

# Unable to monitor with WMI

SQL Elements 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.

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 SQL Elements from making a connection. Ensure that SQL Elements 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.](#)
- [Help with Scripts.](#)

## Using WbemTest (Windows Management Instrumentation Tester)

You can use the [WbemTest](#) 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`.
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](#).

If you receive an error message, use the following processes to help identify and resolve the issue.

### 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 ncacl_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
```

1. 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.
2. Try to use the remote server IP address instead of the server name. If the IP address works, you may have a DNS issue.
3. 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.
4. If both computers are in the same domain, and the user account has administrator permissions, try rejoining both computers to the domain.

### 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.
  - 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 underPermissions for User, select Remote Access, and then click OK.
5. Make sure the correct WMI namespace permissions are configured.
  - a. Run wmicmgmt.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.