

# Creating NMIS Email Notifications for a Specific Node and Interface

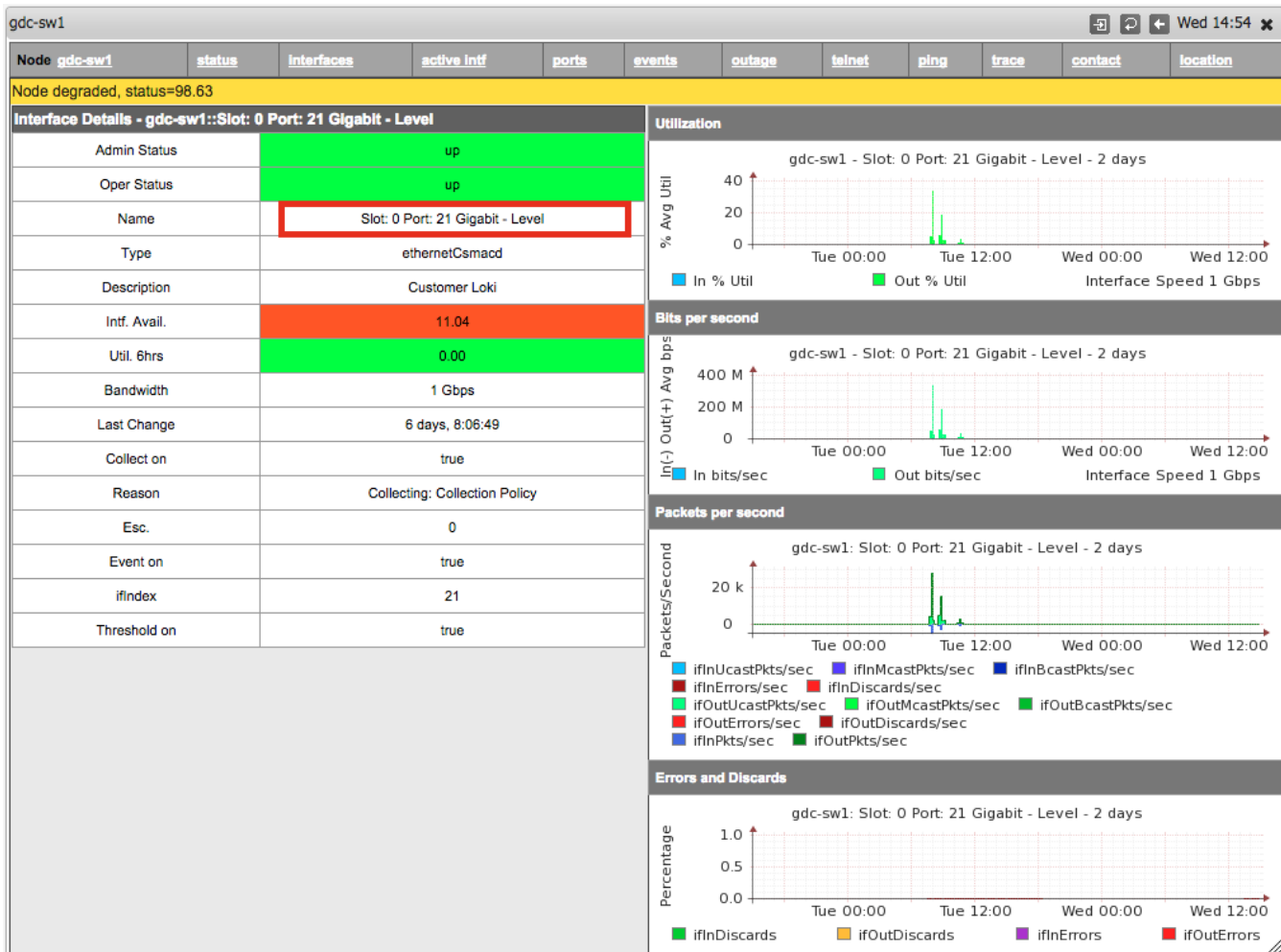
Network Management Information System (NMIS) is very powerful for sending out custom notifications to people who want to be notified about specific things. For example if a network manager wanted to be notified when a specific interface on a specific router or switch was down, you could configure this as an escalation. The following will describe how to configure NMIS Contacts and Escalations to do this.

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## Determine Node and Interface in NMIS

Using the NMIS GUI, find the node, then when viewing the node select "interfaces" or "active intf" to view the interfaces. Please note NMIS will only send notifications for interfaces which are "active" that means NMIS is managing the interface and when "Event on" is equal to true.

We need the interface name, in this example from a NetGear 24 port switch, it has an odd and long name, "Slot: 0 Port: 21 Gigabit - Level", will need this exact text.



