

Oracle® Enterprise Manager

System Monitoring Plug-in Installation Guide for Microsoft .NET Framework

10g Release 2 (10.2.0.2)

B28043-02

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This document provides a brief description about the Oracle System Monitoring Plug-in for Microsoft .NET Framework, details on the .NET Framework versions and operating system platforms the plug-in supports, prerequisites for installing the plug-in, and step-by-step instructions on how to download, install, verify, and validate the plug-in.

Description

Microsoft .NET Framework is a component of the Microsoft Windows operating system used to build and run Windows-based applications. The System Monitoring Plug-in for Microsoft .NET Framework extends Oracle Enterprise Manager Grid Control to add support for managing the Microsoft .NET Framework. By deploying the plug-in within your Grid Control environment, you gain the following management features for Microsoft .NET Framework:

- Monitor availability and receive Microsoft .NET Framework Server data for the following performance areas:
 - .NET CLR Memory
 - .NET CLR Networking
 - .NET CLR Locks and Threads
 - .NET CLR Exceptions
- Perform trend analysis on collected performance information.
- Receive email and/or page notification concerning potential problems surrounding availability, performance, and/or configuration data.
- Gain access to rich out-of-box reports.
- Support monitoring by a remote Agent. For remote monitoring, the Agent does not need to be on the same computer as the .NET Framework.

Versions Supported

This plug-in supports the following versions of products:

- Enterprise Manager Grid Control 10g Release 2 or higher Management Service
- Enterprise Manager Grid Control 10g Release 2 or higher Agent for Windows
- Microsoft .NET Framework 1.1.x running on Windows Server 2003 (see note below)

- Microsoft .NET Framework 2.0.x running on Windows Server 2003 (see note below)

Note: For details on which editions (such as Enterprise, Standard, and so forth) and versions of Windows operating systems that this Microsoft product is supported to run on, refer to the Microsoft website and/or documentation.

Prerequisites

The following prerequisites must be met before you can deploy the plug-in:

- Microsoft .NET Framework 1.1.x or 2.0.x is installed.
- The following components of Oracle Enterprise Manager 10g Grid Control release 2 or higher are installed:
 - Oracle Management Service with Oracle Management Repository
 - Oracle Management Agent for Windows

You can install the Agent on the same computer as .NET Framework (referred to as local Agent monitoring), or you can install the Agent on a different computer from .NET Framework (referred to as remote Agent monitoring).

- Ensure that the Windows Management Instrumentation Service is up and running.
- For remote Agent monitoring, a remote Agent must be properly configured. See "[Configuring a Remote Agent](#)" for the procedure.
- User privileges for the Job system of Enterprise Manager. For the procedure, refer to "Setting Credentials for the Job System to Work with Enterprise Manager" in one of the following installation guides:
 - *Oracle Database Installation Guide 10g Release 2 (10.2) for Microsoft Windows (32-Bit) — B14316-01*
 - *Oracle Database Installation Guide 10g Release 2 (10.2) for Microsoft Windows (64-Bit) on Intel Itanium — B14317-02*
 - *Oracle Database Installation Guide 10g Release 2 (10.2) for Microsoft Windows (x64) — B15681-02*

These guides are listed in the Installation Guides section of the Oracle Database Documentation Library at the following location:

<http://www.oracle.com/pls/db102/homepage>

Note: If you do not assign the correct privileges for users, the deployment will fail.

- If you want to use version 2.0.2.1.0 of the Microsoft .NET Framework plug-in, you need to do one of the following:
 - Install this version on Oracle Enterprise Manager Windows Agent version 10.2.0.2.

or

- Apply a one-off patch on Oracle Enterprise Manager Windows Agent version 10.2.0.1. Refer to Metalink and Oracle bug #5349647 for more information.

Deploying the Plug-in

After you ensure that the prerequisites are met, use the following steps to deploy the plug-in:

1. Download the Microsoft .NET Framework Plug-in archive to your desktop or computer on which the browser is launched. You can download the archive from the Oracle Technology Network (OTN).
2. Log in to Enterprise Manager Grid Control as a Super Administrator.
3. Click the **Setup** link in the upper right corner of the Grid Control Home page, then click the **Management Plug-ins** link on the left side of the Setup page.
4. Click **Import**.
5. Click **Browse** and select the plug-in archive.
6. Click **List Archive**.
7. Select the plug-in and click **OK**.
8. Verify that you have set preferred credentials on all Agents where you want to deploy the plug-in.
9. In the Management Plug-ins page, click the icon in the **Deploy** column for the Microsoft .NET Framework plug-in. The Deploy Management Plug-in wizard appears.
10. Click **Add Agents**, then select one or more Agents to which you want to deploy the plug-in. The wizard reappears and displays the Agent you selected.
11. Click **Next**, then click **Finish**.

