

# Integrating Entuity Network Management with BMC TrueSight Operations Management

For use with Entuity 16.5 downwards  
June 2017

The screenshot shows the BMC TrueSight Operations Management interface. At the top, there is a navigation bar with the BMC logo, the text 'TrueSight', the time '07:19', the date '11/07/2017 GMT-03:00', and a user greeting 'Welcome truesight'. Below the navigation bar, the main heading is 'Applications (14)' with a 'View by Importance' dropdown menu. A summary bar shows the following counts: Critical (3), Major (0), Minor (0), Warning (1), Information (1), and OK (9). Below this, the applications are grouped by importance level: High Importance, Medium Importance, and Low Importance. Each application card includes a status icon (warning or OK) and the application name.

Importance	Application	Status
High Importance	StockTrader for IT Ops	Warning
	medrec	Warning
	stocktrader	Warning
	Cloud Services	OK
Medium Importance	TS10 Environment	Warning
	PB	Information
	Corporate Web	OK
	Monthly Processing	OK
	Test Osama	OK
win-app1-ao.flightdeck.local	OK	
Low Importance	Phone Book	OK
	Scheduling	OK

<b>Document Overview</b>	<b>3</b>
<b>Installing the Entuity Network Component</b>	<b>3</b>
Example	4
<b>Adding the Entuity Network Component</b>	<b>4</b>
<b>Logging in to TrueSight and Entuity</b>	<b>5</b>
<b>Network &gt; Services</b>	<b>5</b>
Key Metrics	6
Components	7
<b>Network &gt; Devices</b>	<b>8</b>
Key Metrics	10
Ports	10
<b>Network &gt; TopN</b>	<b>12</b>
<b>Event Forwarding</b>	<b>14</b>
Configuring the incident forwarding callback URL	14
Drilling down into Events	18

## Document Overview

This document will instruct how to add the Entuity Network Management component to BMC TrueSight Operations Management. It will then provide a brief overview of the features provided by the Entuity Network Management component.

## Installing the Entuity Network Component

The installation operation is only to be used for the initial installation of the Entuity Network component. To install the component, run the following command from the **installationDirectory\truesightserver\bin** folder:

```
tssh componenttype add <Entuity.zip file path>
```

To update the component, run the following command:

```
tssh componenttype update <Entuity.zip file path>
```

The administrator should not be issuing both commands.



The Entuity Server must be running with SSL/TLS. This can be enabled during the Entuity Server configuration.

The Entuity.zip file is included in Patch 16.5p1. Once the patch is installed, the file can be found in: **installationDirectory\integ\TrueSight\Entuity.zip**.



The Entuity Component permission is stored in the Presentation Server's database using the permission id number of 6324. An error may occur if installing another component that uses the same value for the permission id.

## Example

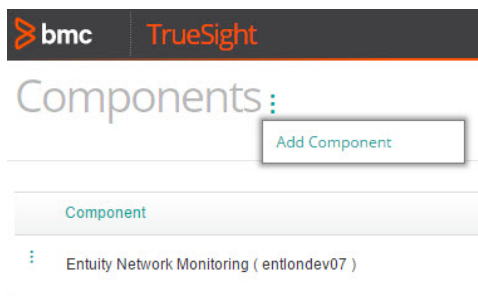
An example of installing the Entuity Network Component where the Entuity.zip file is located in c:\installationDirectory\integ\TrueSight:


```
tssh componenttype add c:\installationDirectory\integ\TrueSight\Entuity.zip
```

## Adding the Entuity Network Component

To add the Entuity Network Component:

1. Click **Administration > Components** to open the Components page.



2. Click the action menu  next to **Components** and select **Add Component**.
3. For **Component Type**, select **Entuity Network Monitoring**  
 For **Host Name/IP Address**, enter a valid **host name** or **IP address**  
 For **Port**, enter the value for the **port number** (the default number is 443)  
 For **Tenant**, select a **Tenant** from the list. Only users that belong to the specified tenant will have access to the component.
4. Click **Save**.