## Create a Contact for the Escalation

Create a new contact or edit an existing contact, access the contacts from the NMIS Menu "System -> System Configuration -> Contacts", click on Add or Edit.

Fill in the Contact, Email address at a minimum, in the example below, DutyTime is configured for 24x7 emails, you can also configure this for Business Hours, which would be "08:18:MonTueWedThuFri" for example. This means that emails will only be sent during those times. The other very powerful option is the Level field, here I am saying only send events to this contact which are Fatal or Critical or Major or Normal, alternately I could include all the levels which would be "(Fatal|Critical|Major|Minor|Warning|Normal)". The level for Normal is so that Up Notifications can be set.

More details about configuring Contacts can be found here: [NMIS8 Contacts](#)

Table Contacts	
Contact	NetworkManager
DutyTime	00:24:MonTueWedThuFriSatSun
Level	(Fatal Critical Major Normal)
Email	keiths+nm@opmantek.com
Location	default
Mobile	
Pager	
Phone	
TimeZone	0

\* mandatory fields.

Add Cancel

## Create an Escalation to receive Email Notifications

Create a new escalation policy access the escalations from the NMIS Menu "System -> System Configuration -> Escalation Policy", click on Add.

Configure:

- The **Event** by selecting "**Interface Down**" from the list.
- **Event Node** to be the name of the router or switch. The node name can be a regular expression and will match ignore case sensitive.
- The **Event Element** to be the name of the interface you saved earlier, in this example "Slot: 0 Port: 21 Gigabit - Level". Event Element can be a regular expression and will match ignore case sensitive. There is a known bug in NMIS 8.6.8, where elements with "/" are not processed correctly. In this case, a regular expression should be used. This bug will be fixed in the next release.
- Set the escalation Level you require, in this case it is set to **Level 0**, which means send the notification straight away, setting it to Level 1 would wait for by default 300 seconds (5 minutes) before sending the email, if the interface was to come up within 300 seconds, the event would close and no notification would be sent.
- Lastly the **UpNotify** has been configured to **true** which means an email will be sent when the interface comes up again.

Escalation PolicyWed 15:47

Table Escalations	
Group	default
Role	default
Type	default
Event	Interface Down
Event Node	gdc-sw1
Event Element	Slot: 0 Port: 21 Gigabit - Level
Level 0	email:NetworkManager
Level 1	
Level 2	
Level 3	
Level 4	
Level 5	
Level 6	
Level 7	
Level 8	
Level 9	
Level 10	
UpNotify	true

\* mandatory fields.

AddCancel

## Receiving Less Specific Events

If the manager wanted to receive ANY event associated to this element, the element being the Interface on this node, then you can leave the Event field configured as "default" and any event NMIS generates for this interface will be sent to the manager, like Interface Utilisation, Error Packets, Discarded Packets, etc.

Emails, Notifications and Escalations

Wed 14:51

Table Escalations

Group	default
Role	default
Type	default
Event	default
Event Node	gdc-sw1
Event Element	Slot: 0 Port: 21 Gigabit - Level
Level 0	email:NetworkManager
Level 1	
Level 2	
Level 3	
Level 4	
Level 5	
Level 6	
Level 7	
Level 8	
Level 9	
Level 10	
UpNotify	true

\* mandatory fields.

Add
Cancel

## Resulting Logs in the NMIS Event Log

When all this is configured, and the interface goes down, easily tested on my switch here, you will see an event for the Interface Down in the NMIS event log as well as a log entry letting you know an email was sent and who it was sent to.

Log of Event\_Log

Log Name

Event\_Log

Search String

gdc-sw1

Lines

50

Level

ALL

Sort

Group

Go

Lines:

15 25 50 100 250 500 1000

Level:

ALL Fatal Critical Major Minor Warning Error Normal Unknown

Summary

Log List

NMIS	14-Jan-2015 14:53:37	gdc-sw1	email to keiths+nm@opmantek.com	UP	Notify	Normal	Slot: 0 Port: 21 Gigabit - Level Customer Loki	Time=00:00:29
NMIS	14-Jan-2015 14:53:34	gdc-sw1	Interface Up			Normal	Slot: 0 Port: 21 Gigabit - Level Customer Loki	Time=00:00:29
NMIS	14-Jan-2015 14:53:07	gdc-sw1	email to keiths+nm@opmantek.com	Esc0	Interface Down	Major	Slot: 0 Port: 21 Gigabit - Level Customer Loki	
NMIS	14-Jan-2015 14:53:05	gdc-sw1	Interface Down	Major			Slot: 0 Port: 21 Gigabit - Level Customer Loki	