5.2 Editing a product in IDERA Dashboard

Use the following steps to register a product.

1. In the Manage Products view, select the product for which you want to change details. IDERA Dashboard displays the related information in the Edit Product dialog.

Edit Product

| | |
|---------------------|---|
| Product Name | <input type="text" value="SQLInventoryManager(sim-texas)"/> |
| Instance Name | <input type="text" value="sim-texas"/> |
| Version | <input type="text" value="2.3.0.1"/> |
| Registered | <input type="text" value="Sep 09, 2016 09:50 AM"/> |
| Location | <input type="text" value="http://CA-SQL2012:9275/SQLInventoryM"/> |
| Connection User | <input type="text" value="simpsons\administrator"/> |
| Connection Password | <input type="password"/> |

2. Make the necessary changes, and then click **Save**.

5.5.3 Removing a product from the IDERA Dashboard

Use the following steps to remove a product from registration in IDERA Dashboard.

1. In the Manage Products view, select the product you want to remove from IDERA Dashboard.
2. Verify that the Edit Product dialog displays the information for the correct product, and then click **Delete**. IDERA Dashboard displays a warning message that requires a confirmation whether you want to unregister that selection.
3. Click **Yes**. IDERA Dashboard unregisters the product and users can no longer access that product.

5.5.4 Migrating a product to another IDERA Dashboard installation

Users who have multiple IDERA products also may have more than one version or installation of the IDERA Dashboard. To take advantage of all of the features of the latest version of IDERA Dashboard, you can migrate your products from one version of IDERA Dashboard to another. This process migrates data to the target version and unregisters the product from the previous IDERA Dashboard.

Use the following steps to migrate an IDERA product from one installation or version of IDERA Dashboard to another.

1. In the Manage Products view, select the product you want to migrate from one installation of IDERA Dashboard to another.
2. Verify that the Edit Product dialog displays the information for the correct product, and then click **Migrate product**. IDERA Dashboard displays the Migrate to different IDERA Dashboard dialog.

3. Type the name of the host machine on which the target IDERA Dashboard is installed and the port in which you communicate.
4. In the **Dashboard Administrator** section, type the user name and password for the target IDERA Dashboard administrator account using the *domain\username* format.
5. Click **Migrate**. IDERA Dashboard migrates the product to the target IDERA Dashboard.

5.5.4.1 [Learn more](#)⁶⁵ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ⁶⁶ | Products ⁶⁷ | Purchase ⁶⁸ | Support ⁶⁹ | Community ⁷⁰ | About Us ⁷¹ | Resources ⁷² | Legal (see page 177) |
|---|--|--|---------------------------------------|---|--|---|---|

5.6 Managing tags in the IDERA Dashboard

Tags can help you organize your managed instances and databases. While you can still create a tag within any IDERA product supporting that functionality, tags created in IDERA Dashboard can be used in other IDERA SQL

⁶⁵ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁶⁶ <http://www.idera.com>

⁶⁷ <http://www.idera.com/productssolutions/sqlserver>

⁶⁸ <https://www.idera.com/buynow/onlinestore>

⁶⁹ <https://idera.secure.force.com>

⁷⁰ <http://community.idera.com>

⁷¹ <http://www.idera.com/about/aboutus>

⁷² <http://www.idera.com/resourcecentral>

products. Create, import, view, edit, and delete tags and their associated instances and databases using the Manage Tags action.

To access tag management in IDERA Dashboard, either select Manage Tags from the Administration menu or click **Manage Tags** on the Administration view of IDERA Dashboard.

The screenshot displays the IDERA Dashboard interface for managing tags. The main area shows a table of existing tags, and a modal dialog is open for editing a tag. The modal includes a search field for the tag name, and sections for associating instances and databases to the tag. The 'Instances' section has a table with 'Instance' and 'Product' columns, and a 'No Results Found' message. The 'Databases' section has a table with 'Instance', 'Database', and 'Product' columns, also showing 'No Results Found'. Buttons for 'Add instance' and 'Add Database' are present. At the bottom of the modal, there are buttons for 'Delete tag', 'Save', and 'Discard changes'.

5.6.1 Global versus local tags

Tags created in IDERA Dashboard 3.0.x and later are known as global tags and are available to all products that are integrated with that version of IDERA Dashboard. Local tags are available only within the IDERA product in which they are created.

When you assign a global tag to an instance or database, you must wait for the synchronization job to run before the tag is available in all other IDERA products. The synchronization job runs every 15 minutes by default.

5.6.2 Adding a global tag in the IDERA Dashboard

In the IDERA Dashboard, you can create a global tag to be used across all SQL products. Use the following steps to add a global tag.

1. In the Manage Tags view, click **Add Tag**. IDERA Dashboard displays the Manage Tags dialog.

5.6.3 Editing a global tag in the IDERA Dashboard

Simply selecting the row of an existing global tag allows you to add and remove instances and databases associated with the global tag as well as change the name of the global tag itself. Use the following steps to edit a global tag.

1. In the Manage Tags view, click the row of the global tag you want to edit. IDERA Dashboard displays the Manage Tags dialog, populated with the known detail for that global tag.

2. Make the necessary changes. **If you want to add an instance or database to this global tag**, click **Add instance** or **Add database**. IDERA Dashboard displays additional fields for you to add appropriately.
3. Click **SAVE**.

5.6.4 Deleting a global tag from the IDERA Dashboard

Use the following steps to delete a global tag.

1. In the Manage Tags view, click the row of the global tag that you want to delete. IDERA Dashboard displays the Manage Tags dialog.
2. **If there are any instances or databases assigned to the tag**, remove them. You cannot delete a tag when instances are assigned to that tag.
3. Click **Delete tag**. IDERA Dashboard displays a warning message that requires a confirmation whether you want to delete that selection.
4. Click **Yes**. IDERA Dashboard removes the global tag. **If you did not mean to delete the global tag**, click **No**.

5.6.4.1 [Learn more](#)⁷³ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ⁷⁴ | Products ⁷⁵ | Purchase ⁷⁶ | Support ⁷⁷ | Community ⁷⁸ | About Us ⁷⁹ | Resources ⁸⁰ | Legal (see page 181) |
|---|--|--|---------------------------------------|---|--|---|---|

5.7 Configure navigation order in the IDERA Dashboard

The IDERA Dashboard supports multiple IDERA products, each on their own tab. You can even have more than one installation of the same product in your environment displayed on the IDERA Dashboard. Each installation appears as a tab, displaying the product name followed by a unique name entered during product installation. For this reason, IDERA Dashboard allows you to customize the tab order.

To rearrange product tabs on the IDERA Dashboard, click **Customize Main Navigation Tab Order** in the Administration view, and the Products window displays:

⁷³ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁷⁴ <http://www.idera.com>

⁷⁵ <http://www.idera.com/productssolutions/sqlserver>

⁷⁶ <https://www.idera.com/buynow/onlinestore>

⁷⁷ <https://idera.secure.force.com>

⁷⁸ <http://community.idera.com>

⁷⁹ <http://www.idera.com/about/aboutus>

⁸⁰ <http://www.idera.com/resourcecentral>



Move tabs using a drag-and-drop operation. Be sure to click **Save** before leaving this window.

5.7.1 [Learn more](#)⁸¹ >>

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ⁸² | Products ⁸³ | Purchase ⁸⁴ | Support ⁸⁵ | Community ⁸⁶ | About Us ⁸⁷ | Resources ⁸⁸ | Legal (see page 183) |
|---|--|--|---------------------------------------|---|--|---|---|

5.8 Configure IDERA Dashboard DBA views

The purpose of IDERA Dashboard is to host other IDERA products. These products must register with IDERA Dashboard, which is typically done at the time the product is installed or uninstalled. The [Manage Products](#)(see page 177) option lets you view and manage the list of registered products.

The Customize DBA Dashboard option lets you manage the objects that appear on the Overview and Details View tabs of the IDERA Dashboard.

⁸¹ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁸² <http://www.idera.com>

⁸³ <http://www.idera.com/productssolutions/sqlserver>

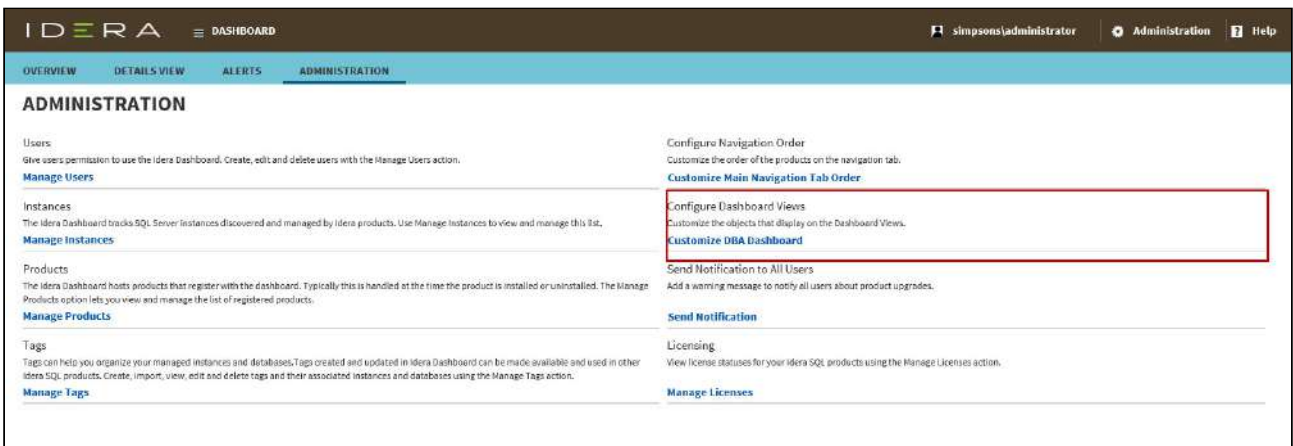
⁸⁴ <https://www.idera.com/buynow/onlinestore>

⁸⁵ <https://idera.secure.force.com>

⁸⁶ <http://community.idera.com>

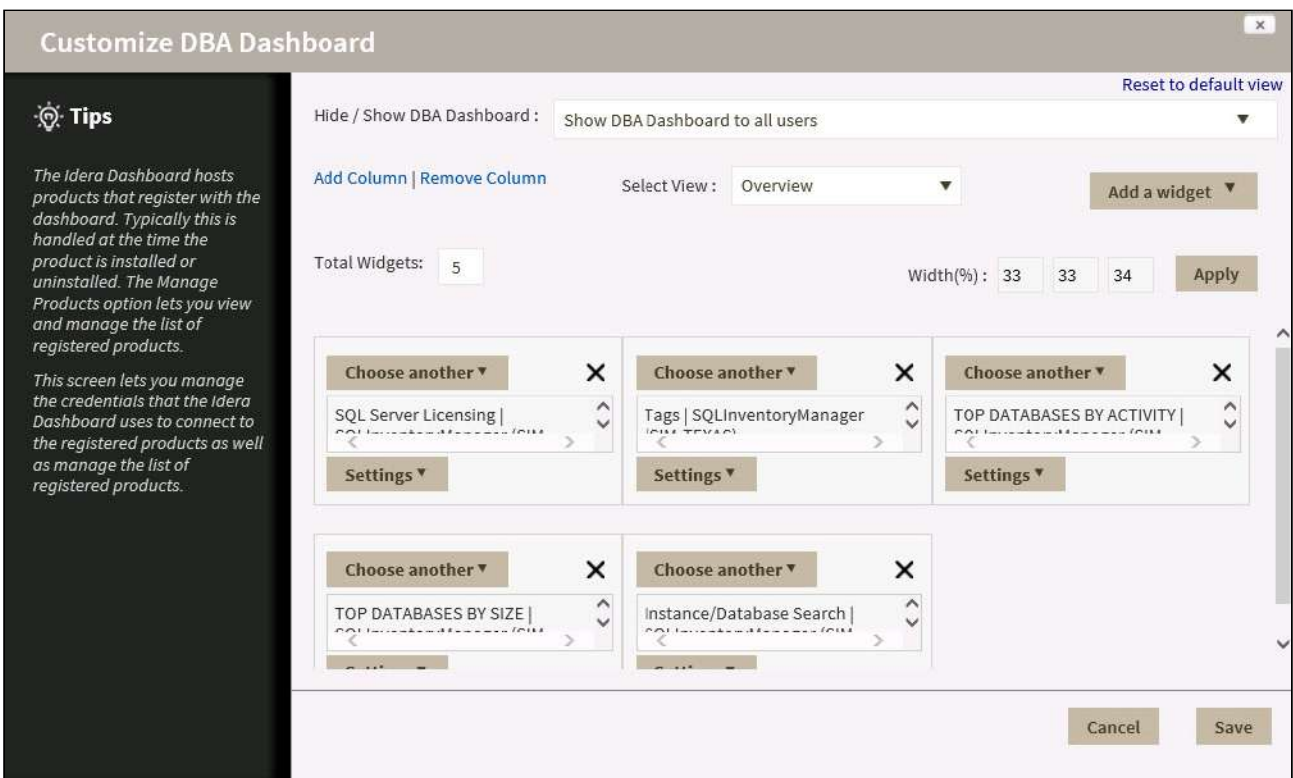
⁸⁷ <http://www.idera.com/about/aboutus>

⁸⁸ <http://www.idera.com/resourcecentral>



To customize Dashboard views:

Click **Customize DBA Dashboard** in the Administration view, and the Customize DBA Dashboard dialog appears. Note that the **Select View** field which displays whether the changes you are making apply to the Overview or Details View of the IDERA Dashboard.



In the Customize DBA Dashboard dialog you can:

- **Hide/Show DBA Dashboard.** Options allow you to display the Dashboard to all users, hide the Dashboard from all users, or display the Dashboard only to users who have permissions on two or more registered IDERA products.
- **Add/Remove Column.** Based on the number of widgets you want to include, you can change the number of columns for a better view.

- **Width (%)**. Use percentages to set the width of your columns.

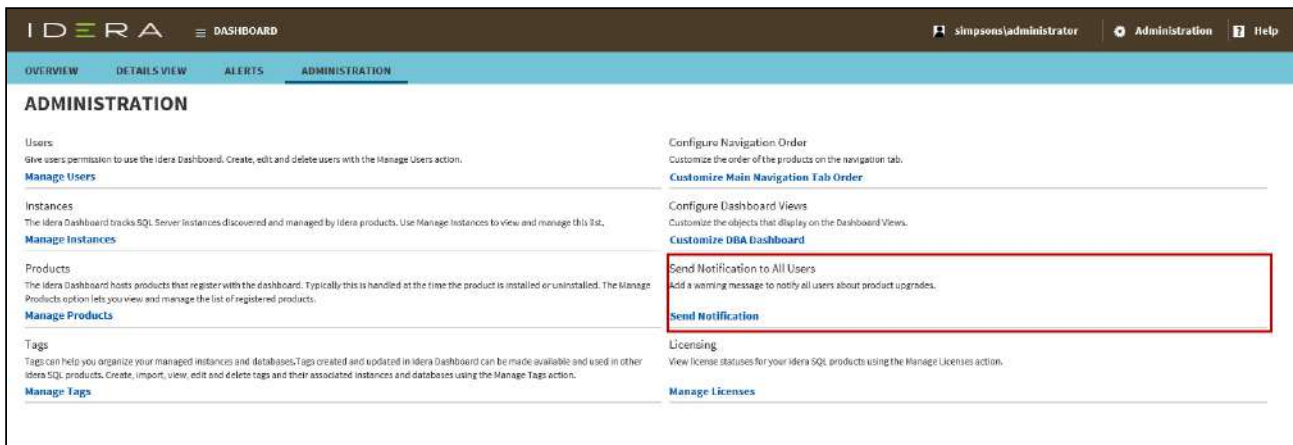
Be sure to click **Save** to retain your changes.

5.8.1 [Learn more](#)⁸⁹ > >

| | | | | | | | |
|---|--|--|---------------------------------------|---|--|---|---|
| IDERA Website ⁹⁰ | Products ⁹¹ | Purchase ⁹² | Support ⁹³ | Community ⁹⁴ | About Us ⁹⁵ | Resources ⁹⁶ | Legal (see page 184) |
|---|--|--|---------------------------------------|---|--|---|---|

5.9 Sending notifications in the IDERA Dashboard

The Send Notification to All Users widget of the Administration view allows users to send a product upgrade warning message to all users.



To send a notification:

1. Select **Send Notification** in the Administration view, and the Send Notification to All Users window displays:

⁸⁹ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁹⁰ <http://www.idera.com>

⁹¹ <http://www.idera.com/productssolutions/sqlserver>

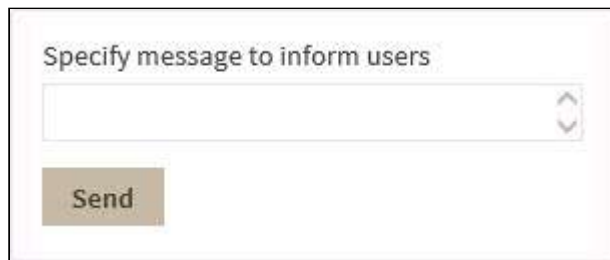
⁹² <https://www.idera.com/buynow/onlinestore>

⁹³ <https://idera.secure.force.com>

⁹⁴ <http://community.idera.com>

⁹⁵ <http://www.idera.com/about/aboutus>

⁹⁶ <http://www.idera.com/resourcecentral>



Specify message to inform users

Send

2. Type your warning message and click **Send**.
3. A preview of your warning displays. If you want to proceed, click **OK**.

5.9.1 [Learn more](#)⁹⁷ > >

| | | | | | | | |
|---|--|---|--|--|---|--|---|
| IDERA Website ⁹⁸ | Products ⁹⁹ | Purchase ¹⁰⁰ | Support ¹⁰¹ | Community ¹⁰² | About Us ¹⁰³ | Resources ¹⁰⁴ | Legal (see page 186) |
|---|--|---|--|--|---|--|---|

⁹⁷ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

⁹⁸ <http://www.idera.com>

⁹⁹ <http://www.idera.com/productssolutions/sqlserver>

¹⁰⁰ <https://www.idera.com/buynow/onlinestore>

¹⁰¹ <https://idera.secure.force.com>

¹⁰² <http://community.idera.com>

¹⁰³ <http://www.idera.com/about/aboutus>

¹⁰⁴ <http://www.idera.com/resourcecentral>

6 Viewing information on the SQL Inventory Manager Overview

The IDERA SQL Inventory Manager Home tab is the home page of the product. This tab provides a high-level status of your registered instances, and health check recommendations for issues found across your environment.

6.1 Health Check Recommendations

IDERA SQL Inventory Manager performs health checks on your registered instances to help you monitor the most important issues across your environment. For more information about the health checks performed by IDERA SQL Inventory Manager, see [What Health Check Recommendations are available with SQL Inventory Manager?\(see page 296\)](#)

On this section of the Overview tab, IDERA SQL Inventory Manager shows you the most critical health check recommendations for your environment, grouped by health check type, and ordered by level of criticality, where:

- Level 3 = critical
- Level 2 = warning
- Level 1 = informational

i If you have no health check recommendations, you will see the message: **All instances are passing their health checks.**

Click **Show Details** or click the name of the health check recommendation to:

- view a list of instances or databases affected by the respective health check.
- individually **Dismiss** the health check recommendation.
- individually **Refresh** the status of a database or instance.
- view the knowledge base detail about the specific health check recommendation.

To close this view of the details, click **Hide Details**.

When you have multiple instances listed under a single health check recommendation, you can dismiss the information for an individual database or instance but you can also choose to **Dismiss** the whole health check recommendation by clicking Dismiss at the top level of the recommendation.

Use **Refresh** to get the most updated information for a specific health check recommendation.

⚠ Dismissing Health Check Recommendations

Dismissing a health check recommendation causes IDERA SQL Inventory Manager to ignore this recommendation temporarily. You do not get alerts until the health check passes and then goes into an alert status again.

✓ Tip

When you dismiss a health check recommendation, a dialog window opens to confirm this action, you can enable the option **Do not show this warning again** so that IDERA SQL Inventory Manager does not prompt this warning message each time you dismiss a health check recommendation.

6.1.1 Exporting health check recommendation reports

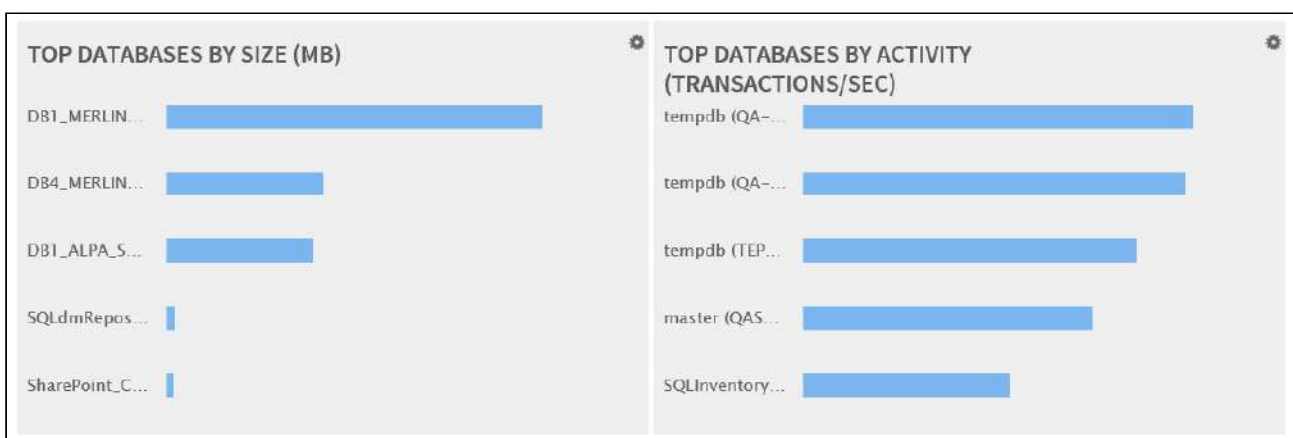
At the top of the Health Check Recommendations section, you can find the **Exporting reports** option. Use this feature to export:

- **Summary of recommendation categories.** The overview displays a summary of all health checks recommendations grouped by categories of health check recommendations. This option allows you to export this summarized information.
- **Details for all recommendations.** By using this option, you can export a report that includes all available health check recommendations in detail.
- **Details for selected categories.** With this option you can select those categories of health check recommendations you want to export. For example, you can choose to have a report for all databases that do not have a backup or for all the instances that are not monitored.
- **Service Instance Type.** This option allows you to select the type of instances to include on the exported reports.

You have three formats for exporting your reports: **PDF**, **XLS**, and **XML**. Choose one of these options, and then click **Export**.

6.2 Databases Graphs

IDERA SQL Inventory Manager provides you bar graphs of the most important databases from your environment. You can get a view of the largest and busiest databases across your instances.



6.3 Instances

This section provides you with a table of all the registered instances on your environment. It displays information about the instances status, response time, SQL Server version, number and size of databases per instance. You can click any of the column headers to order the table by the respective field.

On this section, you can also add new instances by clicking the **Add SQL Server instance** option located on the top right section of this table. For more information on how to add instances, refer to [Add SQL Server instances](#)(see page 139).

By clicking the gear icon next to an instance name, you can perform the following specific actions for that instance:

- **Refresh Data** - Click this option to update information.
- **Disable Monitoring** - Go to [Disabling instances](#)(see page 268) for more information.
- **Remove** - Refer to [Removing instances](#)(see page 269) [Removing instances](#)(see page 269)for guidance on this section.
- **Decommission** - Refer to [Decommissioned Instances](#)(see page 212) for more information.
- **Edit Instance Properties** - Refer to the [Edit instance properties](#)(see page 252) for more information.

Tip

You can also access an instance details view by clicking directly its name. Go to [Viewing instance details](#)(see page 245), for more information on this view.

| INSTANCES (251 instances 5,136 databases 3.7 TB total size) | | | | | | Add SQL Server Instances |
|---|--------------------------|---------------|--|----------|-------------------|--------------------------|
| SQL Server | Status | Response Time | Version | # Of DBs | Size Of DBs (...) | |
| 2012R2\BCTEST_SQL2014 | Down | -1 ms | SQL Server 2014 RTM (12.0.2000.8) | 0 | 0.0 | |
| 2012R2\SQL2012 | Refresh Data | | SQL Server 2012 RTM (11.0.2100.60) | 0 | 0.0 | |
| AUT-SQLNOV-006 | Disable Monitoring | | SQL Server 2008 R2 SP1 (10.50.2500.0) | 10 | 87.0 | |
| DM-CT-W2012\SQL2201GWITNESS | Remove | | SQL Server 2016 CTP3.3 (13.0.1000.281) | 5 | 65.8 | |
| DWM-W03-01\SQL2000 | Decommission | | SQL Server 2000 RTM (8.0.194.0) | 6 | 41.7 | |
| SF-ALPACAONE\SQL14 | Edit Instance Properties | | SQL Server 2014 SP1 (12.0.4100.1) | 6 | 95.8 | |
| SF-ALPACAONE\SQL2012 | Down | -1 ms | SQL Server 2012 SP2 (11.0.5058.0) | 11 | 173.5 | |
| TGT-BRITISH\SQL2012 | Down | -1 ms | SQL Server 2012 RTM (11.0.2100.60) | 100 | 6,145.7 | |
| WS2012_R2\SQL2012 | Down | -1 ms | SQL Server 2012 SP3 (11.0.6020.0) | 17 | 148.1 | |
| SF-ALPACAONE\SQL EXPRESS | Slow | 14,448 ms | 13.0.407.1 (13.0.407.1) | 24 | 740.4 | |


251 total instances 10 items per page

6.4 Status Area

On the right side of the overview, IDERA SQL Inventory Manager provides a summary of the status and contents of your environment that includes:

- The number of Instances that are up, down or critical.
- The number of Health Recommendations.
- The number of newly discovered instances. Click **New Instances** and IDERA SQL Inventory Manager displays the list of recently discovered instances. For more information, go to [Discovered Instances](#)(see page 215).
- If the Auto-Registration option is off or on. You can click this option to enable or disable it. For more information, refer to [Auto registration options](#)(see page 164).



- A summary of your environment with the number of instances, databases, data size, log size, disabled instances, and available licenses. You can click these options to access the following information
 - **Instances** - Get a list of all [managed instances](#).(see page 203)
 - **Instances Private** A list of all the instances on a on-premises environment.
 - **Instances Cloud** A list of all the instances on Azure or Amazon
 - **Databases** - Get a view of your databases count filtered by tags.
 - **Data Size** - Get a view of your data size filtered by tags.
 - **Log Size** - Get a view of your log size filtered by tags.
 - **Disabled instances** - Get a view of all your [managed instances](#)(see page 203), ordered by status.
 - **Available licenses** - Access this option to view your current license, add, or buy another one. For more information, refer to [Managing licenses](#).(see page 165)
- A section of the most used Tags. You can click the pencil icon to manage all tags. For more information, refer to the [Managing all tags](#)(see page 122) section.

 Take into account that IDERA SQL Inventory Manager rounds off data so there may be minor discrepancies between the size data displayed in the Summary and Instances section of the Overview tab.



 **Tip**

If you click on a tag name, IDERA SQL Inventory Manager displays a view of your environment's data size by instance, filtered with the respective tag.

| UP | DOWN | CRITICAL |
|------------|----------|-----------|
| 243 | 8 | 67 |


| | | |
|-----|---|------------------------|
| 584 |  | Health Recommendations |
| 175 |  | New Instances |
| ON |  | Auto-Registration |

MY ENVIRONMENT

| | | |
|---|--------------------|-----------|
|  | Instances | 251 |
|  | Servers | 147 |
|  | Databases | 5,136 |
|  | Data Size | 2 TB |
|  | Log Size | 1.7 TB |
|  | Disabled Instances | 0 |
|  | Available Licenses | Unlimited |

TAGS

[Integration](#)
[Test](#)
[Business Hours](#)
[Production](#)
[Disaster Recovery](#)
[Development](#)
[Business Critical](#)
[24x7](#)
[Non-Critical](#)

 Tags font size represents the most used tags. The bigger the font size, the greater the number of instances that belong to that tag.

7 Exploring your instances

The IDERA SQL Inventory Manager Explorer tab lets you explore the instances and databases of your environment. You can choose different views and filters in order to learn more about the data and activity of your SQL Servers instances.

The following is an example of the many options for exploring the information on your environment:

- You can select to show data size by instance/database tags to see which of your tags contain the most data.
- Then, you can select a tag name to get more specific information.
- Finally, you can access the tagged instances to get a view of your data size by instances/databases and filtered with the respective tag.

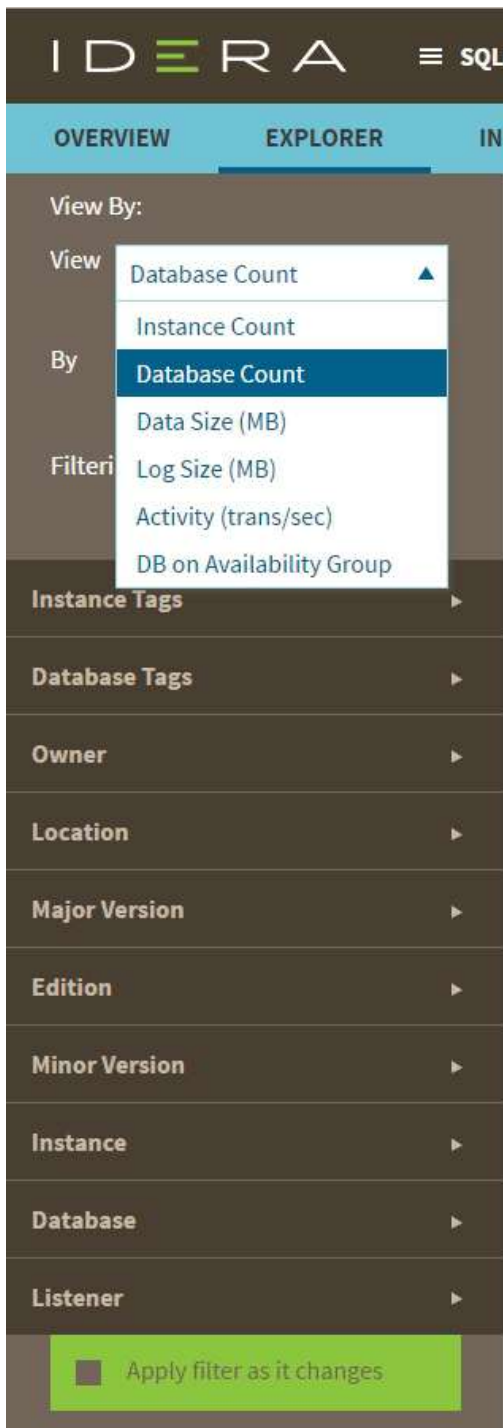
Like this example, you have many different options to select the information you want to see from your environment. By using tags, owners, and locations from your SQL Servers instances, you get significant advantages from this section.

7.1 Choosing the information you want to see

The **View Selection** section allows you to choose what specific information or under which main parameter you want IDERA SQL Inventory Manager to display the information.

You can select to **View** the following type of information:

- Instance count
- Database count
- Data size (MB)
- Log size (MB)
- Activity (transactions per second)
- Database on Availability Group



7.2 Understanding the Databases on Availability Group view

IDERA SQL Inventory Manager allows you to explore by **Databases on Availability Group**. Depending on need, you can monitor any member of the AlwaysOn Availability Group and IDERA SQL Inventory Manager displays information about the primary node, secondary nodes, and databases that are in the AlwaysOn Availability Group including:

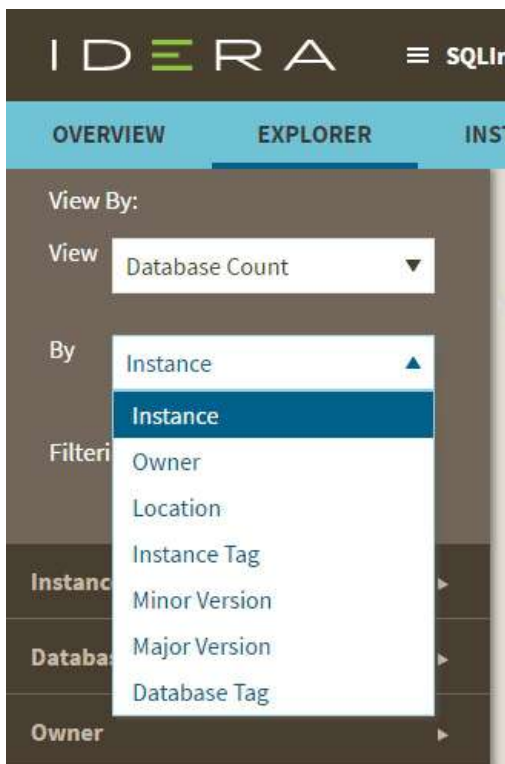
- Database Name
- Listener
- Primary Node
- Secondary Node
- Owner

If you not only want to receive static information about AlwaysOn Availability Group databases but also want to monitor health checks of all nodes or track statuses of databases that are not in the AlwaysOn Availability Group, you must add all of the nodes in which you are interested. Because the listener is simply a virtual network name that points to physical instance in a primary or secondary replica of an AlwaysOn Availability Group, you are responsible for the correct AlwaysOn Availability Group configuration.