The Component Type, Host Name/IP Address and Tenant fields cannot be changed later. Only the Port number can be edited.

The **Network** option should now be available in the sidebar menu.

Only one Entuity component can be added per tenant. However, it is possible to add the same Entuity component (referencing the same host) to multiple tenants but only whilst logged in as a user of each tenant.





## Logging in to TrueSight and Entuity

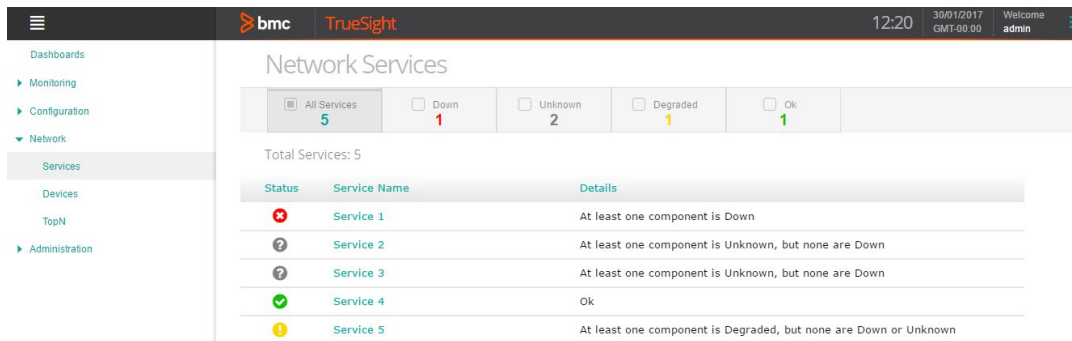
TrueSight uses the Entuity login credentials. In the **Network** tab, clicking on **Services**, **Devices** or **TopN** will prompt a login form to appear. Fill out the login form with your Entuity username and password.

 When logging out of TrueSight, the Entuity session will remain active. To log out of Entuity, open Entuity in a new tab and log out.






## Network > Services

The **Services** dashboard shows the summary of all services from the **My Network** view. Any service can have one of the following statuses (shown in the **Status** column of the table):

-  Down
-  Degraded
-  Unknown
-  Ok



The screenshot shows the TrueSight interface for Network Services. At the top, there's a navigation bar with 'bmc TrueSight', the time '12:20', the date '30/01/2017 GMT-00:00', and a user profile 'Welcome admin'. The left sidebar shows a menu with 'Dashboards', 'Monitoring', 'Configuration', 'Network' (expanded), 'Services' (selected), 'Devices', 'TopN', and 'Administration'. The main content area is titled 'Network Services' and features a summary bar with filters for 'All Services' (5), 'Down' (1), 'Unknown' (2), 'Degraded' (1), and 'Ok' (1). Below this, it says 'Total Services: 5'. A table follows with columns for 'Status', 'Service Name', and 'Details'.

Status	Service Name	Details
	Service 1	At least one component is Down
	Service 2	At least one component is Unknown, but none are Down
	Service 3	At least one component is Unknown, but none are Down
	Service 4	ok
	Service 5	At least one component is Degraded, but none are Down or Unknown

Clicking on the service name will take you to its summary details page. The summary details page provides a summary of the **Key Metrics**, a list of **Components** related to the service and **General Information** on the service.

Key Metrics

- Hourly Availability: No Data
- Hourly Degraded: No Data
- Hourly Unavailability: No Data
- Hourly Unknown: No Data
- Aggregate Inbound Traffic (bps): No Data
- Aggregate Outbound Traffic (bps): No Data

