CA Nimsoft Monitor

Probe Guide for Active Directory Response

ad_response v1.6 series

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Contents

Documentation Changes

This table describes the version history for this document.

Version	Date	What's New?
1.6	December 2013	Documentation on the initial web-based GUI version of the Active Directory Response probe. (Previous versions of this probe are configured using Infrastructure Manager).

Chapter 1: Overview

The **Active Directory** (AD) is a directory service, which is integrated in most of the Windows Server operating systems. The Active Directory stores information about network components and enables clients to find objects within its namespace.

The Active Directory Response probe monitors the availability of the Active Directory. This probe can monitor and report:

- Connect response time of AD server.

- Object and number of objects found. Everything that AD server tracks is considered as an object.

- Replication of modified objects between servers, sites, and domains.

This section contains the following topics:

About This Guide

This guide is for the CA Nimsoft Monitor to help understand the configuration of the Active Directory Response probe and provides the following information:

- Overview of the Active Directory Response probe and related documentation for previous probe versions.

- Configuration details of the probe.

- Field information and common procedures for configuring the probe.

Important! Description for the intuitive GUI fields is not included in the document.

Related Documentation

Related Documentation

Documentation for other versions of the ad_response probe

The Release Notes for the ad_response probe

User documentation for the Admin Console

Monitor Metrics Reference Information for CA Nimsoft Probes (http://docs.nimsoft.com/prodhelp/en_US/Probes/ProbeReference/index.htm)

Preconfiguration Requirements

This section contains the preconfiguration requirements for the Nimsoft Active Directory Response probe.

Supported Platforms

Refer to the Nimsoft Compatibility Support Matrix for the latest information on supported platforms. See also the Support Matrix for Nimsoft Probes for information on the ad_response probe.

Chapter 2: Configuration Details

The left pane of the Active Directory Response probe contains an **Active Directory** node. This node contains the following subnodes:

- Replication: Lets you create a profile, which monitors replication of modified objects between servers, sites, and domains.

- Response: Lets you calculate the response time, which monitors the response time or connect time of server.

- Search: Lets you create a profile, which calculates the search time and number of objects found.

Note: The **Active Directory** node does not have any sections or fields.

This section contains the following topics:

ad_response Node

This node lets you view the probe information and configure the log level information of the Active Directory Response probe.

Navigation: ad_response

Set or modify the following values as required:

ad_response > Probe Information

This section provides information about the probe name, probe version, start time of the probe, and the probe vendor.

ad_response > Log Level Configuration

This section lets you configure the log level of the Active Directory Response probe.

- Log level: Specifies the detail level of the log file.

ad_response > Message Properties

This section displays a list of alarm messages available in the Active Directory Response probe.

- Message: Indicates the variables used in the message.

- Subsystem: Indicates the alarm subsystem. All profiles using one connection use this ID as their alarm subsystem.

Replication

This node lets you add a profile to the **Replication** node. The added profile monitors replication of modified objects between servers, sites, and domains.

Navigation: ad_response > Active Directory > Replication

Set or modify the following values as required:

Replication > Add Profile

This section lets you add or edit a profile in the **Replication** folder.

- Profile Name: Defines the name of the profile to be added in the **Replication** folder.

<Profile Name> Node

The profile name node lets you:

- Configure the general properties of the profile.

- Configure the connection properties of the Active Directory Response probe.

- Define the object the profile monitors.

- List the counters available for the object.

Note: This node is called profile name in the document and is user-configurable.

Navigation: ad_response > Active Directory > Replication > *profile name*

Set or modify the following values as required:

profile name > **General**

This section lets you configure the general properties of the profile.

- Name: Defines the name of the profile.

- Description: Defines a description of the profile.

- Sample Data Every (in events): Samples the data at the specified poll interval.

- Enabled (runs at specified interval): Enables or disables the profile.

profile name > **Connection**

This section lets you configure the connection properties of the Active Directory Response probe.

