

## [Enigma NMS – Clusters and Templates](#)

Enigma NMS has very powerful custom grouping mechanism, which we call “**Cluster**”. With clusters you can quickly group Sites, Nodes, Interfaces, Server Processes and Applications. Clusters are present in most reports and views throughout the system as filtering option. Also you can configure “Notification Email” in Cluster, which allows custom alert forwarding to specific email address.

However in large enterprise network environment inevitably there could be a lot of activity such as network node additions, decommissioning and changes effecting node name and interface label and interface status. All this creates a challenge with keeping Clusters content relevant and up to date. This could be quite time and labour consuming exercise, as incorrect Cluster content could lead to incorrect results in network reports and incorrect alert forwarding.

In order to address above challenges we have developed Site, Node and Interfaces Templates, which allow keeping Cluster content up to date dynamically and automatically, thus reducing maintenance overhead.

Nodes, Interface and Site Templates are avail via:

Main Menu → FOR MANAGERS

### **Node Templates.**

Main Menu → FOR MANAGERS → Node Templates



Template Name	Match Patterns	Added/Modified Date
Routers	router pin to any	14/11/2015 16:42:56
Routers and Switches	router pin to any switch pin to any	9/12/2015 07:44:50
Switches	switch pin to any	14/11/2015 14:49:24

Before you can create the Node Template, you will need to create at least one Node Name Match Pattern. Click on “**Node Name Match Patterns**” link.



Match Pattern String	Pattern Position	Added/Modified Date
LADC	any	8/11/2015 17:03:59
NYDC	any	8/11/2015 16:21:07
router	any	14/11/2015 16:42:41
switch	any	14/11/2015 14:48:35

When you are adding a new template “+” or modifying “✎” existing Node Template you will have to define Template Name and select at least one Match Pattern, please see below:

All Node Templates		
Node Name Match Patterns		
<b>Note:</b> You will need to configure <a href="#">Node Name Match Patterns</a> before creating the New Node Template		
Template Name	Match Patterns	Added/Modified Date
Routers	router pin to any	14/11/2015 16:42:56
Routers and Switches	router pin to any switch pin to any	9/12/2015 07:44:50
Switches	switch pin to any	14/11/2015 14:49:24

### Modifying Following Node Template

\* Node Template Name:

Routers and Switches

Minimum Length is 2 chars

\* Match Patterns:

"LADC" pin to "any" position  
"NYDC" pin to "any" position  
"router" pin to "any" position  
"switch" pin to "any" position

Next

### Following Node Template Modified: OK

Node Template Name:

Routers and Switches

Match Patterns:

router pin to any  
switch pin to any

View All Interface Templates

## Site Templates











Main Menu → FOR MANAGERS → Site Templates

Site Templates are configured exactly the same way as Node Templates.









All Site Templates		
Site Name Match Patterns		
<b>Note:</b> You will need to configure <a href="#">Site Name Match Patterns</a> before creating the New Site Template		
Template Name	Match Patterns	Added/Modified Date
Data Centers	Data Center pin to any	14/11/2015 14:54:56

## Interface Templates

Main Menu → FOR MANAGERS → Interface Templates

<div><div></div><div>All Interface Templates</div><div><a href="#">Interface Match Patterns</a></div><div></div><div> <a href="#">Apply Template to the Port Monitor</a></div></div>					
<div> <b>Note:</b> You will need to configure <a href="#">Interface Match Patterns</a> before creating the New Interface Template</div>					
Template Name	Match Patterns	Applied to Port Monitor / Role	Linked Node Template	Linked Site Template	Added/Modified Date
ADSL And Router Links	172.16.1. pin to start ADSL pin to any Laptop pin to any Printer pin to any Router pin to any Test pin to any	 Y - Additional	<b>Routers and Switches</b> <a href="#">Node Match Patterns</a> router pin to any switch pin to any		24/03/2016 19:12:57
Combined WAN and Router Ports	ADSL pin to any Router pin to any Telstra pin to any WAN pin to any	N			9/11/2015 15:56:25
Environment Monitor	Environ pin to any	N			4/03/2016 09:31:47
WAN Ports	Telstra pin to any WAN pin to any	N			18/10/2015 18:20:09
Watermelon	Watermelon pin to any	N			9/11/2015 16:01:43


Before you configure Interface Template, you will have to add at least one “**Interface Match Patterns**” . Click on the link “**Interface Match Patterns**”.
