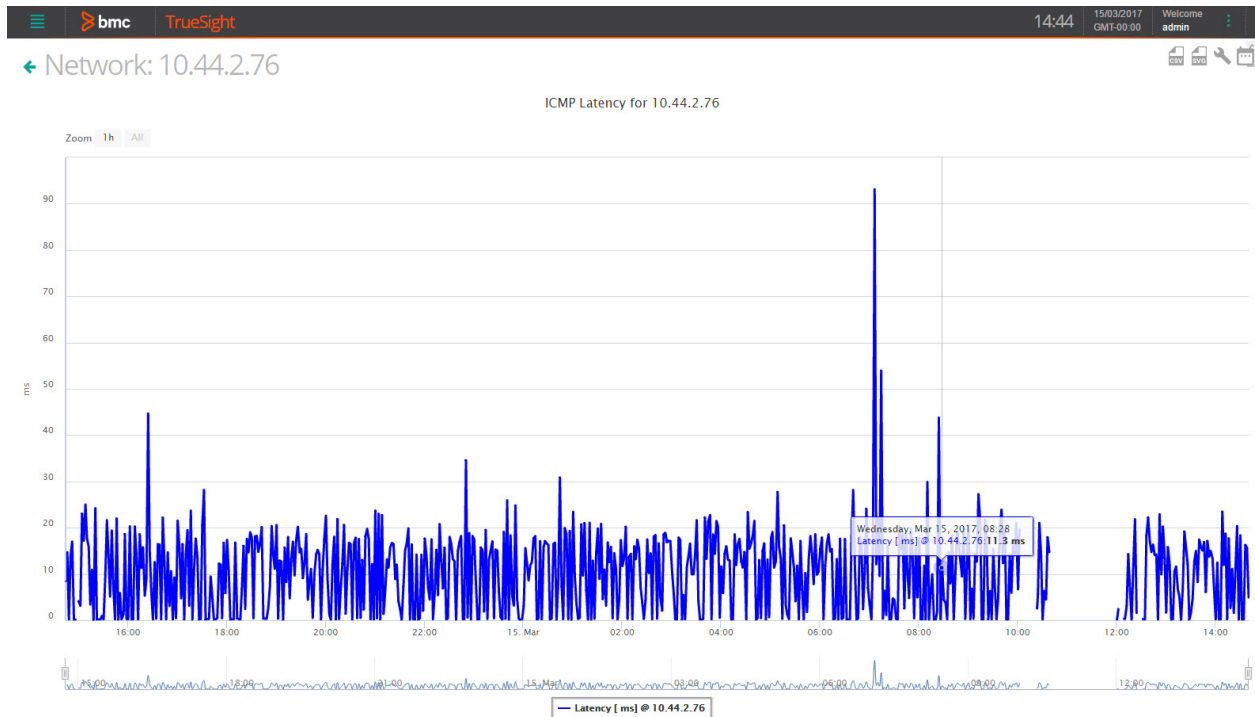
Name	Type
bottom2960	Switch Device
[ Se0/0/0 ] Serial0/0/0	Leased Line Port
[ Gi0/1 ] GigabitEthernet0/1-mpls layer	Port
[ Gi0/1 ] GigabitEthernet0/1	Port
[ Se0/1/0 ] Serial0/1/0	Leased Line Port

General Info

Service Name:	Service 5	Description:		Type:	And
At Least:	0	Degraded Threshold:	0	Raise Events:	True
Treat Unknown As Down:	False	Web UI Image:	Default	Status:	Degraded
Failure Cause:	Degraded: e2821: [ Gi0/1 ] GigabitEthernet0/1, ...	Top Level:	Yes	Display Name:	Service 5

