

# CA Nimsoft Monitor

## Probe Guide for File and Directory Scan

dirscan v3.1 series



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## Documentation Changes

This table describes the version history for this document.

Version	Date	What's New?
3.1	July 2014	<ul style="list-style-type: none"><li>■ Update the &lt;Profile Name&gt; Node topic.</li><li>■ Added the Software Requirements topic.</li></ul>
3.1	June 2014	No documentation updates, only document version is updated.
3.0	September 2013	Initial Web-based GUI version of this probe. (Previous versions of this probe are configured using Infrastructure Manager).

# Chapter 1: Overview

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The dirscan probe monitors files in specific directories. Alarms can be sent on number of files, age of files, and space used by files.

This section contains the following topics:

[About This Guide](#) (see page 7)

[Related Documentation](#) (see page 7)

[Preconfiguration Requirements](#) (see page 8)

## About This Guide

This guide is for the CA Nimsoft Monitor Administrator to help understand the configuration of the File and Directory Scan probe.

This guide contains the following information:

- Overview of the File and Directory Scan 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 intuitive GUI fields is not included in the document.

## Related Documentation

For related information that may be of interest, see the following material:

Related Documentation

Documentation for other versions of the dirscan probe

The [Release Notes](#) for the dirscan 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](http://docs.nimsoft.com/prodhelp/en_US/Probes/ProbeReference/index.htm))

## Preconfiguration Requirements

This section contains the preconfiguration requirements for the Nimsoft File and Directory Scan probe.

### Supported Platforms

Please refer to the [Nimsoft Compatibility Support Matrix](#) for the latest information on supported platforms. See also the [Support Matrix for Nimsoft Probes](#) for additional specific information on the dirscan probe.

### Software Requirements

The dirscan probe requires the following software environment:

- Nimsoft Monitor Server 5.1.1 or later
- Nimsoft Robot 5.23 or later
- Probe Provisioning Manager (PPM) probe version 2.36 or later
- Java Virtual Machine 1.6 or later

Note: The UI of the probe is not displayed properly if the correct version of PPM is not installed.



# Chapter 2: Configuration Details

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This section describes the configuration concepts and procedures for setting up the File and Directory Scan probe. This probe is configured to monitor a directory for:

- Directory existence.
- Particular files or file types are located in the directory.
- Size and age of the files do not exceed expected value.

This section contains the following topics:

[dirscan Node](#) (see page 10)

[Configure a Node](#) (see page 15)

[How to Configure Alarm Thresholds](#) (see page 16)

[Add Integrity Profile](#) (see page 16)

[Add Profile](#) (see page 16)

[Delete an Integrity Profile](#) (see page 17)

[Delete Profile](#) (see page 17)

## dirscan Node

This node allows you to configure the log properties of the File and Directory Scan probe. You can also view the list of alarm messages and their properties.

Navigation: dirscan

Set or modify the following values as required:

dirscan > Probe Information

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

dirscan > General Configuration

This section allows you to configure the log properties of the File and Directory Scan probe.

- Check Interval (seconds): specifies the time interval at which the directories are scanned.
- Default Message Level: specifies the level of the alarm message.
- Log Level: specifies the level of details that are written to the log file.  
Default: 0-Fatal
- Log Size (KB): specifies the size of the file to which the internal probe messages are stored.
- User Name (including domain name): defines the user name to access the directory or the file. The user name must include the domain name.

dirscan > Message Pool

This section allows you to view the list of alarm messages and their properties.

- Identification Name: indicates the name of the alarm message.
- Token: indicates the checkpoint that the probe sets.
- Error Alarm Text: specifies the text of the alarm message.
- Clear Alarm Text: specifies the text of the message that is issued after the erroneous values are back within the threshold limits.
- Error Severity: indicates the severity of the alarm.
- Subsystem string/ID: indicates the ID of the sub system which issues the alarm.

## Integrity Profiles Node

This node allows you to create and configure an integrity profile.

Navigation: dirscan > Integrity Profiles

Set or modify the following values as required:

Integrity Profiles > Add Profile > Integrity Profile Information

This section allows you to create the integrity profile.

- Profile Name: defines the name of the integrity profile.
- Active: enables you to activate the integrity profile.
- Description: specifies the profile description.

### <Integrity Profile Name> Node

This node allows you to configure the properties of the integrity profile of the File and Directory Scan probe. You can also configure the QoS properties of the integrity profile.

Note: The integrity profile is added as a child node under the Integrity Profiles node. This node is referred to as *integrity profile name* node in the document and is user-configurable.