<div><div></div><div>All Interface Match Patterns</div><div><a href="#">All Interface Templates</a></div><div></div></div>		
<div> <b>Note wildcards use:</b></div> <div>% --&gt; Matches 0 or more chars.</div> <div>"_" --&gt; Matches exactly 1 char.</div>		
Match Pattern String	Pattern Position	Added/Modified Date
172.16.1.	start	24/03/2016 19:12:12
ADSL	any	19/10/2015 07:56:38
Environ	any	4/03/2016 09:31:05
Laptop	any	16/11/2015 09:51:41
Printer	any	16/11/2015 09:51:34
Router	any	18/10/2015 17:02:15
Telstra	any	18/10/2015 18:18:48
Test	any	16/11/2015 09:53:47
WAN	start	21/10/2015 09:55:38
WAN	any	18/10/2015 18:18:35
Watermelon	any	9/11/2015 16:01:15






Interface Templates are different from Node and Site Templates:

- **Interface Template can be overlayed by Node and Site Templates, which allows more accurate detection of required interfaces.**
- **Interface Templates can also be applied to the Port Monitor, please note that only one Interface Template can be applied to the Port Monitor.**

Following is the example of modification of Interface Template. Click on “” link:

<div> <b>All Interface Templates</b></div> <div><a href="#">Interface Match Patterns</a></div> <div></div> <div> <a href="#">Apply Template to the Port Monitor</a></div>					
 <b>Note:</b> You will need to configure <a href="#">Interface Match Patterns</a> before creating the New Interface Template					
Template Name	Match Patterns	Applied to Port Monitor / Role	Linked Node Template	Linked Site Template	Added/Modified Date
 <u>ADSL And Router Links</u>	172.16.1. pin to start ADSL pin to any Laptop pin to any Printer pin to any Router pin to any Test pin to any	 Y - Additional	<b>Routers and Switches</b> <a href="#">Node Match Patterns</a> router pin to any switch pin to any		24/03/2016 19:12:57
 Combined WAN and Router Ports	ADSL pin to any Router pin to any Telstra pin to any WAN pin to any	N			9/11/2015 15:56:25
 Environment Monitor	Environ pin to any	N			4/03/2016 09:31:47
 WAN Ports	Telstra pin to any WAN pin to any	N			18/10/2015 18:20:09
 Watermelon	Watermelon pin to any	N			9/11/2015 16:01:43




**Modifying Following Interface Description Template**

• Interface Description Template Name:

ADSL And Router Links

Minimum Length is 2 chars


 • Match Patterns:

"172.16.1." pin to "start" position

"ADSL" pin to "any" position

"Environ" pin to "any" position

"Laptop" pin to "any" position

 Please be careful here!

If Optional Node or Site Templates below are selected,  
they will be applied as "Logical AND"

Select Optional Node Template:




Routers and Switches


Select Optional Site Template:

— No Site Template Selected —

Next

Define the template name, select relevant Match Patterns and overlaying Node and Site Templates if applicable and click “Next” button.




**Following Interface Description Template Modified: OK**

Interface Description Template Name:	ADSL And Router Links
Match Patterns:	<b>172.16.1.</b> pin to <b>start</b> <b>ADSL</b> pin to <b>any</b> <b>Laptop</b> pin to <b>any</b> <b>Printer</b> pin to <b>any</b> <b>Router</b> pin to <b>any</b> <b>Test</b> pin to <b>any</b>
 <b>Warning:</b> You seem to have selected Optional Node or Site Templates Please note - they will be applied as "Logical AND"	
Optional Node Template:	Routers and Switches
Optional Site Template:	
<div>View All Interface Templates</div>	

Please note that Enigma NMS uses internal logic to determine if particular interface needs to be monitored for Operational Status changes i.e. UP/Down Events.