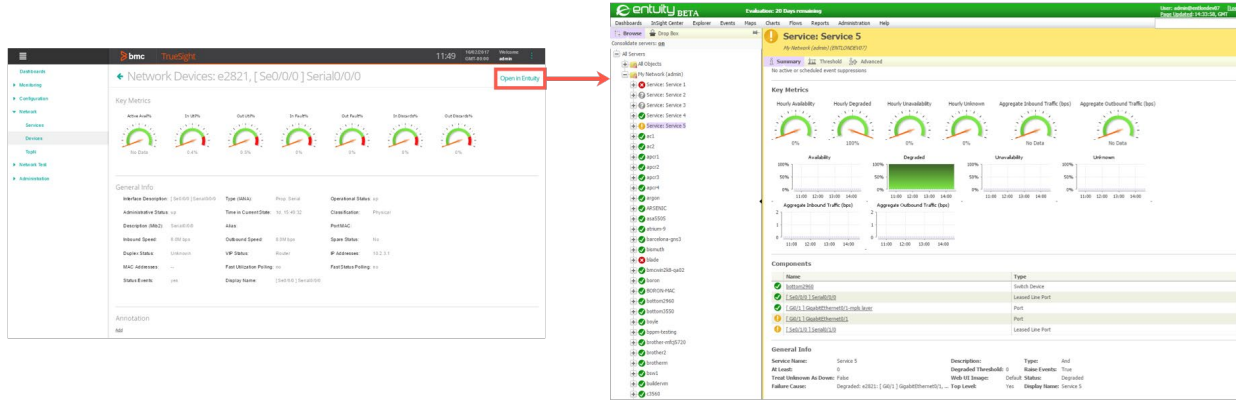
## Key Metrics

Clicking on a Key Metrics gauge will open the chart view.



## Components

From the components list you can click on any component to open its summary details page. Clicking on the [Open in Entuity](#) link will open the object's summary details page in the Entuity server in another tab.



## Network > Devices

The **Devices** dashboard shows the summary of all devices from **My Network** view. Devices can have one of the following statuses (shown in the **Status** column of the table):

- Down
- Degraded
- Unknown
- Uninitialized
- Polling Off
- Ok

bmc TrueSight
12:06 16/02/2017 GMT-00:00 Welcome admin

### Network Devices

All Devices **205**
Ok **200**
Polling Off **1**
Uninitialised **0**
Unknown **1**
Degraded **1**
Down **2**

Total Devices: 205

Status	Device Name ▲	Polled IP	Device Type	Details
✓	3cx-Ion-01	10.44.2.42	Unclassified	ICMP responding (SNMP polling disabled)
✓	ac1	10.44.2.92	Unclassified	ICMP responding (SNMP polling disabled)
✓	ac2	10.44.2.60	Unclassified	ICMP responding (SNMP polling disabled)
✓	amparo-pc	10.44.2.176	Ethernet Switch	Ok
✓	android-279b62c82da68af1	10.44.3.37	Unclassified	ICMP responding (SNMP polling disabled)
✓	android-43514769df7a95d7	10.44.2.68	Unclassified	ICMP responding (SNMP polling disabled)
✓	android-24671869640d900f	10.44.2.162	Unclassified	ICMP responding (SNMP polling disabled)
✓	android-dbf16880b8066b2e	10.44.2.183	Unclassified	ICMP responding (SNMP polling disabled)
✓	android-eb92482c212dbe50	10.44.2.151	Unclassified	ICMP responding (SNMP polling disabled)
✓	apcr1	10.44.6.1	Uninterruptible Power Supply	Ok
✓	apcr2	10.44.6.2	Uninterruptible Power Supply	Ok
✓	apcr3	10.44.6.3	Uninterruptible Power Supply	Ok
✓	apcr4	10.44.6.4	Uninterruptible Power Supply	Ok
✓	argon	10.44.1.131	Unclassified	ICMP responding (SNMP polling disabled)
✓	asa5505	10.44.4.176	Unclassified	ICMP responding (SNMP polling disabled)
✓	atrium-9	10.44.4.113	Unclassified	ICMP responding (SNMP polling disabled)
✓	barcelona-gns3	10.44.4.146	Unclassified	ICMP responding (SNMP polling disabled)
✓	bismuth	10.44.6.133	Unclassified	ICMP responding (SNMP polling disabled)



Clicking on the **Device Name** will take you to the device's summary details page. The summary details page provides a summary of the **Key Metrics**, a list of components and **Ports** related to the device, and **General Information** on the device.