- Connection Type: Specifies the connection type used by the profile (LDAP or Global Catalog).

- Use Secure Connection: Lets you use a secure connection ensuring that all communications are encrypted.

- Bind to Specific Server: Binds the connection to the server specified in the **Server Address** field. If the server defined is unavailable, the connection fails.

- Server Address (Fully Qualified Domain): Defines the server address the profile monitors.

- Domain: Defines the domain used by the profile while logging on to the server.

profile name > **Object**

This section lets you define the object the profile monitors.

- Container: Specifies the container in which the profile looks for the object and attribute.

- Object: Defines the object, which the profile searches. The profile checks if the object exists and the object age.

- Attribute: Defines the attribute the profile monitors. The profile checks if the attribute exists.

- Write Mode: Provides the write access to the selected object and attribute.

- Test Write: Writes a test data manually to the selected object and attribute.

  Note: Test Write is enabled on selecting the **Write Mode** check box.

- Test Read: Checks if the object and attribute exists or not.

Note: This section appears only for the **Replication** profiles.

profile name > **Counter Name**

This section lists the counters available for the object the profile monitors.

- Operator: Specifies the comparison operator for verifying the number of rows returned against the threshold value.

- Value: Specifies the alarm value of the profile response time.

- Severity: Specifies the alarm severity when the profile response time exceeds the threshold value.

- Message: Defines the alarm message issued when the profile response time exceeds the threshold value.

Response

This node lets you add a profile to the **Response** node. You can also calculate the response time, which monitors the response time or connect time of server.

Navigation: ad_response > Active Directory > Response

Set or modify the following values as required:

Response > Add Profile

This section lets you add or edit a profile in the **Response** folder.

<Profile Name> Node

The *profile name* node in the **Response** node lets you:

- Configure the general properties for the profile.

- Configure the connection properties of the Active Directory Response probe.

- List the counters available for the object.

Navigation: ad_response > Active Directory > Response > *profile name*

Set or modify the following values as required:

profile name **> General**

This section lets you configure the general properties of the profile.

Note: The field descriptions are the same as described in the **General** section of the *profile name* node in the **Replication** node.

profile name **> Connection**

This section lets you configure the connection properties of the profile.

Note: The field descriptions are the same as described in the **Connection** section of the *profile name* node in the **Replication** node.

profile name **> Counter Name**

This section lists the counters available for the object the profile monitors.

Note: The field descriptions are the same as described in the **General** section of the *profile name* node in the **Replication** node.

Search

This node lets you create a profile, which calculates the search time and number of objects found.

Navigation: ad_response > Active Directory > Search

Set or modify the following values as required:

Search > Add Profile

This section lets you add or edit a profile of the **Search** node.

Note: The field description is the same as described in **Add Profile** section of the **Replication** node.

<Profile Name> Node

The *profile name* node in the **Search** node lets you:

- Configure the general properties for the profile.
- Configure the connection properties of the profile.
- Define the query the profile monitors.
- List the counters available for the object.

Navigation: ad_response > Active Directory > Search > *profile name*

Set or modify the following values as required:

profile name **> General**

This section lets you configure the general properties of the profile.

Note: The field descriptions are the same as described in the **General** section of the *profile name* node in the **Replication** node.

profile name **> Connection**

This section lets you configure the connection properties of the profile.

Note: The field descriptions are the same as described in the **Connection** section of the *profile name* node in the **Replication** node.

Profile Name > Query

This section lets you define the search query, which the profile executes for monitoring. You can also click the **Test** button in this section to perform the search in the root container. If the objects are found, the response time and number of records are displayed.

- Search root container: Specifies the objects to be searched for in this field.
- Include Subcontainers: Executes a query in the subcontainers under the root container.
- Filter: Defines an LDAP for the search.

Note: This section appears only for **Search** profiles.

profile name **> Counters**

This section lists the counters available for the object the profile monitors.

