

Adding a SQL Server Failover Cluster Target Environment

This topic describes how to add a SQL Server Failover Cluster target environment to the Delphix Engine.

Adding a Failover Cluster target environment will discover SQL Server Failover Cluster instances that are running. You can then provision VDBs to these Failover Cluster instances.

Prerequisites

- You must add each node in the Windows Failover Cluster individually as a standalone target environment using a non-cluster address. See **Adding a SQL Server Standalone Target Environment**.
 - A cluster node added as a standalone environment will only have non-clustered SQL Server instances discovered.
 - A cluster target environment will only have SQL Server Failover Cluster instances discovered.
- Each clustered SQL Server instance must have at least one clustered disk added to the clustered instance resource group which can be used for creating mount points to Delphix storage.
 - The clustered drive must have a drive letter assigned to it.
 - The clustered drive must be formatted using the "GUID Partition Table (GPT)" partition style.
- An additional target environment that can be used as a **Connector Environment** must exist. This environment must NOT be a node in the cluster. See **Adding a SQL Server Standalone Target Environment**.



Hotfix required for Windows 2008 R2 hosts

The following hotfix is required for Windows 2008 R2 Cluster nodes:

"0x80070490 Element Not found" error when you enumerate a cluster disk resource by using the WMI MSCluster_Disk class query in a Windows Server 2008 R2-based failover cluster

<http://support.microsoft.com/kb/2720218>



Cluster environment restrictions

Failover Cluster target environments cannot be used as staging environments.

Supported Operating System and SQL Server Versions for Cluster Target Environments

Supported Operating System Versions

Windows 2008 R2

Windows 2012

Windows 2012 R2

Supported SQL Server Versions

SQL Server 2008 (10.0)

SQL Server 2008 R2 (10.5)

SQL Server 2012 (11.0)

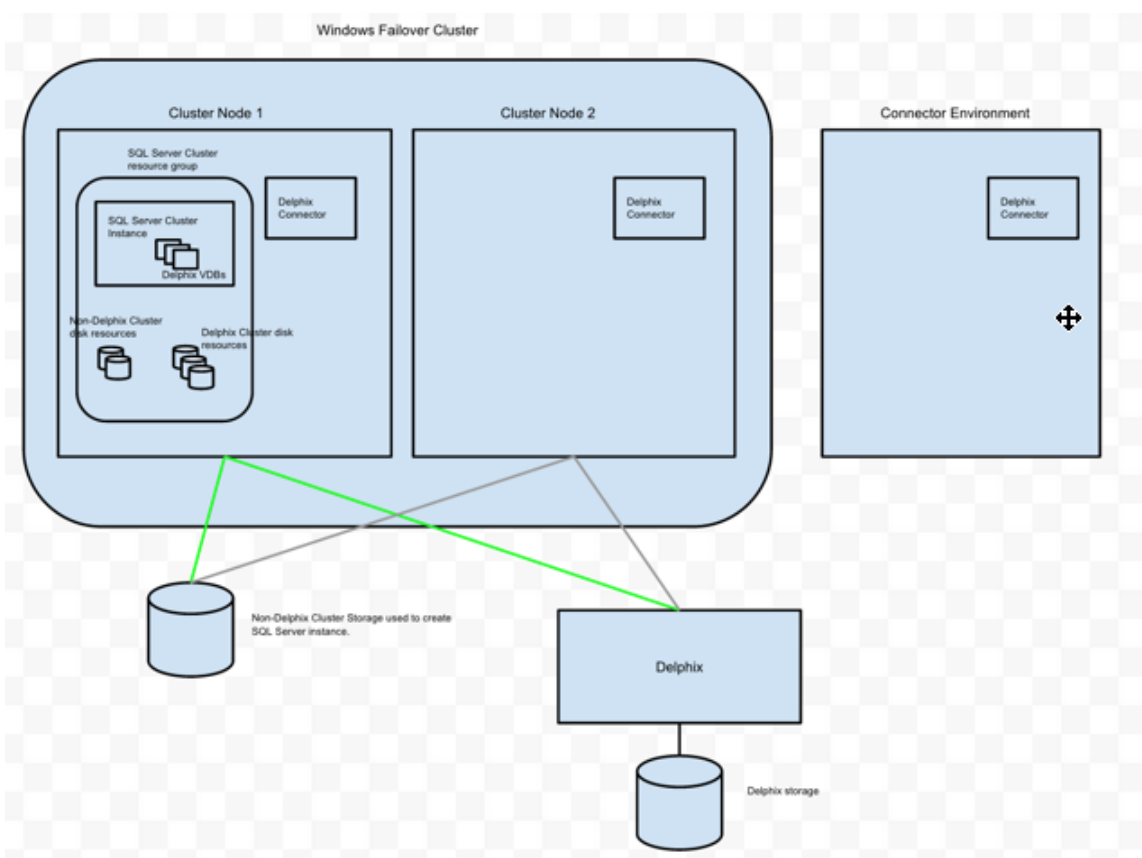
SQL Server 2014 (12.0)

Procedure

1. Click **Manage**.

2. Select **Environments**.
 3. Next to **Environments**, click the green **Plus** icon.
 4. In the **Add Environment** dialog, select **Windows** in the operating system menu.
 5. Select **Target**.
 6. Select **Cluster**.
 7. Specify the cluster address of the Windows Failover Cluster.
 8. Select a host which is **NOT** a node in the cluster as the **Connector Environment**.
 9. Enter the **Username** and **Password** for the target environment.
 10. Click **Validate Credentials**.
 11. Click **OK**.
 12. Click **Yes** to confirm the target environment addition request.
- In the Delphix Engine interface, you will see a new icon for the Target environment, and two jobs running in the **Delphix Admin Job History**, one to **Create and Discover** an environment, and another to **Create** an environment. When the jobs are complete, click the icon for the new environment, and you will see the details for the environment.

Example Environment



In this example environment, the Delphix Connector was installed on **Connector Environment**, **Cluster Node 1**, and **Cluster Node 2**. Each host was added to Delphix as standalone target environments. Next, the **Windows Failover Cluster** was added as a Windows Target Cluster environment using the cluster address. **Cluster Node 1** is currently the active node for the SQL Server Failover Cluster resource group. Delphix has exported iSCSI LUs and has created the corresponding Cluster Disk resources for each VDB.

Related Links

- [Setting Up SQL Server Environments: An Overview](#)
- [Adding a SQL Server Standalone Target Environment](#)
- [Adding a SQL Server Source Environment](#)
- [Requirements for SQL Server Target Hosts and Databases](#)