According to Enigma NMS default logic, interface operational status will be monitored and alerted upon if:


- **Interface is a trunk port between two network devices, e.g. switch↔switch or switch↔Router, which also includes layer 2 and 3 ether-channels.**
- **Interface is a routed link with a valid IP Address.**
- **Interface has multiple MACs visible on it, the default MAC count is 3 MACs, which can be modified via relevant system settings.**


Also if Interface satisfies any of the above conditions it has to be in Operational “Up” state before the monitoring is turned on. But once the monitoring has been turned it stays on.


The default logic can be overwritten manually on per node basis or in bulk by Interface Summary Report or by Interface Template if it is applied to Port Monitor.

If you need to apply Interface Template to the Port Monitor, click on “Apply Template to the Port Monitor” link:


**All Interface Templates**  
[Interface Match Patterns](#)  


 **Note:** You will need to configure [Interface Match Patterns](#) before creating the New Interface Template

 **Note:** There is Only **ONE** Template can be applied to the **Port Monitor**

 **Note:** If you select the template's role to be **Explicit**,  
**the ONLY Interfaces, that match the pattern strings will be enabled for Operational Status Monitoring.**  
**Please use with caution!**

Template Name	Match Patterns	Select "Applied to Port Monitor" flag and Role	Linked Node Template	Linked Site Template	Added/Modified Date
ADSL And Router Links	172.16.1. pin to start ADSL pin to any Laptop pin to any Printer pin to any Router pin to any Test pin to any	<input checked="" type="radio"/> ---> Role: <div style="border: 1px solid black; padding: 2px; display: inline-block;"> Additional  Additional  Explicit </div>	<b>Routers and Switches</b> <a href="#">Node Match Patterns</a> router pin to any switch pin to any		3/04/2016 15:40:34
Combined WAN and Router Ports	ADSL pin to any Router pin to any Telstra pin to any WAN pin to any	<input type="radio"/> ---> Role: Additional			9/11/2015 15:56:25
Environment Monitor	Environ pin to any	<input type="radio"/> ---> Role: Additional			4/03/2016 09:31:47
WAN Ports	Telstra pin to any WAN pin to any	<input type="radio"/> ---> Role: Additional			18/10/2015 18:20:09
Watermelon	Watermelon pin to any	<input type="radio"/> ---> Role: Additional			9/11/2015 16:01:43

The “**Role**” flag determines how Interface Template is affecting the Port Monitor. If the role is set to be “Additional” then interfaces matching the relevant match patterns and overlaying Node and Site Templates will be added to the Port Monitor without affecting interfaces, which are already covered by Port Monitor.

If the role is set to “Explicit” then **ONLY** interfaces matching the relevant match patterns and overlaying Node and Site Templates will be added to the Port Monitor and all non-matching interfaces will be removed from the Port Monitor.

Please have full understanding and exercise maximum care when you apply Interface Templates to the Port Monitor.

Since we have covered Templates we will move onto the Clusters.

## Clusters

As stated at the beginning of this article clusters are flexible and custom way to group various system objects together.