Note: The field descriptions are the same as described in the **General** section of the *profile name* node in the **Replication** node.

Configure a Node

This procedure provides the information to configure a section within a node.

Each section within a node enables you to configure the properties of the Active Directory Response probe for monitoring the response of user-defined queries.

Follow these steps:

1. Select the appropriate navigation path.

2. Update the field information and click **Save**.

   The specified section of the Active Directory Response probe is configured. You can now define connections and profiles for the monitored instance.

Configure Dynamic Alarm Thresholds

Dynamic thresholds are configured at the QoS metric level in each probe that publishes an alarm for a QoS metric.

Important! In order to create dynamic alarm thresholds, you must have the baseline_engine probe version 2.0 installed on the robot and configured.

Follow these steps for each QoS metric where you want to configure dynamic thresholds:

1. Select a node in the tree to view any associated monitors and QoS metrics.

2. Select the monitor you want to modify in the table.

3. Select the Publish Data and Compute Baseline options to enable the Dynamic Alarm Thresholds section of the configuration.

4. Choose a threshold algorithm. There are three algorithms allowed for dynamic alarm thresholds:

   Note: You must indicate the direction for each algorithm, either increasing or decreasing.

   ■ Scalar: Each threshold is a specific value from the computed baseline.

   ■ Percent: Each threshold is a specific percentage of the computed baseline.

   ■ Standard Deviation: Each threshold is a measure of the variation from the computed baseline. A large standard deviation indicates that the data points are far from the computed baseline and a small standard deviation indicates that they are clustered closely around the computed baseline.

   Important! To change the subsystem ID, you must have the baseline_engine probe version 2.1 installed on the robot and configured.

5. (Optional) If the Subsystem ID listed in the Subsystem (default) field is not correct for your configuration, enter the correct ID in the Subsystem (override) field.

6. Save your settings.

Manage Profiles

You can configure the Active Directory Response probe to create a profile in one of the groups of Active Directory. You can then configure the general properties and the connection properties of the profile.

Follow these steps:

1. Click the **Options** icon next to the **Replication** node in the navigation pane.

2. Click the **Create new profile** option.

3. Update the field information and click **Submit**.

    The profile is saved.

Note: This procedure is also applicable to **Response** and **Search** profiles.

Delete Profile

You can delete an existing profile when you no longer want the Active Directory Response probe to monitor.

Follow these steps:

1. Click the **Options** icon beside the *profile name* node that you want to delete.

2. Click **Delete Profile** and then click **Save**.

    The profile is deleted.

Test Connection of a Profile

You can the test connection defined in a **Replication**, **Response**, and **Search** profile.

Follow these steps:

1. Click the *profile name* node under the **Replication** node.

2. Go to the **Connection** section.

3. Enter the field information.

4. Click **Test** in the **Action** drop-down list.

    A success message appears and displays the response time taken to test the profile connection.

Test Read or Write Operation of a Profile

You can test read or write operation on replication profiles. You can check if the object and attribute of a profile exists and also the age of the object is displayed.

Note: A replication profile must have a write profile and at least one read profile.

Follow these steps:

1. Click the *profile name* node under the **Replication** node.

2. Go to the **Objects** section.

3. Enter the field information.

4. Click **Read** in the **Action** drop-down list.

    A Read test success message appears.

5. Click **Write** in the **Action** drop-down list.

    A Write test success message appears.

Chapter 3: ad_response Metrics

The following table describes the checkpoint metrics that can be configured using the *ad_response* probe.

Monitor Name	Units	Description
QOS_AD_CONNECT_RESPONSE	Milliseconds	Active Directory Connect Response
QOS_AD_REPLICATION_AGE	Seconds	Active Directory Replication Age
QOS_AD_SEARCH_OBJECTS	Objects	Active Directory Search Objects
QOS_AD_SEARCH_RESPONSE	Milliseconds	Active Directory Search Response