opCharts User Guide

Introduction

Opmantek's opCharts module is an industry leading custom dashboard tool designed specifically to enable users to generate targeted, custom single-pane of glass views into the network's performance - both current and over time. Drawing data from NMIS as well as 3rd party SQL databases, opCharts puts the power into the user's hands to build dynamic interfaces by combining Components into single or multilayer visual landscapes called Dashboards.

By abstracting data into Key Performance Metrics, and combining and sorting devices into dynamic groups through user-defined metadata, opCharts can easily support high-level abstracted user views at the 50,000 ft level while still allowing quick drill-down into detailed performance metrics for fast problem resolution.

Executive or technician - opCharts gives each user the power to easily organize and view their network's performance *the way they want to see it*.

Overview

opCharts supports five primary views: Nodes, Interfaces, Monitored Services, Dashboards, and TopN.

Nodes View

To open the Nodes View, select Views -> Nodes from the opCharts menu bar. By default, this displays a list of all nodes in your environment, but you can also select Panel View to abstract each nodes performance information into easy-to-understand panels. These panels include such information as the node name, node status, vendor, and key performance information regarding each node.

Note The Nodes view is the default view for opCharts unless a default Dashboard has been assigned to the user account.

Panel view

In this view each node is represented by a panel versus a line in a table. Each panel provides important information for the represented node. Some of this information is conveyed via dials. There are two options to chose from in regard to how data is displayed in the 'node panel dials'. Please refer to the administration guide in order to switch between the two panel dial options.

Node Panel Dial Display Options:

- KPI based
- Resource based

KPI based

In this mode the dials represent the health of the KPI being measured, higher ratings are more desirable. In the example below with the CPU at 4.3% utilization the KPI score is 95.7%; a desirable condition. If a KPI value is below the desired standard the dial will turn red.

Resource based

In this mode the dial represents the amount of resource consumption. In the example below the CPU utilization for asgard is at 6%; a desirable and the dial is green. The memory usage of bne-server1 is at 94.1%; an undesirable condition and the dial is red.
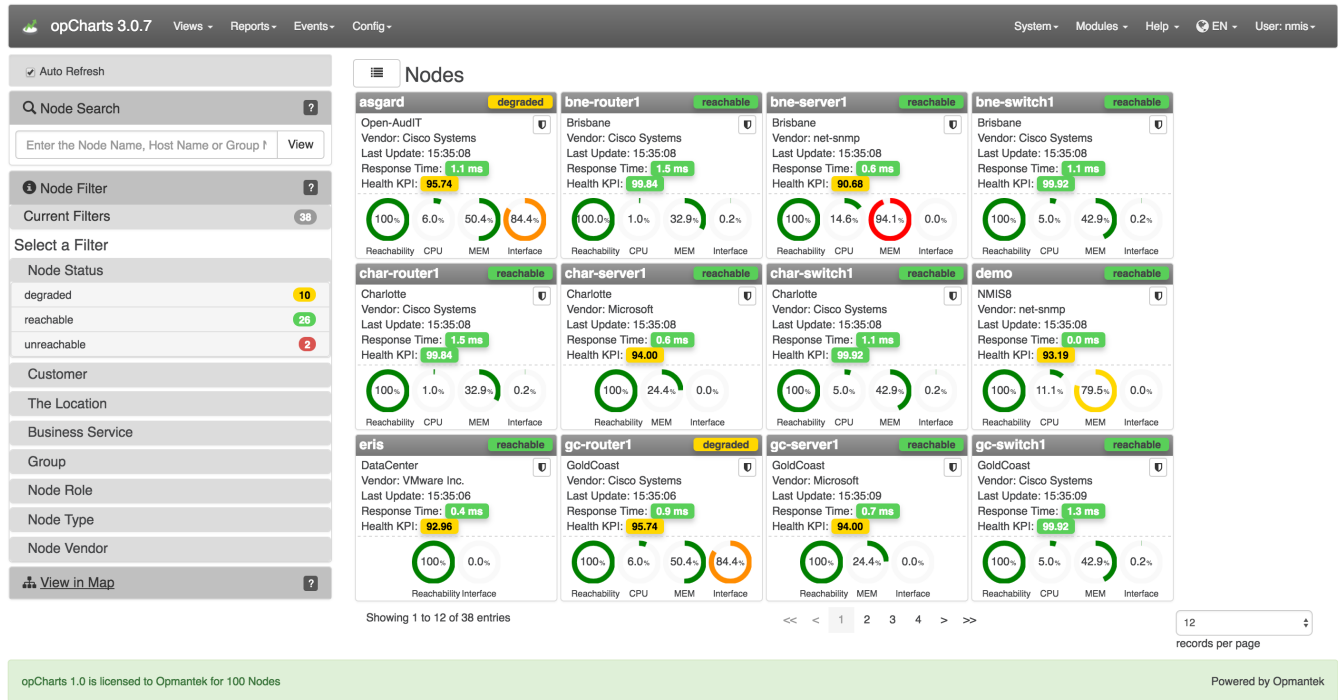
Interfaces View

