NØRTEL NETWORKS

Preside Multiservice Data Manager

Device Alarms

Reference Guide

241-6001-502

Preside Multiservice Data Manager
Device Alarms
Reference Guide

Publication: 241-6001-502
Document status: Standard
Document version: 14.3 RSUP
Document date: December 2003

Publication history

December 2003

14.3RSUP Standard

Commercial availability.

Contents

About this document

The following topics are discussed in this section:

- "Who should read this document and why" (page 9)

- "What you need to know" (page 9)

- "How this document is organized" (page 10)

- "What's new in this document" (page 10)

- "Text conventions" (page 10)

- "Related documents" (page 11)

Who should read this document and why

This guide is for systems administrators and network operators who are responsible for Preside Multiservice Data Manager (MDM) fault management. This guide describes the alarm codes coming from MDM-supported SNMP devices.

What you need to know

This document assumes that you have a knowledge of

- the elements in your network

- the diagnostics of the switches being managed by the Preside Multiservice Data Manager (MDM)

- network fault management

How this document is organized

241-6001-502 *Preside MDM Device Alarms Reference Guide* contains the following sections:

- "Introducing device alarms" (page 13) describes Preside Multiservice Data Manager (MDM)-supported SNMP device alarms and their particular alarm code ranges.

- "Generic SNMP alarms" (page 15) contains a sequential listing of the generic SNMP alarms that can apply to different types of devices.

What's new in this document

This document no longer describes alarm information for the following devices: Passport 4400.

Text conventions

This document uses the following text conventions:

- `nonproportional spaced plain type`

  Nonproportional spaced plain type represents system generated text or text that appears on your screen.

- **`nonproportional spaced bold type`**

  Nonproportional spaced bold type represents words that you should type or that you should select on the screen.

- *italics*

  Statements that appear in italics in a procedure explain the results of a particular step and appear immediately following the step.

  Words that appear in italics in text are for naming.

- `[optional_parameter]`

  Words in square brackets represent optional parameters. The command can be entered with or without the words in the square brackets.

- `<general_term>`

  Words in angle brackets represent variables which are to be replaced with specific values.

- UPPERCASE,lowercase

  In the Preside Multiservice Data Manager (MDM), uppercase and lowercase letters that appear in UNIX commands and parameters must be matched exactly. The system matches upper and lowercase characters differently.

- |

  This symbol separates items from which you may select one; for example, ON|OFF indicates that you may specify ON or OFF. If you do not make a choice, a default ON is assumed.

- ...

  Three dots in a command indicate that the parameter may be repeated more than once in succession.

The term absolute pathname refers to the full specification of a path starting from the root directory. Absolute pathnames always begin with the slash (/) symbol. A relative pathname takes the current directory as its starting point, and starts with any alphanumeric character (other than /).

Related documents

See the following documents for related information:

- 241-6001-303 *Preside MDM Administrator Guide*

Chapter 1
Introducing device alarms

This chapter describes the Preside Multiservice Data Manager (MDM)-supported SNMP device alarms and their alarm codes.

Alarm codes

Preside Multiservice Data Manager (MDM)-supported SNMP devices have alarms with alarm codes in particular ranges.

The table "Device types" (page 13) shows the first portion of the alarm code for the listed devices.

Table 1
Device types

Code range	Device
C000	Generic SNMP alarms
CDxx xxxx	Customer-defined alarms. For more information, see 241-6001-011 *Preside MDM Fault Management User Guide*.

Chapter 2
Generic SNMP alarms

C000 0000

Component	Severity	Status
<device type>/<device name>	warning	set
	minor	set
	major	set
	critical	set
	cleared	clear

Alarm Type
operator

Probable Cause
operational condition

Legend
<device type> is the type of device.

<device name> is the name of the device that has issued the corresponding SNMP trap.

Details
The trap ColdStart indicates that the system has restarted after a power shutdown.

For devices monitored by the MDM generic DCD (GENDCD):

- 1 cold start within 30 minutes generates a 'clear' alarm. The 'clear' alarm is generated because a cold start can be a normal operation.

- 2 cold starts within 30 minutes generates a 'minor' set alarm.

- 3 cold starts within 30 minutes generates a 'major' set alarm.

- 4 cold starts within 30 minutes generates a 'critical' set alarm.