**Network Devices: e2821** [Open in Entuity](#)

**Key Metrics**

Metric	Value
Average CPU%	16%
Average Memory%	24.6%
Latency (ms)	0.9
IP No Route%	5.4%
Buffer Fails	0
Avg SNMP Response (ms)	3.2

**Ports**

Showing all 8 ports

**General Info**

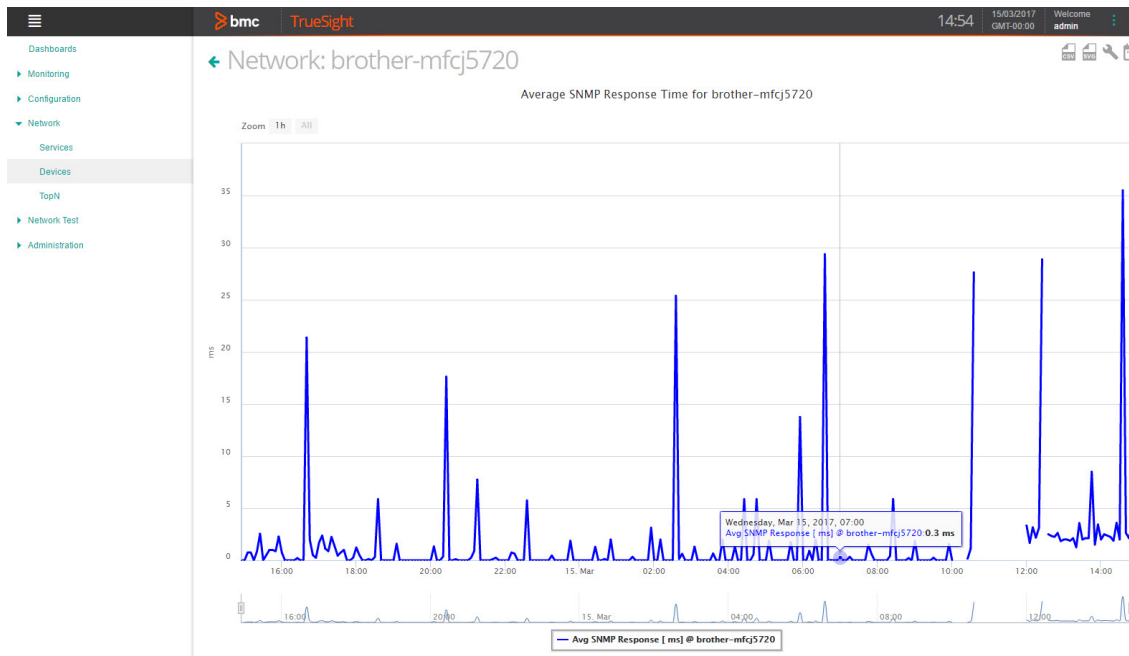
Management Level:	Full	Certified:	Certified	Manufacturer:	Cisco
Model:	2821	Version:	12.4(6)XT	Serial Number:	FHK1130F2WR
Polled IP Address:	10.44.1.59	Last Reboot Time:	11-Jul-2016 10:52:39	Managed Since:	20-Jan-2017 22:47:44
Zone:	None	Display Name:	e2821		

**Annotation**

[Add](#)

## Key Metrics

Clicking on a Key Metrics gauge will open the chart view.



## Ports

If the device has **Ports**, you can click on a port icon to open its summary details page.

Network Devices: e2821, [Se0/0/0] Serial0/0/0 [Open in Entuity](#)

Key Metrics

Metric	Value
Active Avail%	No Data
In Util%	0.4%
Out Util%	0.5%
In Fault%	0%
Out Fault%	0%
In Discards%	0%
Out Discards%	0%