7.3 Additional options

Then you choose to see the previous selected information delimited **By** the following options:

- Instance
- Instance tag
- Owner
- Location
- Minor server version
- Major server version
- Edition
- Database (Type the name of the database. This field accepts wildcards.)
- Database tag
- Listener (Database and Listener filters allow you to filter for specific items when you are trying to get a list of databases on availability groups.)



As a result, you may be able to see information such as database count by instance, instance count by location, data size by owner, and other interesting information from your environment. Take into account that some options may only be available depending of what you choose in the **View** and **By** fields.

You can enable the option **Applying filter as it changes** to have immediate information, or you can disable this option when you want to make your selections first and see the requested information after you finish.

7.4 Using filters to refine what information you see

After you choose what data you want to see and by which parameter, you can also optionally select from the group of filters to narrow your search criteria. This section contains the following options:

7.4.1 Instance Tags

This option allows you to determine a specific instance tag or tags for your selection. When you click the drop down menu of this section, you can sort the list of tags by name or count, and then choose the tag or tags that you want to include in your selection.

To access to the complete list of tags, click **more**. If you want to remove your selections, click **Remove tag filters**.

7.4.2 Database Tags

This option allows you to determine a specific database tag or tags for your selection. When you click the drop down menu of this section, you can sort the list of tags by name or count, and then choose the tag or tags that you want to include in your selection.

To access to the complete list of tags, click **more**. If you want to remove your selections, click **Remove tag filters**.

7.4.3 Owner

This option allows you to determine a specific owner or owners for your selection. When you click the drop down menu of this section, you can see a list of all your environment's owners. Choose the owner or owners that you want to include in your selection.

To access to the complete list of owners, click **more**. If you want to remove your selections, click **Remove owner filters**.

7.4.4 Location

This option allows you to determine a specific location or locations for your selection. When you click the drop down menu of this section, you can see a list of all your environment's locations. Choose the location or locations that you want to include in your selection.

To access to the complete list of locations, click **more**. If you want to remove your selections, click **Remove location filters**.

7.4.5 Instance

This option allows you to determine a specific instance or instances for your selection. When you click the drop down menu of this section, you can see a list of your registered instances. Choose the instance or instances that you want to include in your selection.

To access to the complete list of instances, click **more**. If you want to remove your selections, click **Remove instance filters**.

7.4.6 Version

This option allows you to determine a specific version or versions for your selection. When you click the drop down menu of this section, you can see the list of all available versions, choose the version or versions that you want to include in your selection.

To access to the complete list of versions, click **more**. If you want to remove your selections, click **Remove version filters**. On the top section of the filtering options, click **Clear** to quickly remove all your chosen filters and select new ones.

As you filter your information, the options you select appear on the top section of your graphs. You can uncheck from this section to individually remove filters.

7.4.7 Viewing filtered information

After you specify the filters you need, IDERA SQL Inventory Manager displays graphs to provide a visual representation of the data you have selected. The bar and pie graphs let you quickly get a glance of your environment according to your parameters.

You can also choose how many instances IDERA SQL Inventory Manager will display on your graphs by selecting the top **100**, **500**, or **All** instances. This option is located at the bottom right side of your graphs.

Below these graphs, IDERA SQL Inventory Manager shows you a table of the information that corresponds to your selection.

You can click a database or instance name to access its respective details. For more information on what is available on these views, refer to [Viewing Database Details](#)(see page 257) or [Viewing instance details](#)(see page 245) respectively.


7.4.8 Saving your filtering criteria

Creating a useful filter to "weed out" unnecessary information takes time but is important when managing large environments. As a result, you may want to save that filter for future use. IDERA SQL Inventory Manager allows you to save filters for use in the Explorer and Instances views. Simply create the filter, and then click **Save as Explorer favorite** or click **Save as Instances favorite**, depending on which view you are in when creating the filter. To use that filter, click **Load Explorer favorite** or click **Load Instances favorite**.

7.5 Drill-down options for locating more specific information

7.5.1 Drill down to view by instances


When you view high-level objects such as tags, owners, locations, or versions, you can drill down to see their respective instances by clicking the arrow icon next to the object you want to see more specific information.

Click  and IDERA SQL Inventory Manager changes your selection to **View by Instances** and filters it according to the tag, owner, location or version you selected before.

You can go back to your previous view by clicking  on the top left section of your instances table.

7.5.2 Drill down to view by databases

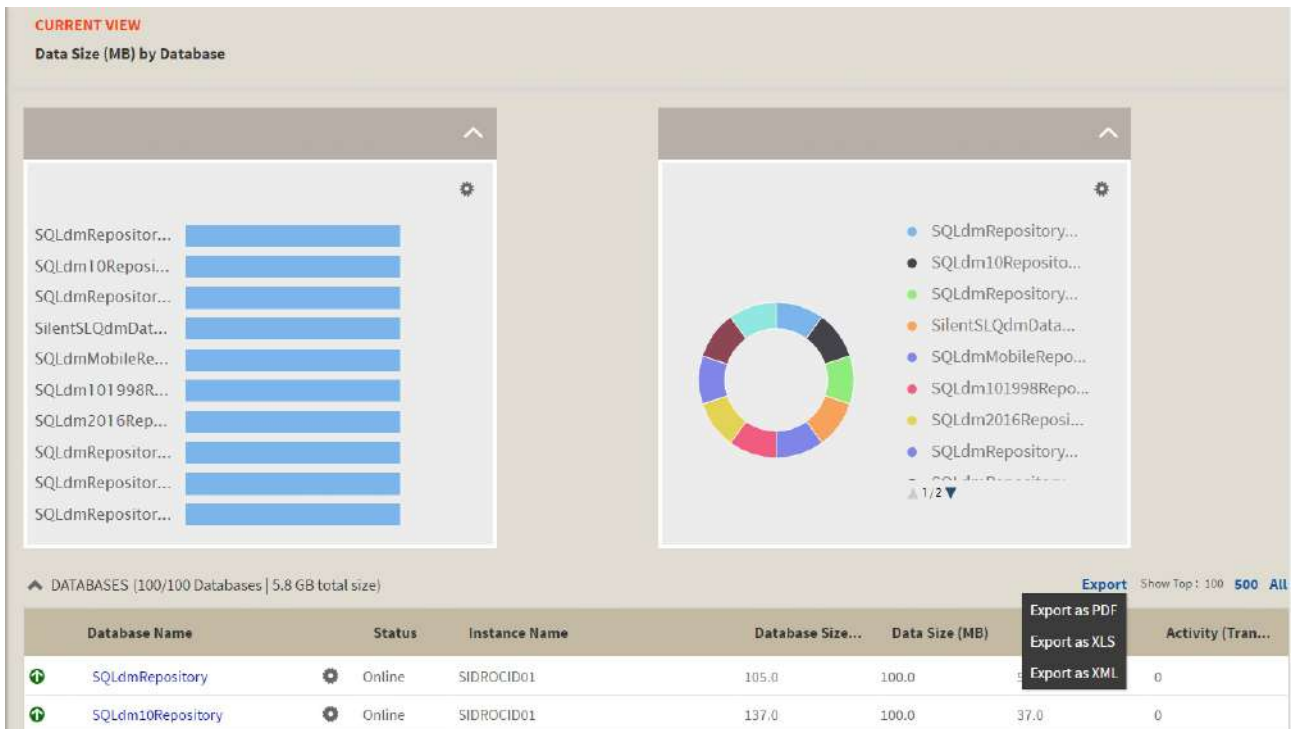
When you are viewing your information by instances, you can drill down one more level and view by databases.

Click  next to the instance you want to see its respective databases, and IDERA SQL Inventory Manager displays the list of databases that belong to the respective instance. The view changes to **View by Databases** and filters it by the selected instance.

You can go back to the previous view by clicking  on the top left section of your databases list.

7.6 Exporting Explorer view information

You can export the information available on the Explorer view, by clicking the **Export** option on the right-bottom side of your graphs and selecting your preferred format for Exporting: **PDF**, **XLS**, or **XML**.



You can set the number of instances you want IDERA SQL Inventory Manager to show per page, go to the bottom of the page, type the number you require, and then press **Enter**.

8 Viewing BI Services

To access the BI Services view, go to the **Instances** tab and select **BI Services** from the **View By** drop down menu.

| Service Name | Server/Instance Name | BI Services | Status |
|--------------|----------------------|-------------|---------|
| MsDt... | ROCID01 | SSIS | Running |
| MSSQ... | ROCID01 | SSAS | Stopped |
| Repo... | ROCID01 | SSRS | Stopped |
| ReportServer | WIN-90GCKKJIPTJ | SSRS | Running |

The BI Services view allows you to see relevant information for discovered BI services. You can access the following information in the BI Services view:

Service Name: The name of BI the service.

Server/Instance Name: The instance name were the service is located.

BI Services: The type of service, for example SSRS, SSAS or SSIS

Status: The service status.

Version: The MS SQL Server version and build number.

Edition: The MS SQL Server Edition.

Discovered: Displays the date and time when a BI service is discovered.

| Service Name | Server/Instance Name | BI Services | Status | Version | Edition | Discovered |
|--|--------------------------|-------------|---------|---------------------------------------|-------------------------------|-----------------------|
| <input type="checkbox"/> MsDtsServer100 | SIDROCID01 | SSIS | Running | SQL Server 2008 R2 RTM (10.50.1600.1) | Standard Edition | Mar 28, 2017 10:25 AM |
| <input type="checkbox"/> MSSQL_ServerOLAPService | SIDROCID01 | SSAS | Stopped | SQL Server 2008 R2 RTM (10.50.1600.1) | Standard Edition | Mar 28, 2017 10:25 AM |
| <input type="checkbox"/> ReportServer | SIDROCID01 | SSRS | Stopped | SQL Server 2008 R2 RTM (10.50.1600.1) | Standard Edition | Mar 28, 2017 10:25 AM |
| <input type="checkbox"/> ReportServer | WIN-90GCKKJIPTJ | SSRS | Running | SQL Server 2014 RTM (12.0.2000.8) | Enterprise Evaluation Edition | Mar 28, 2017 10:26 AM |
| <input type="checkbox"/> MSSQL_ServerOLAPService | WIN-90GCKKJIPTJ | SSAS | Running | SQL Server 2014 RTM (12.0.2000.8) | Enterprise Evaluation Edition | Mar 28, 2017 10:26 AM |
| <input type="checkbox"/> ReportServer\$SERVER012 | WIN-90GCKKJIPTJ\SERVE... | SSRS | Running | SQL Server 2014 RTM (12.0.2000.8) | Enterprise Evaluation Edition | Mar 28, 2017 10:26 AM |
| <input type="checkbox"/> MSOLAP\$SERVER012 | WIN-90GCKKJIPTJ\SERVE... | SSAS | Running | SQL Server 2014 RTM (12.0.2000.8) | Enterprise Evaluation Edition | Mar 28, 2017 10:26 AM |

You can sort the order of the elements on a column clicking on a heading; for example, click **Discovered** to order the discovered services according to their discovery date.

Other options available on the BI Services view are **Filtering**, **Discover BI Services**, and **Export**.

8.1 Filtering

The filtering options on the left side of the BI Services view, allow you to filter the BI services you want to display. You can filter the displayed BI services according to BI Service type, Version, and Edition. If you want to filter BI services by type, just select the respective option from the BI Service filter.

Creating a useful filter to "weed out" unnecessary information takes time but is important when managing large environments. As a result, you may want to save that filter for future use. SQL Inventory Manager allows you to save filters for use in the Explorer and Instances views. Simply create the filter, and then click **Save as Explorer favorite** or click **Save as Instances favorite**, depending on which view you are in when creating the filter. To use that filter, click **Load Explorer favorite** or click **Load Instances favorite**.

You can enable or disable the option Apply filter as it changes depending if you want to see the changes as you apply the filter, or if you prefer to select your filters first and see the results when you finish.

8.2 Discover BI services

If you want to discover BI services on your environment, click **Configure BI Services**. And refer to the [Discovery Center Options](#)¹⁰⁵ documentation.

8.3 Export

If you want to export the information displayed on the BI Services view, go to the **Export** option, located on the action items bar, and select your preferred format for exporting (PDF, XLS, or XML). You can import your exported views on SQL BI Manager.

¹⁰⁵ <http://wiki.idera.com/display/SQLInventoryManager/How+to+manage+Discovery+Center+options>

9 Viewing all instances

The **Instances** tab provides a broad visibility of your environment. IDERA SQL Inventory Manager displays in this section all available instances in the following views:

- [MANAGED BY INSTANCES](#)(see page 203) - Instances you have registered with SQL Inventory Manager.
- [MANAGED BY HOST SERVER](#)(see page 219) - A hierarchical view of the host servers and instances you have registered with SQL Inventory Manager.
- [SQL LICENSING BY INSTANCES](#)(see page 207) - Helpful information about your registered instances to help you determine your SQL Server licensing requirements.
- [SQL LICENSING BY SERVER](#)(see page 223) - Helpful information about your registered servers to help you determine your SQL Server licensing requirements.
- [DECOMMISSIONED INSTANCES](#)¹⁰⁶ - Instances decommissioned in SQL Inventory Manager.
- [DISCOVERED INSTANCES](#)(see page 215) - Instances discovered by SQL Inventory Manager and not registered yet.
- [IGNORED INSTANCES](#)(see page 218) - Instances you have chosen not to manage with SQL Inventory Manager.

9.1 Filtering and Sorting

9.1.1 Sorting

The instances views allow sorting data by one column data. To sort the listed instances, expand the dropdown menu next to the column name you want to use as sorting criteria and select either **Sort Ascending** or **Sort Descending**.

| <input type="checkbox"/> | SQL Server | Status |
|--------------------------|----------------------|----------------------|
| <input type="checkbox"/> | ↑ AUT-CMPREV-001 | ↑ Sort Ascending |
| <input type="checkbox"/> | ↑ AUT-HOOVER | ↓ Sort Descending |
| <input type="checkbox"/> | ↑ AUT-HOOVER\SQL2005 | — |

Alternatively click a column name to sort either in ascending or descending order.

9.1.2 Filtering

⚠ SQL Inventory Manager only uses either quick or advanced filters. For example, selecting advanced filtering will clear any applied quick filter.

9.1.2.1 Quick Filtering

You can find the quick filtering options on the left side of the Instances view. These options will help you get a quick view of your required instances; for example, if you want to see your managed instances filtered by a specific Owner, just choose the respective option from the Owner filter.

¹⁰⁶ <https://wiki.idera.com/display/SIM24/Decommissioned+instances>

Creating a useful filter to "weed out" unnecessary information takes time but is important when managing large environments. As a result, you may want to save that filter for future use. SQL Inventory Manager now allows you to save filters for use in the Explorer and Instances views. Simply create the filter, and then click **Save favorite**, depending on which view you are in when creating the filter. To use that filter, click **Load favorite**.

You can enable or disable the option **Apply filter as it changes** depending if you want to see the changes as you apply the filter, or if you prefer to select your filters first and see the results when you finish.

9.1.2.2 Advanced Filtering

The **Advanced Filter** option on the actions bar allow you to create, save, and apply advanced filters. The advanced filtering options use both the criteria on the quick filters and all the available data column to create custom filters.

To create an advanced filter click **Advanced Filter** and select **Create Filter**.

Choose a **Custom Filter Name**.

From the first drop down menu you can choose your new filter by SQL Server Name, SQL Version, SQL Edition, # of DBs, Owner, Supported, and Supported Status.

The second drop down menu sorts options such as Equals, >=, <=, or Contains, according to your previous choice.

After you finish creating your custom filter you have the options of **Apply Filters without Saving**, **Save and Filter**, and **Cancel**.

You can create more than one filter at a time.

9.2 Managed Instances



The IDERA SQL Inventory Manager list of managed instances displays all your environment's registered instances together with their status, SQL Server versions, editions, number and size of their databases, owners, locations and whether the instances are clustered.


You can click the headers of these columns to order your information; for example, click **# of DBs** to order all your instances according to the number of databases.

 SQL Inventory Manager now supports Azure DB (Single, Managed Instances, and Elastic Pool) and Amazon RDS as monitored databases.

Instance status

Next to the instance name, you can find the following icons that represent the instance status:

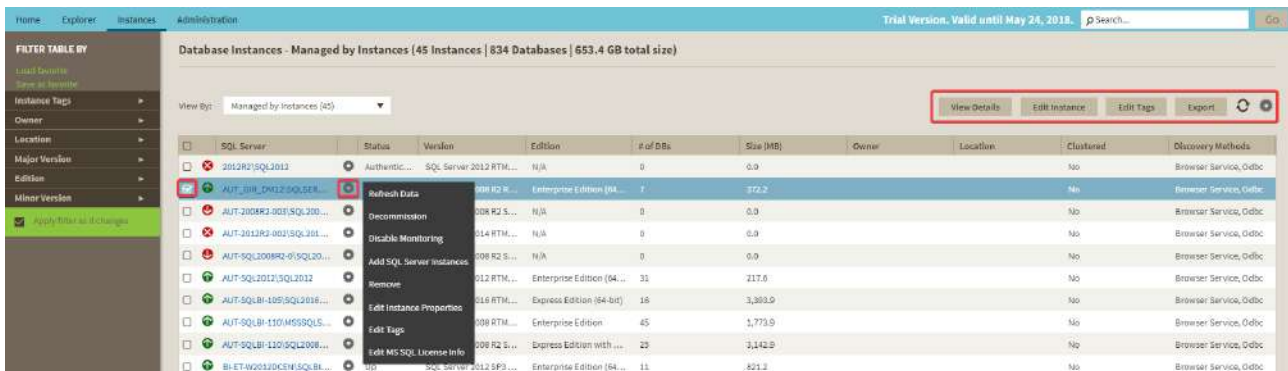
 Instance up  Instance down  Disabled instance  Instance not available  Authentication failure
 Slow

 You can set the number of instances you want SQL Inventory Manager to show per page. Go to the **Display** option at the bottom of the page, type the number you require, and then click **Refresh**.

9.2.1 Available individual instance actions

When you select one instance, you can perform any of the following actions:


- View Details
- Refresh Data
- Edit Instance Properties
- Edit Tags
- Export
- [Decommission](#)¹⁰⁷
- Disable Monitoring
- Remove
- Add SQL Server Instance
- Edit MS SQL License Info
- Apply advanced filters
- Clear filters



9.2.1.1 Viewing instance details

You can access an instance details view by selecting the instance and clicking **View Details** on the action items bar or by clicking directly on the instance name. For more information about what information is available on the instance details view, refer to [Viewing instance details](#).¹⁰⁸

9.2.1.2 Refresh Data

If you want to refresh the collected data for an instance, select the instance and click  **Refresh Data** on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. You can only perform this action for one instance at a time.

¹⁰⁷ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

¹⁰⁸ <http://wiki.idera.com/display/SQLInventoryManager/Viewing+instance+details>


9.2.1.3 Edit instance properties

Select an instance and click **Edit Properties** on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. On the properties dialog window you can change the owner, location, comments, and credentials. For more information go to [Editing instances properties](#).¹⁰⁹

9.2.1.4 Edit Tags

By selecting an instance and clicking **Edit Tags** on the action items bar, SQL Inventory Manager opens a new dialog window where you can add new tags or change the currently assigned tags of the selected instance. You can also find this option by clicking the gear icon next to the respective instance. For more information about editing tags for a specific instance, go to [Manage tags for a single instance](#).¹¹⁰

9.2.1.5 More Actions

Click the **More Actions** button  on the action items bar to find additional options: [Decommission](#)¹¹¹, Disable Monitoring, Remove, and Add SQL Server instance.

9.2.1.6 Decommission

Using **More Actions**, select an instance and click **Decommission** on the action items bar to stop monitoring and alerting on that instance. You can also find this option by clicking the gear icon next to the respective instance. For more information about decommissioning an instance or database, see [Decommissioned instances](#).¹¹²

9.2.1.7 Disable Monitoring

If you want to disable the monitoring of an instance, select the instance, go to **More Actions**, and select **Disable Monitoring**. You can also find this option by clicking the gear icon next to the respective instance. For more information about disabling instances, click [here](#).¹¹³

9.2.1.8 Remove instance

If you no longer want to manage an instance, you can remove it by selecting the respective instance, going to **More Actions** on the action items bar, and selecting **Remove**. You can also find this option by clicking the gear icon next to the instance. SQL Inventory Manager displays all removed instances on the Ignored instances view. For more information about removing instances click [here](#).¹¹⁴

9.2.1.9 Add SQL Server instance

If you want to access the **Add SQL Server instance wizard**, go to **More actions** and select this option. The wizard opens and allows you to browse and register SQL Server instances.

¹⁰⁹ <http://wiki.idera.com/display/SQLInventoryManager/Edit+instance+properties>

¹¹⁰ <http://wiki.idera.com/display/SQLInventoryManager/Manage+tags+for+a+single+instance>

¹¹¹ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

¹¹² <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

¹¹³ <http://wiki.idera.com/display/SQLInventoryManager/Disabling+instances>

¹¹⁴ <http://wiki.idera.com/display/SQLInventoryManager/Removing+instances>

9.2.1.10 Advanced Filter

Apply advanced filters to your instances view, for more information refer to [Filtering and Sorting](#).(see page 228)

9.2.1.11 Clear Filters

Clears any applied advanced filters.

9.2.2 Available bulk actions for multiple instances

9.2.2.1 Edit bulk properties

You can select several instances and change:

- Owner
- Location
- Credentials
- Tags

For example, if you have a new DBA, you can select all instances on this tab and click **Edit Owner** to change all instances owner at once.

You can also perform the following actions under the **More Actions** option:

- [Decommission](#)¹¹⁵
- Disable monitoring
- Enable monitoring
- Remove
- Add SQL Server instances

To bulk edit several instances, select the instances you want to change and follow any of these paths:


- Click the option you want to perform on the action items bar: **Refresh Data, Edit Owner, Edit Location, Edit Credentials, Edit Tags, Export, and More Actions** including **Decommission, Enable/Disable Monitoring, Remove, and Add SQL Server Instance**. You can also apply **Advanced Filters** or **Clear Filters**.
- Or click the gear icon next to one of the selected instances. SQL Inventory Manager opens a dialog window that shows you on how many instances you are performing the changes.

¹¹⁵ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>



Take into account that **Enable Monitoring** will only be available if you have disabled instances.

9.2.3 Exporting Instances view information

On the action items bar of the Managed Instances view, you can find the **Export** option  which allows you to choose your preferred format for exporting the information available on this view. You can export as a **PDF, XLS, or XML** file. The filters you choose on this view will be taken into account for your exported reports.


9.2.4 Filtering and Sorting

SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#)(see page 228)

Tip

IDERA SQL Inventory Manager displays the filters you select on the top section of your managed instances view under **Filtered by**. You can remove filters from this section too.

9.3 SQL Licensing by Instance

 Microsoft SQL SERVER licensing information provided within IDERA SQL Inventory Manager is based on your system information and is only for guidance.

IDERA SQL Inventory Manager gathers information that allows you to determine your SQL Server licensing requirements. The SQL Licensing by Instance view shows information like the instance version, edition, host computer name, CPU name, number of logical and physical processors, and whether the server is virtual. If your instance is using core licensing, this area also displays the number of sockets and cores, the core factor, and possible number of core licenses (number of cores multiplied by the core factor), whether this instance is fully licensed with SA, and a timestamp of the most recent change to the displayed information. To access this view, go to the **Instances** tab, and then select **SQL Licensing by Instance**.

To find more information on how to determine Microsoft SQL Server licenses, refer to [Microsoft Documentation](#)(see page 207).

i Decommissioned instances do not count against your license. For more information about decommissioning, see [Decommissioned instances](#)(see page 207).

⚠ Core Factor is not relevant for SQL Server 2016 and above.

9.3.1 Available options

On the SQL Licensing view, there are multiple options available on the action items bar:

- **Add SQL Server instances**(see page 101) . Click this option to go to the respective wizard and add new SQL Server instances.
- **Export**. You can choose any of the following formats: **PDF**, **XLS**, or **XML** for exporting the information displayed on the SQL Licensing view.
- **Core Factor Table**(see page 118) . Click this option to open the Core Factor Table for viewing SQL Server core-specific information for your instances.

| SQL Server | Version | Edition | Host | CPU Name | # of Sockets | # of Logical Processors | # of Cores | Core Factor | Possible Core Licenses | Virtual | Fully Licensed With SA | Last Changed |
|--------------------------------|---------------------------------------|--|-----------------|--|--------------|-------------------------|------------|-------------|------------------------|---------|--------------------------|------------------------|
| AUT-SQL2012-002 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | <input type="checkbox"/> | May 9, 2018 2:21:14 PM |
| AUT-SQLBI-110 | SQL Server 2008 SP4 (9.0.3000.0) | Standard Edition | AUT-SQLBI-110 | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:56:14 PM |
| AUT-SQLBI-110\MSSSQLSERVER | SQL Server 2008 RTM (10.0.1600.22) | Enterprise Edition | AUT-SQLBI-110 | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 2:17:14 PM |
| AUT-SQLBI-110\SQL2008R2EXPRESS | SQL Server 2008 R2 SP2 (10.50.4000.0) | Express Edition With Advanced Services | AUT-SQLBI-110 | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 2:17:23 PM |
| AUT-SQLCLUSTER\SQL2008R2 | SQL Server 2008 R2 RTM (10.50.3600.1) | Enterprise Edition (64-Bit) | AUT-SQL2008R2-1 | Intel(R) Xeon(R) CPU E5302 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:56:16 PM |
| DMSQL10\DBS1 | SQL Server 2014 SP1 (12.0.4100.1) | Enterprise Edition (64-Bit) | DMSQL10 | AMD Opteron(TM) Processor 6274 | 2 | 4 | 4 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:56:15 PM |
| DMSQL10\DBS10 | SQL Server 2014 SP1 (12.0.4100.1) | Enterprise Edition (64-Bit) | DMSQL10 | AMD Opteron(TM) Processor 6274 | 2 | 4 | 4 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:55:58 PM |
| JS-XW758\SQL2005 | SQL Server 2005 SP4 (9.0.5000.0) | Standard Edition (64-Bit) | JS-XW758 | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:56:16 PM |
| MB-VISTA | SQL Server 2005 SP4 (9.0.5000.0) | Standard Edition | MB-VISTA | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:55:55 PM |
| PUL-H4W7X86 | SQL Server 2005 SP4 (9.0.5000.0) | Standard Edition | PUL-H4W7X86 | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 2:23:03 PM |
| SF-TEDDY | SQL Server 2005 SP4 (9.0.5000.0) | Standard Edition | SF-TEDDY | Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz | 2 | 2 | 2 | N/A | -4.0 | Yes | <input type="checkbox"/> | May 9, 2018 1:56:14 PM |
| SF-WIN08R2 | SQL Server 2008 R2 RTM (10.50.3600.1) | Enterprise Edition (64-Bit) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | <input type="checkbox"/> | May 9, 2018 1:56:16 PM |

✓ You can type on the bottom section of this view the number of instances you want IDERA SQL Inventory Manager to display per page. Click **Refresh** to apply the changes.

9.3.2 Options available for a single instance

On the SQL Licensing view, IDERA SQL Inventory Manager allows you to perform several actions on a single instance as well as bulk actions on several selected instances.

If you select one instance you can perform the following actions:

- View details
- Refresh data

- [Edit instance properties](#)(see page 271) (Owner, Location, Comments and Credentials)
- [Edit Tags](#)(see page 122)
- Export
- More actions: [Decommission](#)(see page 207), [Disable Monitoring](#)(see page 268), [Remove](#)(see page 269), [Add SQL Server instance](#)(see page 101), [Core Factor Table](#)(see page 118), and [Edit MS SQL license info](#)(see page 274).
- Advanced Filters
- Clear Filters


✔ You can also access most of these options from the gear icon next to the selected instance. To access the instance details view, you can click directly on the instance name.

| SQL Server | Version | Edition | Host | CPU Name | # Of Sockets | # Of Logical Processors | # Of Cores | Core Factor | Possible Core Licenses | Virtual | Fully Licensed | Remove |
|---------------------------|---------|---------|------|----------|--------------|-------------------------|------------|-------------|------------------------|---------|----------------|--------------------------|
| 2012R2\SQL2012 | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| AUT-2008R2-003\SQL2008R2 | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | May 10, 2018 10:22:42 AM |
| AUT-2012R2-002 | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | May 10, 2018 10:22:42 AM |
| AUT-2012R2-002\SQL2014_CS | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | May 10, 2018 10:22:42 AM |
| AUT-CNF-001 | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | May 10, 2018 12:16:59 PM |

9.3.2.1 Viewing instance details

You can access an instance details view by selecting the instance and clicking **View Details** on the action items bar or by clicking directly on the instance name. For more information about what information is available on the instance details view, refer to [Viewing instance details](#)(see page 245).

9.3.2.2 Refresh Data

If you want to refresh the collected data for an instance, select the instance and click **Refresh Data**  on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. You can only perform this action for one instance at a time.


9.3.2.3 Edit instance properties

Select an instance and click **Edit Properties** on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. On the properties dialog window you can change the owner, location, comments, and credentials. For more information go to [Editing instances properties](#).(see page 271)


9.3.2.4 Edit Tags

By selecting an instance and clicking **Edit Tags** on the action items bar, IDERA SQL Inventory Manager opens a new dialog window where you can add new tags or change the currently assigned tags of the selected instance. You can also find this option by clicking the gear icon next to the respective instance. For more information about editing tags for a specific instance, go to [Manage tags for a single instance](#).(see page 157)

9.3.2.5 Export

The export option  allows you to export the information displayed in this view as a PDF, XLS, or XML format.

9.3.2.6 More Actions

You can find additional options under the **More Actions** button  on the actions items bar. The following options are available under **More Actions**: Decommission, Disable Monitoring, Remove, Add SQL Server instance, and Core Factor Table.

9.3.2.7 Decommission

Select an instance and click **Decommission** under **More Actions** to stop monitoring and alerting on that instance. You can also find this option by clicking the gear icon next to the respective instance. For more information about decommissioning an instance or database, see [Decommissioned instances](#)¹¹⁶.

9.3.2.8 Disable Monitoring

If you want to disable the monitoring of an instance, select the instance, go to **More Actions**, and select **Disable Monitoring**. You can also find this option by clicking the gear icon next to the respective instance. For more information about disabling instances, click [here](#).(see page 268)

9.3.2.9 Add SQL Server instance

If you want to access the **Add SQL Server instance wizard**, go to **More actions** and select this option. The wizard opens and allows you to browse and register SQL Server instances.

9.3.2.10 Remove

If you no longer want to manage an instance, you can remove it by selecting the respective instance, going to **More Actions** on the action items bar, and selecting **Remove**. You can also find this option by clicking the gear icon next to the instance. IDERA QL Inventory Manager displays all removed instances on the Ignored instances view. For more information about removing instances click [here](#).(see page 269)

9.3.2.11 Core Factor Table

If your instance is using SQL Server core licensing, you can view the current Core Factor Table values by selecting the appropriate instance, clicking **More Actions** and selecting **Core Factor Table**. These values are set by Microsoft and can help you calculate the number of possible core licenses for your physical servers. for more information about this feature, see [Using the Core Factor Table](#)(see page 118).

The SQL Server Licensing view displays the following columns specific to core licensing:

- **# of Sockets.** Displays the number of cores per processor, whether physical or virtual.
- **# of Cores.** Displays the sum of all the cores on a system. For example, if a system includes six cores per processor and contains two processors, then the total # of cores is 12. note that the sum does not mix

¹¹⁶ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

physical and virtual cores but displays each type as a separate line. Check the **Virtual** column for each row to determine if the core is virtual (displays "**Yes**") or physical (displays "**No**").

- **Core Factor.** Displays a numerical value that determines the number of core licenses necessary. While an administrator can change this value in the Core Factor Table, this number is provided by Microsoft based on the CPU in use.
- **Possible Core Licenses.** Displays the product of the total number of cores on a system multiplied by the **Core Factor**.
- **Fully Licensed with SA.** Check this box to remove the license count for the instance. You can also manage this setting in the Edit MS SQL Server License Information dialog box.
- **Last Changed.** Displays a timestamp of the most recent change to this record. Changed values include SQL Server major version, CPU name, number of processors, and total number of cores.

If you select several instances IDERA SQL Inventory Manager allows you to perform the following bulk actions on the selected instances:

- Edit Owner
- Edit Location
- Edit Credentials
- [Edit Tags](#)(see page 122)
- Export
- More Actions ([Disable Monitoring](#)(see page 268), [Enable Monitoring](#), [Decommission](#)(see page 207), [Remove](#)(see page 269), [Add SQL Server instances](#)(see page 101), and [Core Factor Table](#)(see page 118))

For example, if you have a new DBA, you can select all instances on this tab and click **Edit Owner** to change all instances owner at once.