Clusters can be accessed via

Main Menu → CLIENTS → All Clusters

All Clusters Found: 13 Clusters										
Cluster Name	Cluster Code	Client	Email	Linked Sites and Site Templates	Linked Nodes and Node Templates	Linked Interfaces and Interface Templates	Linked Processes	Linked Apps	Linked People	Modified By/A
All WAN Thresholds	AW	Demo Client	n/a	n/a	n/a	n/a	n/a	n/a	n/a	G. A. / 3/03/201
Herb Cluster Thresholds Dashboard Top Stats Historical Stats	HC	Demo Client	n/a	n/a	n/a	Template: <a href="#">Environment Monitor</a> → Role: Exploit 7 Interfaces	n/a	n/a	n/a	S. A. / 4/03/201
Kerry Cluster Thresholds	KC	Demo Client	n/a	n/a	n/a	n/a	n/a	1 Applications	n/a	S. A. / 23/02/20
Router Interfaces Thresholds Dashboard Top Stats Historical Stats	RT	Demo Client	n/a	n/a	n/a	Template: <a href="#">ADSL And Router Links</a> → Role: Additional 20 Interfaces	n/a	n/a	n/a	S. A. / 23/02/20
SNR TEST Cluster Thresholds	Snr test	Demo Client	n/a	1 Sites	n/a	n/a	n/a	n/a	n/a	S. A. / 15/03/20
Security team Interfaces Thresholds Dashboard Top Stats Historical Stats	STI	Demo Client	n/a	n/a	n/a	25 Interfaces	n/a	n/a	n/a	S. A. / 15/03/20
Test Business Service Thresholds Dashboard Top Stats Historical Stats	TBS	Demo Client	support@netsas.com.au Role: Additional	Template: <a href="#">Data Centers</a> → Role: Exploit 3 Sites	Template: <a href="#">Routers</a> → Role: Exploit 2 Nodes	Template: <a href="#">ADSL And Router Links</a> → Role: Exploit 19 Interfaces	8 Processes	2 Applications	S. Admin DEMO	S. A. / 23/02/20
abksbdc Thresholds	ccscsdc	External Monitoring Domain	n/a	n/a	n/a	n/a	n/a	n/a	n/a	G. A. / 3/03/201
External Web Sites Thresholds Dashboard Top Stats Historical Stats	EWB	External Monitoring Domain	n/a	2 Sites	6 Nodes	n/a	n/a	n/a	n/a	S. A. / 27/02/20
Lab Devices Thresholds Dashboard Top Stats Historical Stats	LD	Pathology	n/a	n/a	7 Nodes	n/a	n/a	n/a	n/a	S. A. / 9/11/201
Pathology Cluster Thresholds Dashboard Top Stats Historical Stats	PT	Pathology	support@pathology.com Role: Additional	n/a	n/a	Template: <a href="#">WAN Ports</a> → Role: Exploit 26 Interfaces	n/a	n/a	n/a	S. A. / 11/11/20
Some Ports Thresholds	SP	Pathology	n/a	n/a	n/a	n/a	n/a	n/a	n/a	S. A. / 11/11/20
sxaxxaxs Thresholds	SSBXBXBXBXBX	Pathology	n/a	n/a	n/a	n/a	n/a	n/a	n/a	G. A. / 3/03/201

To create a new cluster, please click on “+” icon:

Adding new Cluster

Cluster Name:

My New Cluster

Cluster Code:

MNC

+

Client:

-- Please choose one --

Demo Client

External Monitoring Domain

Gold Coast

Pathology

unassigned

Please note that Cluster Client is used as a filter for User Visibility of the clusters. Only users who belong to relevant client or belong to the relevant Workgroup, which is linked to particular client, will be able to see the cluster.

Following NEW Cluster added: OK

Cluster Name:

My New Cluster

Cluster Code:

MNC

Client:

Demo Client

View All Clusters







**Modifying Linked Nodes**

Linked Nodes:
n/a

Link Nodes (Multiple): Node name search pattern:
Pin pattern to Any

**Note:** Nodes, which are already linked to this Cluster are Excluded
Site search pattern:
Pin pattern to Any

Compare pattern to Both

Apply Filter: N

3com\_lab\_switch (IP: 192.168.1.78) - AUTO DISCOVERED HOST on 20151006 (SNMP) - CLIENT: HJH  
ARMONODETEST.1.AAA (IP: 192.168.1.114) - AUTO DISCOVERED HOST on 20140414 (SNMP) - CLIENT: DEMO  
Broadcom (IP: 192.168.1.1) - AUTO DISCOVERED HOST on 20140905 (SNMP) - CLIENT: DEMO  
cisco-wlc-4402 (IP: 192.168.1.50) - Cisco WLC 4402 - 12APs - CLIENT: HJH  
ciscoccm1-cluster (IP: 137.45.229.21) - Cisco Call Manager - CLIENT: DEMO  
DBC\_PRINTER (IP: 192.168.1.45) - AUTO DISCOVERED HOST on 20131209 (SNMP) - CLIENT: GC  
demo-64-binary.one-nms.com (IP: 192.168.1.108) - AUTO DISCOVERED HOST on 20140302 (SNMP) - CLIENT: DEMO  
demo-64.enigma-nms.com (IP: 192.168.1.100) - ENIGMA NMS Server - Mandatory System Record - CLIENT: DEMO  
demo-65-32.netsas.com.au (IP: 192.168.1.85) - AUTO DISCOVERED HOST on 20140622 (SNMP) - CLIENT: DEMO  
enigma-32 (IP: 192.168.1.102) - AUTO DISCOVERED HOST on 20131209 (SNMP) - CLIENT: DEMO

