# opHA 3 - Integration with other products

In this document, a description about the opHA 3 features when integrating with other products will be made.

- NMIS 9
  - Standalone Server
  - o Primary Server
  - Poller Server
  - ° Summary
- opHA
  - Standalone Server
    - Primary Server
  - Poller Server
- opCharts
- opEvents
- opConfig
- opReports

## NMIS 9

opHA will synchronise all the NMIS 9 database information. That means:

- · Log files from the pollers will not be synchronised
- RRD files will not be moved

The functional differences between a primary, poller and standalone server are as follows:

#### **Standalone Server**

- It will poll all the local nodes
- All the local nodes can be managed locally.

#### **Primary Server**

- It can poll local nodes
- It will have information about the remote nodes
- It will create network metrics for local and remove nodes
- Just Local nodes can be edited
- It will redirect to the poller to read information for remote nodes

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🔊 NINIS 9.2.3 - VOIIa 🕻	NMIS Modules	✓ NMIS9 ✓	Mon Sep 06 18:34:02 202					
letwork Status Network Perform	ance Network To	ols Reports Service Desk Setu	p System Windows Help					
Metrics 🖸 🎦 Mon 9:34 🗙	Network Metrics and		🖸 💽 Mon 9:34 🗙					
Metric 89%	Axtell 🕀 🖸 M Axtell is managed	10n 9:34 🗙	02118:33:21 to 06-Sep-202118:33:21					
Reachability 89%	A Not Secure	fulla.opmantek.net/cgi-nmis9/net	Axtell - fulla etwork.pl?act=network_node_view&refresh=300&widget=false&node=Axt					
▲ InterfaceAvail 99%	NMIS 9.2.3 No	ode <u>Axtell</u> <u>status</u> <u>interfaces</u>	active intf events outage Diagnostic - contact location					
Health 85%	Node Details - Ax	tell - <u>Edit Node</u> - <u>Node Configura</u>	tion - Node Context - SSH to Node					
85%	nodestatus	reachable	KPI Scores					
ResponseTime 29ms	System Name	AXTELL_5K_1	Reachability ▲ 10/10         Availability ▲ 10/10         Response ▲ 20/20         CPU ▲ 20/20					
	IP Address	10.152.0.39	MEM 🛦 10/10 Interface 🛦 30/30					
Quick Search 🔁 🗙	Backup IP Address		Key Performance Indicators					
Group Model Type Role	uuid	0916899d-9a01-5633-900a- 2f781488add1	Axtell - 2 days           5         0           Sun 00:00         Sun 12:00           Meachability, KPI         Availability, KPI           Availability, KPI         Availability, KPI           Mem KPI         Avg. 9.95%           Mem KPI         Avg. 9.95%           Overall Health Avg. 9.85%           Overall Reachability, KPI avg. 19.75%					
Net	Group	SNMPSIM						
Vendor Filter Device list by input string	Customer	Opmantek						
ASGARD	Location	HeadOffice						
Angmar Axtell	Business Service	Web Page						
Beattie C880	Service Status	Development						
Ciena-Waveserver CiscoISR4451	Notes		Axtell - 2 days					
FortiGate_100F	Туре	generic	± ∦					
Reset the List	Model	Default	Sun 00:00 Sun 12:00 Mon 00:00 Mon 12:00					
VMIS Community	Polling Policy	default	Health Avg 99.826% ■ Reachability Avg 99.826% Availability Avg 99.999% ■ Ping_loss Avg 0.288%					
NMIS 9 Installation Guide, Mark	Uptime	125 days, 11:13:51	Response Time in milliseconds					
Unwin, 2021-09-01           New NMIS9 Virtual Machine Release           2021-08-19, Robin Twiggs, 2021-08-27	SNMP Location	Axtell CO (hiding in Chuck Norris's shadow)	É 90 Axtell - 2 days					
Simplified Chinese Language	Contact	www.adtran.com	50 50 50 50 50 50 50 50 50 50 50 50 50 5					
Support, Simon May, 2021-08-26	Description	TA5000 23 inch shelf	2 Sun 00:00 Sun 12:00 Mon 00:00 Mon 12:00 ■ Response msec. Avg 40.64 msec Max 114.05 msec					
More News //.	Interfaces	29504	1					

Remote node is redirected from the primary.