9.3.2.12 Advanced Filter

Apply advanced filters to your instances view, for more information refer to [Filtering and Sorting](#).(see page 228)

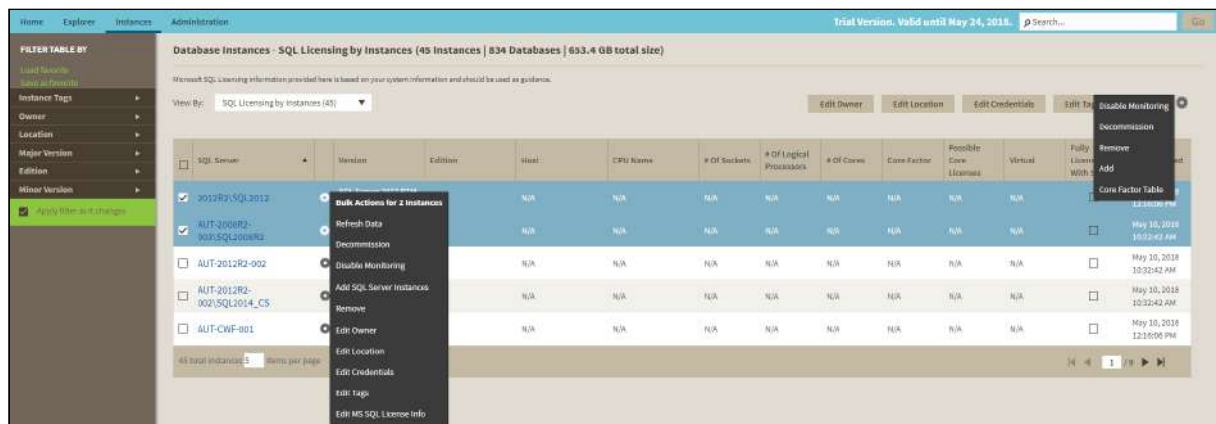
9.3.2.13 Clear Filters

Clears any applied advanced filters.

9.3.3 Options available for multiple instances

To bulk edit several instances, select the instances you want to change and follow any of these paths:

- Click the option you want to perform on the action items bar: **Edit Owner, Edit Location, Edit Credentials, Edit Tags, Export, Disable Monitoring, Decommission, Remove, Add SQL Server Instance, and Core Factor Table.**
- Or click the gear icon next to one of the selected instances. IDERA SQL Inventory Manager opens a dialog window that shows you on how many instances you are performing the changes.



9.3.4 Exporting from the SQL Licensing view

On the action table items bar of the SQL Licensing view, you can find the **Export** option which allows you to choose your preferred format for exporting the information available on this view. You can export as a **PDF**, **XLS**, or **XML** file. The filters you choose on this view will be taken into account for your exported reports.

Unable to render include or excerpt-include. Could not retrieve page.

9.3.5 Filtering and Sorting

SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#)(see page 228)

Tip

IDERA SQL Inventory Manager displays the filters you select on the top section of your managed instances view under **Filtered by**. You can remove filters from this section too.

9.4 Decommissioned Instances

IDERA SQL Inventory Manager users can mark instances and databases as "decommissioned" within the product, thereby preventing erroneous alerting yet retaining the data for historical purposes. Decommissioned items are not monitored, do not trigger alerts or recommendations, and do not count against your IDERA SQL Inventory Manager license. The data stored before an item is decommissioned remains in the repository database, but is only included in the Decommissioned tab in the Instances view and the Decommissioned Databases list at the bottom of the Instance Details view.

The Decommissioned tab and the Decommissioned Databases list show information about decommissioned items such as the name, timestamp of decommission, SQL Server version and edition (Instance only), recommendations (Databases only), and more. To access the Decommissioned tab, go to the **Instances** tab, and click **Decommissioned**.


i Users who decommission or recommission instances and databases must be administrators within IDERA SQL Inventory Manager.

✓ Tip

To add notes on why an instance is decommissioned, you can use the **comments field** on the [Instance](#)(see [page 271](#)) options, or you can create a custom inventory field. You must add the notes before changing the status to decommission.

9.4.1 Available options

On the Decommissioned view there are two options available on the action items bar:

- **Add**(see [page 101](#)). Click this option to go to the respective wizard and add new SQL Server instances.
- **Export** . You can choose any of the following formats: PDF, XLS, or XML for exporting the information displayed on the Decommissioned view.
- **Advanced Filter**. Apply advanced filters.
- **Clear Filters**. Clears any applied advanced filters.



✓ You can type on the bottom section of this view the number of instances you want IDERA SQL Inventory Manager to display per page. Click **Refresh** to apply the changes.

9.4.2 Options available when you select instances

On the Decommissioned view, IDERA SQL Inventory Manager allows you to perform several actions on a single instance as well as bulk actions on several selected instances.

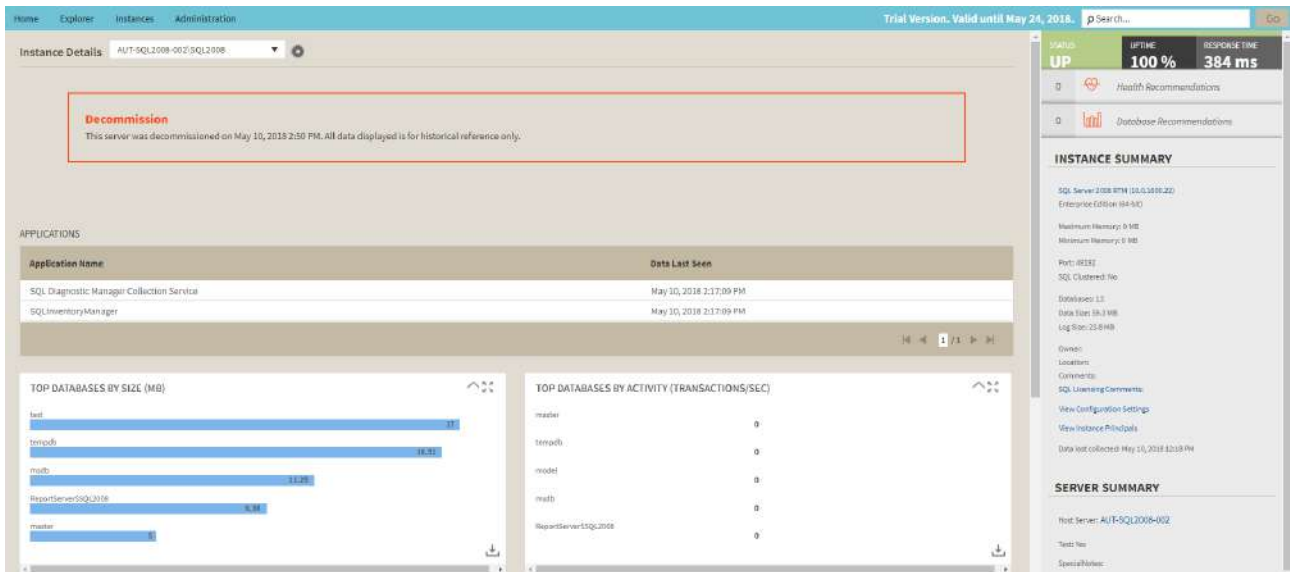
If you select one or more instances, you can perform the following actions:

- Recommission
- Remove

✓ You can also access most of these options from the gear icon next to the selected instance. To access the instance details view, you can click directly on the instance name.

9.4.2.1 Viewing instance details

You can access an instance details view by clicking directly on the instance name. For more information about what information is available on the instance details view, refer to [Viewing instance details](#)(see [page 245](#)). Decommissioned instances display a large message including the timestamp when the instance was decommissioned and to remind the user that all displayed data is for historical purposes only.



9.4.2.2 Remove

If you no longer want to manage an instance, you can remove it by selecting the respective instance, going to **More Actions** on the action items bar, and selecting **Remove**. You can also find this option by clicking the gear icon next to the instance. IDERA SQL Inventory Manager displays all removed instances on the Ignored instances view. For more information about removing instances click [here](#).(see page 269)

9.4.2.3 Recommission

Select an instance and click **Recommission** on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. On the confirmation message dialog, verify the correct instance(s) appears, and then click **Yes**. Note that the instance disappears from the Decommissioned tab and appears on the Managed tab. Remember that this instance is now active and does count against your IDERA SQL Inventory Manager license.

9.4.2.4 Add SQL Server instance

If you want to access the **Add SQL Server instance wizard**, click **Add SQL Server instance**. The wizard opens and allows you to browse and register SQL Server instances.


9.4.2.5 Advanced Filter

Apply advanced filters to your instances view, for more information refer to [Filtering and Sorting](#).(see page 228)

9.4.2.6 Clear Filters

Clears any applied advanced filters.

9.4.3 Exporting from the Decommissioned view

On the action items bar of the Decommissioned view, you can find the **Export**  option which allows you to choose your preferred format for exporting the information available on this view. You can export as a **PDF**, **XLS**, or **XML** file. The filters you choose on this view will be taken into account for your exported reports.

9.4.4 Filtering and Sorting

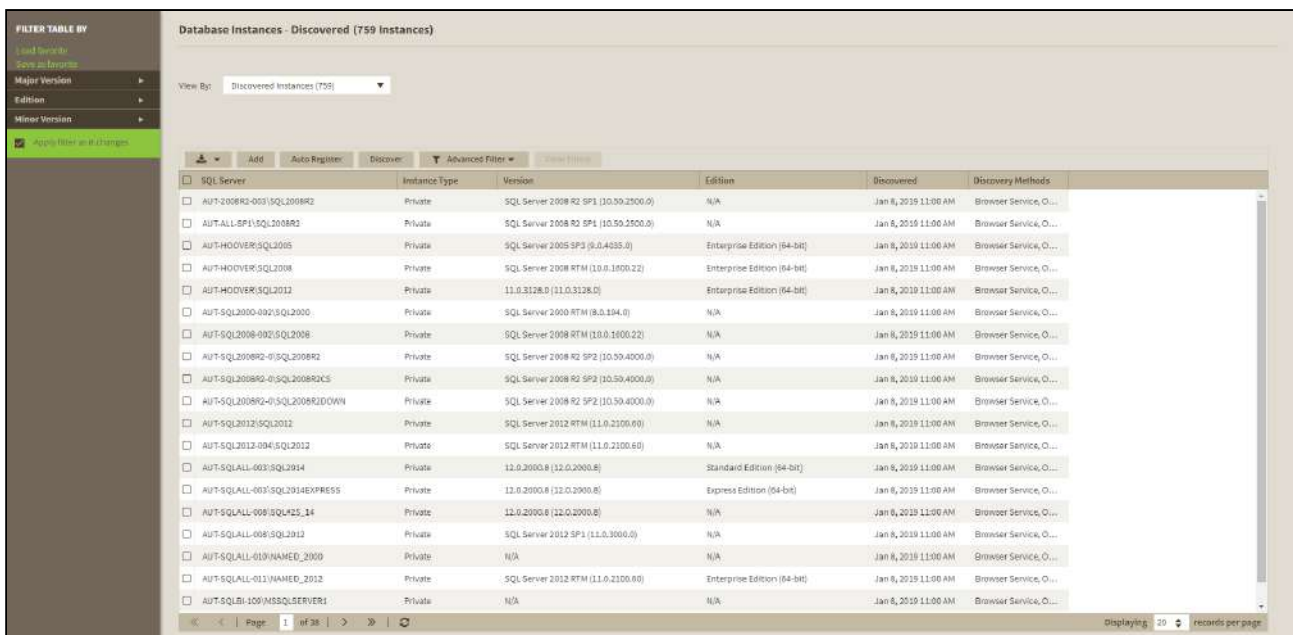
SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#) (see page 228)



Tip

IDERA SQL Inventory Manager displays the filters you select on the top section of your managed instances view under **Filtered by**. You can remove filters from this section too.

9.5 Discovered Instances




| Instance Name | Instance Type | Version | Edition | Discovered | Discovery Methods |
|-------------------------------|---------------|---------------------------------------|-----------------------------|----------------------|-----------------------|
| AUT-2008R2-003\SQL2008R2 | Private | SQL Server 2008 R2 SP1 (10.50.2500.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-ALL-SP1\SQL2008R2 | Private | SQL Server 2008 R2 SP1 (10.50.2500.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-HQOVER\SQL2005 | Private | SQL Server 2005 SP3 (9.0.4035.0) | Enterprise Edition (64-bit) | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-HQOVER\SQL2008 | Private | SQL Server 2008 RTM (10.0.1800.22) | Enterprise Edition (64-bit) | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-HQOVER\SQL2012 | Private | 11.0.3128.0 (11.0.3128.0) | Enterprise Edition (64-bit) | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2000-002\SQL2000 | Private | SQL Server 2000 RTM (8.0.194.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2008-002\SQL2008 | Private | SQL Server 2008 RTM (10.0.1800.22) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2008R2-0\SQL2008R2 | Private | SQL Server 2008 R2 SP2 (10.50.4000.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2008R2-0\SQL2008R2CS | Private | SQL Server 2008 R2 SP2 (10.50.4000.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2008R2-0\SQL2008R2DOWN | Private | SQL Server 2008 R2 SP2 (10.50.4000.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2012\SQL2012 | Private | SQL Server 2012 RTM (11.0.2100.60) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQL2012-004\SQL2012 | Private | SQL Server 2012 RTM (11.0.2100.60) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLALL-003\SQL2014 | Private | 12.0.2000.8 (12.0.2000.8) | Standard Edition (64-bit) | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLALL-003\SQL2014EXPRESS | Private | 12.0.2000.8 (12.0.2000.8) | Express Edition (64-bit) | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLALL-009\SQL2012_14 | Private | 12.0.2000.8 (12.0.2000.8) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLALL-009\SQL2012 | Private | SQL Server 2012 SP1 (11.0.3000.0) | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLALL-019\NAME0_2009 | Private | N/A | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLALL-011\NAME0_2012 | Private | SQL Server 2012 RTM (11.0.2100.60) | Enterprise Edition (64-bit) | Jan 8, 2019 11:00 AM | Browser Service, O... |
| AUT-SQLBI-109\MSSQLSERVER1 | Private | N/A | N/A | Jan 8, 2019 11:00 AM | Browser Service, O... |

IDERA SQL Inventory Manager continuously searches your network to find new SQL Server instances. To see newly discovered instances, go to the **Discovered** view on the **Instances** tab. IDERA SQL Inventory Manager shows you a list of those instances not yet monitored in your environment. The **Discovered** view shows you the instances as well as their aliases in separate rows. From this view you can add or ignore instances. Once you register an instance it is removed from the **Discovered Instances** tab and it is visible in the **Managed Instances** tab, and the aliases display in parenthesis.



Note

If you have the auto-registration option enabled, newly discovered instances will be automatically registered according to your settings in the [Auto registration options](#)(see page 130). Those instances that were discovered before this option was enabled will remain on the Discovered view.

 The **Discovered Instances** tab shows the instances and their aliases in separate rows. This may result in an instances count mismatch.

9.5.1 Actions available on the Discovered instances view

9.5.1.1 Ignoring instances

You can choose to ignore any of these discovered instances. For this purpose, mark the checkbox next to the instance you want to ignore, and click **Ignore** on the action items bar.

IDERA SQL Inventory Manager no longer shows the ignored instances on the Discovered view but adds them to the Ignored view.

9.5.1.2 Auto registration options

Use these options to automatically register SQL Server instances as they are discovered. On this dialog window you can choose which SQL Server editions you want to exclude from auto registration.

9.5.1.3 Discover instances

Use this option to start a job to discover instances. Take into account that this process may take some time to complete. When you select to discover instances, IDERA SQL Inventory Manager displays three options:

- **Discover Instances Browser Service** - Lets you discover instances by using "System.Data.Sql.SqlDataSourceEnumerator" which enumerates all available SQL Server instances within the local network.
- **Discover Instances Odbc** - Lets you discover instances using "odbc32.dll" which gets the instances list from the system's registry data.
- **Discover Cloud Instances/Databases** - Lets you discover instances/databases hosted on Amazon or Azure.

9.5.1.4 Adding instances

If you want to register some of these instances, select the respective checkboxes of the instances you want to add, and then click **Add SQL Server Instance** on the action items bar.

IDERA SQL Inventory Manager opens the wizard for adding new SQL Server instances, and automatically adds the names of the instances you selected before. For more information on how to register SQL Server instances, go to [Adding SQL Server instances](#).(see page 139)


Tip

On the Discovered view, you can find the Microsoft SQL version and edition next to the instances status to help you decide which instances you want to add or ignore.

9.5.1.5 Login to SQL Instance

Log into SQL Instances to collect additional information such as version and edition. For this, mark the checkbox next to the instance you want to log into and click **Log Into Instances** on the action items bar. In the Log in Dialog enter a valid User Name and Password for the selected SQL Instance.

9.5.1.6 Export reports

If you want to export the information displayed on the Discovered Instances view, click the Export button , located on the action items bar, and select your preferred format (**PDF**, **XLS**, or **XML**) for exporting.

9.5.1.7 Advanced Filter

Apply advanced filters to your instances view, for more information refer to [Filtering and Sorting](#).(see page 228)

9.5.1.8 Clear Filters

Clears any applied advanced filters.

9.5.2 Filtering and Sorting

SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#)(see page 228)



Tip

IDERA SQL Inventory Manager displays the filters you select on the top section of your Discovered instances view under **Filtered by**. You can remove filters from this section too.



Tip

You can set the number of instances you want IDERA SQL Inventory Manager to show per page, go to the **Display** option at the bottom of this view, type the number you want, and click **Refresh**.

9.5.3 Manage your discovery options

If you want to configure the discovery job, go to the Administration tab and click **Manage Discovery Options** on the Discovery section. On this dialog window you can specify not only those IP address ranges and domains where you want IDERA SQL Inventory Manager to perform the discovery job, but also you can choose which methods you want to use to search in each computer. You can schedule your discovery jobs, add IP address ranges and those domains that IDERA SQL Inventory Manager will use in discovery.

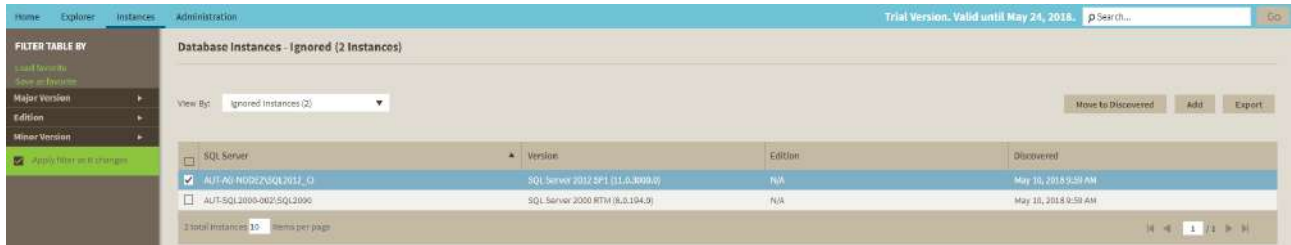
For more information on how to configure your manage discovery options, click [here](#).(see page 125)



Access from the Dashboard

You can also access the **Discovered** instances section by clicking **New Instances** on the right sidebar of the overview. For more information, go to [Viewing information on the SQL Inventory Manager Overview](#). (see page 188)

9.6 Ignored Instances



While IDERA SQL Inventory Manager continuously searches your network for new SQL Server instances, you may not always want to manage all these instances. By ignoring instances, you take them out of the **Discovered** view and IDERA SQL Inventory Manager adds them to the **Ignored** view.

The **Ignored** instances view also contains those instances that you were previously monitoring but then you decided to remove. For more information on how to remove instances, refer to [Removing instances](#).(see page 269)


You can perform the following actions on your ignored instances:

- Move to Discovered
- Add SQL Server Instance
- Export report.
- Apply advanced filters.


To perform any of these options, select your instances, and click **Add SQL Server Instance** or **Move to Discovered** respectively.

9.6.1 Grooming Ignored Instances

IDERA SQL Inventory Manager grooms ignored instances older than 30 days.

 SQL Inventory Manager may rediscover groomed instances.

9.6.2 Exporting reports

You can also export the information available on the Ignored instances view, just go to the **Export** option  , located on the action items bar, and select your preferred format for exporting (**PDF**, **XLS**, or **XML**).

Tip

You can set the number of instances you want IDERA SQL Inventory Manager to show per page. Go to the **Display** option at the bottom of this view, type the number you want, and click **Refresh**.

9.6.3 Filtering and Sorting

SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#)(see page 228)

Tip
 IDERA SQL Inventory Manager displays the filters you select on the top section of your Discovered instances view under **Filtered by**. You can remove filters from this section too.

Tip
 You can set the number of instances you want IDERA SQL Inventory Manager to show per page, go to the **Display** option at the bottom of this view, type the number you want.

9.7 Managed by Host Server

To access the SQL Inventory Manager go to the **Instances** tab and select **Managed by Host Server** from the **View By** drop down menu. This view provides a hierarchical structure of the instances and host servers managed by SQL Inventory Manager together together with relevant information about their characteristics. This view contains three different levels of information: host servers, virtual host servers, and instances.



Host servers:

A physical or virtualized host server containing either instances or virtual servers. The following information is available for Host Servers: Host Server, Type, SQL Server Version, Edition, O/S, Model, CPU Name, CPU Speed, CPU Speed, # of Sockets, #of Logical Processors, #of Cores, Disk Capacity, Free Space, and Windows Cluster.

| Host Server | Type | SQL Server Ve... | Edition | O/S | Model | CPU Name | CPU Speed | # of Sockets | # of Logical Pr... | # of Cores | Disk Capacity | Free Space | Windows Clus... |
|-------------|-------------|---------------------------------------|-------------------|---|----------------|--------------------------------------|-----------|--------------|--------------------|------------|---------------|------------|-----------------|
| SQL-HYPERV | Physical | SQL Server 2008 R2 RTM (10.50.1600.1) | Enterprise Edi... | Microsoft Windows Server 2012 Datacenter | PowerEdge R... | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 2 | 4 | 13.6 TB | 5.6 TB | No |
| vhost | Virtualized | SQL Server 2016 RTM (13.0.1801.5)* | Express Editio... | VMware vCenter Server 6.0.0 build-7462485 | linux-x64 | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 2 | 4 | 13.6 TB | 2.8 TB | |

Virtual host servers:

Virtual host servers contained on a host. The following information is available for virtual host servers: Virtual Machine, SQL Server Version, Edition, O/S, Model, CPU Name, CPU Name, CPU Speed, # of Sockets, #of Logical Processors, #of Cores, Disk Capacity, Free Space, and Windows Cluster.

| Virtual Machine | SQL Server Ver... | Edition | O/S | Model | CPU Name | CPU Speed | # of Sockets | # of Logical Pr... | # of Cores | Disk Capacity | Free Space | Windows Clust... |
|-----------------|-------------------|-------------------|------------------|------------------|-------------------|-----------|--------------|--------------------|------------|---------------|------------|------------------|
| AUT-SQL2012 | SQL Server 20... | Enterprise Edi... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon[... | 2394 | 2 | 2 | 4 | 30.0 GB | 1,003.5 MB | No |
| AUT-SQLBI-110 | SQL Server 20... | Express Editio... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon[... | 2601 | 2 | 2 | 4 | 80 GB | 4.2 GB | No |
| AUT-SQLBI-105 | SQL Server 20... | Express Editio... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon[... | 2600 | 2 | 2 | 4 | 79.7 GB | 1.9 GB | No |
| CM-WIN8 | SQL Server 20... | Enterprise Edi... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon[... | 2600 | 2 | 2 | 4 | 79.7 GB | 43.4 GB | No |
| AUT_GIR_DM12 | SQL Server 20... | Enterprise Edi... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon[... | 2394 | 2 | 2 | 4 | 38.9 GB | 0 | No |

Instances:

Instances on either a virtual or physical host. The following information is available for instances: Instance Name, SQL Server Version, Edition, CPU Speed, Sockets, Logical Processors, Cores, Cores Factors, Possible Core Licenses, Last Changed.

| Virtual Machine | SQL Server Ver... | Edition | O/S | Model | CPU Name | CPU Speed | # of Sockets | # of Logical Pr... | # of Cores | Disk Capacity | Free Space | Windows Clust... |
|-----------------|-------------------|-------------------|------------------|------------------|-------------------|-----------|--------------|--------------------|------------|---------------|------------|------------------|
| QASS-2008VM1 | SQL Server 20... | Enterprise Edi... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon[... | 2400 | 5 | 5 | 5 | 96.0 GB | 22.4 GB | No |

| Instance Name | SQL Server Version | Edition | CPU Speed | Sockets | Logical Processors | Cores | Cores Factors | Possible Core Licen... | Last Changed |
|--------------------|-----------------------|--------------------------|-----------|---------|--------------------|-------|---------------|------------------------|-------------------|
| QASS-2008VM1/SQ... | SQL Server 2008 SP... | Enterprise Edition (...) | 2400 | 5 | 5 | 5 | N/A | 5.0 | 11/07/18 01:34 PM |

9.7.1 Available individual instance actions

View By: Managed by Host Server (2) View Details Edit Instance Edit Tags Export Refresh Settings

| Host Server | Type | SQL Server Ver... | Edition | O/S | Model | CPU Name | CPU Speed | # of Sockets | # of Logical Pr... | # of Cores | Disk Capacity | Free Space | Windows Clust... |
|-------------|----------|---------------------------------------|-------------------|--|----------------|--------------------------------------|-----------|--------------|--------------------|------------|---------------|------------|------------------|
| SQL-HYPERV | Physical | SQL Server 2008 R2 RTM (10.50.1800.1) | Enterprise Edi... | Microsoft Windows Server 2012 Datacenter | PowerEdge R... | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 16 | 8 | 13.6 TB | 5.7 TB | No |

| Instance Name | SQL Server Version | Edition | CPU Speed | Sockets | Logical Processors | Cores | Cores Factors | Possible Core Licen... | Last Changed |
|------------------|-------------------------|--------------------------|-----------|---------|--------------------|-------|---------------|------------------------|-------------------|
| SQL-HYPERV/SQ... | SQL Server 2008 R2 R... | Enterprise Edition (6... | 2394 | 2 | 16 | 8 | N/A | N/A | 11/07/18 01:11 PM |

When you select one instance, you can perform any of the following actions on the actions items bar:

- View Details
- Edit Instance Properties
- Edit Tags
- Export
- Refresh Data
- Decommission¹¹⁷
- Remove
- Add SQL Server Instance


9.7.1.1 Viewing instance details

You can access an instance details view by selecting the instance and clicking **View Details** on the action items bar. For more information about what information is available on the instance details view, refer to [Viewing instance details](#).¹¹⁸

117 <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

118 <http://wiki.idera.com/display/SQLInventoryManager/Viewing+instance+details>

9.7.1.2 Refresh Data

If you want to refresh the collected data for an instance, select one or more instances and click  **Refresh Data** on the action items bar.


9.7.1.3 Edit instance properties

Select an instance and click **Edit Properties** on the action items bar. On the properties dialog window you can change the owner, location, comments, and credentials. For more information go to [Editing instances properties](#).¹¹⁹

9.7.1.4 Edit Tags

By selecting an instance and clicking **Edit Tags** on the action items bar, SQL Inventory Manager opens a new dialog window where you can add new tags or change the currently assigned tags of the selected instance. For more information about editing tags for a specific instance, go to [Manage tags for a single instance](#).¹²⁰

9.7.1.5 More Actions

Click the **More Actions** button  on the action items bar to find additional options: [Decommission](#)¹²¹, Remove, and Add SQL Server instance.

9.7.1.6 Decommission

Using **More Actions**, select an instance and click **Decommission** on the action items bar to stop monitoring and alerting on that instance. For more information about decommissioning an instance or database, see [Decommissioned instances](#)¹²².

9.7.1.7 Remove instance

If you no longer want to manage an instance, you can remove it by selecting the respective instance, going to **More Actions** on the action items bar, and selecting **Remove**. SQL Inventory Manager displays all removed instances on the Ignored instances view. For more information about removing instances click [here](#).¹²³

9.7.1.8 Add SQL Server instance

If you want to access the **Add SQL Server instance wizard**, go to **More actions** and select this option. The wizard opens and allows you to browse and register SQL Server instances.

9.7.1.9 Advanced Filter

Apply advanced filters to your instances view, for more information refer to [Filtering and Sorting](#).(see page 228)

¹¹⁹ <http://wiki.idera.com/display/SQLInventoryManager/Edit+instance+properties>

¹²⁰ <http://wiki.idera.com/display/SQLInventoryManager/Manage+tags+for+a+single+instance>

¹²¹ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

¹²² <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

¹²³ <http://wiki.idera.com/display/SQLInventoryManager/Removing+instances>

9.7.1.10 Clear Filters

Clears any applied advanced filters.

9.7.2 Available bulk actions for multiple instances

| Host Server | Type | SQL Server Ver... | Edition | O/S | Model | CPU Name | CPU Speed | # of Sockets | # of Logical |
|------------------------|-------------|---|------------------|---|----------------|--|-----------|--------------|--------------|
| SQL-HYPERV | Physical | SQL Server 2008 R2 RTM (10.50.1600.1) | Enterprise Ed... | Microsoft Windows Server 2012 Datacenter | PowerEdge R... | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 16 |
| esx- 53.redhouse.hq | Virtualized | 11.0.3128.0 (11.0.3128.0)* | Enterprise Ed... | VMware vCenter Server 6.0.0 build- 7462485 | linux-x64 | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 16 |

| Virtual Machine | SQL Server Ver... | Edition | O/S | Model | CPU Name | CPU Speed | # of Sockets | # of Logical Pr... |
|-----------------|-------------------|-------------------|-------------------|------------------|-------------------|-----------|--------------|--------------------|
| QASS-2008/VM1 | SQL Server 20... | Enterprise Edi... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon ... | 2400 | 5 | 5 |
| SF-MEEKO | SQL Server 20... | Enterprise Edi... | Microsoft® Win... | VMware Virtua... | Intel(R) Xeon ... | 2661 | 2 | 2 |

| Instance Name | SQL Server Version | Edition | CPU Speed | Sockets | Logical Processors | Cores |
|--------------------|-----------------------|-------------------------|-----------|---------|--------------------|-------|
| SF-MEEKO\SQL201... | SQL Server 2012 RT... | Business Intelligenc... | 2661 | 2 | 2 | 2 |
| SF-MEEKO\SQL201... | SQL Server 2012 RT... | Enterprise Edition | 2661 | 2 | 2 | 2 |

| | | | | | | | | |
|----------------|-------------------|-------------------|------------------|------------------|-------------------|------|---|---|
| SS-ALWYSN20... | 11.0.3128.0 (1... | Enterprise Edi... | Microsoft Win... | VMware Virtua... | Intel(R) Xeon ... | 2600 | 1 | 1 |
|----------------|-------------------|-------------------|------------------|------------------|-------------------|------|---|---|

You can select several instances and perform different actions:

- Edit Owner
- Edit Location
- Edit Credentials
- Edit Tags
- Export
- Refresh

For example, if you have a new DBA, you can select all instances on this tab and click **Edit Owner** to change all instances owner at once.

You can also perform the following actions under the **More Actions** option:


- [Decommission](#)¹²⁴
- Remove
- Add SQL Server instances

To bulk edit several instances, select the instances you want to change and follow any of these paths:

- Click the option you want to perform on the action items bar: **Refresh Data, Edit Owner, Edit Location, Edit Credentials, Edit Tags, Export, and More Actions** including **Decommission, Remove, and Add SQL Server Instance**.
- Or click the gear icon next to one of the selected instances. SQL Inventory Manager opens a dialog window that shows you on how many instances you are performing the changes.

¹²⁴ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

9.7.3 Exporting Instances view information

On the action items bar of the Managed Instances view, you can find the **Export** option  which allows you to choose your preferred format for exporting the information available on this view. You can export as a **PDF**, **XLS**, or **XML** file. The filters you choose on this view will be taken into account for your exported reports.

9.7.4 Filtering and Sorting

SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#).(see page 228)



Tip

IDERA SQL Inventory Manager displays the filters you select on the top section of your managed instances view under **Filtered by**. You can remove filters from this section too.



Access from the Overview

You can also access the **Managed** instances section by clicking **Instances** on the right sidebar of the overview. For more information, go to [Viewing information on the SQL Inventory Manager Overview](#)(see page 188).

9.7.4.1 [Learn more](#)¹²⁵ > >

| | | | | | | | |
|--|---|---|--|--|---|--|---|
| IDERA Website ¹²⁶ | Products ¹²⁷ | Purchase ¹²⁸ | Support ¹²⁹ | Community ¹³⁰ | About Us ¹³¹ | Resources ¹³² | Legal (see page 219) |
|--|---|---|--|--|---|--|---|

9.8 SQL Licensing by Server



The SQL Licensing by Server view only shows the highest SQL Server version and edition for all the SQL instances registered and linked to the host. No information is available for unregistered or unlinked SQL instances.