Or you can use the Node Template, click on “” for Linked Node Template:

**Modifying Linked Node Template**

Linked Node Template:

Select Node Template:

Routers and Switches

--> Role:

Explicit

Link Node Template to this Cluster

After you click on “Link Node Template to this Cluster” button, system will find all nodes, which match relevant template and add them to the cluster. Please note the Role is set to “Explicit” meaning that all nodes which maybe currently linked to this cluster but don’t match the template will be removed from this cluster. Background process will regularly refresh cluster content and if new nodes added to the database, match the Node Template, they will be added to the cluster, keeping this cluster’s content dynamically up to date.

All Clusters

Thresholds

Dashboard

Top Stats

Historical Stats

Single Cluster

Cluster Name:	<b>My New Cluster</b>
Cluster Code:	MNC
Client:	Demo Client
Notification Email Address:	n/a
Linked Site Template:	n/a
Linked Sites:	n/a
Linked Node Template:	<u>Routers and Switches</u> --> Role: <u>Explicit</u>
Linked Nodes:	<div style="font-family: monospace; font-size: 0.9em;"> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: red; margin-right: 5px;"></div> <div>3com_lab_switch (192.168.1.78) AUTO DISCOVERED HOST on 20151006 (SNMP)</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: green; margin-right: 5px;"></div> <div>lab_cisco2821_router (192.168.1.144) AUTO DISCOVERED HOST on 20131209 (SNMP)</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: green; margin-right: 5px;"></div> <div>Lab_router.netsas.com.au (192.168.1.254) AUTO DISCOVERED HOST on 20131209 (SNMP)</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: green; margin-right: 5px;"></div> <div>lab_switch (192.168.1.70) Lab Switch Cisco3560</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: green; margin-right: 5px;"></div> <div>lab_switch_lwapp (192.168.1.75) AUTO DISCOVERED HOST on 20140327 (SNMP)</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: red; margin-right: 5px;"></div> <div>my_new_switch (192.168.30.30) new switch data_center</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: red; margin-right: 5px;"></div> <div>my_new_switch_next (192.168.30.40) new switch data_center_next</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; border-radius: 50%; background-color: red; margin-right: 5px;"></div> <div>my_new_switch_next_aaa (192.168.30.50) new switch data_center_next_aaa</div> </div> </div>
Linked Interface Template:	n/a
Linked Interfaces:	n/a
Linked Processes:	n/a
Linked Applications:	n/a
Linked People:	n/a
Added/Moded by/at:	S. A. / 3/04/2016 16:24:06

You can group Interfaces the same way. To configure the Email address, please click on “✎” icon at the top and on “✎” at the “Linked Interfaces” line:

Modifying Linked Interfaces

Linked Interfaces: n/a

Link Interfaces (Multiple): Node name search pattern: Pin pattern to: Any

Please note: Interfaces, which are already linked to this Cluster are EXCLUDED Site search pattern: Pin pattern to: Any

Compare pattern to: Both

Apply Filter: N

Show All Nodes

Interface name or description search pattern: Apply Filter: N Showing up to 5000 Interfaces

3com\_lab\_switch - Aux1/0/0 Aux1/0/0 Interface Oper Status: up CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/1 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/10 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/11 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/12 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/13 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/14 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/15 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/16 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/17 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/18 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/19 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/2 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/20 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/21 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/22 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/23 Oper Status: down CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/24 Oper Status: up CLIENT: EMD  
3com\_lab\_switch - Ethernet1/0/3 Oper Status: down CLIENT: EMD

Of for the Interface Template, please click on “✎” icon at the top and on “✎” at the “Linked Interface Template” line:

Modifying Linked Interface Template

Linked Interface Template: Select Interface Template: -- None -- --> Role: Additional

Linked Interfaces: n/a

Linked Processes: n/a

ADSL And Router Links  
Combined WAN and Router Ports  
Environment Monitor  
WAN Ports  
Watermelon