Navigation: dirscan > Integrity Profiles > *integrity profile name*

*integrity profile name* > Integrity Profile Information

This section allows you to configure the properties of the integrity profile.

*integrity profile name* > Quality of Service message

This section allows you to configure the QoS properties of the alarm message.

- Message ID: specifies the alarm message appearing on the detection of a change in the file.
- Command: defines the action taken on the detection of a change in the file.
- File Integrity: activates the monitoring of one or more specified files for detecting any change.

## Profiles Node

This node allows you to create a monitoring profile for the File and Directory Scan probe.

Navigation: dirscan > Profiles

Set or modify the following values as required:

Profiles > Add Profile > Add

This section allows you to create and configure a monitoring profile for the File and Directory Scan probe.

- Profile Name: Defines the name of the monitoring profile.

### <Profile Name> Node

This node allows you to configure the properties of the monitoring profile. You can also configure the properties of the directory or the file that is monitored.

Note: The integrity profile is added as a child node under the Profiles node. This node is referred to as the *profile name* node in the document and is user-configurable.

Navigation: dirscan > Profiles > *profile name*

*profile name* > Profile General Configuration

This section allows you to configure the properties of the monitoring profile.

- Active: activates the monitoring of files and directories.
- Directory: defines the path of the directory that is scanned.
- Pattern: defines the string that is matched in the files that are present in the directory. Those files that match with the pattern are included.
- Recurse into subdirectories: includes the subdirectories of the directory that is scanned.
- Exclude directories Pattern: defines the pattern that is matched with the files for determining the files that are excluded.

*profile name* > Monitors

This section lets you configure the performance counters for generating QoS.

Note: The performance counters are visible in a tabular form. You can select any one counter in the table and can configure its properties.

#### profile name > Monitors > Directory Age

This performance counter allows you to check if the directory has changed between each scan. This type of change occurs when a file is created or removed from the directory.

- Operator: specifies the operator that is used to set the condition for comparing the measured value with the specified value.
- Value: specifies the condition for comparing the measured value.
- Unit: specifies the unit for comparing the measured value
- Message: specifies the message that is issued when the specified condition is not met.
- Command: defines the action that is performed when the specified condition is not met.
- Age Of: specifies the age of file that matches the pattern. The file can be the newest file, the oldest file or, an individual file.
- On Creation Time: specifies the creation time of the file which is used while defining threshold.

#### profile name > Monitors > Directory Exists

This performance counter lets you check whether the specified directory exists or not.

- Message: specifies the message that is issued when the directory is not found.
- Command: defines the action that is performed when the directory is not found.
- QoS Directory exists: issues the QoS message when the directory is not found.

Note: The current version of the File and Directory Scan probe does not monitor the directories that are shared on a network.

#### profile name > Monitors > Directory Modification

This performance counter allows you to check whether the specified directory is modified or not.

- Message: specifies the message that is issued when the specified condition is not met.
- Command: defines the action that is performed when the specified condition is not met.

profile name > Monitors > Directory Space Used

This performance counter allows you to configure the space used by all files found in the specified directory matching the specified pattern. You can also generate alarms for any changes made to the file size.

- Operator: specifies the space condition and unit.
- Value: specifies the value for checking the specified file.
- Unit: specifies the unit for comparing the measured value.
- Message: specifies the alarm message that is generated when the file space breaches the specified condition.
- Delta Operator: specifies the used space delta condition and unit.
- Cycle: specifies the number of cycles over which the used space delta value is calculated.
- Delta Message: specifies the alarm message that is generated when the file space breaches the threshold condition.
- Command: specifies a command to be performed when the specified condition is not met.

profile name > Monitors > File Count

This performance counter allows you to scan the total number of files found in the specified directory matching the specified pattern.

- Operator: specifies the operator that is used to set the condition for comparing the measured value with the specified value.
- Value: specifies the condition for comparing the measured value.
- Message: specifies the message that is issued when the specified condition is not met.
- Command: defines the action that is performed when the specified condition is not met.

profile name > Monitors > File Read Response Time

This performance counter allows you to configure the time taken to read the specified file.

Note: When specifying read response time, the response time is calculated from reading the first one Mb of the file. If no file specified, the largest file in the directory is read for generating the QoS for the File Read Response Time.

- Operator: specifies the operator that is used to set the condition for comparing the measured value with the specified value.
- Value: specifies the threshold value in seconds for comparing the actual response time. This field accepts only an integer value.
- Unit: specifies the unit for comparing the measured value.