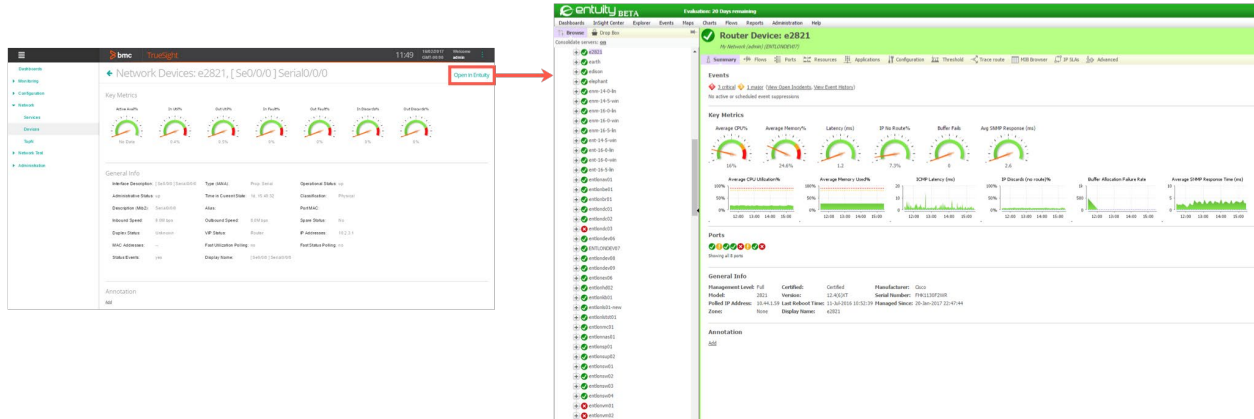
General Info

Interface Description: [Se0/0/0] Serial0/0/0	Type (IANA): Prop. Serial	Operational Status: up
Administrative Status: up	Time in Current State: 1d, 15:49:32	Classification: Physical
Description (Mib2): Serial0/0/0	Alias:	Port MAC:
Inbound Speed: 8.0M bps	Outbound Speed: 8.0M bps	Spare Status: No
Duplex Status: Unknown	VIP Status: Router	IP Addresses: 10.2.3.1
MAC Addresses: --	Fast Utilization Polling: no	Fast Status Polling: no
Status Events: yes	Display Name: [Se0/0/0] Serial0/0/0	

Annotation

[Add](#)

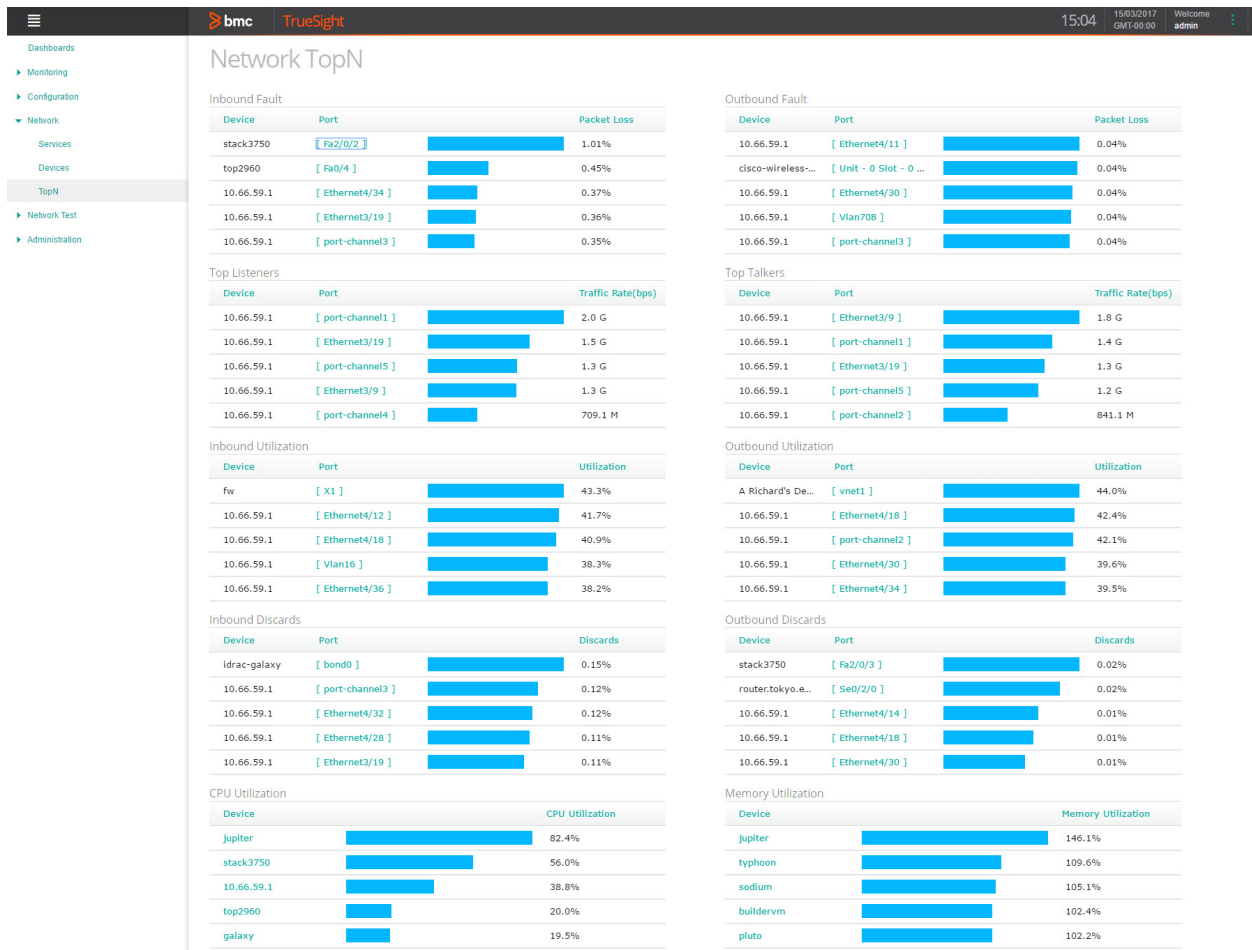
Clicking on the **Open in Entuity** link will open the device's summary details page in the Entuity server in another tab.