#### **Poller Server**

- It will poll local nodes.
- Nodes must be edited from primary server.
  All the information can be read from the poller.

\delta N	MIS 9.2.3 - fulla NMIS Mod	lules 🗸	•					[?]	Mon Sep 0	6 18:40:33 202	1 AEST Use
Network	NMIS Nodes (devices)									ÐP	1on 9:40 🗙
Metrics						This peer is a poller. Con	figuration m	ust be set in	the master.		
8Hr Su	Table Nodes										
Metr	Name	UUID	Host Name/IP Address	Fallback Host Name/IP Address	Group	Customer	Business Service	Display Name	Notes	Location	Polling Policy
▲ Inter	abc-cust1	251b85ed- 6ab7-11e8- 8a70- ac79be6c7f0d	10.248.255.16		ABC_Corp	Opmantek			vyos-ce1	Los Angeles	default
A Heal	Adtran-TA5000	ed4469f7- 7e43-57d9- af0e- 77093f792a80	10.152.0.39		SNMPSIM	Opmantek	eMail			default	default
Quick S Select D	amor	488c4434-ffc7- 11e6-a1bd- 92267129d77a	amor.opmantek.com		Branches		Web Page				default
Group Mode Type Role	Angmar	16a60f09- 0fdc-5469- bffe- e64ecfc237cf	138.68.11.77		East_Net_Dist					HeadOffice	quicklime
Net Vendo Filter De	apc-ups	324e43c3- 3c23-504d- b0fa- 2786b8223e4b	192.168.88.250		DataCentre	onecustomer				Gold Coast	default
Angma Axtell Beattie C880 Ciena-\ Huawe	AroValley	8c8beeb9- 4283-5875- 98fd- 924a97e9018c	210.54.38.168		Branches	3costumers			James moved house.	Aro	default

Node configuration view in the poller: Not possible edition.

## Summary

Action	Standalone	Primary	Poller
View local Nodes	<b>v</b>	<b>I</b>	
View Remote Nodes	<b>v</b>	<b>I</b>	8
Edit Local Nodes	<b>v</b>	<b>v</b>	8
Edit remote Nodes	8	<b>v</b>	8
Poll Local Nodes	<b>v</b>	<b>v</b>	<b>v</b>
Poll Remote Nodes	8	8	8

# opHA

The views from the poller and the primary will change.

## **Standalone Server**

We will access the main screen, just the local information will be available.

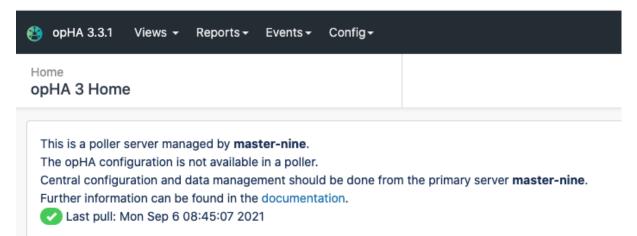
# **Primary Server**

We will see all the actions and all the pollers:

🚷 op	HA 3.3.1 Views 👻 Events 🗸	Config <del>-</del>				System
Home opHA	A 3 Home					
ор	HA Menu		Pollers			
			poller-nine		fulla	
	Peers		Last pull	Mon Sep 6 08:45:08 2021	Last pull	Mon Sep 6 08:45:06 2021
Discover and manage peers		Pull Status	Success	Pull Status	Success	
			Nodes	522	Nodes	76
			DB status		DB status	
	Configuration Edit remote configuration files		Opevents	d opconfigd opchartsd	opchartso	opeventsd opconfigd
	E		(		(	
	Log Peers last activity		nn	nis9d omkd	nm	is9d omkd

#### **Poller Server**

We will see a message that indicate us that it is a poller:



# opCharts

As opCharts operates with NMIS 9 data, we will be able to see and use the remote nodes as local nodes from opCharts, and use them in Charts or maps.