Single Cluster

All Clusters Thresholds Dashboard Top Stats Historical Stats

Cluster Name: My New Cluster

Cluster Code: MNC

Client: Demo Client

Notification Email Address: n/a

Linked Site Template: n/a



Linked Sites: n/a

Linked Node Template: Routers and Switches --> Role: Explicit

Linked Nodes: 3com\_lab\_switch (192.168.1.78) AUTO DISCOVERED HOST on 20151006 (SNMP)  
lab\_cisco2821\_router (192.168.1.144) AUTO DISCOVERED HOST on 20131209 (SNMP)  
Lab\_router.netsas.com.au (192.168.1.254) AUTO DISCOVERED HOST on 20131209 (SNMP)  
lab\_switch (192.168.1.70) Lab Switch Cisco3560  
lab\_switch\_fwapp (192.168.1.75) AUTO DISCOVERED HOST on 20140327 (SNMP)  
my\_new\_switch (192.168.30.30) new switch data\_center  
my\_new\_switch\_next (192.168.30.40) new switch data\_center\_next  
my\_new\_switch\_next\_aaa (192.168.30.50) new switch data\_center\_next\_aaa

Linked Interface Template: ADSL And Router Links --> Role: Explicit

Linked Interfaces: lab\_cisco2821\_router (192.168.1.144) - GigabitEthernet0/1.2 MIK TEST 20110603 - AAA 100 Mbps, Oper Status: up IP: 192.168.2.252  
lab\_cisco2821\_router (192.168.1.144) - Tunnel1 100 kbps, Oper Status: up IP: 172.16.1.2  
Lab\_router.netsas.com.au (192.168.1.254) - FastEthernet0.2 MIK TEST 20110603 - AAA 100 Mbps, Oper Status: up IP: 192.168.2.254  
Lab\_router.netsas.com.au (192.168.1.254) - Tunnel1 9 kbps, Oper Status: up IP: 172.16.1.1  
lab\_switch (192.168.1.70) - FastEthernet0/1 ADSL Router 100 Mbps, Oper Status: up  
lab\_switch (192.168.1.70) - FastEthernet0/10 Warren Test Link 10 Mbps, Oper Status: down  
lab\_switch (192.168.1.70) - FastEthernet0/14 10 Mbps, Oper Status: down  
lab\_switch (192.168.1.70) - FastEthernet0/19 Mikes old laptop 10 Mbps, Oper Status: down  
lab\_switch (192.168.1.70) - FastEthernet0/2 Canon Printer 100 Mbps, Oper Status: up  
lab\_switch (192.168.1.70) - FastEthernet0/20 10 Mbps, Oper Status: down  
lab\_switch (192.168.1.70) - FastEthernet0/24 Trunk to Cisco Router 100 Mbps, Oper Status: up  
lab\_switch (192.168.1.70) - FastEthernet0/3 ONE-NMS 64 SSD 100 Mbps, Oper Status: up  
lab\_switch (192.168.1.70) - FastEthernet0/4 MC TEST Dec 13 CCC 10 Mbps, Oper Status: down  
lab\_switch (192.168.1.70) - FastEthernet0/5 Enigma VM 10 Mbps, Oper Status: down  
lab\_switch (192.168.1.70) - FastEthernet0/6 TEST 12345 FOR JEST TODAY 20160229 100 Mbps, Oper Status: up  
lab\_switch (192.168.1.70) - FastEthernet0/7 TEST ABC FOR JESPER 10 Mbps, Oper Status: down

Please note the cluster field called “Notification Email Address”. If configured all alerts for relevant Nodes and Interfaces will be sent to email address. To configure the Email address, please click on “” icon at the top and on “” at the “Notification Email Address” line:



Modifying Notification Email Address

Notification Email Address: For multiple email addresses, please use "white-space( )", "comma(.)" or "semi-column(:)"

→ Role: Additional ▼

Additional

Explicit

Modify Notification Email Address

Please note the “Role” flag. If it is set to Explicit then alerts for relevant nodes and interfaces will be sent ONLY to this email address, overwriting the default notification logic:

**Interface → Node → Client → Workgroup → On-Call Engineer.**

Once you configure cluster content it will become avail as filtering option on the most reports and view throughout the system.