- Message: specifies the alarm message that is generated when the specified condition is breached.
- Command: specifies the action to be performed when the specified condition is not met.
- Watch: specifies the required option that is used to compare the response time with the specified value for generating alarms.

*profile name* > Monitors > Size of File

This performance counter allows you to configure the size of the file found in the specified directory matching the specified pattern.

- Operator: specifies the threshold operator for comparing the measured value with the specified value.
- Value: specifies the threshold value for comparing the actual file size. This field accepts only an integer value.
- Unit: specifies the unit for comparing the measured value.
- Message: specifies the alarm message that is generated when the file size breaches the threshold condition.
- Command: specifies the action to be performed when the specified condition is not met.
- Size Of: specifies the size of file that can be configured to use the size of the newest file, the oldest file, or each individual file, when more than one file match the pattern.

## Configure a Node

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

Each section within the node allows you to configure the properties of the File and Directory Scan probe.

## How to Configure Alarm Thresholds

Some Quality of Service measurement probes allow you to set different types of alarm thresholds. These threshold options allow you to more broadly control when alarm messages are sent for each QoS probe.

For more information about the different alarm thresholds and their configuration requirements, refer to the *General Probe Configuration* section of the Admin Console Help.

**Important!** Alarm threshold settings are dependent on the `baseline_engine` probe. If you do not have the correct version of `baseline_engine` configured, you will not see the additional threshold options.

## Add Integrity Profile

You can add an integrity profile which is displayed as a child node under the Integrity Profiles node.

Follow these steps:

1. Click the Options icon beside the Integrity Profiles node.
2. Click the Add Profile option.
3. Update the field information and click Submit.

The profile is saved and you can configure the event selection criteria for the File and Directory Scan probe.

## Add Profile

You can add a monitoring profile which is displayed as a child node under the Profiles node.

Follow these steps:

1. Click the Options icon beside the Profiles node.
2. Click the Add Profile option.
3. Update the field information and click Submit.

The profile is saved and you can configure the event selection criteria for the File and Directory Scan probe.



## Delete an Integrity Profile

If you no longer want the probe to monitor the directories and files, you can delete the integrity profile.

Follow these steps:

1. Click the Options icon beside the *integrity profile name* node.
2. Click the Delete Profile option.

The profile is deleted.

## Delete Profile

If you no longer want the probe to monitor the event log messages, you can delete the monitoring profile.

Follow these steps:

1. Click the Options icon beside the *profile name* node.
2. Click the Delete Profile option.

The profile is deleted.



# Chapter 3: QoS Threshold Metrics

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Many Nimsoft Monitor probes ship with default QoS threshold values set. The default threshold values provide an idea of the type of values to be entered in the fields and are not necessarily recommended best practice values. To aid in tuning thresholds and reducing false-positive alarms, this section describes the QoS metrics and provides the default QoS thresholds.

This section contains the following topics:

[dirscan QoS Metrics](#) (see page 19)

[dirscan Alert Metrics Default Settings](#) (see page 19)

## dirscan QoS Metrics

This section contains the QoS metrics for the *File and Directory Scan* probe.

Monitor Name	Units	Description
QOS_DIR_AGE	Seconds	Age of oldest matching file
QOS_DIR_EXISTS	Boolean	Directory exists or not
QOS_DIR_SPACE	Kilobytes	The total size of all files in the specified directory matching the specified pattern.
QOS_DIR_NUMBER	Number	The total number of files in the specified directory matching the specified pattern.
QOS_DIR_RESPONSE_TIME	Seconds	The time taken to read the specified file.

## dirscan Alert Metrics Default Settings

This section contains the alert metrics default settings for the File and Directory Scan probe.

QoS Metric	Warning Threshold	Warning Severity	Error Threshold	Error Severity	Description
FileSizeAlarm	None	None	None	Major	Alarm for file size
FileNumberAlarm	None	None	None	Major	Alarm for file number
FileSpaceAlarm	None	None	None	Major	Alarm for file space

FileDeltaSpaceAlarm	None	None	None	Major	Alarm for delta change in space used by files
FileAgeAlarm	None	None	None	Major	Alarm for file age
ResponseTimeAlarm	None	None	None	Major	Alarm for response time
FileIntegrityAlarm	None	None	None	Major	Alarm for file integrity
DirectoryCheckAlarm	None	None	None	Major	Alarm for directory existence
FileError	None	None	None	Major	Alarm for file existence
DirAge	None	None	None	Major	Alarm for file age