- a return to 0 cold starts within 30 minutes generates a 'cleared' clear alarm.

For SNMP devices that generate their own alarms and are not monitored using the MDM generic DCD (GENDCD):

- 1 cold start within the polling interval (device specific) generates a 'warning' set alarm.

- the alarm is cleared when no cold starts are generated within the aging period

Remedial action
No remedial action is necessary.

C000 0001

Component	Severity	Status
<device type>/<device name>	warning	set
	minor	set
	major	set
	critical	set
	cleared	clear

Alarm type

operator

Probable Cause

operational condition

Legend

<device type> is the type of device.

<device name> is the name of the device that has issued the corresponding SNMP trap.

Details

The trap WarmStart indicates that the system has started without a power shutdown.

For devices monitored by the MDM generic DCD (GENDCD):

- 1 warm start within 30 minutes generates a 'clear' alarm. The 'clear' alarm is generated because a warm start can be a normal operation.

- 2 warm starts within 30 minutes generates a 'minor' set alarm.

- 3 warm starts within 30 minutes generates a 'major' set alarm.

- 4 warm starts within 30 minutes generates a 'critical' set alarm.

- a return to 0 warm starts within 30 minutes generates a 'clear' alarm.

For SNMP devices that generate their own alarms and are not monitored using the MDM generic DCD (GENDCD):

- 1 warm start within the polling interval (device specific) generates a 'warning' set alarm.

- the alarm is cleared when no warm starts are generated within the aging period

Remedial action

If the trap is caused by administrative action, no remedial action is necessary. Otherwise, contact your Nortel Networks representative.

C000 0002

Component	Severity	Status
<device type>/<device name> IF/<IF name>	major	set
	critical	set
	cleared	clear

Alarm type

communications

Probable Cause

loss of signal

Legend

<device type> is the type of device.

<device name> is the name of the device that has issued the corresponding SNMP trap.

<IF name> is the interface port.

Details

This trap indicates that a link is down. This trap is probably caused by a local transmission error.

For devices monitored by the MDM generic DCD (GENDCD), the Link Down trap is reported as a 'critical' set alarm.

For SNMP devices that generate their own alarms and are not monitored using the MDM generic DCD (GENDCD), the Link Down trap is reported as a 'major' set alarm.

When the MDM receives the Link Up trap, this is reported as a 'clear' alarm.

Remedial action

Check the link status to determine the cause of the problem. There can be multiple causes for this trap. Analyze the statistics to determine if this is a physical connection problem such as a disconnected or broken cable or a configuration problem such as unmatched far-end and near-end parameters.

C000 0004

Component	Severity	Status
<device type>/<device name> SECURITY $	warning	message
	minor	set
	major	set
	critical	set
	cleared	clear

Alarm type

security

Probable Cause

authentication failure

Legend

<device type> is the type of device.

<device name> is the name of the device that has issued the corresponding SNMP trap.

Details

Trap Authentication indicates that an attempt was made to access the device with the wrong SNMP community name.

For devices monitored by the MDM generic DCD (GENDCD):

- 3 authentication failures within 10 minutes generates a 'warning' message alarm.

- 6 authentication failures within 10 minutes generates a 'minor' set alarm.

- 9 authentication failures within 10 minutes generates a 'major' set alarm.

- 12 authentication failures within 10 minutes generates a 'critical' set alarm.

- a return to 1 authentication failure within 10 minutes generates a 'cleared' clear alarm.

For SNMP devices that generate their own alarms and are not monitored using the MDM generic DCD (GENDCD):

- 1 to 4 authentication failures within the polling interval (device specific) generates a 'warning' message alarm.

- 5, or more, authentication failures within the polling interval (device specific) generates a 'major' set alarm.

- the alarm is cleared when no authentication failures are generated within the aging period

Remedial action

Take appropriate security actions.

C001 9999

Component	Severity	Status
GEN/<device name>	indeterminate	message

Alarm type

unknown

Probable Cause

unknown

Legend

<device name> is the name of the generic device that has issued the corresponding SNMP trap.

Details

A device specific trap has been received for which the generic SNMP device driver has no translation.

Remedial action

Take appropriate action for the specific trap received.

Index

A

C

D

I

Preside Multiservice Data Manager
Device Alarms
Reference Guide

Release: R14.3

**NØRTEL
NETWORKS**