We just need:

- opHA keeps synchronising the data in order to be updated.
- The nodes should be activated for opCharts in order to see them.
- Have opHA urls configured correctly.

OpCharts 4.2.8	5 Views <del>-</del> Events - Config	g <del>-</del> Sea	rch Nodes	~ Q	System <del>-</del>	Modules - Help -	🌐 EN 👻 U	ser: nmis
Home / Nodes / Be Beattie	eattie	Node Per	formance Graphs			Filter	2d 🔻 🕄	
🌍 🚠 🛡	ø	Overall Reachability, Avai	lability and Health (2d)	•	Key Performance Ind	icators (2d)		۲
Node Info	2	150			Sunday, Sep 5, 00:30 • Disk KPI: 0.00 • SWAP KPI: 0.00	₹.		
Status	reachable	100			• MEM KPI: 10.00		V	
SNMP	up	6 Health			<ul> <li>Availability KPI: 10.</li> <li>Reachability KPI: 10.</li> </ul>			
group	SNMPSIM	50			<ul> <li>CPU KPI: 20.00</li> <li>Response KPI: 20.0</li> </ul>			
host	10.152.0.39				Interface KPI: 30.00	5. Sep 12:00	6. Sep	
host addr		0 12:00	5. Sep 12:00 6. Se	p		ty KPI Avg 9.98% — <u>Availability</u> KPI Avg 19.96% — <u>CPU KPI</u>	KPI Avg 9.98% Avg 19.96%	
location		- Health Ave	99.822% - Reachability Avg 99.822	%	MEM KPI	Avg 9.98% <u>SWAP KPI</u> PI Avg 29.95% <u>Disk KPI</u>	Avg 0.00% Avg 0.00%	
nodeVendor	Adtran	Availability Ave	g 100.000% - Ping_loss Avg 0.234%		Overall Health A		nig clock	
nodeModel	Default							
sysDescr	TA5000 23 inch shelf	Topology	Zoom Loc	k 오	Event History			_
Last Updated						Search term	Event 🔻	Go X
Uptime	125 days, 8:05:09						Incident	
Managed by	fulla				Start Time 🗸	Event	Level	Active
I Node Interfac	ce Summary				2021-09- 06T08:34:02	Proactive Baseline Response Delta	Major	True
	dmin Status Oper Status orted with Oper Status marked				<ul> <li>2021-09- 06T07:24:03</li> </ul>	Proactive Baseline Response Delta Closed	Minor	False
« < 1	down		$\searrow$	1	<ul> <li>2021-09- 06T06:54:03</li> </ul>	Proactive Baseline Response Delta Closed	Warning	False
»	·				<ul> <li>2021-09- 06T06:44:02</li> </ul>	Proactive Baseline Response Delta Closed	Warning	False
More					<ul> <li>2021-09- 06T06:29:03</li> </ul>	Proactive Baseline Response Delta Closed	Minor	False
	Summary 🔹				• 2021-09-	Proactive Baseline	Minor	False
I Node Status Event L	Level Value				06T06:19:03	Response Delta Closed		
					06T06:19:03 2021-09- 06T05:24:03	Response Delta Closed Proactive Baseline Response Delta Closed	Minor	False

Remote node from the primary.

As RRD data is not synchronised, opCharts makes a remote call to visualise the graph information. If you cannot see the graphs, please review this information.

#### opEvents

opHA just synchronises the information collected by NMIS9. But there are different approaches regarding opEvents data integration between servers:

- Using the opEvents API
- Send events to the primary server using syslog.

Depending on the followed approach, the opEvents rules can be set up in the poller or the primary.

They should be set up in the primary in case os using the syslog approach.

If we are using the API they can be set up in the poller or the primary. It is a common approach to just send the important events to the primary.

#### opConfig

opHA does not provide integration at the moment for opConfig.

opConfig will work just with local nodes.

#### opReports

opHA does not provide integration at the moment for opReports.

As opReports uses rrd data and this is not synchronised.

The reports must be created from the pollers, and use local data. Then the reports can be synchronised with the primary server.