¹²⁵ <https://www.idera.com/productssolutions/sqlserver/sql-elements>

¹²⁶ <http://www.idera.com>

¹²⁷ <http://www.idera.com/productssolutions/sqlserver>

¹²⁸ <https://www.idera.com/buynow/onlinestore>

¹²⁹ <https://idera.secure.force.com>

¹³⁰ <http://community.idera.com>


¹³¹ <http://www.idera.com/about/aboutus>

¹³² <http://www.idera.com/resourcecentral>


Microsoft SQL Licensing information provided here is based on your system information and should be used as guidance.

View By: SQL Licensing by Server (2) Add Export Core Factor Table

| Host | SQL Server Ver... | O/S | Model | CPU Name | CPU Speed | # Of Sockets | # Of Logical Pr... | # Of Cores | Disk Capacity | Free Space | Windows Cluste... |
|--------------------------|---|---|--------------------------------------|--------------------------------------|--------------|---------------------|-------------------------|---------------|---------------|------------------------|-------------------|
| SQL-HYPERV | 10.50.1600.1 | Microsoft Windows Server 2012 Datacenter | PowerEdge R710 | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 2 | 4 | 13.6 TB | 5.8 TB | No |
| <input type="checkbox"/> | SQL Server | | | CPU Name | | # Of Sockets | # Of Logical Processors | # Of Cores | Core Factor | Possible Core Licenses | |
| <input type="checkbox"/> | SQL-HYPERV\SQL2008R2 | | | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | | 2 | 16 | 8 | 1.0 | 8.0 | |
| Virtual | | VMware vCenter Server 6.0.0 build-7462485 | linux-x64 | Intel(R) Xeon(R) CPU E5645 @ 2.40GHz | 2394 | 2 | 2 | 4 | 13.6 TB | 2.5 TB | Yes |
| Virtual Server N... | O/S | Model | CPU Name | CPU Speed | # Of Sockets | # Of Logical Pro... | # Of Cores | Disk Capacity | Free Space | Windows Clustered | |
| AUT-SQL-DEV-001 | Microsoft Windows Server 2008 R2 Enterprise | VMware-Virtual Platform | Intel(R) Xeon(R) CPU E5645 @ 2.40GHz | 2394 | 2 | 2 | 4 | 99.9 GB | 35.1 GB | No | |
| <input type="checkbox"/> | SQL Server | | | CPU Name | | # Of Sockets | # Of Logical Processors | # Of Cores | Core Factor | Possible Core Licenses | |
| <input type="checkbox"/> | AUT-SQL-DEV-001 | | | Intel(R) Xeon(R) CPU E5645 @ 2.40GHz | | 2 | 2 | 2 | | 4.0 | |

 Microsoft SQL SERVER licensing information provided within IDERA SQL Inventory Manager is based on your system information and is only for guidance.

The SQL Licensing by Server view shows an organized hierarchical view of your managed servers and instances and information that allows you to determine your SQL Server licensing requirements. This view contains two different levels of information:

 **Core Factor** is not relevant for SQL Server 2016 and above.

Host server

A host server that contains your managed instances. The following information is available: Host, SQL Server Version (Only the highest available version is listed), Edition, CPU Name, # Of Sockets, #Of Logical Processors, #Of Cores, Core Factor, Possible Core Licenses.

| Host | SQL Server Ver... | O/S | Model | CPU Name | CPU Speed | # Of Sockets | # Of Logical Pr... | # Of Cores | Disk Capacity | Free Space | Windows Cluste... |
|--------------------------|----------------------|--|----------------|--------------------------------------|-----------|--------------|-------------------------|------------|---------------|------------------------|-------------------|
| SQL-HYPERV | 10.50.1600.1 | Microsoft Windows Server 2012 Datacenter | PowerEdge R710 | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2394 | 2 | 2 | 4 | 13.6 TB | 5.8 TB | No |
| <input type="checkbox"/> | SQL Server | | | CPU Name | | # Of Sockets | # Of Logical Processors | # Of Cores | Core Factor | Possible Core Licenses | |
| <input type="checkbox"/> | SQL-HYPERV\SQL2008R2 | | | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | | 2 | 16 | 8 | 1.0 | 8.0 | |


SQL Instances

Instances registered on SQL Inventory Manager. The following information is available: SQL Server, CPU Name, # of Sockets, # of Logical Processors, # of Cores, Core Factor, Possible Core Licenses.

| <input type="checkbox"/> | SQL Server | CPU Name | # Of Sockets | # Of Logical Processors | # Of Cores | Core Factor | Possible Core Licenses |
|--------------------------|----------------------|--------------------------------------|--------------|-------------------------|------------|-------------|------------------------|
| <input type="checkbox"/> | SQL-HYPERV\SQL2008R2 | Intel(R) Xeon(R) CPU E5620 @ 2.40GHz | 2 | 16 | 8 | 1.0 | 8.0 |


To access this view, go to the **Instances** tab, and then select **SQL Licensing by Server**.


To find more information on how to determine Microsoft SQL Server licenses, refer to [Microsoft Documentation](#)(see page 223).

 Decommissioned instances do not count against your license. For more information about decommissioning, see [Decommissioned instances](#)(see page 212).

9.8.1 Available options

On the SQL Licensing view, there are multiple options available on the action items bar:

- [Add SQL Server instances](#)(see page 101). Click this option to go to the respective wizard and add new SQL Server instances.
- **Export** . You can choose any of the following formats: **PDF**, **XLS**, or **XML** for exporting the information displayed on the SQL Licensing view.
- [Core Factor Table](#)(see page 118). Click this option to open the Core Factor Table for viewing SQL Server core-specific information for your instances.

 On the bottom section of this view, you can change the number of instances you want IDERA SQL Inventory Manager to display per page.

9.8.2 Options available for a single instance

IDERA SQL Inventory Manager allows you to perform several actions on a single instance as well as bulk actions on several selected instances.

If you select one instance you can perform the following actions:

- View details
- [Edit instance properties](#)(see page 271) (Owner, Location, Comments and Credentials)
- [Edit Tags](#)(see page 122)
- Export
- Refresh data
- More actions: [Decommission](#)(see page 212), [Remove](#)(see page 269), [Add](#)(see page 101), and [Core Factor Table](#)(see page 118).
- Advanced filters

9.8.2.1 Viewing instance details

You can access an instance details view by selecting the instance and clicking **View Details** on the action items bar or by clicking directly on the instance name. For more information about what information is available on the instance details view, refer to [Viewing instance details](#)(see page 245).

9.8.2.2 Edit instance properties

Select an instance and click **Edit Properties** on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. On the properties dialog window you can change the owner, location, comments, and credentials. For more information go to [Editing instances properties](#)(see page 271)


9.8.2.3 Edit Tags

By selecting an instance and clicking **Edit Tags** on the action items bar, IDERA SQL Inventory Manager opens a new dialog window where you can add new tags or change the currently assigned tags of the selected instance. You can also find this option by clicking the gear icon next to the respective instance. For more information about editing tags for a specific instance, go to [Manage tags for a single instance](#).(see page 157)


9.8.2.4 Export

You can export the information displayed in this view as a PDF, XLS, or XML format.

9.8.2.5 Refresh Data

If you want to refresh the collected data for an instance, select the instance and click **Refresh Data**  on the action items bar. You can also find this option by clicking the gear icon next to the respective instance. You can only perform this action for one instance at a time.

9.8.2.6 More Actions

You can find additional options under the **More Actions** button  on the actions items bar. The following options are available under **More Actions**: Decommission, Disable Monitoring, Remove, Add SQL Server instance, and Core Factor Table.

Decommission

Select an instance and click **Decommission** under **More Actions** to stop monitoring and alerting on that instance. You can also find this option by clicking the gear icon next to the respective instance. For more information about decommissioning an instance or database, see [Decommissioned instances](#)¹³³.

Add SQL Server instance

If you want to access the **Add SQL Server instance wizard**, go to **More actions** and select this option. The wizard opens and allows you to browse and register SQL Server instances.

Remove

If you no longer want to manage an instance, you can remove it by selecting the respective instance, going to **More Actions** on the action items bar, and selecting **Remove**. You can also find this option by clicking the gear icon next to the instance. IDERA QL Inventory Manager displays all removed instances on the Ignored instances view. For more information about removing instances click [here](#).(see page 269)

Core Factor Table

If your instance is using SQL Server core licensing, you can view the current Core Factor Table values by selecting the appropriate instance, clicking **More Actions** and selecting **Core Factor Table**. These values are set by Microsoft and can help you calculate the number of possible core licenses for your physical servers. for more information about this feature, see [Using the Core Factor Table](#)(see page 118).

¹³³ <http://wiki.idera.com/display/SQLInventoryManager/Decommissioned+instances>

The SQL Server Licensing view displays the following columns specific to core licensing:

- **# of Sockets.** Displays the number of cores per processor, whether physical or virtual.
- **# of Cores.** Displays the sum of all the cores on a system. For example, if a system includes six cores per processor and contains two processors, then the total # of cores is 12. Note that the sum does not mix physical and virtual cores but displays each type as a separate line. Check the **Virtual** column for each row to determine if the core is virtual (displays "Yes") or physical (displays "No").
- **Core Factor.** Displays a numerical value that determines the number of core licenses necessary. While an administrator can change this value in the Core Factor Table, this number is provided by Microsoft based on the CPU in use.
- **Possible Core Licenses.** Displays the product of the total number of cores on a system multiplied by the **Core Factor**.
- **Fully Licensed with SA.** Check this box to remove the license count for the instance. You can also manage this setting in the Edit MS SQL Server License Information dialog box.
- **Last Changed.** Displays a timestamp of the most recent change to this record. Changed values include SQL Server major version, CPU name, number of processors, and total number of cores.

9.8.2.7 Advanced Filter

Apply advanced filters to your instances view, for more information refer to [Filtering and Sorting](#) (see page 228)

9.8.2.8 Clear Filters

Clears any applied advanced filters.

9.8.3 Options available for multiple Instances

If you select several instances IDERA SQL Inventory Manager allows you to perform the following bulk actions on the selected instances:

- Edit Owner
- Edit Location
- Edit Credentials
- [Edit Tags](#) (see page 122)
- Export
- More Actions ([Decommission](#) (see page 212), [Remove](#) (see page 269), [Add](#) (see page 101), and [Core Factor Table](#) (see page 118))
- Apply filters

For example, if you have a new DBA, you can select all instances on this tab and click **Edit Owner** to change all instances owner at once.

9.8.4 Exporting from the SQL Licensing view

On the action items bar of the SQL Licensing view, you can find the **Export** option which allows you to choose your preferred format for exporting the information available on this view. You can export as a **PDF**, **XLS**, or **XML** file. The filters you choose on this view will be taken into account for your exported reports.

9.8.5 Filtering and Sorting

SQL Inventory Manager offers different ways of sorting and filtering the listed instances/servers, for further information refer to [Filtering and Sorting](#)(see page 228)

✓ Tip

IDERA SQL Inventory Manager displays the filters you select on the top section of your managed instances view under **Filtered by**. You can remove filters from this section too.

9.9 Filtering and Sorting

Starting with SQL Inventory Manager 2.6 you can now use advanced filtering and sorting options on all the instances views.

9.9.1 Sorting

The different instances views in SQL Inventory Manager allow sorting data by one column data. To sort the listed instances, expand the drop down menu next to the column name you want to use as sorting criteria and select either **Sort Ascending** or **Sort Descending**.

| SQL Server | | Instance Type | Version |
|--------------------------|-----------------|----------------------|---------|
| <input type="checkbox"/> | CMWIN8X86-S6 | ↑ Sort Ascending | SQL Se |
| <input type="checkbox"/> | DEVWIN10X64 | ↓ Sort Descending | SQL Se |
| <input type="checkbox"/> | CWF-AUTO | Columns ▶ | SQL Se |
| <input type="checkbox"/> | CMWIN7X86-S3 | Filters ▶ | N/A |
| <input type="checkbox"/> | DESKTOP-H2V08UL | Private | N/A |

Alternatively click a column name to sort either in ascending or descending order.

9.9.2 Filtering

⚠ SQL Inventory Manager only uses either quick or advanced filters. For example, selecting advanced filtering will clear any applied quick filter.

9.9.2.1 Quick Filtering

You can find the quick filtering options on the left side of the Instances view. These options will help you get a quick view of your required instances; for example, if you want to see your managed instances filtered by a specific Owner, just choose the respective option from the Owner filter.

Creating a useful filter to "weed out" unnecessary information takes time but is important when managing large environments. As a result, you may want to save that filter for future use. SQL Inventory Manager now allows you to save filters for use in the Explorer and Instances views. Simply create the filter, and then click **Save favorite**, depending on which view you are in when creating the filter. To use that filter, click **Load favorite**.

You can enable or disable the option **Apply filter as it changes** depending if you want to see the changes as you apply the filter, or if you prefer to select your filters first and see the results when you finish.

9.9.2.2 Filtering columns by name

| <input type="checkbox"/> | SQL Server ↓ | Status | Server/Instance/DB ... | Version |
|--------------------------|-----------------------|-----------------|---|---------|
| <input type="checkbox"/> | WIN16DBMIRROR2 | Sort Ascending | Virtual | SQL Se |
| <input type="checkbox"/> | WIN10X64-SQL14 | Sort Descending | Virtual | SQL Se |
| <input type="checkbox"/> | WIN-UQITD93V9AC\SQL | Columns | <input checked="" type="checkbox"/> SQL Server | |
| <input type="checkbox"/> | SQLCMTEST\SQL2014 | Filters | <input checked="" type="checkbox"/> Actions | |
| <input type="checkbox"/> | SQLCMTEST | Up | <input checked="" type="checkbox"/> Status | |
| <input type="checkbox"/> | SQL-HYPERV\SQL 2008R2 | Up | <input checked="" type="checkbox"/> Server/Instance/DB Type | |

To have a more compact and relevant view you can filter out columns from the instances views. To filter out columns by name follow these instructions.

1. Click ▼ next to a column name.
2. Go to **Columns**.
3. Click the checkbox next to the column name you want to filter out.

9.9.2.3 Filtering by column value

| Version | Edition | # of DBs | Size (MB) |
|----------------------|---------------------|--|-----------|
| SQL Server 2016 F... | Sort Ascending | 9 | 261.6 |
| SQL Server 2014 F... | Sort Descending | 16 | 954.1 |
| SQL Server 2014 F... | Columns | 14 | 604.2 |
| SQL Server 2014 F... | Filters | <input type="checkbox"/> SQL Server 2016 RTM (13.0.1601.5) | |
| SQL Server 2012 S... | Enterprise Edition | <input type="checkbox"/> SQL Server 2014 RTM (12.0.2000.8) | |
| SQL Server 2016 R... | Enterprise Edition | <input type="checkbox"/> SQL Server 2012 SP2 (11.0.5058.0) | |
| SQL Server 2016 C... | Enterprise Evaluat. | <input type="checkbox"/> SQL Server 2016 CTP 3.3 (13.0.1400.361) | |

You can also filter instances using column values as filtering criteria. To filter out columns by value follow these instructions.

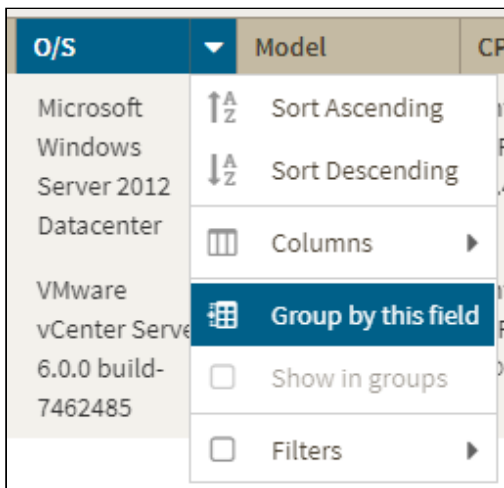
1. Click ▼ next to a column name.
2. Go to **Filters**.
3. Click the column value you want to use as filtering criteria.

9.9.2.4 Grouping Columns

The Managed by Host Server and SQL Licensing by Server views allow you organize instances by grouping them according to column names.

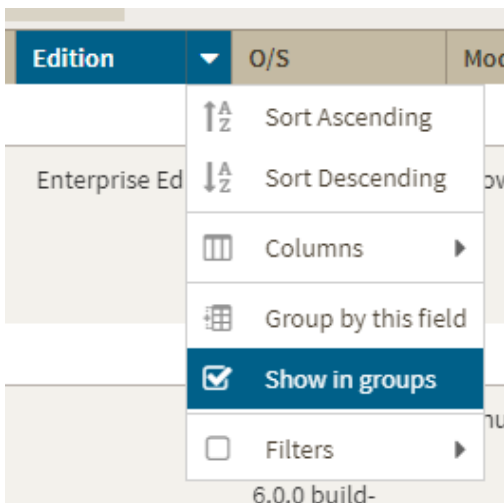
To group instances by column name follow these instructions.

1. Click ▼ next to a column name you want to use as group criteria.
2. Select **Group by this field**.



To ungroup instances follow these instructions.

1. Click ▼ next to a column name.
2. Uncheck **Group by this field**.



9.9.2.5 Advanced Filtering

The **Advanced Filter** option on the actions bar allows you to create, save, and apply advanced filters. The advanced filtering options use both the criteria on the quick filters and all the available data column to create custom filters. To create an advanced filter click **Advanced Filter** and select **Create Filter**.

The Advanced Filters dialog in IDERA SQL Inventory Manager has the following structure:

1. **Custom Filter Name** - Enter a name for your custom filter.
2. **Filters Field** - Allow you to setup filtering criteria.
3. **Add Filter** - Allow you to add an additional filter.
4. **Clear Filters** - Clears the value of filter creation fields.
5. **Cancel** - Cancels the creation of the filter.
6. **Apply Filters without Saving** - Applies the current advanced filter without saving it.
7. **Save and Filter** - Saves and applies the filter.

The **Filters Field** contains the following elements:

Column Name - The column name used as filtering criteria, like Instance or SQLServer Version.

Operator - Compares the value on its left with the value on its right.

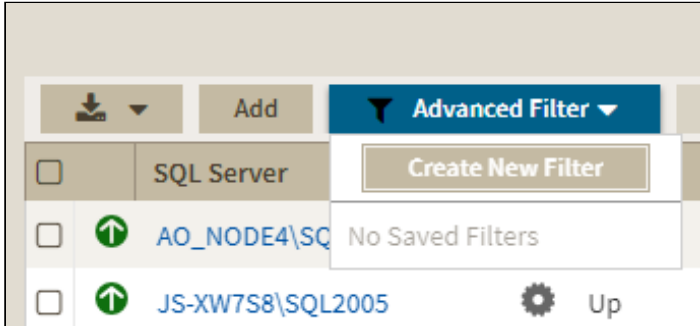
Column Value - The value to be used as filtering criteria.

Conditional - Conditional statements that determine additional filtering options. Available options are **AND**, **OR**, and **NOT**.

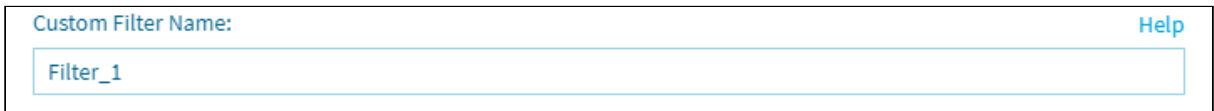
Creating Advanced Filters

To create an advanced filter follow these instructions:

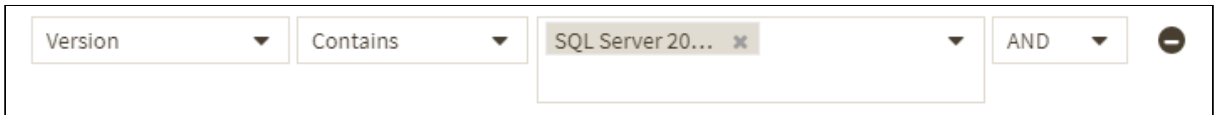
1. Go to the instance view where you want to create a filter.
2. Click **Advanced Filter** and select **Create New Filter**.



3. On the **Advanced Filters** dialog enter a name for your filter.



4. Use the drop down menus to select your desired criteria on the filter creation field.



5. Click Save and Filter

You can also use conditions to further refine your advanced filters

You can also use further conditions to refine your advanced filters. To add more filtering fields click **Add Filter** and choose an operator.




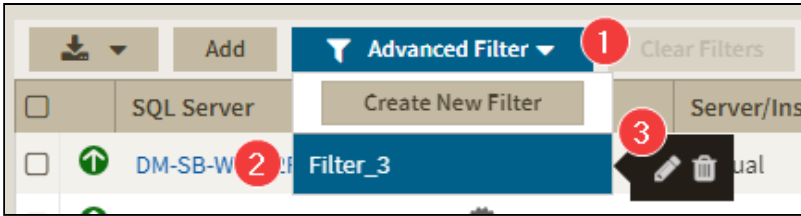
To remove a filter field click  .

Editing Advanced Filters

To edit a filter go to an instance view and follow these instructions:


1. Click Advanced Filter.

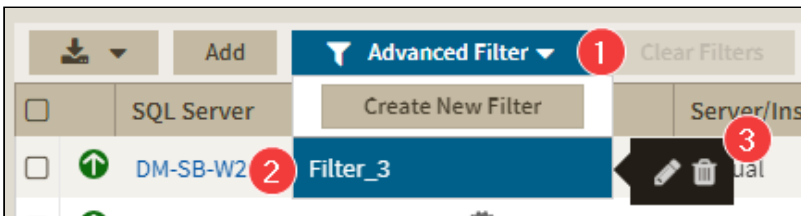
2. Go to the filter you want to edit.
3. Click on the edit option 



Deleting Advanced Filters

To delete a filter go to an instance view and follow these instructions:

1. Click Advanced Filter.
2. Go to the filter you want to delete.
3. Click on the delete button 



10 IDERA Reports Utility

Your SQL Inventory Manager installation includes the IDERA Reports Utility. You can use this tool to deploy the [included reports](#) (see page 235) on your SSRS Instances. You can also use the IDERA Reports Utility to deploy other custom reports.

Note

IDERA Reports Utility needs to be present on the same server as the SIM services.

10.1 Accessing the report deploy utility

To access the IDERA Report Utility go to the **ReportUtility** folder inside the SQL Inventory Manager installation path. The default location for the IDERA Reports Utility is **C:\Program Files\Idera\SQLInventoryManager\ReportUtility**

⚠ You may need to run it as Admin in some cases

10.2 Deploying reports

⚠ If you are upgrading to SQL Inventory Manager 2.6 you need to redeploy the reports.

To deploy reports on your instances follow these steps:

1. Open IDERA Report Utility.

Idera SIM Reports Installer

Report Server Web Service URL:

Note: To successfully deploy reports using this utility, your logon account must have Content Manager rights on the Report Server. For more information, see the Reporting Services Books Online.

SIM Repository Information

Target SQL Server:

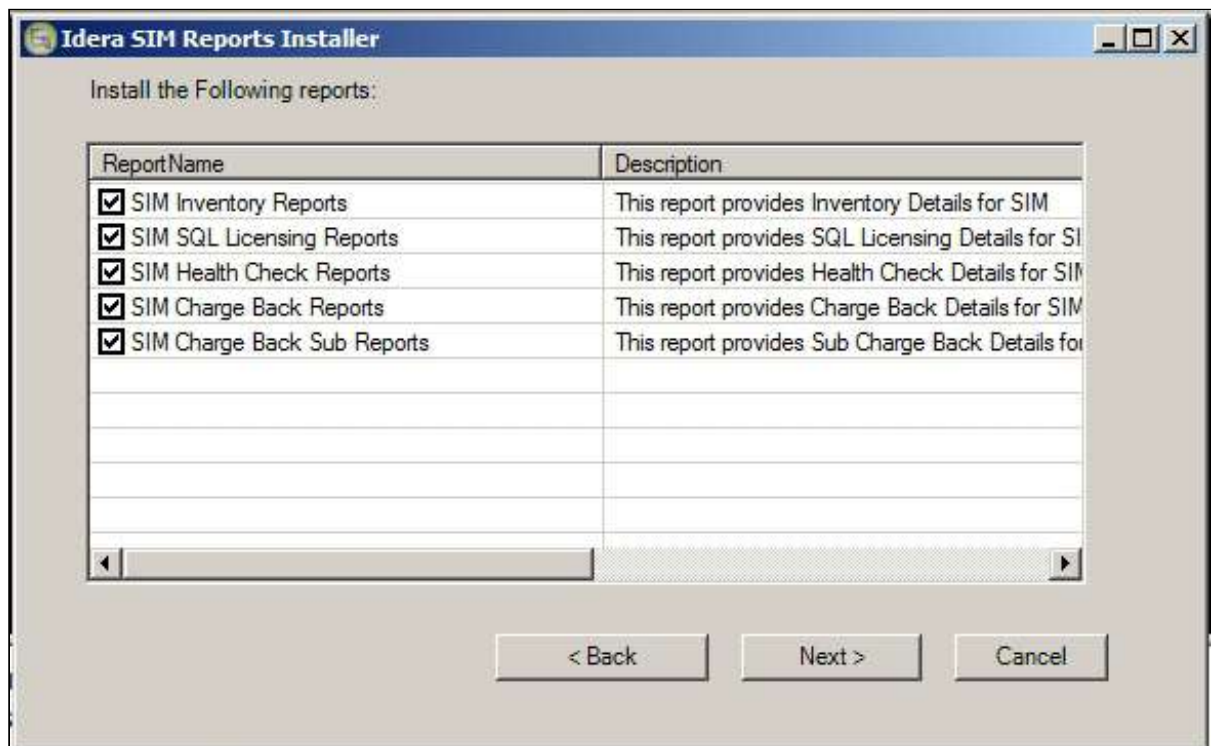
SQL Database:

Please specify the Windows credentials the Report Server should use to connect to the SIM Repository database. The specified account should have read permissions on this database.

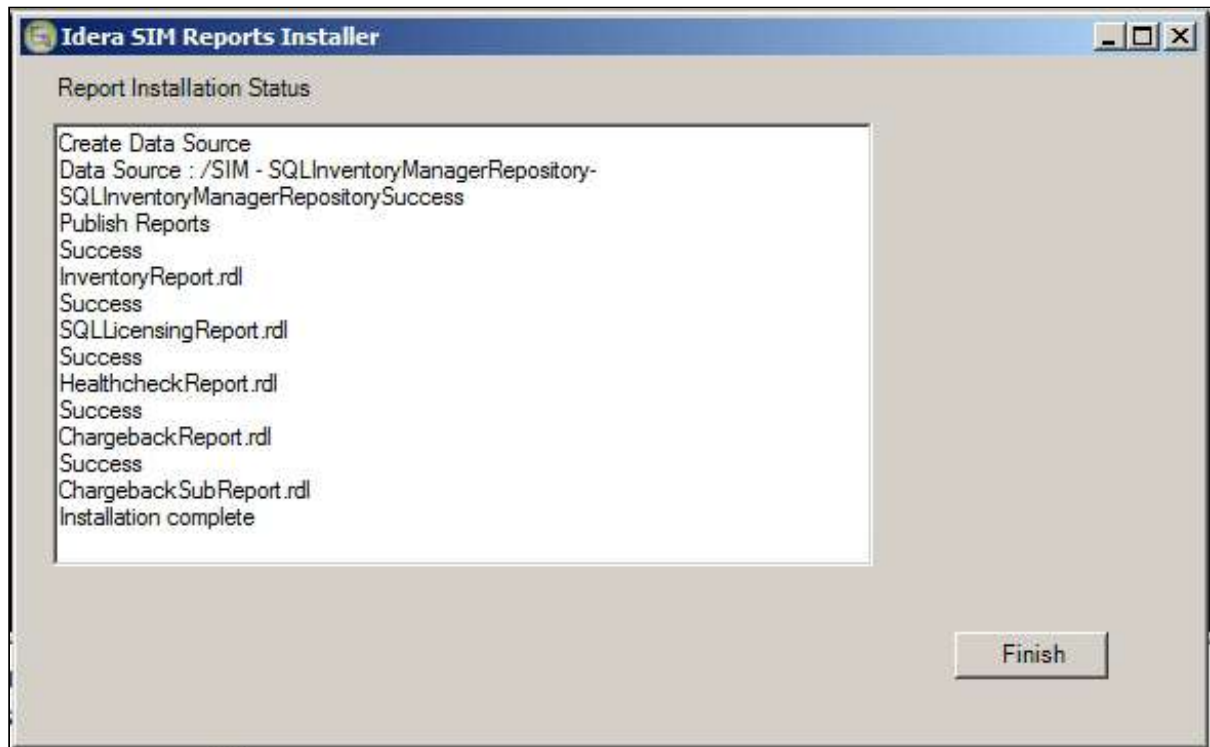
Login ID:

Password:

2. Type the required information.
 - **Report Server Web Service URL:** The location of the report server.
 - **Target SQL Server:** The server that hosts the SQL Inventory Manager repository database.
 - **SQL Database:** The SQL Inventory Manager repository database, the default name is SQLInventoryManagerRepository.
 - **Login ID:** A user ID with access rights to the Inventory Manager repository database.
 - **Password:** A valid password for the previous user ID.
3. Click **Next**.
4. Select the reports you want to deploy and click **Next**.



5. Click **Finish** to close the window.



10.3 Adding custom reports

You can also add custom reports to your installation. To add custom reports go to the Reports Utility folder, the default location is **C:\Program Files\Idera\SQLInventoryManager\ReportUtility**, and follow these steps.

1. Place the reports you want to install inside the **Reports** folder.
2. Open the file **rdl.xml** located in the same folder as the Reports Utility.
3. Add and customize the following code, make sure to add it before the `</folder>` tag.

```
<reportfile>
<name>The name of a Report</name>
<file>Reports\filename.rdl</file>
<description>Enter a description for your report.</description>
</reportfile>
```

4. Save the file and close it.
5. Run the IDERA Reports Utility

10.4 Available Reports

SQL Inventory Manager provides the following reports to help organizations report and track their SQL Server Environment.

 If you are upgrading to SQL Inventory Manager 2.6 you need to redeploy the reports.

Available reports

Licensing Report

Provides MS SQL Licensing view of SQL Server instances being managed in SQL Inventory Manager. For more information refer to [Licensing Report](#)(see page 238).

Inventory Report

Provides a view for monitored, discovered, decommissioned and ignored instances so you can assess your SQL Server landscape. For more information refer to [Inventory Report](#)(see page 239).

Chargeback report

Gives you metrics for the managed SQL instances and databases so an organization can calculate chargeback costs to allocate back for database usage. For more information refer to [Chargeback Report](#)(see page 241).


Health Report

Gives a summary of the state of SQL Server instances and databases monitored by SQL Inventory Manager. For more information refer to [Health Report](#)(see page 242).

To learn how to deploy reports on your instances, refer to the [IDERA Reports Utility](#)(see page 235) documentation.

10.4.1 Licensing Report

Provides an overview of the SQL Licensing information of the managed instances within SQL Inventory Manager. This report displays information from the [SQL Licensing by Instance](#)(see page 207), it also contains additional columns for custom inventory fields and tags on the managed instances. Refer to [IDERA Reports Utility](#)(see page 235) for information on how to deploy or remove this report.

 Microsoft SQL SERVER licensing information provided within IDERA SQL Inventory Manager is based on your system information and is only for guidance.

The Licensing report offers the following information.

SQL Server

The SQL Server instance name.

Version

The SQL Instance version number.

Edition

The SQL Server Instance edition number.

Virtual

Whether it is a virtual server or not, possible values are **yes** or **no**.

CPU Name

The name of the installed CPU.

of Sockets

The number of sockets available on the server.

of Logical Processors

The number of logical processors installed on the server.

of Cores

The number of available cores on the Instance.

Core Factor

Displays a numerical value that determines the number of core licenses necessary. While an administrator can change this value in the Core Factor Table, this number is provided by Microsoft based on the CPU in use.

Possible Core Licenses

Displays the product of the total number of cores on a system multiplied by the Core Factor.

Fully Licensed with SA

Whether the instance is fully licensed with SA or not. Value is represented with a checkbox.

Custom Inventory Fields for Instances

Any custom inventory fields in the server

10.4.2 Inventory Report

The Inventory report provides an overview of information from the [Managed](#)(see page 203), [Discovered](#)(see page 215), [Decommissioned](#)(see page 212), and [Ignored](#)(see page 218) instances views. This report contains three sections, **Managed Instances**, **Decommissioned Instances**, and **Unmanaged Instances**. Refer to [IDERA Reports Utility](#)(see page 235) for information on how to deploy or remove this report.

The following information is available on the Inventory Report.

- 10.4.2.1
- [Managed Instances Decommissioned Instances Discovered Instances Ignored Instances Managed Instances](#)
 - [Decommissioned Instances](#)
 - [Discovered Instances](#)
 - [Ignored Instances](#)

Managed Instances

SQL Server Name

The name of the SQL Server instance.

Status

The status of the SQL Server instance at the time of data collection.

Version

The version number of the SQL Server instance.

Edition

The edition number of the SQL Server instance.

of Databases

The number of databases on the SQL Server instance.

Size of Databases (MB)

The size of the databases on the SQL Server instance.

Owner

The owner name set during instance registration.