If you see an error message stating that the preferred credential is not set up, go to the Preferences page and add the preferred credentials for the Agent target type and host target type on which the Agent resides.

Adding Instances for Monitoring

After successfully deploying the plug-in, follow these steps to add the plug-in target to Grid Control for central monitoring and management:

1. From the Agent Home page where the Microsoft .NET Framework Plug-in was deployed, select the **Microsoft .NET Framework** target type from the **Add** drop-down list, then click **Go**. The Add Microsoft .NET Framework page appears.
2. Provide the following information for the properties:
 - **Name** — Unique target name across all the Grid Control targets, such as `.net_hostname`. The name represents this .NET target across all user interfaces within Grid Control.

- **Host** — Full name (inclusive of domain, such as machineA.com) or the IP address of the host
 - **Username** — Host user name (must be an Admin account). Required only for remote Agent monitoring.
 - **Password** — Password for the user name. Required only for remote Agent Monitoring.
 - **Agent Location** — Remote specifies that the Agent monitoring .NET Framework targets *is not* on the same computer as the target being monitored. (See "[Configuring a Remote Agent](#)" for more information.) Local specifies that the Agent monitoring the target *is* on the same computer as the target being monitored. Note that remote and local are case-sensitive and should be lowercase.
3. Click **Test Connection** to make sure the parameters you entered (such as the password) are correct.
 4. Reenter the encrypted parameters from step 2 if the connection test was successful, then click **OK**.

Note: After you deploy and configure the plug-in to monitor one or more targets in the environment, you can customize the monitoring settings of the plug-in. This alters the collection intervals and threshold settings of the metrics to meet the particular needs of your environment. If you decide to disable one or more metric collections, this could impact the reports that the metric is a part of.

Verifying and Validating the Plug-in

After waiting a few minutes for the plug-in to start collecting data, use the following steps to verify and validate that Enterprise Manager is properly monitoring the plug-in target:

1. Click the Microsoft .NET Framework target link from the Agent home page Monitored Targets table. The Microsoft .NET Framework home page appears.
2. Verify that no metric collection errors are reported in the Metrics table.
3. Ensure that reports can be seen and no errors are reported by selecting the **Reports** property page.

Configuring a Remote Agent

The steps for deploying the plug-in are the same for remote Agent monitoring and local Agent monitoring. However, if the Agent is on a remote computer from the plug-in target, certain configuration changes are required to access the Windows Management Instrumentation (WMI) data on the computer where the plug-in target resides.

In a scenario where computer A runs the Agent, and the target is installed on computer B, do the following to set up computer A:

1. Go to the Windows Control Panel and select Administrative Tools, then Services.

2. Select the Oracle Enterprise Manager Agent service from the listed computer where the Agent is running.
3. Right-click the service, then select **Properties**.
4. Click the **Log On** tab. By default, this service is started with the Local System account.
5. Change the default account by selecting the **This account** radio button, and provide an account and password that exist on both computer A and computer B.

Note that the account should be a member of the Administrators group, and the account should have administrative privileges on computer B. The password should not be left blank.

6. Click **OK**, then restart the Agent service.
7. Ensure that the Windows Management Instrumentation Service is up and running on both computers.

The Agent should now be able to collect data from the remote plug-in target computer. If the configuration above is not initiated, metric collection errors can appear for the plug-in target's metrics.

To ensure that metric collection errors do not occur within Enterprise Manager, Oracle recommends reviewing the Microsoft documentation on the WMI setup. Refer to the Microsoft documentation from the Microsoft website for additional configuration details.

Note: For a remote Agent, the platform to which the Agent is installed can be any Windows type that may not be supported for .NET Framework. For example, if .NET Framework is running on Windows 2003, you can install the remote Agent on Windows XP to monitor it.

Undeploying the Plug-in

Use the following steps to undeploy the plug-in from an Agent:

1. Log in to Enterprise Manager Grid Control as a Super Administrator.
2. Select the **Targets** tab, then the **All Targets** subtab. The All Targets page appears.
3. Select the Microsoft .NET Framework Plug-in target and click **Remove**. You must do this step for all targets of the plug-in.
4. Make sure that the preferred credentials are set on the Agents where the plug-in is deployed.
5. Click the **Setup** link in the upper right corner of the All Targets page, then click the **Management Plug-ins** link on the left side of the Setup page. The Management Plug-ins page appears.
6. Click the icon in the **Undeploy** column for the Microsoft .NET Framework Plug-in. The Undeploy Management Plug-in page appears.
7. Check all the Agents that are currently deployed with the Microsoft .NET Framework Plug-in and click **OK**.

You must undeploy the plug-in from every Agent in the system to completely remove it from the enterprise.

8. Select the Microsoft .NET Framework Plug-in on the Management Plug-ins page and click **Delete**.

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