

# Configuring Listener scenario

The Listener scenario is recommended for users who want to audit only AlwaysOn databases on the Primary node using LISTENER. **If you want to audit read-only Secondary nodes**, use the Nodes scenario.

Review the following steps to successfully configure your Listener:

1. Install cluster agent services on all Listener nodes using the SQL Compliance Manager Cluster Configuration Console
2. Install cluster agent services on all Listener nodes using the Failover Cluster Manager
3. Add the Listener to SQL Compliance Manager

## 1. Install cluster agent services on all Listener nodes using the SQL Compliance Manager Cluster Configuration Console

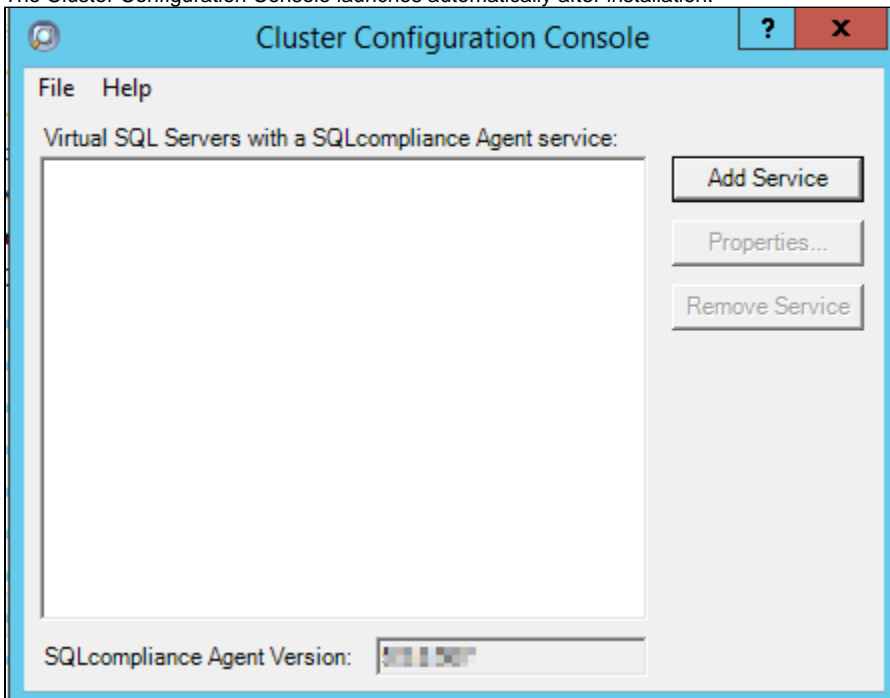
Use the following steps on each node involved in the AlwaysOn group before adding the listener to SQL Compliance Manager for auditing.



Before stepping through the following instructions make sure that the SQL CM Collection Server, the Management Console and the Repository Databases are already installed.

- To install these components in a standalone server, please review step 10 in [How to install SQL Compliance Manager](#).
- To install these components in a clustered environment, please review the steps to [Install SQL Compliance Manager Collection Service on Cluster nodes](#).

1. From the installation folder of the SQL Compliance Manager Collection Service on the Collection and Repository database server, copy the SQLComplianceClusterSetup.exe file onto the nodes of the Availability Group, to install the Cluster Configuration Console on the nodes of the Availability Group you are going to be auditing.
2. Beginning with the primary node of the Availability Group, run SQLComplianceClusterSetup.exe to launch the installation wizard.
3. Follow the steps in the Setup wizard to install and configure [SQL Compliance Manager in a clustered environment](#).
4. Once the installation is complete, go to the SQL Compliance Manager install path. Unless you have specified a different path, the one by default is C:\Program Files\IDERA\SQLCompliance.
5. Once the setup wizard launches, click the **Next** button to proceed to the License Agreement.
6. Read the license agreement, select the option to accept the terms of the license agreement, and click **Next**.
7. Select the destination path in which you want to install the IDERA Cluster Configuration Console. Define the permissions for the software and click **Next**.
8. Click **Install** to complete the installation.
9. The Cluster Configuration Console launches automatically after installation.



10. Click **Add Service** to specify the listener. SQL Compliance Manager displays the **Add SQLcompliance Agent Service - General** window.

11. On the **General** dialog window, type the name of the clustered instance to be audited by SQL Compliance Manager and click **Next**. *If you receive a message stating that the selected SQL Server instance is not clustered*, click **Yes**. This is correct behavior when configuring a Listener scenario and confirms that the selected SQL Server instance is hosted on a Windows Failover Cluster.
12. On the **Collection Server** dialog window, specify the name of the server where SQL Compliance Manager Collection Service is installed, and click **Next**.
13. On the **SQLcompliance Agent Service Account** dialog window, specify the login credentials for the Agent service account, and click **Next**. This account must have administrator privileges. IDERA recommends that you use the same account as used for the Collection Server.
14. On the **SQLcompliance Agent Trace Directory** dialog window, specify the path on which trace files will temporarily reside before being transferred to the SQL Compliance Collection Service and click **Next**. Note that the administrator account specified for the cluster agent service has read/write permissions for this trace directory folder.
15. On the **CLR Trigger Location** dialog window, Specify the location where you want the SQL Compliance Manager Agent to store the corresponding CLR trigger assemblies, and click **Next**. Note that the administrator account specified for the cluster agent service has read/write permissions for this assembly folder.