Location

The location name set during instance registration.

Clustered

Whether the instance is on a clustered environment or not.

Discovery Methods

The methods used for instance discovery.

Custom Inventory Fields for Instances

Any custom inventory fields assigned to an Instance.

Tags for Instances

Any tags assigned to an instance.

10.4.2.2 Decommissioned Instances

SQL Server Name

The name of the SQL Server instance.

Version

The version number of the SQL Server instance.

Edition

The edition number of the SQL Server instance.

of Databases

The number of databases in the SQL Server instance.

Size of Databases (MB)

The size of the databases on the SQL Server instance.

Owner

The owner name set during instance registration.

Location

The location name set during instance registration.

Clustered

Whether the instance is on a clustered environment or not.

Discovery Methods

The methods used for instance discovery.

10.4.2.3 Discovered Instances

SQL Server Name

The name of the SQL Server instance.

Version

The version number of the SQL Server instance.

Edition

The edition number of the SQL Server instance.

Discovery Date

The Timestamp at instance discovery.

Discovery Methods

The methods used for instance discovery.

10.4.2.4 Ignored Instances

SQL Server Name

The name of the SQL Server instance.

Version

The version number of the SQL Server instance.

Edition

The edition number of the SQL Server instance.

Discovery Date

The time stamp at instance discovery.

10.4.3 Chargeback Report

This report displays chargeback information for managed instances and databases. Refer to [Reports Utility](#)¹³⁴ for information on how to deploy or remove this report.

The chargeback report provides the following information:

Instance Name

The SQL Server instance name.

Version

The SQL Instance version number.

Edition

The SQL Server Instance edition number.

Owner

The name set at Instance registration.

Data Center/Location

The location name set at instance registration.

Hostname

VM Vendor

Model

Operating System

The name of the OS running the SQL Server instance.

OS Version

The version of the OS running the SQL Server instance.

Physical Cores

The number of available physical cores on the server.

Logical Cores

The number of available physical cores on the server.

¹³⁴ <http://wiki.idera.com/display/SQLInventoryManager/Reports+Utility>

Physical Memory

The total available physical memory on the server.

CPU Name

The name of the CPU on the server.

CPU Speed

The speed of the CPU.

Clustered

Whether it is a clustered instance or not.

Total Size of Disks for Instance

The total Disk space allocated for the instance.

Database Count

The total number of databases in the instance.

Total Database Size

The total size of databases.

Disk Percent Used by Databases

The disk space databases use.

Custom Inventory Fields for Instances

Any

Tags for Instances

any

Database Information at instance level

Database Name

Database Type (user or system)

Data Size

Log Size

Custom Inventory Fields for Database

Tags for Database

Decommissioned status

10.4.4 Health Report

The Health Report lists active health check findings at the time the report runs. For information on how to deploy this report refer to the [IDERA Reports Utility](#)(see page 235) documentation.

The Health Report includes the following information:

Severity

There are three different levels; Critical (Level 3), Warning (Level 2), and Informational (Level 1)

Instance Name

The name of the Instance where alerts raised.

Database Name

The name of the database where alerts raised. If the name of the database is irrelevant, this field is blank.

Details

Details about the alerts.

You can also use the following optional parameters for filtering results on your reports:

Instance Tags

Only display instances that have the selected tag name.

Database Tags

Only display databases that have the selected tag name.

10.5 Custom Reports

SQL Inventory Manager 2.6 allows users to add additional RDLs and deploy them with the IDERA Reports Utility, for information on how to deploy reports refer to [IDERA Reports Utility](https://wiki.idera.com/display/SIM25/IDERA+Reports+Utility)¹³⁵.

¹³⁵ <https://wiki.idera.com/display/SIM25/IDERA+Reports+Utility>

11 Discovery scans and permissions

<placeholder page>

12 Viewing instance details

After you register an instance in IDERA SQL Inventory Manager, you can view the instance details on the following sections:

- **Overview** - The Instance Details view appears when you click an instance name.
- **Instances** tab > **Managed** view - The Instance Details view appears when you click an Instance name.
- **Instances** tab > **SQL Licensing** view - The Instance Details view appears when you an Instance name.

The Instance Details view allows you to get health checks recommendations for that instance, information about its databases, bar graphs, other relevant information, and also get access to computer and configuration details.

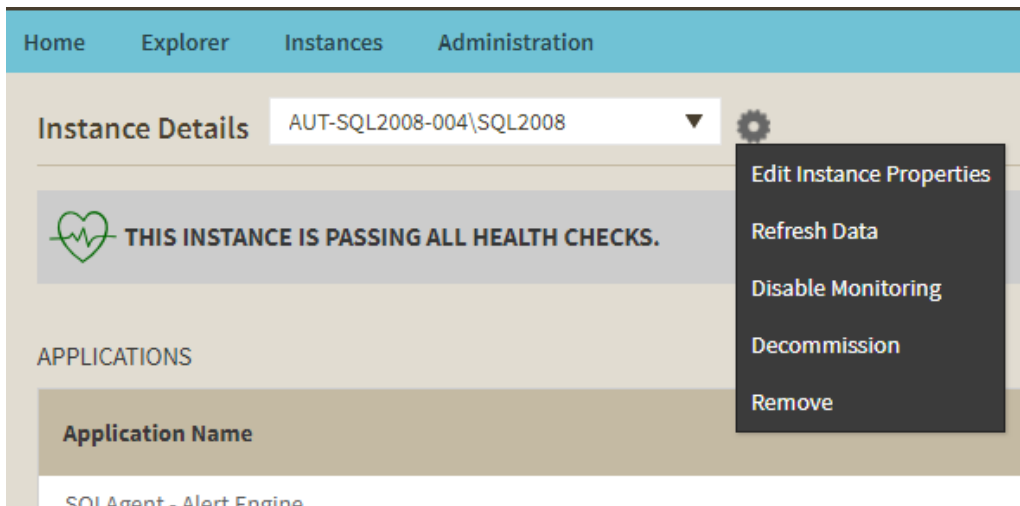
12.1 Information available on Instance Details

The Instance Details view allows you to see specific information for an instance. SQL Inventory Manager displays the instance health check recommendations, top databases, relevant information, and also allows you to get access to the instance host server computer details and configuration settings.

Click on the cog icon next to the instance name to find the following options:

- [Edit Instance Properties](#)(see page 252) - Allows you to change select properties for this instance.
- **Refresh data** - Forces the system to collect data off-schedule so you can have the latest information for this instance.
- [Disable Monitoring](#)(see page 268) - Allows you to temporarily stop monitoring this instance.
- [Decommission / Recommission](#)(see page 212) - Allows you to decommission or recommission this instance.
- [Remove](#)(see page 269) - Allows you to remove instances that you no longer want to monitor.

If you click the drop-down arrow next to the instance name, you can choose a different instance to access its respective details.



12.1.1 Information available on the Instance Details view

12.1.1.1 Health Check Recommendations

This section provides you with specific health check recommendations for the selected instance. SQL Inventory Manager groups these health checks by type, and orders them by level of criticality; where:

- **RED** Level 3 = Critical
- **YELLOW** Level 2 = Warning
- **GREY** Level 1 = Informational

You can choose to show details, hide details, dismiss, or refresh any health check recommendation. You can also export this information according to your required format. For more information on how to view health check recommendations for a specific instance, refer to [Viewing Health Check Recommendations for a specific instance](#). (see page 251)



i Health Check Recommendations

To view what health checks are performed by SQL Inventory Manager, refer to [What Health Checks are available in SQL Inventory Manager?](#)(see page 296)

12.1.1.2 Applications

SQL Inventory Manager periodically takes a sampling of the applications connecting to each SQL Server instance. This sampling occurs approximately once every hour. The Applications list on the Instance Details view includes the name of the application along with the timestamp of the most recent sampling that included that application. You can also manually add an application to track using **Add Application**. For more information about this feature, see [Manage instance applications](#)(see page 256).

Click the gear icon next to the application name to select one of the following options:

- **Create Application Alias** - Change the default name of the application to an alias that displays in the Applications list.
- **Hide** - Allows you to prevent SQL Inventory Manager from displaying this application in the list. Click **Unhide** to display any hidden applications.

| Application Name | Data Last Seen |
|---------------------|-------------------------|
| Report Server | Mar 24, 2017 3:36:30 PM |
| SQLdefrag | Mar 24, 2017 3:36:30 PM |
| SQLInventoryManager | Mar 24, 2017 3:36:30 PM |

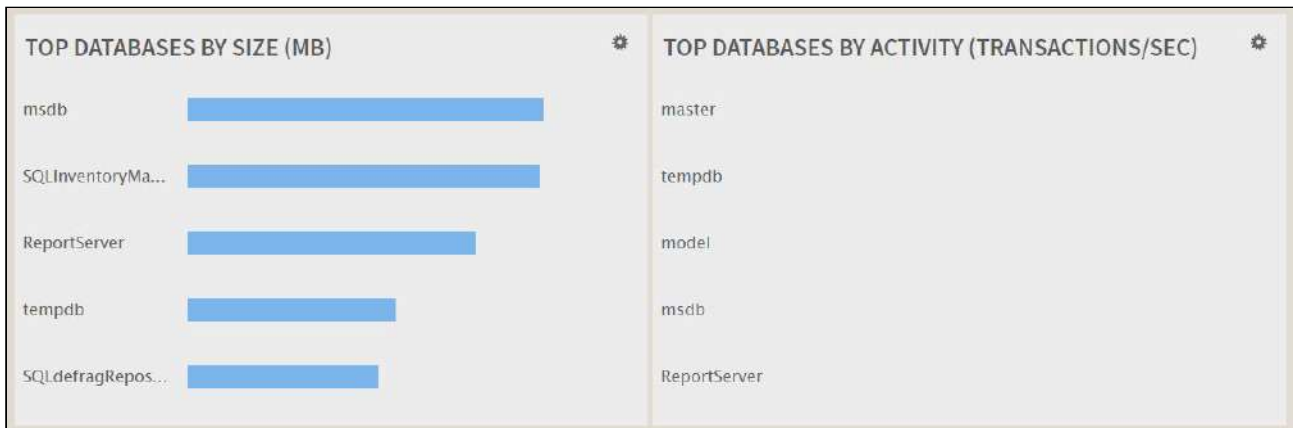
12.1.1.3 Top bar graphs

These graphs provide insight of the most important databases for your instance, based on databases size and how busy they are (transactions per second).

SQL Inventory Manager shows you the following bar graphs:

- Top Databases by Size (MB)

- Top Databases by Activity (Transactions per second)




12.1.1.4 Instance summary and status

On the right side of the Instance Details view, you can see a section that provides general information for your instance.



On this sidebar, you can see the following information for this instance:

- status (up or down)
- up time and response time status
- number of health check recommendations
- number of database recommendations
- summary of the instance details including:
 - Microsoft SQL Server version
 - maximum and minimum memory
 - port information
 - whether the instance is clustered
 - number of databases
 - data size
 - log size
 - owner
 - location
 - comments
 - custom inventory fields (click the pencil icon to change the field values. For more information, see [How to manage custom inventory fields](#)(see page 134).)
 - configuration settings (for more information go to [View configuration settings](#)(see page 254))
 - a list of Users and Principals for the currently selected instance, for more information go to [Viewing Security Profiles](#)(see page 259).
 - date and time of last data collection
- summary of the host machine details including:
 - host machine name
 - applied inventory tags (click the pencil icon to access the Inventory Tag information)
 - server details (for more information go to [Computer Details](#)(see page 255))
- associated tags (click the pencil icon to access the [Managing tags for an instance](#)(see page 265) window where you can add new tags or choose other tags for this instance)

 Take into account that SQL Inventory Manager rounds off data so there may be minor discrepancies between the size data displayed in the Instance Summary and Databases section of the Instance Details view.

 **Edit instance properties**

Click the pencil icon next to the **Instance Summary** title and you can access the options for editing your instance properties such as owner, location, comments, and credentials. For more information, refer to [Edit instance properties](#)(see page 252).

| STATUS | | UPTIME | RESPONSE TIME |
|-----------|---|---------------------------------|---------------|
| UP | | 100 % | 1 ms |
| 21 |  | <i>Health Recommendations</i> | |
| 20 |  | <i>Database Recommendations</i> | |

INSTANCE SUMMARY

SQL Server 2014 RTM (12.0.2000.8)
 Enterprise Evaluation Edition (64-bit)
 Patch Updates Available

Maximum Memory: 2,147,483,647 MB
 Minimum Memory: 16 MB

Port: 0
 Clustered: No

Databases: 11
 Data Size: 62.3 MB
 Log Size: 25.4 MB

Owner:
 Location:
 Comments:

[SQL Licensing Comments:](#)

[View Configuration Settings](#)

[View Instance Principals](#)

Data last collected: Mar 27, 2017 8:46 AM

SERVER SUMMARY

Host Server: WIN-IR53181517Q

[View Server Details](#)

TAGS

No Tags Found

12.1.1.5 Instance Databases

At the bottom section of the Instance Details view, SQL Inventory Manager displays a list of all databases available as well as any decommissioned databases on this instance.

The Databases list shows you information about the status, number of recommendations, type, data size, log size, and activity for each database.

Click the gear icon next to the database name to select one of the following options:

- **Edit Tags** - Access your database tags to add or assign new tags to your selected database.
- **Disable Monitoring**(see page 264) - Temporarily stop monitoring of this instance. When you choose this option, you will no longer receive alert notifications from this database until you enable its monitoring again.
- **Decommission**(see page 212) - Allows you to decommission this database. Decommissioned databases appear below the Databases list.

If you click directly on the database name, you can access the **Database Details**. For more information on what is available on these details, go to [Viewing Database Details](#)(see page 257).

DATABASES (11 databases | 87.7 MB total size)

| Database | Status | Recommendations | Type | Data Size (MB) | Log Size (MB) | Activity (Trans/Sec) |
|-------------------------------|--------|-----------------|--------|----------------|---------------|----------------------|
| DataCopy | Online | 2 | User | 3.0 | 1.0 | 0 |
| IderaDashboardRepository | Online | 2 | User | 4.2 | 3.1 | 0 |
| master | Online | 2 | System | 4.0 | 2.0 | 0 |
| model | Online | 2 | System | 2.2 | 0.5 | 0 |
| msdb | Online | 2 | System | 14.1 | 0.8 | 0 |
| ReportServer | Online | 2 | User | 5.2 | 6.9 | 0 |
| ReportServerTempDB | Online | 2 | User | 4.2 | 1.1 | 0 |
| ReposOne | Online | 2 | User | 3.0 | 1.0 | 0 |
| SQLdefragRepository | Online | 2 | User | 7.2 | 0.8 | 0 |
| SQLInventoryManagerRepository | Online | 2 | User | 7.2 | 7.6 | 0 |

The Decommissioned Databases list shows you information about the decommission date, recommendations, database type, size, and activity for each database.

Click the gear icon next to the decommissioned database to select one of the following options:

- **Recommission** (see page 212)- Returns the database to a monitored state.
- **Remove** - Removes the database from the instance.

If you click directly on the database name, you can access the Database Details. for more information on what is available on these details, go to [Viewing Database Details](#)(see page 257).

DECOMMISSIONED DATABASE (1 database)

| Database | Decommission Date | Recommendations | Type | Data Size (MB) | Log Size (MB) | Activity (Trans/Sec) |
|----------|-----------------------|-----------------|------|----------------|---------------|----------------------|
| ReposOne | Mar 27, 2017 12:25 PM | 2 | User | 3.0 | 1.0 | 0 |

12.2 Viewing Health Check Recommendations for a specific instance

When you go to the IDERA SQL Inventory Manager Instance Details view for a specific instance, you can find a report of the health check recommendations. These health check recommendations are grouped by type and ordered by level of criticality; where:

- Level 3 = Critical
- Level 2 = Warning
- Level 1 = Informational

You can click **Show Details** or click the name of the health check recommendation to access the following options:

- List of databases affected by the health check
- Individually **Dismiss** the health check recommendation for a database
- Individually **Refresh** the status of a database
- Knowledge base of the health check recommendation
- Link to more information about the health check recommendation

If you do not want to see these details, click **Hide Details**. To hide all health check recommendations for this instance, click **Hide recommendations** on the action items bar.

You can also **Dismiss** or **Refresh** at the level of the whole health check recommendation.



Dismissing health check recommendations

When you dismiss a health check recommendation, you do it temporarily and IDERA SQL Inventory Manager ignores it until the health check passes and goes into an alert status again.

12.2.1 Exporting Health Check Recommendations

If you want to export Health Check Recommendations, click **Export** on the action items bar and choose from the following options:

- Export summary of recommendation categories
- Export details for all recommendations
- Export details for selected categories

Then choose the format for exporting: **PDF**, **XLS**, or **XML**. Click **Export**.

IDERA SQL Inventory Manager allows you to export the specific information that you need for the instance that you select so you can perform a better assessment of your environment. For more information about exporting in IDERA SQL Inventory Manager, click [here](#).(see page 316)

Tip

When you dismiss a health check recommendation, a dialog window opens to confirm this action, you can enable the option **Do not show this warning again** so that IDERA SQL Inventory Manager does not prompt this warning message every time you dismiss a health check recommendation.

12.3 Edit instance properties

When you register an instance, you define certain properties such as credentials, owner, location, and comments. You can change this information from the **Edit Instance properties** window. To access this window, go to any of the following views:

- **Overview** tab - The **Edit properties** option is located on the gear icon next to the instance you want to edit.
- **Instance details** view - The **Edit Properties** option is located on the action items bar.
- **Instances** tab > **Managed** view - **Edit properties** option on the gear icon menu next to the selected instance or on the action items bar.
- **Instances** tab > **SQL Licensing** view - **Edit properties** option on the gear icon menu next to the selected instance or on the action items bar.

Tip

On the **Instances** view, on the **Managed** instances section, you can also select several instances at once and click **Edit Owner**, **Edit Location**, or **Edit Credentials** for a faster edition of these fields. For more information about what you can do on the **Managed** Instances view, refer to [Managed Instances](#)(see page 203).

Edit Instance ✕

Instance: WIN-IR53181517Q

Instance Details and Ownership

Owner Location

Comments

SQL Connection Credentials

Account Type

Cloud instance

WMI Connection Credentials

Account Type

12.3.1 Editing Owner, Location and Comments

You can define owner, location, and comments when you register an instance; however, if you did not typed them before, or you want to change any of these fields, go to the respective sections on the **Edit instance properties** window, make the necessary changes, and then click **SAVE**.

12.3.2 SQL connection credentials

These credentials allow you to connect to SQL Server instances to collect availability, capacity, and configuration data. When you register an instance, you define these credentials; however, you can change them later on the **Edit instance properties** window.

You can choose between an IDERA SQL Inventory Manager service account, a Windows user account, or a SQL Server login account. The last two options require that you provide the respective login and password.

Note

When IDERA SQL Inventory Manager has the [auto-registration option enabled](#)(see page 164), it uses the IDERA SQL Inventory Manager service account as the default SQL connection credentials.

12.3.3 WMI connection credentials

These credentials allow you to connect to the computer that hosts the SQL Server instance, and collect its performance and computer details. When you register an instance, you define these credentials; however, you can change them later on the **Edit instance properties** window.

You can choose between an IDERA SQL Inventory Manager service account or a Windows user account. You need to provide a login and password for the Windows user account.

Note

When IDERA SQL Inventory Manager has the [auto-registration option enabled](#)(see page 164), it uses the IDERA SQL Inventory Manager service account as the default WMI connection credentials.

Minimum requirements

For more information on what permissions you need for any of these accounts, see [Required accounts and permissions](#)(see page 45).

12.4 View Configuration Settings

IDERA SQL Inventory Manager provides you a view of the configuration settings for the SQL Server instances that you choose to monitor. The configuration settings window shows you the global configuration settings for the selected SQL Server instance.

To access this information, go to the **Instance Details** view. On the right sidebar of the window, on the **Instance Summary** section, click **View Configuration Settings** and IDERA SQL Inventory Manager opens a window with the configuration settings of the respective instance.

The **Configuration Settings** window shows you the following information:

- Property Name
- Running Value
- Configured Value
- Description

| Configuration Settings | | | |
|---------------------------------|---------------|------------------|--|
| Instance WIN-IR53181517Q | | | |
| Property Name | Running Value | Configured Value | Description |
| access check cache bucket count | 0 | 0 | Default hash bucket count for the access check result security cache |
| access check cache quota | 0 | 0 | Default quota for the access check result security cache |
| Ad Hoc Distributed Queries | 0 | 0 | Enable or disable Ad Hoc Distributed Queries |
| affinity I/O mask | 0 | 0 | affinity I/O mask |
| affinity mask | 0 | 0 | affinity mask |
| affinity64 I/O mask | 0 | 0 | affinity64 I/O mask |
| affinity64 mask | 0 | 0 | affinity64 mask |
| Agent XPs | 0 | 0 | Enable or disable Agent XPs |
| allow updates | 0 | 0 | Allow updates to system tables |
| backup checksum default | 0 | 0 | Enable checksum of backups by default |

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[Close](#)

12.5 View Computer Details

IDERA SQL Inventory Manager provides you with the computer details of your SQL Server instance host machines.

To access this information, go to the **Instance details** view, and review the information in the Server Summary section. Click **View Server Details** or click the name of the **Host Server** and SQL Inventory Manager opens a window with the respective computer details. Also note the custom inventory fields included above the **View Server Details** button. Click the pencil icon to change this value. For more information about this feature, see [How to manage custom inventory fields](#)(see page 134).

On this window you can get the following information:

- **Computer information**
 - Computer name
 - Full computer name
 - Domain
- **Windows information**
 - Windows version
- **System information**
 - Manufacturer
 - Model
 - Computer Type
 - Physical and Logical CPUs
 - Physical Memory
 - Number of Network Interface Cards (NICs)
 - CPU Name
 - CPU Speed

- Whether the computer is clustered
- **Drive information** - All drives, type, their capacity, and respective free space.
- **Hosted instances** - All instances hosted by this computer, if they are clustered, and their active and passive nodes.

Computer Details ✕

Computer information

Computer name: WIN-IR53181517Q

Full computer name: WIN-IR53181517Q

Domain: IDERAINFODEV.LOCAL

Windows information

Microsoft Windows Server 2012 R2 Datacenter

Build: 6.3.9600

Drive Information

| Drive | Type | Capacity | Free Space |
|-------|-------|----------|------------|
| C:\ | Fixed | 60.0 GB | 44.3 GB |

System information:

Manufacturer: VMware, Inc.

Model: VMware Virtual Platform

Computer Type: Virtual

Physical CPUs: 1

Logical CPUs: 1

Physical Memory: 1023.4 MB

NICs: 1

CPU Name: Intel(R) Core(TM)2 Duo CPU E8400 @ 3.00GHz

CPU Speed: 3000 MHz

Clustered: No

Close

12.6 Manage instance applications

IDERA SQL Inventory Manager periodically takes a sampling of the applications connecting to each SQL Server instance. This sampling occurs approximately once every hour. The Applications list on the [Instance Details view](#) (see [page 245](#)) includes the name of the application along with the timestamp of the most recent sampling that included that application.

Click the gear icon next to the application name to select one of the following options:

- **Create Application Alias** - Change the default name of the application to an alias that displays in the Applications list.
- **Hide** - Allows you to prevent SQL Inventory Manager from displaying this application in the list. Click **Unhide** to display any hidden applications.

| Application Name | Data Last Seen |
|---------------------|-------------------------|
| Report Server | Mar 29, 2017 2:20:22 PM |
| SQLInventoryManager | Mar 29, 2017 2:20:22 PM |
| Idera Core Services | Mar 29, 2017 1:20:37 PM |

12.6.1 Manually adding an application

If you need to manually add an application, click **Add Application**, type the name of the application, and then click **OK**. SQL Inventory Manager displays this item in the Applications list and includes "Added Manually" next to the application name. If you attempt to add a name that matches the display name of actual application name that already exists in the database, SQL Inventory Manager displays a warning message and does not allow you to add that name.

12.7 Viewing Database Details

IDERA SQL Inventory Manager lets you see the details of the databases of your monitored instances. In order to access this information, go to the respective Instance details view, then go to the bottom section of this view to the list of databases and click the name of the respective database.

| OVERVIEW | EXPLORER | INSTANCES | ADMINISTRATION |
|-------------------|----------|-----------|----------------|
| ReportServer | | | model |
| tempdb | | | msdb |
| SQLdefragRepos... | | | ReportServer |

DATABASES (10 databases | 83.7 MB total size)

| Database | Status | Recommendations | Type | Data Size (MB) | Log Size (MB) |
|--------------------------|--------|-----------------|--------|----------------|---------------|
| DataCopy | Online | 2 | User | 3.0 | 1.0 |
| IderaDashboardRepository | Online | 2 | User | 4.2 | 3.1 |
| master | Online | 2 | System | 4.0 | 2.0 |

The Database Details window includes the following information:

- **Database details:** Displays the instance and database name.
- **Comments:** You can use this field to enter comments that help you identify your database. Click the pencil icon to open the field for comments.
- **Decommission** (see page 212): Allows you to decommission this database. Decommissioning stops all monitoring of the database and moves it to the Decommissioned Database list on the Instance Details view.
- **Recommission** (see page 212): Allows you to recommission a decommissioned database. Decommissioning stops all monitoring of the database and moves it to the Decommissioned Database list on the Instance Details view.

- **Tags:** Allows you to view tags assigned to your database. Click the pencil icon to edit these tags or add new ones.
- **Database Information:** Displays the current database state, date the database was created, current size of the data contained within, current log size, timestamp of the most recent full backup, timestamp of the most recent log backup, timestamp of the most recent differential backup, timestamp of the most recent DBCC CHECKDB, database owner name, compatibility level, whether it is a system database, and the type of recovery model (Simple, Full, Bulk logged).
- **Security Information:** Allows you to view a list of Principals for the currently selected database. For more information refer to [Viewing Security Profiles](#)(see page 259)
- **Database Inventory Fields:** Displays any available custom inventory fields and their values. Click the pencil icon to change this value.
- **Database Files:** Displays a list of all files in this database, their type, size, autogrowth settings, maximum size, and file paths.

Database Details
✕

Decommission

Instance: WIN-IR53181517Q

Database: DataCopy

Comments: ✎

TAGS ✎

No Tags Found

Database Information

| | | | | | |
|---------------|---------------------|--------------------|-------|----------------------|---------------|
| State: | Online | Last Full Backup: | Never | Owner: | Example\admin |
| Date Created: | Jan 3, 2017 2:47 PM | Last Log Backup: | Never | Compatibility Level: | |
| Data Size: | 3.0 MB | Last Diff Backup: | Never | System Database: | False |
| Log Size: | 1.0 MB | Last DBCC CHECKDB: | Never | Recovery Model: | Full |

Security Information

View Database Principals

Database Inventory Fields

On-Call DB: John Doe ✎

Database Files

| File | Type | Size | Autogrowth | Max Size | Path |
|--------------|------|--------|------------|-----------|---|
| DataCopy | Data | 3.0 MB | 1.0 MB | Unlimited | C:\Program Files\Microsoft SQL Server\MSSQL1... |
| DataCopy_log | Log | 1.0 MB | 10% | 2.0 TB | C:\Program Files\Microsoft SQL Server\MSSQL1... |

Close

12.7.1 Viewing Security Profiles

The **Users and Principals** dialog provides a general overview of logins, roles, users, and schemas at either **Instance Level** or **Database Level**.

Accessing the Users and Principals view.

There are two ways to access the Users and Principals view.

From the Instance Summary section

- Go to the instance summary section.
- Select an instance.
- On the Instance Summary panel, click **View Instance Principals**. This opens the Users and Principals dialog at the instance level view.

From the Database dialog

- Go to the instance summary section.
- Select an instance.
- Go to the Databases section and select a database
- Click **View Database Principals** under the Security **Information Section**. This opens the **Users and Principals** dialog at the database level view.

For more details on the available information on each views refer to these documents:

- [Database level view](#)(see page 259)
- [Instance level view](#)(see page 262)

12.7.1.1 Database level view

The **Database Level** view groups information in three tabs **Users**, **Roles**, and **Schemas**.

Logins

The **Logins** tab shows all the roles for the database with the following columns:

Name: Shows the name of a user.

User Type: Shows the user type. Possible values are SQL User with Login, SQL User without Login, User mapped to a certificate, User mapped to an asymmetric key, and Windows User.

Login Name: Shows the login name associated with a user. (null values display as blank).

Has Access: Indicates the access status of a user.

Users and Principals ✕

[Logins](#) [Roles](#) [Schema](#)

Database IderaDashboardRepository

| User | User Type | Login Name | Has Access |
|--------------------|------------------------|---------------|------------|
| Dbo | Windows User | Example\Admin | True |
| Guest | SQL User Without Login | | False |
| INFORMATION_SCHEMA | SQL User Without Login | | False |
| Sys | SQL User Without Login | | False |
| | | | |

4 Total 10 per page
⏪ ⏩ 1 / 1 ⏪ ⏩

Close

Roles

The **Roles** tab shows all the roles for a database with the following columns:

Name: The name assigned to the selected role.

Object Type: Database Role or Application Role.

Users and Principals ✕

[Logins](#) **[Roles](#)** [Schema](#)

Database IderaDashboardRepository

| Role | Object Type | Owner |
|-------------------|---------------|-------|
| Db_accessadmin | DATABASE_ROLE | Dbo |
| Db_backupoperator | DATABASE_ROLE | Dbo |
| Db_datareader | DATABASE_ROLE | Dbo |
| Db_datawriter | DATABASE_ROLE | Dbo |
| Db_ddladmin | DATABASE_ROLE | Dbo |
| Db_denydatareader | DATABASE_ROLE | Dbo |

10 Total 10 per page
⏪ ⏩ 1 / 1 ⏪ ⏩

Close

Schemas

The **Schemas** tab shows all roles for the server with the following columns:

Name: Shows the name of the schema.

Owner: Shows the owner of the schema.

i The Schemas tab isn't available for SQL2000 servers.

Users and Principals

Logins Roles **Schema**

Database IderaDashboardRepository

| Name | Owner |
|-------------------|-------------------|
| Common | Dbo |
| Db_accessadmin | Db_accessadmin |
| Db_backupoperator | Db_backupoperator |
| Db_datareader | Db_datareader |
| Db_datawriter | Db_datawriter |
| Db_ddladmin | Db_ddladmin |

14 Total 10 per page 1 / 2

Close

12.7.1.2 Instance level view

The **Instance Level** view groups information in two tabs, **Logins** and **Roles**.

Logins

The **Logins** tab shows a list of all the logins for a server with the following columns:

- Name:** The name of a Windows user, Windows group, or SQL user.
- Object Type:** Windows User, Windows Group, or SQL User.
- Member Of:** A list of the roles a user is a member of.
- Connect Permission:** Shows connection permissions as Granted or Denied.
- Login Status:** Shows a users login status as Enabled or Disabled.

Users and Principals ✕

Logins Roles

Instance WIN-90GCKKJIPTJ

| Login Name | Object Type | Member Of | Connect Permiss... | Login Status |
|------------------------|---------------|-----------|--------------------|--------------|
| Admin | SQL_LOGIN | Sysadmin | Granted | Enabled |
| Administrator | SQL_LOGIN | Sysadmin | Granted | Enabled |
| Example\Admin | WINDOWS_LOGIN | Sysadmin | Granted | Enabled |
| NT Service\MSSQLSER... | WINDOWS_LOGIN | Sysadmin | Granted | Enabled |
| NT SERVICE\SQLSERV... | WINDOWS_LOGIN | Sysadmin | Granted | Enabled |

8 Total 10 per page
⏪ ⏩ 1 / 1 ⏪ ⏩

Close

Roles

The **Roles** tab shows all roles for the server with the following columns:

Name: Displays the name of the role.

Members: Displays a list of the logins which are members of this role.

Users and Principals ✕

[Logins](#) **Roles**

Instance WIN-90GCKKJIPTJ

| Role | Members |
|---------------|---------|
| Bulkadmin | |
| Dbcreator | |
| Diskadmin | |
| Processadmin | |
| Public | |
| Securityadmin | |

9 Total 10 per page
⏪ ⏩ 1 / 1 ⏪ ⏩

Close

12.8 Disable database monitoring

You can disable the monitoring of a database if you no longer want to collect information from this database or receive its health check recommendations.

To disable an instance database, go to the respective instance details view, click the gear icon next to the database you no longer want to monitor, and select **Disable Monitoring**.




To enable a database again, look for the same gear icon next to the disabled database, and choose **Enable Monitoring**.