To open the Interfaces View, select Views -> Interfaces from the opCharts menu bar (Views Inventory in opCharts 4). This view provides an easy-to-search list of all interfaces in your environment. From here, the user can drill down into the details of individual nodes and interfaces.

Interfaces

Search term | Node | ▲ | Go

Node ▲	Interface	Description	IP	Mask	Subnet	Speed	Type	Index	AdminStatus	Collect
asgard	Tunnel99		192.168.89.1	255.255.255.0	192.168.89.0	9000	tunnel	9	down	false
asgard	FastEthernet0/1	WAN/DSL	120.29.0.101	255.255.255.248	120.29.0.96	100000000	ethernetCsmacd	2	up	true
asgard	Tunnel42	Connection to other locations	192.168.90.18	255.255.255.252	192.168.90.16	9000	tunnel	8	up	true
asgard	FastEthernet0/0	Opmantek LAN	192.168.88.254	255.255.255.0	192.168.88.0	100000000	ethernetCsmacd	1	up	true
asgard	Null0					10000000000	other	4	up	false
asgard	Tunnel100	Connection to Oxford Lab	192.168.90.22	255.255.255.252	192.168.90.20	9000	tunnel	10	up	true
asgard	Tunnel0	Hurricane Electric IPv6 Tunnel Broker				9000	tunnel	7	up	true
asgard	Serial0/0/0					1544000	propPointToPointSerial	3	down	false
asgard	Dialer1194					56000	propPointToPointSerial	11	down	false
asgard	Loopback0	Peering LoopBack	192.168.90.2	255.255.255.255	192.168.90.2	8000000000	softwareLoopback	6	up	false
bne-router1	FastEthernet0/1	OnTheNet WAN Link	121.50.209.30	255.255.255.252	121.50.209.28	100000000	ethernetCsmacd	2	up	true
bne-router1	Dialer1					56000	propPointToPointSerial	7	down	false
bne-router1	Serial0/0/0					1544000	propPointToPointSerial	3	down	false
bne-router1	FastEthernet0/0	DMZ towards office LAN	120.29.0.102	255.255.255.248	120.29.0.96	100000000	ethernetCsmacd	1	up	true
bne-router1	Null0					10000000000	other	4	up	false
bne-router1	Loopback0	CNOC: Local routing peer	192.168.90.1	255.255.255.255	192.168.90.1	8000000000	softwareLoopback	6	up	true
bne-server1	lo		127.0.0.1	255.0.0.0	127.0.0.0	100000000	softwareLoopback	1	up	false
bne-server1	eth0		192.168.88.8	255.255.255.0	192.168.88.0	1000000000	ethernetCsmacd	2	up	true
bne-switch1	GigabitEthernet1/0/7					10000000	ethernetCsmacd	10107	up	false
bne-switch1	GigabitEthernet1/0/20	OMK DMZ Subnet				100000000	ethernetCsmacd	10120	up	true
bne-switch1	GigabitEthernet1/0/15					10000000	ethernetCsmacd	10115	up	false
bne-switch1	GigabitEthernet1/0/8					10000000	ethernetCsmacd	10108	up	false
bne-switch1	GigabitEthernet1/0/2	magni remote access card				100000000	ethernetCsmacd	10102	up	true
bne-switch1	GigabitEthernet1/0/23	uplink router asgard				100000000	ethernetCsmacd	10123	up	true
bne-switch1	GigabitEthernet1/0/22	router oor				10000000	ethernetCsmacd	10122	up	false

Showing 1 to 25 of 492 entries　　　　　<<　<　1　2　3　4　5　>　>>　　　　25 ▲ records per page

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Monitored Services View

To open the Monitored Services View, select Views -> Monitored Services from the opCharts menu bar. Services can be filtered by groups such as node status and group and as of opCharts 3.2.2 you can do a search of the monitored services list.

Home / Monitored Services
Monitored Services　　　　　　　　　　　Filter　Period ▾　↻

🔍 Node Filter ?