Ensure the *Agent Trace directory* and the *CLR Trigger location* specified exist by creating the folder structure manually through *Windows Explorer*.

16. Review the configuration **Summary** and click **Finish**.
17. The IDERA Cluster Configuration Console displays a confirmation message stating that you have successfully added the SQL Compliance Manager Agent. Click **OK**.



Repeat these steps on each node in your AlwaysOn Availability Group. When you are finished configuring all the nodes, proceed with the steps below.

## 2. Install cluster agent services on all Listener nodes using the Failover Cluster Manager

Use the following steps on each node involved in the AlwaysOn group before adding the listener to SQL Compliance Manager for auditing.

1. After installing the cluster agent service on all Listener nodes, open *Server Manager*.
2. On the Server Manager tree, click **Server Manager > Features > Failover Cluster Manager**. The system displays **Failover Cluster Manager**.
3. Select the clusters' **Service Group** (Windows Server 2008) or **Role** (Windows Server 2012 and later) created for the cluster agent service.
4. On the **Server Name** area, right-click the resource name and click **Properties**. Failover Cluster Manager displays the **Properties** window.
5. Click the **Dependencies** tab.
6. Verify that the **Resource** field displays the listener IP address.
7. On the **Other Resources** area of the **Failover Cluster Manager** window, right-click the resource within the role, and select **Properties**. Failover Cluster Manager displays the **Properties** window.
8. Click the **Dependencies** tab.
9. Verify that the **Resource** field displays the listener name. Click **Cancel** to close this window.
10. After adding the resource information, right-click the **Service Group** or **Role**, and point to **Add a resource**.
11. Click on **Generic Service**. Failover Cluster Manager displays the **New Resource Wizard**.
12. On the **Select Service** page, select the cluster service agent from the available list. The cluster service names are displayed in the format **SQLcomplianceAgent\$[listener name]** where **[listener name]** is a virtual SQL Server name.
13. Click **Next**, continue following the wizard, and click **Finish**.
14. On the **Other Resources** area of the Failover Cluster Manager window, right-click the **SQLcomplianceAgent\$[listener name]**, and **Bring Online the resource**.
15. While the cluster service is online, right-click the **SQLcomplianceAgent\$[listener name]** cluster service, and click **Properties**.
16. On the **General** tab verify that the Service Group or Role is added.
17. On the **Registry Replication** tab, click **Add**. Failover Cluster Manager displays the **Registry Key** window.



The Registry Replication tab is not available in Windows Server 2012.

If you are using Windows Server 2012, you must use the "Add-ClusterCheckpoint" PowerShell cmdlet to add the necessary setting.

For more information, see [Add ClusterCheckpoint](#).

18. Type the specific registry path. To obtain the correct path, go to the **IDERA Cluster Configuration Console** and copy the Replicated Registry Key from the **SQLcompliance Agent details**.
19. Click **OK**. The new root registry key appears in the **Registry Replication** tab of the Properties window.
20. Close the **Properties** window by clicking **OK**.

### 3. Add the Listener to SQL Compliance Manager

Use the following steps to add the listener to SQL Compliance Manager for auditing.

1. Start the IDERA SQL Compliance Manager Management Console and click **New > Registered SQL Server**. SQL Compliance Manager displays the **SQLcm Configuration Wizard - Add Server**.
2. On the **SQL Server** window, specify or browse the listener you want to register with SQL Compliance Manager, and click **Next**.
3. On the **SQL Server Cluster** page, check **This SQL Server instance is hosted by a Microsoft SQL Server Cluster virtual server** box, and click **Next**. This step makes the listener into a virtual SQL Server name.
4. On the **SQLcompliance Agent Deployment** page, verify that the **Manually Deploy** is selected, and click **Next**. This option is required for all virtual SQL Servers.
5. On the **Select Databases** page, check the AlwaysOn database that you want to audit, and click **Next**.
6. SQL Compliance Manager displays the **AlwaysOn Availability Group Details** page including a list of all nodes where the AlwaysOn database is replicated.



This step is valid only if the database selected for auditing is AlwaysOn. The wizard skips this page for regular databases.

7. **If the AlwaysOn Availability Group Details window is displayed**, click **Next** to continue.
8. On the **Audit Collection Level** page, select the desired audit collection level for the database, and click **Next**.
9. On the **Permissions Check** page, SQL Compliance Manager verifies that all the required permissions are in place on the SQL Server instance you want to audit.
10. After all operations are complete and all permissions checks pass, click **Next**. The **Summary** page displays the audit settings for the SQL Server instance.
11. Click **Finish** to close the wizard. SQL Compliance Manager displays the newly-added SQL Server instance and AlwaysOn database in the **Explore Activity** tree.
12. Make all necessary audit settings for the listener and AlwaysOn databases, and then update the configuration and begin collecting data. It is recommended to update the configuration before collecting data because users are unaware of which node is PRIMARY. After updating the configuration, be sure to click **Refresh** in the node context menu to apply the settings to the displayed information.

After configuration, review some [Additional information on SQL Compliance Manager and AlwaysOn Availability Groups](#).