12.9 Managing tags for an instance

The Instance Details view allows you to manage tags for a specific instance. After accessing the Instance Details view for the instance you want to manage, click the pencil icon on the Tags section of the right sidebar.

| UP | DOWN | CRITICAL |
|----------|----------|----------|
| 6 | 1 | 2 |

| | | |
|-----|---|------------------------|
| 84 |  | Health Recommendations |
| 773 |  | New Instances |
| OFF |  | Auto-Registration |

MY ENVIRONMENT

| | | |
|---|--------------------|-----------|
|  | Instances | 7 |
|  | Servers | 4 |
|  | Databases | 135 |
|  | Data Size | 95.5 GB |
|  | Log Size | 11.3 GB |
|  | Disabled Instances | 0 |
|  | Available Licenses | Unlimited |

TAGS

Business Critical Integration Test 24x7 Production
 Development Disaster Recovery Non-Critical Business Hours

SQL Inventory Manager opens a window for managing the instance tags. On this window you can:

- Type the name of a new tag, and then click **ADD**. SQL Inventory Manager adds the new tag to the list. You can add several tags at once by separating each name with a semicolon (;).
- Check or uncheck those tags you want to add or remove for this instance. Previously-added and newly-added tags are checked by default.

When you finish making your edits, click **APPLY**.

Add New Tag

ADD

24x7

Business Critical

Business Hours

Development

Disaster Recovery

Integration

Non-Critical

Production

Test

APPLY

✓ **Tip**

You can also remove tags by clicking the tag name on the sidebar without opening the Manage Tags window.

⚠ **Warning**

- The tag name must begin with an upper or lowercase alphanumeric character.
- Your tag name must have a maximum length of 20 characters.

13 Managing instances

Once you register your instances, IDERA SQL Inventory Manager allows you to manage them according to your requirements. For example, you can disable instances for maintenance plans or remove them if you decide not to monitor them any more.

You can also edit instance properties like owner, location, tags, or change the credentials you use for collecting their information.



In this section, you can find detailed information on how to perform any of these actions and manage your instances according to your preferences.

- [Disabling instances](#)(see page 268)
- [Enabling SQL Server instances](#)(see page 268)
- [Removing instances](#)(see page 269)
- [Change credentials](#)(see page 269)
- [How to edit instance properties](#)(see page 271)
- [How to edit MS SQL Server license information](#)(see page 274)
- [How to discover new instances](#)(see page 276)
- [How to add SQL Server instances for monitoring](#)(see page 277)
- [Reviewing SQL Server patches](#)(see page 285)

13.1 Disabling instances

IDERA SQL Inventory Manager allows you to disable instances from monitoring. Disable an instance when you want to temporarily stop its monitoring. If you need to do maintenance or you need to disable an instance for a period of time, use this option to stop SQL Inventory Manager from collecting data, performing health checks, and sending notifications during this time.

You can access this option on the following views:




- **Home** tab - The **Disable Monitoring** option is located on the gear icon next to the instance you want to disable.
- **Instance Details** view - The **Disable Monitoring** option is located on the gear icon next to the instance name.
- **Instances** tab > **Managed by Instances** view - The **Disable Monitoring** option is located on the gear icon next to the instance you want to disable, or under the **More Actions** button  on the action items bar. Note that you must select at least one instance to have this option enabled.
- **Instances** tab > **SQL Licensing by Instances** view - The **Disable Monitoring** option is located on the gear icon next to the instance you want to disable, or under **More Actions** button  on the action items bar. Note that you must select at least one instance to have this option enabled.

Although IDERA SQL Inventory Manager stops collecting information when you disable an instance, data remains in the database.

13.2 Enabling SQL Server instances

You may disable instances when you need to stop their monitoring for a period of time. For more information on how to disable, refer to [Disabling instances](#).(see page 268)



To enable again the monitoring of these instances, go to any of the following views:

- **Home** tab - The **Enable Monitoring** option is located on the gear icon next to the instance you want to enable.
- **Instance details** view - The **Enable Monitoring** option is located on the **More Actions** button  next to the instance name.
- **Instances** tab > **Managed by Instances** view - The **Enable Monitoring** option is located on the gear icon next to the instance you want to disable, or under the **More Actions** button  on the action items bar. Note that you must select at least one instance to have this option enabled.
- **Instances** tab > **SQL Licensing by Instances** view - The **Enable Monitoring** option is located on the gear icon next to the instance you want to disable, or under **More Actions** button  on the action items bar. Note that you must select at least one instance to have this option enabled.


13.3 Removing instances

If you no longer wish to monitor an instance, IDERA SQL Inventory Manager allows you to remove instances from monitoring and move them to the Ignored Tab.

You can access this option on the following views:

- **Home** tab - The **Remove** option is located on the gear icon next to the instance you want to remove.
- **Instance details** view - The **Remove** option is located on the gear icon next to the instance you want to remove.
- **Instances** tab > **Managed by Instances** view - The **Remove** option is located on the gear icon next to the instance you want to disable, or under the **More Actions** button  on the action items bar. Note that you must select at least one instance to have this option enabled.
- **Instances** tab > **SQL Licensing by Instances** view - The **Remove** option is located on the gear icon next to the instance you want to disable, or under **More Actions** button  on the action items bar. Note that you must select at least one instance to have this option enabled.

When you remove an instance, IDERA SQL Inventory Manager no longer monitors that instance, deletes all associated data from the database, and adds the instance to the list of ignored instances. For more information about ignored instances [Ignored Instances](#)(see page 218).

 Removed instances no longer count against your license count.

13.4 Change credentials

When you register an instance, you define certain credentials, or if you have the auto-registration option enabled, IDERA SQL Inventory Manager registers your instances using the **SQL Inventory Manager service account** as the default connection credentials.

If you need to change these credentials for several instances, you can change them directly by clicking **Edit Credentials** on the **Managed by Instances** section or **SQL Licensing by Instance** section of the **Instances** view. Note that to have this option enabled, you must select those instances whose credentials you want to change.

IDERA SQL Inventory Manager opens the **Edit Credentials** window where you can change your:

- SQL Connection Credentials
- WMI Connection Credentials
- Linux Credentials

13.4.1 SQL Connection Credentials

These credentials allow you to connect to SQL Server instances to collect availability, capacity, and configuration data. To change these credentials, follow these steps:

- Go to the **SQL Connection Credentials** section.
- Choose between the IDERA SQL Inventory Manager service account, User account, or SQL Server login account. The last two options require that you provide the respective login and password.
- After you define your **SQL Connection Credentials**, you can click **TEST CREDENTIALS** to make sure IDERA SQL Inventory Manager can use these credentials to gather data.

Note

When you have the [auto-registration option enabled](#)(see page 164), IDERA SQL Inventory Manager uses the **SQL Inventory Manager service account** as the default SQL connection credentials.

13.4.2 Connection Credentials

These credentials allow you to connect to the computer that hosts the SQL Server instance in order to collect its performance and computer details. To change these credentials, follow these steps:

- Go to the **Connection Credentials** section.
- You can choose between the IDERA SQL Inventory Manager service account or User account. If you choose the latter, you need to provide a login and password.
- After you define your **Connection Credentials**, you can click **TEST CREDENTIALS** to make sure IDERA SQL Inventory Manager can use these credentials to gather data from host computers.

13.4.3 For Linux Instances

13.4.3.1 SQL Server connection credentials

These credentials allow you to connect to SQL Server instances to collect availability, capacity, and configuration data. When you register an instance, you define these credentials; however, you can change them later on the **Edit Instance Properties** window.

For Linux, you need to use a user domain account with SQL access when the instance is on a domain, or a SQL Server login account when the instance is not on a domain. This options require that you provide the respective login and password.

Note

When IDERA SQL Inventory Manager has the [auto-registration option enabled](#)(see page 164), it uses the IDERA SQL Inventory Manager service account as the default SQL Server connection credentials.

13.4.3.2 Connection Credentials

These credentials allow you to connect to Linux systems that host SQL Server for Linux instances in order to collect their performance and computer details, specify a user or domain user account that can connect to Linux server. To change these credentials, follow these steps:

- Go to the **Connection Credentials** section and choose **User Credentials**.
- Provide a valid login and password.
- After you define your **Credentials**, you can click **Test Credentials** to make sure IDERA SQL Inventory Manager can use these credentials to gather data from host computers.

13.4.3.3 Querying information from Linux

To query a Linux host for CPU, server and disk information, it is required to have credentials to SSH to that server.

Certain information may be found querying SQL Server:

- Hardware cores
- VM cores
- OS (eg: Ubuntu)
- OS Version (eg: 14.2)

Querying Linux requires several commands be issued to obtain:

- CPU Make, Model & Speed
- Server manufacturer
- Disks

Those commands include:

- \$ dmidecode (board related data)
- \$ lscpu (more specific CPU data)
- \$ df or other (disks)
- \$ uname to return OS

SIM sysadmins must provide one or more users (either Linux or AD) to query Linux. These users need only login and read rights.

Note

When you have the [auto-registration option enabled](#)(see page 164), IDERA SQL Inventory Manager uses the **SQL Inventory Manager service account** as the default WMI connection credentials.

You can also change credentials by accessing the **Edit Instance Properties** window. Keep in mind that the **Edit Instance Properties** window allows you to change credentials only for a specific instance. If you want to change connection credentials for several instances at once, use the **Edit credentials** option explained in this section. For more information about editing instance properties, see [How to edit instance properties](#)(see page 269).

13.5 How to edit instance properties

When you register an instance, you define certain properties such as credentials, owner, location, and comments. You can change this information from the **Edit Instance Properties** window, the available options depend on

whether you are editing a Windows SQL Server instance or a Linux SQL Server instance. To access this window, go to any of the following views:

- **Home** tab - The **Edit Instance Properties** option is located on the gear icon next to the instance you want to edit.
- **Instance details** view - The **Edit Instance Properties** option is located under the gear icon next to the instance name.
- **Instances** tab > **Managed by Instances** view - The **Edit Instance Properties** option is located on the gear icon next to the instance you want to disable, or under the **Edit Instance** on the action items bar. Note that you must select at least one instance to have this option enabled.
- **Instances** tab > **SQL Licensing by Instances** view - The **Edit Instance Properties** option is located on the gear icon next to the instance you want to disable, or under **Edit Instance** on the action items bar. Note that you must select at least one instance to have this option enabled.

 **Tip**

On the **Instances** view, on the **Managed by Instances** section, you can also select several instances at once and click **Edit Owner**, **Edit Location**, or **Edit Credentials** for faster editing of these fields. For more information about what you can do on the **Manage by Instances** view, refer to [Managed Instances](#)(see page 203).

13.5.1 For Windows Instances

13.5.1.1 Editing Owner, Location and Comments

You can define owner, location, and comments when you register an instance; however, if you did not or you want to change any of these fields, go to the respective sections on the **Edit Instance Properties** window, make the necessary changes, and then click **SAVE**.

13.5.1.2 SQL Server connection credentials

These credentials allow you to connect to SQL Server instances to collect availability, capacity, and configuration data. When you register an instance, you define these credentials; however, you can change them later on the **Edit Instance Properties** window.

You can choose between the IDERA SQL Inventory Manager service account, a Windows user account, or a SQL Server login account. The last two options require that you provide the respective login and password.

 **Note**

When IDERA SQL Inventory Manager has the [auto-registration option enabled](#)(see page 164), it uses the IDERA SQL Inventory Manager service account as the default SQL Server connection credentials. Credential settings for auto registered instances can later be changed in the **Edit Instance Properties** option.

13.5.1.3 User credentials

These credentials allow you to connect to the computer that hosts the SQL Server instance, and collect its performance and computer details. When you register an instance, you define these credentials; however, you can change them later on the **Edit Instance Properties** window.

You can choose between the IDERA SQL Inventory Manager service account or a Windows user account. You need to provide a login and password for the Windows user account.

Note

When IDERA SQL Inventory Manager has the [auto-registration option enabled](#)(see page 164), it uses the IDERA SQL Inventory Manager service account as the default SQL Server connection credentials. Credential settings for auto registered instances can later be changed in the **Edit Instance Properties** option.

13.5.2 For Linux Instances

13.5.2.1 Editing Owner, Location and Comments

You can define owner, location, and comments when you register an instance; however, if you did not or you want to change any of these fields, go to the respective sections on the **Edit Instance Properties** window, make the necessary changes, and then click **SAVE**.

13.5.2.2 SQL Server connection credentials

These credentials allow you to connect to SQL Server instances to collect availability, capacity, and configuration data. When you register an instance, you define these credentials; however, you can change them later on the **Edit Instance Properties** window.

For Linux, you need to use a user domain account with SQL access when the instance is on a domain, or a SQL Server login account when the instance is not on a domain. This options require that you provide the respective login and password.

Note

When IDERA SQL Inventory Manager has the [auto-registration option enabled](#)(see page 164), it uses the IDERA SQL Inventory Manager service account as the default SQL Server connection credentials. Credential settings for auto registered instances can later be changed in the **Edit Instance Properties** option.

13.5.2.3 Connection Credentials

These credentials allow you to connect to Linux systems that host SQL Server for Linux instances in order to collect their performance and computer details, specify a user or domain user account that can connect to Linux server. To change these credentials, follow these steps:

- Go to the **Connection Credentials** section and choose **User Credentials**.

- Provide a valid login and password.
- After you define your **Credentials**, you can click **Test Credentials** to make sure IDERA SQL Inventory Manager can use these credentials to gather data from host computers.

13.5.2.4 Querying information from Linux

To query a Linux host for CPU, server and disk information, it is required to have credentials to SSH to that server.

Certain information may be found querying SQL Server:

- Hardware cores
- VM cores
- OS (eg: Ubuntu)
- OS Version (eg: 14.2)

Querying Linux requires several commands be issued to obtain:

- CPU Make, Model & Speed
- Server manufacturer
- Disks

Those commands include:

- \$ dmidecode (board related data)
- \$ lscpu (more specific CPU data)
- \$ df or other (disks)
- \$ uname to return OS

SIM sysadmins must provide one or more users (either Linux or AD) to query Linux. These users need only login and read rights.

i Minimum requirements

For more information on what permissions you need for any of these accounts, see [Required accounts and permissions](#)(see page 45).

13.6 How to edit MS SQL Server license information

i Microsoft SQL Server licensing information provided within IDERA SQL Inventory Manager is based on your system information and is only for guidance.

Microsoft began offering a core licensing model in SQL Server 2012. IDERA SQL Inventory Manager supports this type of licensing by including a number of core licensing-specific features and fields. You can change core licensing information in the **Edit MS SQL Server License Information** window. To access this window, go to any of the following views:

- **Instances** tab > **Managed by Instance** view - The **Edit MS SQL License Info** option is on the gear icon menu next to the selected instance.
- **Instances** tab > **SQL Licensing by Instance** view - The **Edit MS SQL License Info** option is on the gear icon menu next to the selected instance.

Below you can see the tabs and sections where you can find **Edit MS SQL License Info**. Click the image to view full size.

✓ **Tip**

On the **Managed by Instance** and **SQL Licensing by Instance** views, you can also select several instances at once before selecting the gear icon for faster editing of some fields. For more information about other tasks you can do on the **Managed by Instance** or **SQL Licensing by Instance** views, see [Managed Instances](#)(see page 203) and [SQL Licensing by Instance](#)(see page 207), respectively.

Edit License Information
✕

SQL Server: AUT-DM-WV600

MS SQL Server Version: 10.50.2500.0

Virtual: Yes

Fully Licensed with SA

CPU: Intel(R) Xeon(R) CPU E5620 @ 2.40GHz

of Sockets: 2

of Logical Processors: 2

Total # of Cores: 2

Core Factor

Total Possible Core Licenses: 4.0

Comments

Cancel
Save

13.6.1 Editing SQL Server license information

IDERA SQL Inventory Manager pulls the following license information from the associated SQL Server:

- **SQL Server.** Displays the name of the SQL Server instance.
- **Virtual.** Displays "**Yes**" if the instance resides on a virtual machine or "**No**" if the machine is physical.

- **MS SQL Server Version.** Displays the version number for the installed SQL Server.
- **Fully Licensed with SA.** Check this box to remove the license count for the instance. You can also manage this setting in the **Instances > SQL Licensing by Instance** view.
- **CPU.** Displays information about the CPU in use.
- **# of Sockets.** Displays the number of cores per processor, whether physical or virtual.
- **# of Logical Processors.** Displays the total number of processors.
- **Total # of Cores.** Displays the sum of all the cores on a system. For example, if a system includes six cores per processor and contains two processors, then the total # of cores is 12. note that the sum does not mix physical and virtual cores but displays each type as a separate line. Check the **Virtual** column for each row to determine if the core is virtual (displays "**Yes**") or physical (displays "**No**").
- **Core Factor.** Displays a numerical value that determines the number of core licenses necessary. While an administrator can change this value in this field or in the [Core Factor Table](#)(see page 118), this number is provided by Microsoft based on the CPU in use.
- **Total Possible Core Licenses.** Displays the product of the total number of cores on a system multiplied by the **Core Factor**.
- **Comments.** Allows you to enter notes about this license.

Make any changes you want to the provided fields, and then click **SAVE**.

13.7 How to discover new instances

IDERA SQL Inventory Manager continuously searches your network to find new SQL Server instances. To see newly discovered instances, go to the **Discovered Instances** view on the **Instances** tab. IDERA SQL Inventory Manager shows you a list of those instances not yet monitored in your environment. From this view you can add or ignore instances.

Note

If you have the auto-registration option enabled, newly discovered instances will be automatically registered according to your settings. Go to [Auto registration Options](#)(see page 130) for more information about these settings. Instances that were discovered before this option was enabled will remain on the Discovered view.

13.7.1 Use the Discovered instances view

On the **Discovered instances** view, IDERA SQL Inventory Manager displays a list of all discovered instances that are not registered yet in your environment. On this view you can choose to **Ignore** instances, set the **Auto register** options, start the **Discover** instances job, and open the **Add** SQL Server Instance wizard.

If you want to export the information displayed on the Discovered Instances view, go to the **Export** option, located on the action items bar, and select your preferred format (**PDF**, **XLS**, or **XML**) for exporting.

For more information about the available actions on this view, go to [Discovered instances](#). (see page 215)

| SQL Server | Version | Edition | Discovered | Discovery Methods |
|---|---------------------------------------|---------|----------------------|-----------------------|
| <input type="checkbox"/> AUT-AG-NODE1\SQLE2012_C1 | N/A | N/A | May 10, 2018 9:59 AM | Odbc |
| <input type="checkbox"/> AUT-SQL2005\SQLE2005 | 9.0.1309.8 (9.0.1309.8) | N/A | May 10, 2018 9:59 AM | Browser Service, Odbc |
| <input type="checkbox"/> AUT-SQL2008R2-0\SQLE2008R2CS | SQL Server 2008 R2 SP2 (10.50.4000.0) | N/A | May 10, 2018 9:59 AM | Browser Service, Odbc |
| <input type="checkbox"/> AUT-SQL2008R2-0\SQLE2008R2DOWN | SQL Server 2008 R2 SP2 (10.50.4000.0) | N/A | May 10, 2018 9:59 AM | Browser Service, Odbc |
| <input type="checkbox"/> AUT-SQLALL-003\SQLE2014 | SQL Server 2014 RTM (12.0.2000.8) | N/A | May 10, 2018 9:59 AM | Browser Service, Odbc |
| <input type="checkbox"/> AUT-SQLALL-003\SQLE2014EXPRESS | SQL Server 2014 RTM (12.0.2000.8) | N/A | May 10, 2018 9:59 AM | Browser Service, Odbc |
| <input type="checkbox"/> AUT-SQLATS-005 | SQL Server 2014 SP1 (12.0.4100.1) | N/A | May 10, 2018 9:59 AM | Odbc |
| <input type="checkbox"/> AUT-SQLATS-SYNE | SQL Server 2008 R2 SP1 (10.50.2500.0) | N/A | May 10, 2018 9:59 AM | Odbc |
| <input type="checkbox"/> AUT-SQLB-105\SQLE2018ENTERPRIS | SQL Server 2018 RTM (13.0.1601.5) | N/A | May 10, 2018 9:59 AM | Browser Service, Odbc |
| <input type="checkbox"/> AUT-SQLB-109 | SQL Server 2008 R2 RTM (10.50.1600.1) | N/A | May 10, 2018 9:59 AM | Odbc |

Access from the Overview

To access the **Discovered instances** view, you can also do it by clicking **New Instances** on the right sidebar of the Home view. For more information, go to [Viewing information on the SQL Inventory Manager Overview](#) (see page 188).

13.7.2 Manage your Discovery Options

If you want to configure the discovery job, go to the Administration tab and click **Manage Discovery Options** on the Discovery section. On this dialog window you can specify not only those computers where you want IDERA SQL Inventory Manager to perform the discovery job, but also you can choose which methods you want to use to search in each computer. You can schedule your discovery jobs, add IP address ranges and those domains that IDERA SQL Inventory Manager will use for discovery.


For more information on how to configure your manage discovery options, see [How to manage Discovery Center options](#) (see page 125).

13.8 How to add SQL Server instances for monitoring

In order to manage an instance, access its details, and add it to your monitored environment, you need to register it with IDERA SQL Inventory Manager. This section helps you register one or more instances with IDERA SQL Inventory Manager.

You can find the **Add SQL Server Instance** option on the following views:

- **Home** tab - The **Add SQL Server Instance** option is located on the top right section of the instances table.
- **Instances** tab - The **Add** option is located on the action items bar of the Managed, Discovered, Ignored, and SQL Licensing sections respectively.
- **Administration** tab - The **Add SQL Server Instance** option is located in the instances section.

 Linux runs multiple SQL Server instances using Docker. When registering multiple instances hosted in Linux, you must specify the the port number of the secondary instances. You can register the primary instance with the host name only. SQL authentication should be used for the connection to instances hosted in linux.

e.g. linux-01:52030

The Add Instance Wizard contains the following four sections:

13.8.1 1. Instance /Cloud database

1. In the **SQL Server Instance** box, specify the SQL Server instances running on private hosts or cloud services (Azure or Amazon) you want to register with SQL Inventory Manager for monitoring. Separate multiple entries with a semicolon.

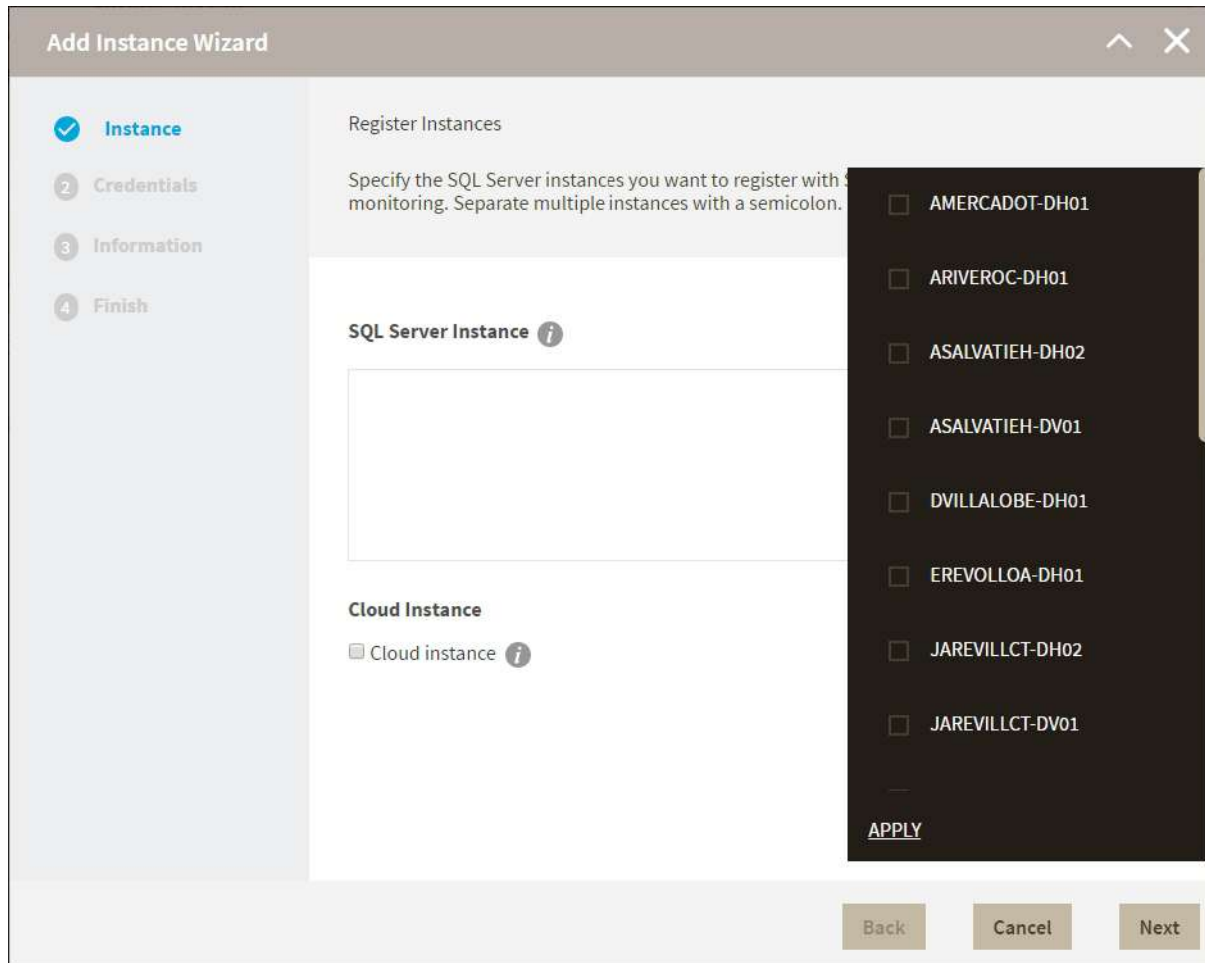
When you select instances on the **Discovered** or **Ignored** Instances views, the wizard already adds them to this box.

⚠ The addition of a cloud instance or database may incur in additional costs for data access on your Cloud Provider account. See more information [here](#)¹³⁶

You can use the **Browse** button to access a list of discovered instances that have not been registered yet with IDERA SQL Inventory Manager.

¹³⁶ <https://wiki.idera.com/display/SQLInventoryManager/Cloud+discovery>

2. Check the box next to the instances you want to add, and click **Apply**.



3. Select the type of instance you want to add, either Private / On-Premise, Amazon, or Azure.

4. Click **Next** to go to the next section.

Add Instance Wizard

1 **Instance**

2 Credentials

3 Information

4 Finish

Register Instances

Specify the SQL Server instances you want to register with SQL Inventory Manager for monitoring. Separate multiple instances with a semicolon.

SQL Server Instance ⓘ

SIDROCID02;ARIVEROC-DH01;WIN-90GCKKJIPTJ\SERVER012;ASALVATIEH-DV01;

Browse

Cloud Instance

Cloud instance ⓘ

Back Cancel Next

13.8.2 2. Credentials

Add Instance Wizard

Instance ✓
Credentials ✓
 Information 3
 Finish 4

SQL Connection Credentials
 Specify the account to be used to connect to the SQL Server instance to collect availability, capacity and configuration data.

Account Type ⓘ
 SQL Inventory Manager service account ▼

Connection Credentials
 Connection Credentials are used to connect to host computer to gather configuration and performance data.
 For host computers running Windows OS, specify the WMI connection credentials as the connection credentials.
 For Linux systems, specify a user or domain user account that can connect to Linux server.

Account Type ⓘ
 SQL Inventory Manager service account ▼

Test Credentials ⓘ

Test credentials now

Back Next Cancel

IDERA SQL Inventory Manager connects to registered SQL Server instances and their hosts to collect information. The collection service requires permissions to connect and gather information using the following types of connections:

- SQL connection credentials to perform queries against registered instances.
- User connection credentials to gather data from the host computers.
- Active Directory account to gather information from Amazon or Azure.

✓ For more information on what are the minimum required permissions for these accounts, click [here](#).¹³⁷

By default, IDERA SQL Inventory Manager connects using the IDERA SQL Inventory Manager service account. However, if you need to provide alternative credentials for any of these two connections, you can choose from the respective options on each section.

¹³⁷ <http://wiki.idera.com/display/SQLInventoryManager/Required+accounts+and+permissions>

13.8.2.1 SQL Connection Credentials

- Specify the type of account that you want to use to access your SQL Server instance and collect its information. If you do not want to use the **SQL Inventory Manager service account**, you can choose to use a **User account** or a **SQL Server login account** from the **Account Type** list.
- If you select a **User account** or **SQL Server login account**, type the respective user name and password. IDERA SQL Inventory Manager uses this account for SQL queries to gather availability and configuration data.
- You can test the correctness of your credentials by clicking **Test Credentials**.

13.8.2.2 Connection Credentials

For Private / On-Premise Instances

- On this section, you can choose to use the **SQL Inventory Manager service account** or a **User account** by selecting either of them from the **Account Type** list.
- If you choose to use a **User account**, type the respective user name and password. This account allows you to access configuration data of the computer that hosts the registered instance.

✓ IDERA recommends that you use the **Test Credentials** option to verify that IDERA SQL Inventory Manager can successfully monitor the newly registered instances.

For Amazon and Azure

- On this section, you can optionally specify an account for connecting to Azure or Amazon.

✓ IDERA recommends that you use the **Test Credentials** option to verify that IDERA SQL Inventory Manager can successfully monitor the newly registered instances.

13.8.3 3. Information

On this section you can specify additional information for your instances like **Owner**, **Location**, **Comments** and **Tags**.

Although none of these fields are required, Owner, Location, Comments and Tags provide a powerful method for grouping instances and help you organize your managed instances. You can use these options to view information such as database counts, size, or activity, grouped by these fields.

Use the **Owner** and **Location** drop down lists to access all available options.

To add tags, you can do one of the following:

- Click any of the suggested **Popular Tags** on the right side of the window. The tag appears now on **Current Tags** on the left.
- You can click **See All Tags** on the top right section to display all available tags.
- If you want to **Add a New Tag**, type the name in the bottom box, and click **ADD**. Your new tag will be added to the **Current Tags** list.

Warning

- The tag name must begin with an upper or lowercase alphanumerical character.
- Your tag name must have a maximum length of 20 characters.
- Only the following special characters are valid for tags: ! # @ () ' . : - _ and embedded spaces.

✔ Refer to the [Managing tags](#)¹³⁸ section for more guidance on how to add, view, edit, or delete tags.

13.8.4 4. Finish

On this section, you can review your Instance Registration Details such as: instance name, SQL Connection Credentials, WMI Connection Credentials, Owner, Location, Comments, and Tags.

¹³⁸ <http://wiki.idera.com/display/SQLInventoryManager/Managing+tags>

To change any of these registration details you can do one of the following:

- You can click any of the title sections (INSTANCE, CREDENTIALS or INFORMATION) and go directly to the place where you need to make the changes.
- You can click **PREV** to go back to the previous sections until you find the place where you need to make changes.

Add Instance Wizard

1 Instance

2 Credentials

3 Information

4 **Finish**

Review Instance Details

Review all the details of the SQL Server instances that you are registering. You can go back to previous steps if you want to change some information.

Instance: **SIDROCID02;ARIVEROC-DH01;WIN-90GCKKJIPTJ\SERVER012;ASALVATIEH-DV01;**

SQL Connection Credentials: **SQL Inventory Manager service account**

WMI Connection Credentials: **SQL Inventory Manager service account**

Owner:

Location:

Comments:

Tags:

Back **Cancel** **Submit**

After you review your registration details click **FINISH**. IDERA SQL Inventory Manager begins to collect instances information after a few minutes of their registration and will continuously collect availability, performance, and configuration information from them and their host computers.

Tip

After registration, you can still change credentials, tags, and information settings on the **Edit Properties** option. Refer to [Editing instance properties](#)¹³⁹ for more information.

13.8.5 About collection intervals

Collection intervals are predefined. You can see more information about collection frequency on the [What Health Checks are available in SQL Inventory Manager?](#)¹⁴⁰ section.