Select by Properties

Node Status
degraded — 23
reachable — 26
unreachable — 11

Group
Node Role
Node Type
Node Vendor

👍 17 Up　　🩺 0 Degraded　　👎 0 Down

Search term | Service Name ▾ | Go | X

| Service Name	Node Name	Status	Description	Response Time	Last Run
flowd	demo	running		0.00	2018-01-05T23:54:10
fping monitor	demo	running		0.00	2018-01-05T23:54:10
google	demo	running	Loads google.com and reports availability and latency for page load	0.520894	2018-01-05T23:53:19
http	demo	running		0.00	2018-01-05T23:54:10
http	hel	running		0.00	2018-01-05T23:54:26
http_server	demo	running		0.00	2018-01-05T23:54:10
mongod	demo	running		0.00	2018-01-05T23:54:10
ms-sqlserver	mani	running	Monitors the local sql-server service to ensure it is up and running. As this is snmp-based it can be checked only once each collect cycle.	0.00	2018-01-05T23:55:32
mysqld_daemon	demo	running		0.00	2018-01-05T23:54:10
omk check	demo	running	Loads the <server>/en/omk/ test page and checks status of system databases	0.189588	2018-01-05T23:53:19
opconfig	demo	running		0.00	2018-01-05T23:54:10
opevents	demo	running		0.00	2018-01-05T23:54:10
port22	eris	running		0.13	2018-01-05T23:54:11
port80	eris	running		0.10	2018-01-05T23:54:11
snmp_daemon	bne-server1	running		0.00	2018-01-05T23:54:03

Showing 1 to 15 of 17 entries　　　　«　‹　1　2　›　»　　　　Show 15 ▾

Dashboards View

To list all available Dashboards, select Views -> Dashboards from the opCharts menu bar. From there, the user can select to create a New Dashboard, and View/Edit/Delete an existing Dashboard.
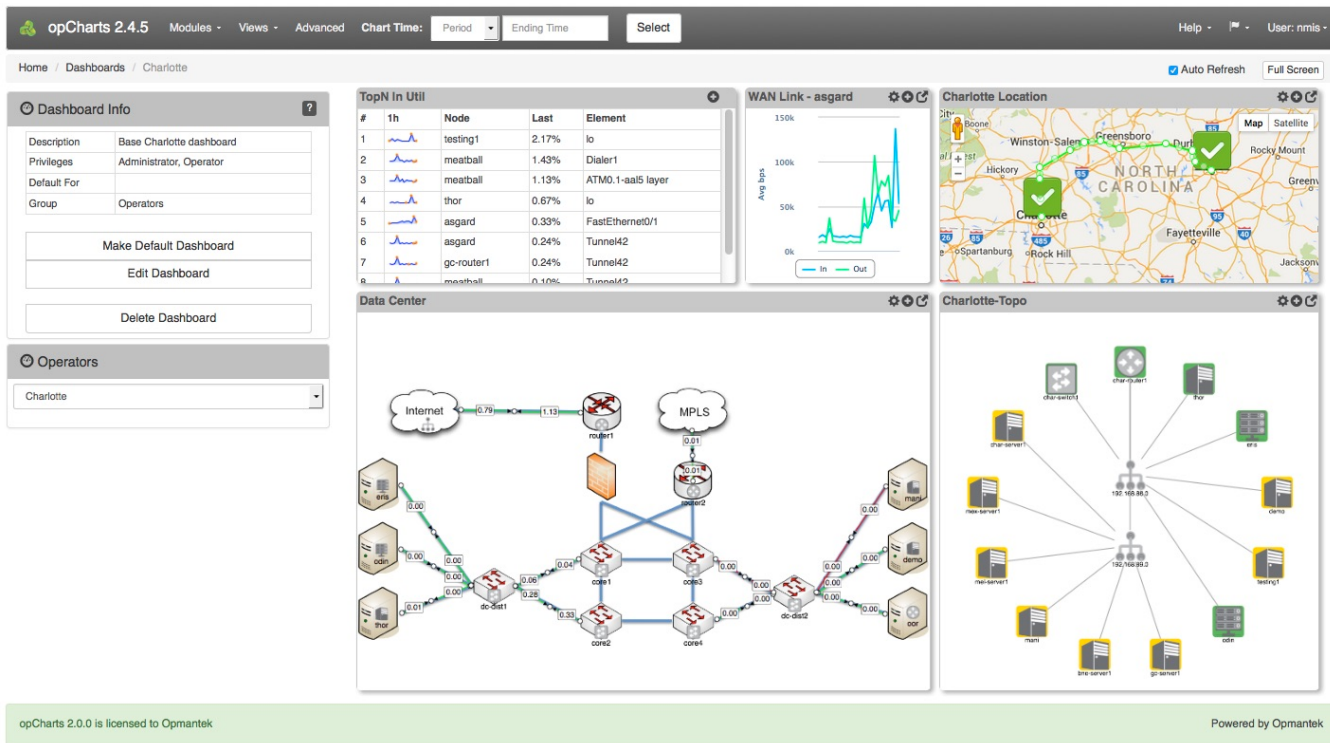
TopN View