¹³⁹ <http://wiki.idera.com/display/SQLInventoryManager/Edit+instance+properties>

¹⁴⁰ <http://wiki.idera.com/pages/viewpage.action?pageId=43024976>

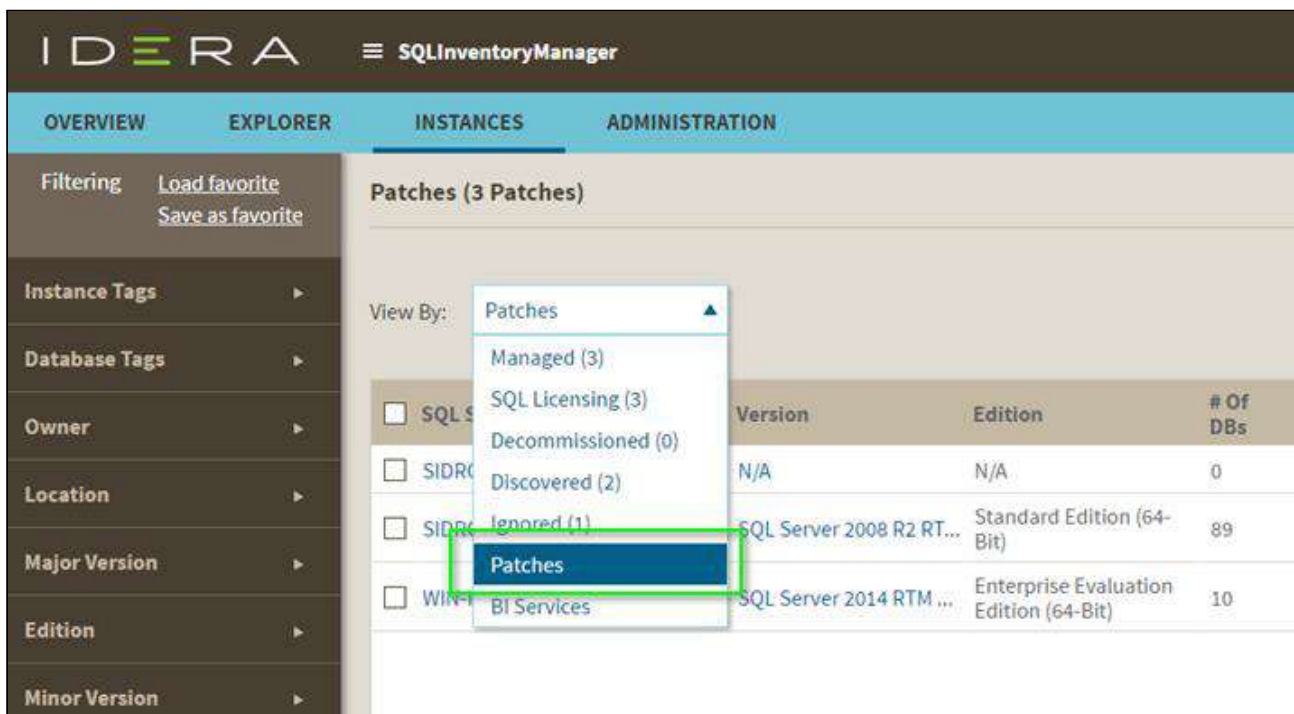
You can also force data collection for an instance by selecting **Refresh Data** on the **Instance details** view. For more information, refer to [Viewing instance details](#)¹⁴¹.

13.9 Reviewing SQL Server patches

The IDERA SQL Inventory Manager Patches view helps you manage SQL Server patches and keep your environment properly patched.

The Patches view displays a list of your managed SQL Server instances including whether they are running a supported version of SQL Server. In addition, you can get information about the patches running on your SQL Server and whether additional hotfixes are available for your SQL Server level. If your SQL Inventory Manager Installation is behind a proxy click [here](#)(see page 288) for instructions on how to update the Build List manually.

Access the Patches view by going to the Instances view, and then clicking the arrow icon to the right of the current view title, such as Database Instances.



The Patches view allows you to:

- Verify that your SQL Servers instances are patched to the same and appropriate level.
- Identify whether any SQL Server instances are running unsupported versions of SQL Server (or versions whose support is about to expire).
- Use quick links to Microsoft Knowledge Base articles to get more information about applied and new hotfixes.
- Keep up with the latest patches by downloading the most recent list compiled by IDERA.

¹⁴¹ <http://wiki.idera.com/display/SQLInventoryManager/Viewing+instance+details>

The screenshot shows the SQL Inventory Manager interface. The top navigation bar includes 'OVERVIEW', 'EXPLORER', 'INSTANCES', and 'ADMINISTRATION'. The 'INSTANCES' tab is active, and the 'Patches (3 Patches)' view is selected. A search bar is located at the top right. The left sidebar contains various filtering options like 'Instance Tags', 'Database Tags', 'Owner', 'Location', 'Major Version', 'Edition', and 'Minor Version'. The main content area displays a table of SQL Server instances with columns for 'SQL Server', 'Version', 'Edition', '# OF DBs', 'Owner', 'Updates Available', 'Supported', and 'Support Status'. A green box highlights the 'Export', 'Display Build List (3/23/2017)', and 'Check for New Build List' buttons. The bottom of the interface shows '3 total instances' and '20 items per page'.

| SQL Server | Version | Edition | # OF DBs | Owner | Updates Available | Supported | Support Status |
|--|--------------------------|--|----------|-------|-------------------|-----------|---------------------------|
| <input type="checkbox"/> SIDROCDEV01\SQL2014 | N/A | N/A | 0 | DBA1 | None | No | N/A |
| <input type="checkbox"/> SIDROCID01 | SQL Server 2008 R2 RT... | Standard Edition (64-Bit) | 89 | | Hotfixes | Yes | Extended Support Only ... |
| <input type="checkbox"/> WIN-IR53181517Q | SQL Server 2014 RTM ... | Enterprise Evaluation Edition (64-Bit) | 10 | | Hotfixes | Yes | Mainstream Support |

13.9.1 Available actions

13.9.1.1 Display Build List (mm/dd/yyyy)

Displays the SQL Server build list associated with the date in parentheses. You can expand/contract the content for each SQL Server version by clicking the small arrow icon next to the version name.

You can get additional information about the build by clicking the link for the associated Microsoft Knowledge Base article, if available.

| Build | Version | Supported | Support Status | Description | KB Address |
|-------------------|------------------------------|-----------|--------------------|---|---|
| ▶ SQL Server 2016 | | | | | |
| ▲ SQL Server 2014 | | | | | |
| 12.0.5540.0 | SQL Server 2014 SP2 + hotfix | Yes | Mainstream Support | KB 4010394: Cumulative Update 4 for SQL Server 2014 SP2 | http://support.micros... |
| 12.0.5537.0 | SQL Server 2014 CU3 | Yes | Mainstream Support | KB 320438: Cumulative update 3 for SQL Server 2014 SP2 | http://support.micros... |
| 12.0.5532.0 | SQL Server 2014 SP2 + hotfix | Yes | Mainstream Support | KB 3194718: MS16-136: Description of the security update for SQL Server 2014 Service Pack 2 CU: November 8, 2016 | http://support.micros... |
| 12.0.5522.0 | SQL Server 2014 SP2 + hotfix | Yes | Mainstream Support | KB 3188778: Cumulative update 2 for SQL Server 2014 SP2 | http://support.micros... |
| 12.0.5511.0 | SQL Server 2014 SP2 + hotfix | Yes | Mainstream Support | KB 3178925: Cumulative update package 1 for SQL Server 2014 SP2 | http://support.micros... |
| 12.0.5203.0 | SQL Server 2014 SP2 + hotfix | Yes | Mainstream Support | KB 3194714: MS16-136: Description of the security update for SQL Server 2014 Service Pack 2 GDR: November 8, 2016 | http://support.micros... |
| 12.0.5000.0 | SQL Server 2014 SP2 | Yes | Mainstream Support | KB 3171021: SQL Server 2014 Service Pack 2 release information | http://support.micros... |

Date of Build List: 3/23/2017 Close

13.9.1.2 Check for New Build List

Verifies that the build file located on your IDERA SQL Inventory Manager server matches the latest build file located on the IDERA server. If the current build list on your machine is older, your list is updated and the changes are applied to the Patches view for the managed instances. IDERA SQL Inventory Manager displays a message if your list matches the latest list on the IDERA server.

13.9.1.3 Export

On the action items bar of the Patches view, you can find the **Export** option which allows you to choose your preferred format for exporting the information available on this view. You can export as a **PDF**, **XLS**, or **XML** file. The filters you choose on this view will be taken into account for your exported reports.

13.9.1.4 View available updates

If a hotfix is available, click the link to view a list of available updates for this SQL Server instance. You can get additional information about the build by clicking the link for the associated Microsoft Knowledge Base article, if available.

| Build | Description | Support St... | KB Address |
|-----------------------|--|--------------------|---|
| RTM | | | |
| 12.0.2269.0 | KB 3045324; MS15-058: Description of the security update for SQL Server 2014 GDR | Mainstream Support | http://support.microsoft.com/kb/3045324/ |
| 12.0.2342.0 | KB 2931693; Cumulative update package 1 for SQL Server 2014 | Mainstream Support | http://support.microsoft.com/kb/2931693/ |
| 12.0.2370.0 | KB 2967546; Cumulative update package 2 for SQL Server 2014 | Mainstream Support | http://support.microsoft.com/kb/2967546/ |
| 12.0.2381.0 | KB 2977316; MS14-044: Description of the security update for SQL Server 2014 QFE | Mainstream Support | http://support.microsoft.com/kb/2977316/ |
| 12.0.2402.0 | KB 2984923; Cumulative update package 3 for SQL Server 2014 | Mainstream Support | http://support.microsoft.com/kb/2984923/ |
| KB 2999809; FIX: Poor | | | |

13.9.1.5 View support status

The **Supported** column displays **Yes** or **No** indicating whether the SQL Server version with the specific build is supported by Microsoft.

13.9.1.6 Support Status

The Supported Status column provides the current status and a link to the Microsoft page for extended support and lifecycle. Options include:

- Mainstream Support
- Retired
- Extended Support Only as of [date]

13.9.2 Update Build List manually

Starting with version 2.4, users can update the Build List manually when SQL Inventory Manager is behind a proxy.

Follow these instructions to update the Build List manually:

1. Download the latest Build List file from <http://www.idera.com/files/SQLServerVersionList.xml>
2. Rename the downloaded file to *SQLServerVersions.xml*.
3. Go to the folder `~\Idera\SQLInventoryManager\CollectionService`.
4. Replace *SQLServerVersion.xml* with the newly downloaded file.

14 Health Recommendations and Alerts

IDERA SQL Inventory Manager performs health checks on your environment. From these health checks, IDERA SQL Inventory Manager provides you with health recommendations to give you a broad visibility of the status of your registered instances; for example, health recommendations let you know if you have databases with no backups, if your drives are at risk of being full soon, or if your instances are running too slow.

Additionally, you can enable/disable those health check recommendations that you wish or not to receive notifications from.

14.1 How to view Health Recommendations

IDERA SQL Inventory Manager allows you to see health check recommendations from the following views:

- **Overview.** Health check recommendations for all your environment.
- **Instance details.** Health check recommendations for a specific instance.

14.1.1 View Health Check Recommendations from all your monitored environments

On the first top section of the **Overview**, IDERA SQL Inventory Manager gives you a summary of the health check recommendations for all your environment. These health recommendations are grouped by health check category and ordered by criticality; where Level 3 is critical, Level 2 is warning, and Level 1 is informational.

You can click **Show Details** on a recommendation to:

- List those instances or databases affected by the respective health check.
- Individually **Dismiss** or **Refresh** the status of a database or instance.
- View the knowledge base for the health check recommendation.
- Link to more information about the health check recommendation.

If you do not want to see these details, click **Hide Details**.

You can also **Dismiss** or **Refresh** at the level of the whole health check recommendation.

Warning

When you dismiss a health check recommendation, you choose to ignore it temporarily until the health check passes and changes to an alert status, then IDERA SQL Inventory Manager raises again the health check recommendation.

Disabling Health Checks

You can also disable the health check so that IDERA SQL Inventory Manager does not perform it anymore and therefore you no longer receive health recommendations from this health check.

The screenshot shows the SQL Inventory Manager interface. The top navigation bar includes 'OVERVIEW', 'EXPLORER', 'INSTANCES', and 'ADMINISTRATION'. The main content area is titled 'YOU HAVE 21 HEALTH CHECK RECOMMENDATIONS'. It features two Level 3 alerts: '10 databases do not have a backup' and '10 databases consistency has never been checked'. Below these is a table of databases with columns for the database name and the error message, and buttons for 'Dismiss' and 'Refresh'. A 'Knowledge Base' section provides information on database corruption. At the bottom, a Level 1 alert states 'Instance WIN-IR53181517Q is not configured to optimize ad hoc workloads.' The right sidebar shows system status (UP: 1, DOWN: 0, CRITICAL: 1) and 'MY ENVIRONMENT' metrics like Instances, Servers, Databases, Data Size, Log Size, Disabled Instances, and Available Licenses.

14.1.2 Exporting Health Checks Recommendations from the Overview

You can use the exporting option for getting reports from the recommendations displayed on the Overview. On the top right section of the Health Checks Recommendations section, you can find the **Exporting reports** option.

When you access the export option, you have the following three choices:

- **Summary of recommendation categories.** The overview displays a summary of all health check recommendations grouped by categories of recommendations. This option allows you to export this summarized information.
- **Details for all recommendations.** By using this option, you can export a report that includes all available health check recommendations in detail.
- **Details for selected categories.** With this option, you can select those categories of health check recommendations that you want to export. For example, you can choose to have a report for all databases that do not have a backup or for all the instances that are not monitored.

Export Health Check Recommendations ✕

Select the type of data to export

Summary of recommendation categories

Details for all recommendations

Details for selected categories

43 instance(s) are down.

12 instances are not monitored.

3 instance(s) are partially monitored

5 databases log files at risk of filling up.

16 volumes at risk of filling up.

16 volumes at risk of filling up.

737 databases do not have a backup.

Export as

PDF XLS XML

Export
Cancel

14.1.3 View Health Check Recommendations from a specific instance

When you go to an instance details view (For more information, go to [Viewing instance details](#)(see page 245)), you can find a report of the health check recommendations for this specific instance. These health check recommendations are grouped by health check category and ordered by level of criticality; where Level 3 is critical, Level 2 is warning, and Level 1 is informational.

You can click **Show Details** to:

- List databases affected by the health check.
- Individually **Dismiss** or **Refresh** the status of a database.
- View the knowledge base for the health check recommendation.
- Link to more information about the health check recommendation.

If you do not want to see these details, click **Hide Details**.

You can also **Dismiss** or **Refresh** at the level of the whole health check recommendation.

Warning

When you dismiss a health check recommendation, you choose to ignore it temporarily until the health check passes and changes to an alert status, then IDERA SQL Inventory Manager raises again the health check recommendation.

Disabling Health Checks

You can also disable the health check so that IDERA SQL Inventory Manager does not perform it anymore and therefore you no longer receive health recommendations from this health check.

The screenshot shows the IDERA SQL Inventory Manager interface. The main content area displays a list of health check recommendations for instance WIN-IRS3181517Q. The recommendations are categorized by level (LEVEL 3) and include a list of databases that have never been checked with DBCC CHECKDB. Each database entry has 'Dismiss' and 'Refresh' buttons. A 'Knowledge Base' section provides information about SQL Server database corruption. The right sidebar shows instance and server summary details.

Info

If you have no health check recommendations or if you dismiss all of them, you get the message: **This instance is passing all health checks.**

14.1.4 Exporting Health Checks Recommendations from an instance

You can also export Health Checks Recommendations from an instance by clicking **Exporting reports** on the action items options of the Health Check Recommendations section.

When you access the export option you have the following three choices for exporting recommendations:

- **Summary of recommendation categories.** The Overview displays a summary of all health checks recommendations grouped by categories of recommendations. This option allows you to export this summarized information.
- **Details for all recommendations.** By using this option, you can export a report that includes all available health check recommendations in detail.
- **Details for selected categories.** With this option you can select those categories of health check recommendations you want to export. For example, you can choose to have a report for all databases that do not have a backup or for all the instances that are not monitored.

Choose the format for exporting, IDERA SQL Inventory Manager allows you export as **PDF, XLS or XML**. Click **Export**.

14.2 How to configure email settings

IDERA SQL Inventory Manager can send email notifications for warning or critical conditions from your environment, but before subscribing to these email notifications; you must first configure your email (SMTP) settings.

You can access this option by going to the **Administration** tab.

In the **Alert Emails** section, click **Configure email (SMTP) settings**. A dialog box opens with three main sections:

- Email Information
- Outgoing Mail Server Information
- Test Email Settings

Email Settings

Email Information

Sender Address:

Reply To Address:

Message Footer:

Outgoing Mail Server Information

SMTP Server Address:

SMTP Server Port: Use an SSL encrypted connection

SMTP Server requires authentication

User name:

Password:

Test Email Settings

Recipient of test email:

14.2.1 Email Information

Sender Address

Enter the email address that IDERA SQL Inventory Manager will use as the sender of the emails notifications.

Reply To Address

Specify a reply-to email address to receive replies from emails.

Message Footer

Enter the text that you want to appear in the footer of notifications.

14.2.2 Outgoing Mail Server Information

In order to send email notifications, you must specify the settings of an email server you want to use. You need to provide the following information:

SMTP Server Address

Enter the name or Internet Protocol (IP) address of your SMTP mail server.

SMTP Server Port

Enter the IP port that the SMTP mail server uses. The default SMTP port is 25.

Use an SSL encrypted connection

Select this check box to use an SSL encrypted connection to connect to the email server.

SMTP Server authentication

Select this checkbox if your SMTP server requires authentication, specify then a valid user name and password to access the email server.

14.2.3 Test Email Settings

You can use this section to test your email settings. For this purpose, enter the **Recipient of the test email** and click **SEND TEST EMAIL**. IDERA SQL Inventory Manager sends a test email to the recipient you specify. You can verify this test email in the respective recipient account.

After you configure your email settings, you can subscribe to alerts. For more information on how to subscribe to alerts, go to [Subscribing to Alerts](#)(see page 153).

 Manage users

From the **Administration** tab, you can decide which users receive alerts or not. For more information, refer to [Managing subscriptions for all users](#).(see page 116)

14.3 How to subscribe to Alerts

IDERA SQL Inventory Manager can send email notifications for warning or critical conditions from your environment, in order to receive these notifications you have to subscribe to alerts.


To subscribe, go to the **Administration** tab, in the **Alert Emails** section, click **Subscribe to alerts**.

On the **Subscribe to Alerts** window, check the respective box and type the email address where you want to receive these notifications.

Subscribe to Alerts
✕

Receive SQL Inventory Manager alert emails for critical issues such as availability problems.

Email address:

 Email settings have not been configured yet. [Click here to configure sending alert emails.](#)

Ok
Cancel

 **Note**

If you have not configured your email settings, IDERA SQL Inventory Manager displays **Email settings have not been configured yet. Click here to configure sending alert emails**, click this option and fill the required fields, for more information go to [Configuring email settings for alert notifications](#)(see page 151).

 **Manage users**

You can also manage your subscriptions from the following sections:

- [Managing users](#).(see page 160)
- [Managing subscriptions for all users](#). (see page 116)

14.4 What Health Checks are available with SQL Inventory Manager?

IDERA SQL Inventory Manager performs Health Checks on your SQL Server instances to alert you about the availability, performance, and other critical issues of your environment.

The following table describes what type of metrics are measured, their status, when alerts are raised, their criticality levels, the collection frequency for each metric, and if email alerts are sent.

| Metric | Category | Status | Alert raised when/ threshold | Collection Interval | Email Alert |
|---------------------------|--------------|---|---------------------------------------|---------------------------|----------------|
| Instance status | Availability | up down | critical: instance down | Runs every half minute | Yes |
| Instance response time | Availability | response time ok slow response time | warning: 2000 ms critical: 5000 ms | Runs every half minute | Yes |

| Metric | Category | Status | Alert raised when/ threshold | Collection Interval | Email Alert |
|--|----------------------|--|---|------------------------|----------------|
| Database status | Availability | normal suspect offline inaccessible emergency mode | critical: suspect, offline, inaccessible, emergency mode | Runs every day | Yes |
| Database never backed up | Disaster recovery | backed up never backed up | critical: never backed up | Runs every day | No |
| Database not backed up recently | Disaster recovery | backed up recently in the last 7 days no full backup in 7 days or more no differential backup in 7 days or more | critical: no full backup in 7 days or more warning: no differential backup in 7 days or more | Runs every day | No |
| Databases with no CHECKDB integrity check | Disaster recovery | CHECKDB never run | critical: CHECKDB never | Runs every day | No |
| Databases with no recent CHECKDB integrity check | Disaster recovery | run CHECKDB in the last 7 days no recent CHECKDB in more than 7 days no recent CHECKDB in more than 30 days | no recent CHECKDB in more than 7 days no recent CHECKDB in more than 30 days | Runs every day | No |
| Drives at risk | Storage capacity | below 75 % capacity between 75% and 90% above 90% | warning: between 75% and 90% critical: above 90%, server drive is at risk of being full soon | Runs hourly | Yes |

| Metric | Category | Status | Alert raised when/ threshold | Collection Interval | Email Alert |
|---|------------------------|---|--|------------------------|----------------|
| Databases at risk | Storage capacity | below 75 % capacity between 75% and 90% above 90% | warning: between 75% and 90% critical: above 90% | Runs hourly | Yes |
| Database Auto shrink enabled | Configuration check | enabled disabled | warning: enabled | Runs every day | No |
| Instance xp_cmdshell enabled | Configuration check | enabled disabled | critical: enabled | Runs every day | No |
| Database Tempdb files not all the same size | Configuration check | same size not the same size | warning: not the same size | Runs every day | No |

Refresh collection

IDERA SQL Inventory Manager allows you to refresh these metrics at any time from the instance view. For more information about this option, please refer to [Viewing instance information](#)(see page 245).

14.4.1 Definitions

Availability Data

Availability Data refers to the instance status (up or down), instance response time, and database status (normal, suspect, offline, inaccessible or emergency mode).

Capacity data

Capacity data refers to storage capacity of your drivers and databases of your environment. IDERA SQL Inventory Manager lets you know if your drives or databases are at risk of being full soon.

CHECKDB Checks the logical and physical integrity of all the objects in the specified database. If corruption has occurred for any reason, the DBCC CHECKDB command will find it, and tell you exactly where the problem is.

Configuration Data

The following configuration data is collected:

- **Auto Shrink** SQL Server automatically shrinks databases to remove unused space. In some cases shrinking databases may not be the best option for your environment since it may cause fragmentation. This configuration check allows you to know if the Auto Shrink option is enabled or disabled.
- **Xp_cmdshell** Xp_cmdshell is essentially a mechanism to execute arbitrary calls into the system using either the SQL Server context (i.e. the Windows account used to start the service) or a proxy account that can be configured to execute xp_cmdshell using different credentials. When xp_cmdshell is enabled, the user could

escalate his/her privileges to sysadmin. It is important to be aware which instances have the xp_cmdshell option enabled for security reasons. This configuration check allows you to know if xp_cmdshell is enabled or disabled in an instance.

- **Tempdb files** It is important to configure the files at the same initial size and with the same growth settings so SQL Server can write the data across the files as evenly as possible. The data files for tempdb should all be the same size and large enough to handle the workload of 24 hours a day. This helps SQL Server distribute the work evenly across the tempdb data files. This configuration check allows you to know if tempdb files are the same size or not.

Disaster recovery

Disaster recovery is a process to help you recover information if disaster occurs. Disaster recovery planning refers to the preparation that must occur in response to a disaster. IDERA SQL Inventory Manager provides Health Checks that give you information of your latest backups, alerting you if any of your databases have not been backed up recently.

For more term definitions, refer to [Definition of terms](#).(see page 26)

14.4.2 Database at risk (Data)

14.4.2.1 REASON

SQL Server databases are primarily backed by two categories of files – [data files](#)¹⁴² and [log files](#)¹⁴³. The data files contain all of the data related to the database, including tables, indexes, and object definitions, while the log files contain a log of all of the changes which have been made to that data. Data files are further subdivided into primary and secondary data files, which can be grouped into collections called filegroups.

14.4.2.2 RESOLUTION

As databases grow in size, the underlying data files will naturally grow as well. When a database grows to the point that a data file filegroup cannot grow any further, further attempts to add data will result in an error. When your data files are full, you can increase free space by manually increasing the size of the files, increasing the free space available on the disk, or by adding additional data files on new disks. Instructions on how to add new files are available [here](#)¹⁴⁴.

Data files may be configured to grow automatically to prevent out-of-space situations, but they remain limited by the space available on the disk drive, and autogrowth should generally be considered a failsafe alternative. It is a better practice to manually grow your data files to accommodate for expected growth before they fill up.

14.4.2.3 Update health checks

The **Database at risk (Data)** health check allows you to set the database at risk warnings as either a percentage or flat value, which represents the remaining space. You also can select the threshold values for warning and critical alerts.

By default, the Database at Risk (Data) *warning alert* is displayed when the storage capacity is between 75-90% full and a *critical alert* is displayed when the storage capacity is above 90% full. You can change the threshold by modifying the percentage for the storage capacity or assigning a flat value for the storage capacity remaining. For example, settings can prevent IDERA SQL Inventory Manager from displaying an alert unless the storage capacity

¹⁴² <https://technet.microsoft.com/en-us/library/ms179316%28v=sql.105%29.aspx>

¹⁴³ <https://technet.microsoft.com/en-us/library/ms190925.aspx>

¹⁴⁴ <https://technet.microsoft.com/en-us/library/ms189253.aspx>

has only 2 GB remaining. The changes are applied to all databases that are part of the managed instances. After making any change, alerts are not displayed until the new thresholds meet or exceed the selected value.

To configure a health check, in the Administration view, click **Manage Health Checks**, and then click **Configure** for the appropriate health check. In this case, IDERA SQL Inventory Manager displays the Update Health Checks - Database at Risk (Data) window.

Update Health Checks - Database at Risk (Data) ✕

The Database at Risk (Data) warning alert will be thrown if one or more databases are 75% to 90% full . A critical alert will be thrown if one or more databases are 90% full. You can change this threshold by modifying the warning and critical alert settings.

Change Warning and Critical Alert Settings

| | | |
|--|---|--|
| <input checked="" type="radio"/> Use Percentage i | Warning <input type="text" value="75"/> % | Critical <input type="text" value="90"/> % |
| <input type="radio"/> Use Flat value i | Warning <input type="text" value="1"/> GB | Critical <input type="text" value="1"/> GB |

Alerts will be thrown when one or more databases threshold has been met or exceeds the selected value(s).

Make the appropriate changes, and then click **Save**.

i **Available Health Checks**

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#)(see page 296)

14.4.3 Database at risk (Logs)

14.4.3.1 REASON

SQL Server databases are primarily backed by two categories of files – [data files](#)¹⁴⁵ and [log files](#)¹⁴⁶. The data files contain all of the data related to the database, including tables, indexes, and object definitions, while the log files contain a log of all of the changes which have been made to that data. This separation of log and data files is critical to ensuring the recoverability of the data in the case of an unexpected server failure.

14.4.3.2 RESOLUTION

Under normal circumstances, the space in the log file is regularly reused, with space being made available for reuse through a process called [log truncation](#)¹⁴⁷. When log truncation cannot occur for some reason, the log file will attempt to grow if autogrow is enabled and the file has not reached its maximum size. When a log file becomes full and can no longer grow, attempts to modify or add data to the database will produce an error: the database essentially becomes read-only.

When a database log file is full, it is important to identify what is preventing log truncation from occurring. Two common reasons that the log might not be truncating include:

- For databases which are operating in the full or bulk logged recovery model, the log file will grow indefinitely until a backup is taken. In this case, you need to back up your log file and either schedule regular backups to continue, or consider changing the [log truncation](#)¹⁴⁸ of your database to better fit your needs.
- For databases of any recovery model, a long running transaction will prevent the log from being truncated. You may need to identify and either commit or kill the offending transaction, or in the case of an important business transaction, you may need to grow the log file to allow it to finish.

There are other reasons truncation may not occur: full details are available [here](#)¹⁴⁹.

If you are not immediately able to resolve the problem that is preventing log truncation, you may need to take another action to create space for the log file. This can include freeing disk space, manually increasing the log file size, or adding an additional log file. Each of those options, along with their implications, is explained [here](#)¹⁵⁰, and can be summarized thus:

- Back up the database log
- Free disk space to allow autogrow
- Manually increase the size of the log file, in cases where autogrow is disabled
- Move the log file to a new, larger disk
- Add an additional log on a different disk
- Complete or kill the longest running transaction

It's a good practice to keep an eye on the sizes of your log files and the space remaining and to take action before reaching a critical stage. You can read more about managing transaction log sizes [here](#)¹⁵¹.

145 <https://technet.microsoft.com/en-us/library/ms179316%28v=sql.105%29.aspx>

146 <https://technet.microsoft.com/en-us/library/ms190925.aspx>

147 <https://technet.microsoft.com/en-us/library/ms189085%28v=sql.105%29.aspx>

148 <https://technet.microsoft.com/en-us/library/ms189085%28v=sql.105%29.aspx>

149 <https://technet.microsoft.com/en-us/library/ms190925.aspx>

150 <https://technet.microsoft.com/en-us/library/ms175495.aspx>

151 <https://technet.microsoft.com/en-us/library/ms365418.aspx>

14.4.3.3 Update health checks

The **Database at risk (Logs)** health check allows you to set the database at risk warnings as either a percentage or flat value, which represents the remaining space. You also can select the threshold values for warning and critical alerts.

By default, the Database at Risk (logs) *warning alert* is displayed when the storage capacity is between 75-90% full and a *critical alert* is displayed when the storage capacity is above 90% full. You can change the threshold by modifying the percentage for the storage capacity or assigning a flat value for the storage capacity remaining. For example, settings can prevent IDERA SQL Inventory Manager from displaying an alert unless the database log has only has 2 GB remaining. The changes are applied to all databases that are part of the managed instances. After making any change, alerts are not displayed until the new thresholds meet or exceed the selected value.

To configure a health check, in the Administration view, click **Manage Health Checks**, and then click **Configure** for the appropriate health check. In this case, IDERA SQL Inventory Manager displays the Update Health Checks - Database at Risk (logs) window.

Update Health Checks - Database at Risk (Logs) ✕

The Database at Risk (Logs) warning alert will be thrown if one or more databases logs are 75% to 90% full . A critical alert will be thrown if one or more databases logs are 90% full. You can change this threshold by modifying the warning and critical alert settings.

Change Warning and Critical Alert Settings

| | | |
|--|---|--|
| <input checked="" type="radio"/> Use Percentage i | Warning <input type="text" value="75"/> % | Critical <input type="text" value="90"/> % |
| <input type="radio"/> Use Flat value i | Warning <input type="text" value="1"/> GB | Critical <input type="text" value="1"/> GB |

Alerts will be thrown when one or more databases logs threshold has been met or exceeds the selected value(s).

Make the appropriate changes, and then click **Save**.

i Available Health Checks

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#)(see page 296)

14.4.4 Database backup is not current

14.4.4.1 REASON

Disaster recovery is deeply embedded into the design of SQL Server, and as such, it is important to carefully understand and manage your database backup policies. SQL Server databases must be backed up using the built-in BACKUP command, either natively within SQL Server or through the use of a SQL-specific, third-party tool. If no backup is done on a particular database, it is impossible to recover in case of corruption, system failure, or accidental data deletion. **Regular filesystem backups are not a substitute for database backups.**

14.4.4.2 RESOLUTION

Refer to the Microsoft Technet article *Backup (Transact-SQL)*¹⁵² for an overview of backup operations in SQL Server. All databases include a configured *recovery model*¹⁵³, which dictates the type of backup and restore operations that are available. In all cases, perform a full backup of any database that has never experienced a backup. In the simple recovery model, perform regular, full backups on an ongoing basis while using the full or bulk-logged recovery model. In addition, add regular log and differential backups to the full backup schedule.

14.4.4.3 Update Health Check

The **Database backup is not current** health check alerts you when the indicated database does not have a current backup file. Currently, this alert is displayed when the database backup meets either one of the following conditions:

1. No differential backup in 7 days or more (Warning Alert)
2. No full backup in 7 days or more (Critical Alert)

You can select a different periods of time for each alert. After making any change, alerts are not displayed until the new thresholds met or exceed the selected value. IDERA SQL Inventory Manager does not display this alert for excluded databases.

To configure this health check, in the Administration view, click **Manage Health Checks**, and then click **Configure** next to **Database backup is not current**.

¹⁵² <https://technet.microsoft.com/en-us/library/ms186865.aspx>

¹⁵³ <https://msdn.microsoft.com/en-us/library/ms189275.aspx>

Update Health Check - Database Backup is not Current ✕

Backup Alerts

Warning Alert: ⓘ Critical Alert: ⓘ

Excluded Databases

Filter by Tag or Database ⓘ Include Exclude

| <input type="checkbox"/> Available Databases | Status |
|--|----------|
| <input type="checkbox"/> AUT-SQLBI-110/70IderaDashboardRepository | Included |
| <input type="checkbox"/> AUT-SQLBI-110/IderaDashboardRepository | Included |
| <input type="checkbox"/> AUT-SQLBI-110/IderaDashboardRepository004 | Included |
| <input type="checkbox"/> AUT-SQLBI-110/IderaDashboardRepository007 | Included |
| <input type="checkbox"/> AUT-SQLBI-110/IderaDashboardRepository1.0 | Included |
| <input type="checkbox"/> AUT-SQLBI-110/IderaDashboardRepository104 | Included |

185 Total per page ⏪ ⏩ 1 / 4 ⏪ ⏩

Cancel Save

Excluded Databases

To exclude databases from this alert select one or more databases from the databases list and click **Exclude**. To reduce the number of listed databases type either a tag name, database name, or instance name on the **Filter By** field or select one from the drop-down list.

ⓘ Available Health Checks

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#) (see page 296)

14.4.5 Database consistency has never been checked

14.4.5.1 REASON

All SQL Server databases are susceptible to corruption, which can cause serious or even complete data loss in extreme circumstances. It is therefore important to verify the logical and physical integrity of databases on a regular basis by running `DBCC CHECKDB`¹⁵⁴. If a database has never been checked for consistency it is possible that corruption has already occurred.

14.4.5.2 RESOLUTION

If and when corruption is detected, the safest (and sometimes only) way to recover lost data is to restore from a backup. It's therefore a good practice to run `DBCC CHECKDB` at least often enough that should corruption be detected, your backup frequency and retention period will allow you to restore back to before the problem occurred.