The open the TopN View, select Views -> TopN from the opCharts menu bar. The TopN view is actually a collection, or predefined dashboard, comprised of six opCharts Components. Any of these TopN charts can each be added to a new or existing Dashboard (see: Dashboards for more information) to create custom views. The small graphs for each TopN are called "sparklines", they give you an impression of the full graph which you can see by clicking on the TopN.
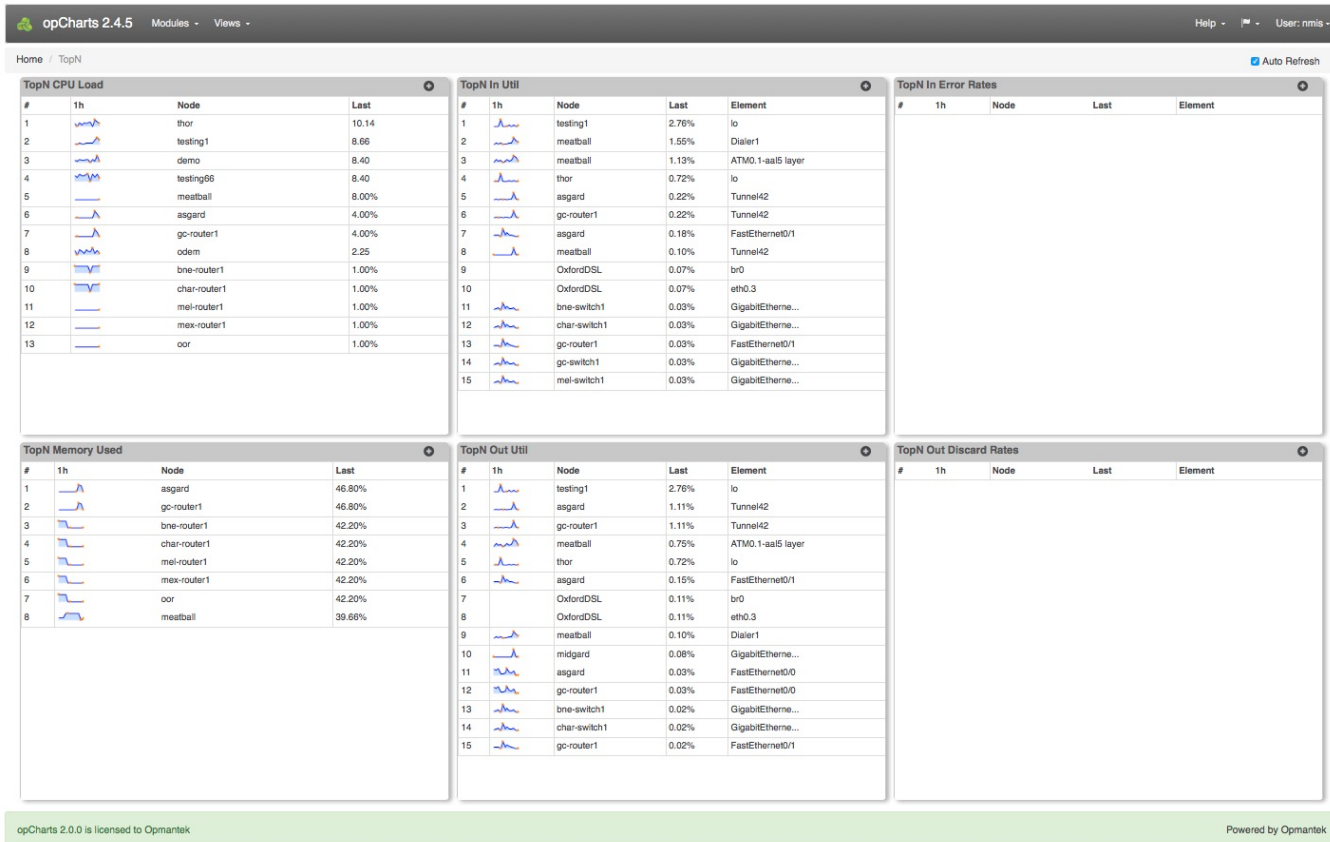
Detail Pages

Please see these additional pages for more detailed information on using opCharts.