Databases where `DBCC CHECKFILEGROUP` was run, may not cause an alert even though `CHECKDB` did not run. There is no reliable way to differentiate between the two commands using `DBCC LastKnownGood`.

14.4.6 Database consistency has not been checked recently

14.4.6.1 REASON

All SQL Server databases are susceptible to corruption, which can cause serious or even complete data loss in extreme circumstances. It is therefore important to verify the logical and physical integrity of databases on a regular basis by running `DBCC CHECKDB`¹⁵⁵.

14.4.6.2 RESOLUTION

If and when corruption is detected, the safest (and sometimes only) way to recover lost data is to restore from a backup. It's therefore a good practice to run `DBCC CHECKDB` at least often enough that should corruption be detected, your backup frequency and retention period will allow you to restore back to before the problem occurred.

14.4.7 Database does not have a backup

14.4.7.1 REASON

Disaster recovery is deeply embedded into the design of SQL Server, and as such, it is important to carefully understand and manage your database backup policies. SQL Server databases must be backed up using the built-in `BACKUP` command, either natively within SQL Server or through the use of a SQL-specific, third-party tool. If no backup is done on a particular database, it is impossible to recover in case of corruption, system failure, or accidental data deletion. **Regular filesystem backups are not a substitute for database backups.**

¹⁵⁴ <https://technet.microsoft.com/en-us/library/ms176064.aspx>

¹⁵⁵ <http://technet.microsoft.com/en-us/library/ms176064.aspx>

14.4.7.2 RESOLUTION

Refer to the Microsoft Technet article *Backup (Transact-SQL)*¹⁵⁶ for an overview of backup operations in SQL Server. All databases include a configured *recovery model*¹⁵⁷, which dictates the type of backup and restore operations that are available. In all cases, perform a full backup of any database that has never experienced a backup. In the simple recovery model, perform regular, full backups on an ongoing basis while using the full or bulk-logged recovery model. In addition, add regular log and differential backups to the full backup schedule.

14.4.8 Database has autoshrink enabled

14.4.8.1 REASON

IDERA SQL Inventory Manager has detected that Autoshrink is enabled on one or more databases. This configuration option causes significant performance problems and it is a best practice to disable it for all databases.

14.4.8.2 RESOLUTION

You can disable Autoshrink by running the command `ALTER DATABASE <dbname> SET AUTO_SHRINK OFF`.

14.4.9 Database is not in a usable state

14.4.9.1 REASON

IDERA SQL Inventory Manager detected a database that in an inaccessible state. This could be an expected or intentional action - for example, if a restore operation is being performed, or if a database has been explicitly set offline - but it could also be a serious problem, so it should be investigated.

14.4.9.2 RESOLUTION

If the state of the database is expected, you may safely dismiss this recommendation.

14.4.10 Limited permissions

14.4.10.1 REASON

The account being used by IDERA SQL Inventory Manager to monitor this SQL Server instance does not have sufficient permissions to perform all health checks. The product will continue to function, but health checks which require elevated permissions will not be performed.

¹⁵⁶ <https://technet.microsoft.com/en-us/library/ms186865.aspx>

¹⁵⁷ <https://msdn.microsoft.com/en-us/library/ms189275.aspx>

14.4.10.2 RESOLUTION

For details about what permissions are required, please click [here](#)(see page 45).

14.4.11 Optimize for adhoc workloads disabled

14.4.11.1 REASON

SQL Server caches the execution plans for queries in an area of memory called the [plan cache](#)¹⁵⁸. When a server executes a large number of single-use queries, which can be a common scenario for certain applications, the space used caching these various execution plans can grow quite large, possibly impacting server performance for very little benefit.

14.4.11.2 RESOLUTION

The server configuration "[optimize for ad hoc workloads](#)"¹⁵⁹ changes the behavior of the instance such that the first time a statement is run, a very small version of the plan called a stub is cached, and it is only once the query is executed a second time that the full execution plan is stored. While there are special cases where this option may have a negative impact, for most environments turning this option on will have a positive or neutral effect on the server.

14.4.12 SQL Server instance is down

14.4.12.1 REASON

IDERA SQL Inventory Manager connects frequently to managed SQL Server instances to ensure they are available and responsive. If the SQL Server instance becomes unreachable for any reason, an alert will be raised to let operators know that an availability problem may have arisen.

14.4.12.2 RESOLUTION

First, attempt to connect to the SQL Server instance by means other than IDERA SQL Inventory Manager. If the connection fails, take note of any error message, which may in some cases explain what the issue is. If the message is not helpful or if the connection simply times out, verify whether the host Windows server is available through a ping test or by attempting to connect via remote desktop. If the server is not responsive, it may be necessary to troubleshoot further to determine whether it is a network issue or whether the server is itself offline or unresponsive. When the server is verified to be back online and reachable, check to make sure that the SQL Server services are started for any and all hosted SQL Server instances.

If the SQL Server instance or Windows server was offline and the downtime sudden or unexpected, SQL Server may need to run recovery for its hosted databases before the instance will be fully available again. Recovery is the process by which completed database transactions are recovered and incomplete transactions are rolled back, bringing the system back into a consistent state. This may complete quickly or it could take an extended period of time, so pay close attention to the status of the databases on this instance until they are all accessible again.

158 <http://technet.microsoft.com/en-us/library/cc293624.aspx>

159 <http://technet.microsoft.com/en-us/library/cc645587.aspx>

If the server is online and this message appears to be in error, it could be that network or security issues are preventing IDERA SQL Inventory Manager from making a connection. Ensure that IDERA SQL Inventory Manager is connecting to the SQL Server with credentials that have the right to connect to the target server.

14.4.12.3 Update Health Check

The **SQL Server is down** health check alerts you when a server is down for more than 30 seconds. You can change this threshold by modifying the value for down time.

Please note that this change applies to all monitored servers. After making any change, alerts are not displayed until the new thresholds met or exceed the selected value.

To configure a health check, in the Administration view, click **Manage Health Checks**, and then click **Configure** for the appropriate health check. In this case, IDERA SQL Inventory Manager displays the Update Health Checks - SQL Server is down window.

Update Health Check - SQL Server is Down [X]

The SQL Server is Down alert will be thrown if the server is down for 30 seconds. You can change this threshold by modifying the down time setting.

Change SQL Server Down Time Setting

Down Time Alert After: [i]

Alerts will be thrown when server disk threshold has been met or exceeds the selected value(s).

[Cancel] [Save]

Make the appropriate changes, and then click **Save**.

[i] Available Health Checks

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#) (see page 296)

14.4.13 SQL Server is slow

14.4.13.1 REASON

When it takes more than a few seconds for IDERA SQL Inventory Manager to connect to a managed server, an action item is raised indicating that the server is slow. A sluggish connection can be very evident to end users and is a tell-tale sign that something may be going wrong on the server.

14.4.13.2 RESOLUTION

Troubleshooting a slow SQL Server can be an involved process, not all of which can be easily discussed in the course of a single article, but it is a good idea to take a look at the server workload, the network responsiveness, and the underlying subsystems (including disk and virtualization platforms).

SQL Servers may naturally become less responsive under certain predicted loads, and if the issue is short term and expected (such as during a maintenance window) this warning may be safely ignored.

14.4.13.3 Update Health Check

The **SQL Server is slow** health check alerts you when the SQL Server response time is slower than the set threshold.

By default, the SQL Server is Slow *warning alert* is displayed when the response time is greater than 2 seconds and a *critical alert* is displayed when the response time is greater than 5 seconds. After making any change, alerts are not displayed until the new thresholds met or exceed the selected value.

To configure a health check, in the Administration view, click **Manage Health Checks**, and then click **Configure** for the appropriate health check. In this case, IDERA SQL Inventory Manager displays the Update Health Checks - SQL Server is slow window.

Update Health Check - SQL Server is Slow ✕

A SQL Server is Slow warning alert will be thrown if the server takes greater than 2 seconds to respond. A critical alert will be thrown if a server doesn't respond within 5 seconds. You can change the warning and critical thresholds by modifying the responsetime settings.

Change SQL Server Response Time Setting

Warning: ⓘ Critical: ⓘ

Alerts will be thrown until the response time threshold has been met or exceeds the selected value(s).

Make the appropriate changes, and then click **Save**.

ⓘ Available Health Checks

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#) (see page 296)

14.4.14 Tempdb inconsistent file sizes

14.4.14.1 REASON

IDERA SQL Inventory Manager detected that the file sizes for tempdb are not equal for one or more SQL Server instances. While this is not a critical error, the size difference can lead to performance problems for tempdb, which is a shared system resource and therefore impacts the entire SQL Server instance.

14.4.14.2 RESOLUTION

It is a best practice to have tempdb divided into multiple equally sized files, each of which has been pre-sized to lessen the chance of autogrow occurring. If autogrow does occur and the database files are no longer balanced, it would be a good idea to resize the files such that they are the same size again when you are able to.

14.4.15 Unable to monitor SQL Server instance

14.4.15.1 REASON

IDERA SQL Inventory Manager connects frequently to managed SQL Server instances to ensure they are available and responsive. If the SQL Server instance becomes unreachable for any reason, an alert will be raised to let operators know that an availability problem may have arisen.

14.4.15.2 RESOLUTION

First, attempt to connect to the SQL Server instance by means other than IDERA SQL Inventory Manager. If the connection fails, take note of any error message, which may in some cases explain what the issue is. If the message is not helpful or if the connection simply times out, verify whether the host Windows server is available through a ping test or by attempting to connect via remote desktop. If the server is not responsive, it may be necessary to troubleshoot further to determine whether it is a network issue or whether the server is itself offline or unresponsive. When the server is verified to be back online and reachable, check to make sure that the SQL Server services are started for any and all hosted SQL Server instances.

If the SQL Server instance or Windows server was offline and the downtime sudden or unexpected, SQL Server may need to run recovery for its hosted databases before the instance will be fully available again. Recovery is the process by which completed database transactions are recovered and incomplete transactions are rolled back, bringing the system back into a consistent state. This may complete quickly or it could take an extended period of time, so pay close attention to the status of the databases on this instance until they are all accessible again.

If the server is online and this message appears to be in error, it could be that network or security issues are preventing IDERA SQL Inventory Manager from making a connection. Ensure that IDERA SQL Inventory Manager is connecting to the SQL Server with credentials that have the right to connect to the target server.

14.4.16 Unable to monitor with WMI

14.4.16.1 REASON

IDERA SQL Inventory Manager will attempt to verify the availability of a SQL Server by contacting its host Windows server. If the server becomes unreachable for any reason, an alert will be raised to let operators know that an availability problem may have arisen.

14.4.16.2 RESOLUTION

Verify whether the server is available through a ping test or by attempting to connect via remote desktop. If the server is not responsive, it may be necessary to troubleshoot further to determine whether it is a network issue or whether the server is itself offline or unresponsive. Once the server is verified to be back online and reachable, check to make sure that the SQL Server services are started for any and all hosted SQL Server instances.

If the server was offline and the downtime sudden or unexpected, SQL Server may need to run recovery for its hosted databases before the instance will be fully available again. Recovery is the process by which completed database transactions are recovered and incomplete transactions are rolled back, bringing the system back into a consistent state. This may complete quickly or it could take an extended period of time, so pay close attention to the status of the databases on this instance until they are all accessible again.

If the server is online and this message appears to be in error, it could be that network or security issues are preventing IDERA SQL Inventory Manager from making a connection. Ensure that IDERA SQL Inventory Manager is connecting to the SQL Server with credentials that have the right to make WMI calls to the target server.

In order to use WMI, the user account under which the Collection Service runs must have administrator permissions on the remote server. The most frequently encountered problems with WMI relate to RPC traffic failing to get through to the remote computer. Another issue involves DCOM/WMI permissions.

The following links provide additional information about how to troubleshoot WMI connectivity issues:

- [Securing a Remote WMI Connection](#)¹⁶⁰
- [Help with scripts](#)¹⁶¹

14.4.16.3 Using WbemTest (Windows Management Instrumentation Tester)

You can use the [Wbem Test](#)¹⁶² tool to connect to a server and issue WMI queries. This tool helps you test and troubleshoot WMI issues.

To use WbemTest:

1. Run `wbemtest.exe`.
2. Click **Connect**.
3. In the **NameSpace text** box, enter `\\server\root\cimv2` where `server` is the name of the server to which you want to connect.
4. Click **Connect**.
5. Click **Query**.
6. Enter `select* from win32_process`.

¹⁶⁰ <https://msdn.microsoft.com/en-us/library/windows/desktop/aa393266%28v=vs.85%29.aspx>

¹⁶¹ <https://technet.microsoft.com/en-us/scriptcenter/>

¹⁶² <https://technet.microsoft.com/en-us/library/cc759703%28v=ws.10%29.aspx>

7. Click **Apply**.

If WbemTest connects to the remote server and issues the query using WMI, you should see a query result with output. In this case, WMI to the required server is working and no further action is needed. For more information on the Windows Management Instrumentation Tester, refer to the Microsoft document, [Windows Management Instrumentation Tester overview](#)¹⁶³.

If you receive an error message, use the following processes to help identify and resolve the issue.

14.4.16.4 Error: The RPC Server Is Unavailable

This error usually indicates that the RPC traffic is not getting to the remote server, or there is no RPC listener on the remote server.

To troubleshoot this RPC error:

1. Make sure that the Remote Procedure Call (RPC) service is running on the remote server.
2. Verify that there is a TCP listener on the remote server by running the netstat -nao command and verifying that there is the following entry: `TCP 0.0.0.0:135 0.0.0.0:0 LISTENING 1304`.
3. In the Tools subdirectory, run `rpcping /s <servername> /t ncacn_ip_tcp` where `<servername>` is the name of the remote server. This command verifies that RPC can communicate with the remote server and output similar to:


```
Completed 1 calls in 15 ms
66 T/S or 15.000 ms/T
```
4. Make sure that local or internal network firewalls do not block traffic by either disabling the firewall or configuring the Windows firewall to allow incoming RPC traffic.
5. Try to use the remote server IP address instead of the server name. If the IP address works, you may have a DNS issue.
6. If the remote server resides in a different domain, the two domains may not trust each other, or the user account does not have administrator permissions on the remote server/domain.
7. If both computers are in the same domain, and the user account has administrator permissions, try rejoining both computers to the domain.

14.4.16.5 Error: Access Denied

This error can indicate permission issues.

To troubleshoot this access error:

1. If the remote computer is running Windows XP, make sure it is not set to Force Guest. This setting forces impersonation of any connection as Guest.
 - a. Open the Local Security Policy console from Administrative Tools.
 - b. Browse to Security Settings > Local Policies > Security Options.
 - c. Double-click **Network Access: Sharing And Security Model For LocalAccounts**.
 - d. Change the settings from **Guest Only** to **Classic**.
2. Make sure DCOM is enabled on the remote server:
 - a. Run `DcomCnfg` on the remote server.
 - b. Click **Component Services**.
 - c. Expand **Computers**.
 - d. Right click **My Computer** and select **Properties**.
 - e. Click the Default Properties tab.

¹⁶³ <https://technet.microsoft.com/en-us/library/cc759703%28v=ws.10%29.aspx>

- f. Make sure **Enable Distributed COM** on this computer is checked.
3. Verify the configuration of the correct DCOM remote launch and activation permissions:
 - a. Run `DcomCnfg` on the remote server.
 - b. Click **Component Services**.
 - c. Expand **Computers**.
 - d. Right click **My Computer** and select **Properties**.
 - e. Make sure **Enable Distributed COM** on this computer is checked.
 - f. Click the Com Security tab.
 - g. Under **Launch and Activation Permissions**, click **Edit Limits**.
 - h. In the Launch Permissions dialog box, make sure your user account or group is listed in the Groups or user names list. If your user account or group is not listed, click **Add** and add it to the list.
 - i. In the Launch Permission dialog box, select your user account or group in the Group or user names list. In the **Allow** column under Permissions for User, select **Remote Launch** and **Remote Activation**, and then click **OK**.
4. Make sure the correct DCOM remote access permissions are configured:
 - a. Run `DcomCnfg` on the remote server.
 - b. Click **Component Services**.
 - c. Expand **Computers**.
 - d. Right click **My Computer** and select **Properties**.
 - e. Make sure **Enable Distributed COM** on this computer is checked.
 - f. Click the Com Security tab.
 - g. Under **Access Permissions**, click **Edit Limits**.
 - h. In the Access Permission dialog box, select `ANONYMOUS LOGON` name in the **Group or user names** list. In the **Allow** column under **Permissions for User**, select **Remote Access**, and then click **OK**.
5. Make sure the correct WMI namespace permissions are configured.
 - a. Run `wmimgmt.msc`.
 - b. Right-click **WMI Control**, and then select **Connect to another computer**.
 - c. Enter the remote server name, and then click **OK**.
 - d. Right-click **WMI Control**, and then select **Properties**.
 - e. In the Security tab, select the **namespace**, and then click **Security**.
 - f. Locate the appropriate account, and then check **Remote Enable** in the Permissions list.

14.4.17 Volume at risk

14.4.17.1 REASON

When a disk volume used for a SQL Server data or log file becomes full, further attempts to add data will result in an error. When the disk volume hosting the operating system or the SQL Server installation itself becomes full, there is the further possibility that the server or the entire system may become unresponsive.

14.4.17.2 RESOLUTION

You should consider freeing space or adding additional space to allow the system to continue functioning normally. Click [here](#)(see page 299) for more information.

14.4.17.3 Update Health Checks

The **Volume at risk** health check alerts you when the indicated database does not have a current backup file.

By default, the Volume at Risk *warning alert* is displayed when the storage capacity is between 75-90% full and a *critical alert* is displayed when the storage capacity is above 90% full. You can change the threshold by modifying the percentage for the storage capacity or assigning a flat value for the storage capacity remaining. For example, settings can prevent IDERA SQL Inventory Manager from displaying an alert unless the storage capacity has only 2 GB remaining. The changes are applied to all databases that are part of the managed instances. After making any change, alerts are not displayed until the new thresholds meet or exceed the selected value.

To configure a health check, in the Administration view, click **Manage Health Checks**, and then click **Configure** for the appropriate health check. In this case, IDERA SQL Inventory Manager displays the Update Health Checks - Volume at Risk window.

Update Health Checks - Volume at Risk [X]

The Volume at Risk warning alert will be thrown if server disk is 75% to 90% full . A critical alert will be thrown if server disk is 90% full. You can change this threshold by modifying the warning and critical alert settings.

Change Warning and Critical Alert Settings

Use Percentage ⓘ Warning % Critical %
 Use Flat value ⓘ Warning GB Critical GB

Alerts will be thrown when server disk threshold has been met or exceeds the selected value(s).

[Cancel] [Save]

Make the appropriate changes, and then click **Save**.

Excluding a drive

The **Disk Drives Excluded From Volume at Risk Alert** section allows you to exclude drives from this health check. To exclude a drive follow these steps:

1. Click Edit on the **Disk Drives Excluded From Volume at Risk Alert** section.
2. Select an instance from the instances view.
3. Select a drive on the **Excluded Drives** drop down menu.
4. Click **Apply**.

To remove a drive from the excluded list select an instance and click **Clear**.

Available Health Checks

For more information about the Health Checks performed by IDERA SQL Inventory Manager, go to [What Health Checks are available with SQL Inventory Manager?](#)(see page 296)

14.4.18 xp_cmdshell enabled

14.4.18.1 REASON

The xp_cmdshell extended stored procedure allows a Windows shell command to be executed from within a SQL Server connection. This command can be used for malicious purposes and is disabled by default in SQL Server.

14.4.18.2 RESOLUTION

If the command is not being used, or if the use of the command can be eliminated, you can disable xp_cmdshell with this command:

```
exec sp_configure 'show advanced options',1
reconfigure
exec sp_configure 'xp_cmdshell',0
reconfigure
```

If xp_cmdshell must remain enabled in your environment, consider changing the proxy account used to execute the commands under in order to reduce risk using the `sp_xp_cmdshell_proxy_account` command. Full details of how to accomplish this are available at [this link](#)¹⁶⁴.

¹⁶⁴ <https://technet.microsoft.com/en-us/library/ms175046.aspx>

15 Exporting reports

IDERA SQL Inventory Manager brings you the opportunity to export useful information for managing your environment. You can export reports from the Health Checks Recommendations, Instances view, and the Explorer view. Additionally, you can choose between three types of formats for your reports: PDF, XLS, or XML.

Exporting reports of specific health check recommendations, your managed instances, databases filtered by owner, are just some examples of the many possibilities for exporting the information that will help you manage your SQL Server environment.

15.1 Exporting Health Checks Recommendations

You can export the information from the Health Check Recommendations displayed on the Overview or the ones available on an Instance Details view. On each view, IDERA SQL Inventory Manager allows you to choose the type of information you want to export and the format for exporting.

15.1.1 Exporting from the Home view

The Home view provides you with the most important information from your SQL Server instances. You can use the exporting option for getting reports from these recommendations. On the top right section of the Health Checks Recommendations section, you can find the option **Exporting reports**.

When you access this option, you have the following three choices for exporting recommendations:

- **Summary of recommendation categories.** The Overview displays a summary of all health checks recommendations grouped by categories of health check recommendations. This option allows you to export this summarized information.
- **Details for all recommendations.** By using this option, you can export a report that includes all available health check recommendations in detail.
- **Details for selected categories.** With this option, you can select those categories of health check recommendations you want to export. For example, you can choose to have a report for all databases that do not have a backup or for all the instances that are not monitored.
- **Service/Instance Types.** With this option, you can select what types of instances you want to include in your reports.

Export Health Check Recommendations ✕

Select the type of data to export

Summary of recommendation categories

Details for all recommendations

Details for selected categories

43 instance(s) are down.

12 instances are not monitored.

3 instance(s) are partially monitored

5 databases log files at risk of filling up.

16 volumes at risk of filling up.

16 volumes at risk of filling up.

737 databases do not have a backup.

Export as

PDF XLS XML

Export **Cancel**

Choose the format for exporting, IDERA SQL Inventory Manager allows you export as **PDF**, **XLS**, or **XML**. Click **Export**.

15.1.2 Exporting from an Instance Details view


IDERA SQL Inventory Manager allows you to view the specific Health Check Recommendations of any registered SQL Server instance. You can export this information from the respective [Instance Details view](#) (see page 245) by clicking **Exporting reports** on the action items options from the Health Check Recommendations section.

When you access this option, you have the following three choices for exporting recommendations:


- **Summary of recommendation categories.** The Overview displays a summary of all health checks recommendations grouped by categories of health check recommendations. This option allows you to export this summarized information.
- **Details for all recommendations.** By using this option, you can export a report that includes all available health check recommendations in detail.
- **Details for selected categories.** With this option, you can select those categories of health check recommendations you want to export. For example, you can choose to have a report for all databases that do not have a backup or for all the instances that are not monitored.

Choose the format for exporting. IDERA SQL Inventory Manager allows you export as **PDF**, **XLS**, or **XML**. Click **Export**.

15.2 Exporting from instances views

On the action items bar in all the instances views, you can find the **Export** option  which allows you to choose your preferred format for exporting the information available on the current view. You can export as a **PDF**, **XLS**, or **XML** file. Your exported reports include the filters you have applied to the view.

15.3 Exporting reports from the Explorer view

You can export the information available on the **Explorer** view, by clicking the **Export** option  on the right-bottom side of your graph and selecting your preferred format for exporting: **PDF**, **XLS**, or **XML**. These reports enable you to get important information according to the filters you have selected on the Explorer view. Get reports for instances per location, databases per owner, etc.

16 About data schedule and retention schedules

To monitor your SQL Server instances, IDERA SQL Inventory Manager collects data on availability, responsiveness, configuration, performance, and capacity data on a specific schedule and maintains a history of the collected values for a certain amount of time.

The following table shows you the frequency with which IDERA SQL Inventory Manager collects information and the amount of time that this information is retained.

| Data Category | Schedule | Data Retention | Alerts | Health Checks |
|--|--|--------------------------------------|--------|---------------|
| Discover Instances | Daily | N/A | No | No |
| Discover Topology (databases, data files, servers, drives) | Sub job - runs at beginning of capacity and configuration jobs | N/A | No | No |
| Availability & Responsiveness at instance level | Every 30 seconds | Kept for 24 hours | Yes | Yes |
| Availability & Responsiveness at database level | Every 5 minutes | Kept every 5 minutes for 24 hours | Yes | Yes |
| Configuration data | Daily | Current Values | No | Yes |
| Capacity Data: Disk total space, disk free space, database data size, database log size, data file size, log file size | Hourly | Current Values | Yes | Yes |

Refresh collection

IDERA SQL Inventory Manager allows you to refresh these metrics at any time from the instance view. For more information about this option, please refer to [Viewing instance information](#)(see page 245).

17 Troubleshooting guide

The IDERA SQL Inventory Manager Troubleshooting guide provides topics that can help you resolve an issue quickly. If you cannot resolve this issue on your own, please contact [IDERA Technical Support](#)¹⁶⁵.

17.1 How do you gather an install log file?

If you are encountering difficulties installing IDERA SQL Inventory Manager, our customer support team may ask you to provide an install log. You can provide this log by typing in a command window the following:

```
msiexec /i <msi file> /l*v install.log
```

Please take into account that the resulting **install.log** file will include machine name information; and therefore it is better to email it than to attach it to a public forum.

17.2 How to enable/disable security

IDERA SQL Inventory Manager supports authentication between internal services, this feature is disabled by default. If you have installed IDERA SQL Inventory Manager on the default path, you can enable/disable security, making the following changes on two locations:

1. Go to C:\Program Files\IDERA\SQL\Inventory Manager\WebApplication\idera-main\conf, open **web.properties**, and then change `enable-authentication-for-rest=false` to `true`.
2. Go to C:\Program Files\IDERA\SQL\Core, open **IderaCoreServices.exe** and change `EnableSecurity` to `true`.

17.3 SQL Inventory Manager and lsass.exe process

Essentially due to the very high number of WMI calls IDERA SQL Inventory Manager makes from the service, the lsass.exe process can grow until it cannot grow any more. The problem only occurs on a Windows 2008 server that has not been fully patched. For more information go to <http://support.microsoft.com/kb/971265/EN-US>(see page 320).

17.4 Troubleshooting WMI issues

IDERA SQL Inventory Manager uses the Windows Management Instrumentation (WMI) interface to collect information about the servers that make up your environment.

Under certain circumstances, IDERA SQL Inventory Manager is unable to access the WMI counters. When the WMI counters are unavailable, IDERA SQL Inventory Manager cannot display performance information from the servers.

When IDERA SQL Inventory Manager is unable to collect WMI information, it generates an alert. The alert includes an error message that indicates the underlying problem.

IDERA SQL Inventory Manager may be unable to retrieve the WMI information for one or more of the following reasons:

- The WMI counters are disabled.
- The performance library is overloaded.

¹⁶⁵ <https://www.idera.com/support/productsupport>

- The WMI repository is corrupt.

If IDERA SQL Inventory Manager is unable to retrieve the WMI information from one or more servers, you should locate and correct the issue that prevents IDERA SQL Inventory Manager from collecting the WMI information.

When you troubleshoot WMI availability, there are several procedures that IDERA recommends to correct the issue. You should perform the following checks in the specified order. If you encounter an error when you perform any of these procedures, please contact IDERA Technical Support for additional assistance.

- Verify that the WMI system is available.
- Verify that the performance counter class is accessible.
- Verify that the performance counter instance is accessible.
- Verify that the Windows performance counters are enabled on the server.
- Change the WMI counter timeout.
- Resynchronize the WMI Performance Library.
- Update the WMI Registry and register the WMI DLL files.
- Salvage the WMI Repository.
- Rebuild the list of WMI counters.
- Assign additional memory to the WMI pool.

17.5 Increase memory available to SQL Inventory Manager

To increase the memory available to IDERA SQL Inventory Manager, you can use the following options:

Approach 1

1. Access the `server.conf` file, the file is located in your installation path: `C:\Program Files\Idera\SQL\Inventory Manager\WebApplication\idera-main\conf\server.conf`
2. Edit `server.conf` as follows:
 - Change `compute.maxmemory=false` to `true`
 - Change `maxmemory` to new value in MB. For example: `maxmemory=1024` to `1536` or `2048`
3. Save `server.conf` file

Approach 2

Follow these steps:

1. Go to your Windows Services.
2. Right click the **IDERA web application service** and select **Properties**.
3. On the **General** tab, click **Stop** to stop the service.
4. Add `-Xms256m -Xmx1536m` in **Start parameters**.
5. Restart the services by clicking **Start**.
6. Click **OK**.

18 WMI may not discover all SQL Server Instances

Take into account that when executing WMI scans on large IP ranges, a No buffer Available Space exception may occur. This exception occurs due to the availability of TCP ports. The Dynamic Port Range is used by the client computer to connect to Well Known Port Services or Root Services. This Dynamic Port Range depends on the version of Operating Systems.

- **Port Range: 1024-65535** - used by the computers running Windows XP, Windows 2000 Professional, and Windows Server 2003.
- **Port Range: 49152-65535** - used by computers running Windows Vista, Windows 7 and Windows Server 2008. By default, a fresh Windows Server 2008 installation will have this Dynamic Port Range configured.

18.1 View the port range

To see the port range you can use the following commands:

- *NetSh INT IPV4 Show DynamicPort TCP*
- *NetSh INT IPV4 Show DynamicPort UDP*

18.2 Change the port range

To set or change the Dynamic Port Range use the following commands:

- *NetSh INT IPV4 SET DynamicPort TCP Start=1024 num=65535*
- *NetSh INT IPV4 SET DynamicPort UDP Start=1024 num=65535*

When you find a No Buffer Available Space exception, follow these steps:

1. Check the Dynamic Port Range using the above commands.
2. If the number of ports is less than the given IP range, increase the port range using the above commands.
3. Run the scan again.

18.3 Other ways to increase the range of ephemeral ports

Windows 2003

Increase the range of ephemeral ports by setting the MaxUserPort TCP/IP parameter to a higher value like 32768 (setting the port range from 1024 to 32768).

Find this option on the windows registry key HKLM\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters as a DWORD value.

Windows 2008 R2

Increase the range of ephemeral ports by setting the Dynamic Port Range to a higher value through the command:

- *netsh int ipv4 set dynamicportrange tcp start=32767 num=65535*

This command will set the port range from 32768 to 65535.

Redhat Linux 5

Increase the range of ephemeral ports by setting ip_local_port_range kernel value on /proc/sys/net/ipv4/ip_local_port_range. Use the command:

- `echo "32768 65535" > /proc/sys/net/ipv4/ip_local_port_range`

This will set the port range from 32768 to 65535.

19 Auto-refresh settings

By default, IDERA SQL Inventory Manager performs an auto refresh process every five minutes (300 seconds). You can edit this setting following these steps.

- Go to <InstallDir>\Inventory Manager\WebApplication\idera-main\conf\web.properties
- In the web.properties files add the following property: *AutoRefreshInterval*=<time>

Where <time> is the time interval in seconds you want to specify for auto refresh. You can define this value from 60 seconds (1minute) to 600 seconds (10 minutes).



Take into account the following considerations:

- In order for the changes to take effect, you need to restart the Inventory Manager Web service after setting the Autorefresh configurations value.
- If you introduce a value that is outside the limits or in a different format, it will take 60 seconds for values under the lower limit, 600 seconds for values over the higher limit, and 300 seconds for values in the wrong format.
- Adjusting the auto-refresh interval may impact performance

20 SQL Inventory Manager PDF

This page contains a direct link to the SQL Inventory Manager 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.com¹⁶⁶.

- [IDERA SQL Inventory Manager 2.5 PDF](#)¹⁶⁷
- [IDERA SQL Inventory Manager 2.6 PDF](#)¹⁶⁸
- [IDERA SQL Inventory Manager 2.6.1 PDF](#)¹⁶⁹
- [IDERA SQL Inventory Manager 2.6.2 PDF](#)¹⁷⁰
- [IDERA SQL Inventory Manager 2.6.3.PDF](#)¹⁷¹

¹⁶⁶ <http://wiki.idera.com/>

¹⁶⁷ https://wiki.idera.com/download/attachments/4350214954/SQL_Inventory_Manager_25.pdf?api=v2&modificationDate=1541765109217&version=1

¹⁶⁸ https://wiki.idera.com/download/attachments/4350214954/SQL%20Inventory%20Manager2.6_comp.pdf?api=v2&modificationDate=1587763769170&version=1

¹⁶⁹ <https://wiki.idera.com/download/attachments/4350214954/SQLIM2.6.xpdf.pdf?api=v2&modificationDate=1603491215270&version=1>

¹⁷⁰ https://wiki.idera.com/download/attachments/4350214954/SQL%20Inventory%20Manager%202.6.2_compressed.pdf?api=v2&modificationDate=1615973934413&version=1

¹⁷¹ <https://wiki.idera.com/download/attachments/4350214954/SQL%20Inventory%20Manager%202.6.3.pdf?api=v2&modificationDate=1659655048720&version=1>