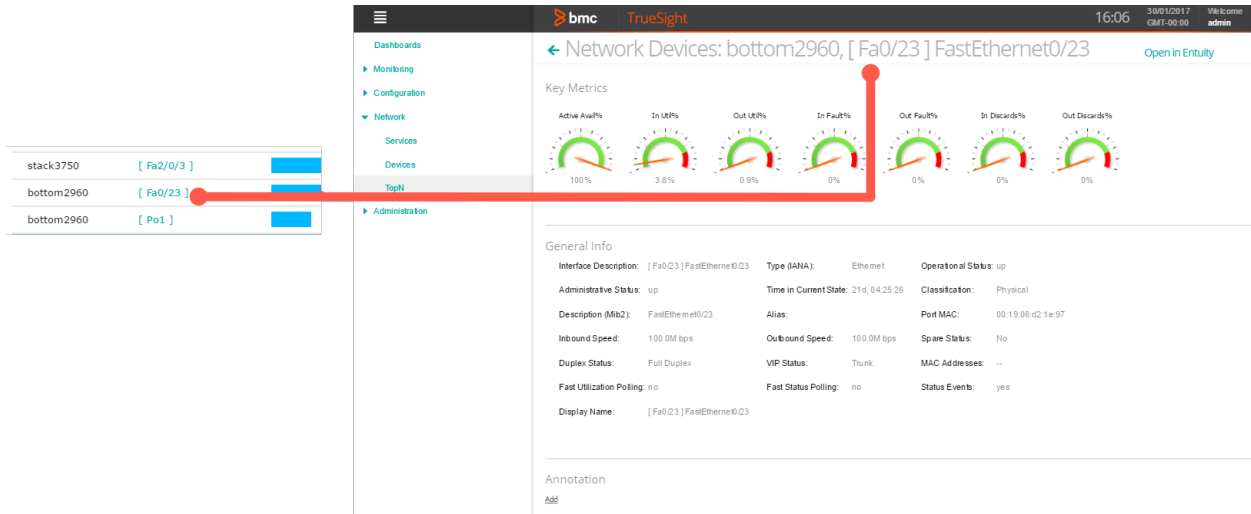
# Network > TopN

The **TopN** dashboard shows the top 5 devices or ports for each category. There are 11 categories:

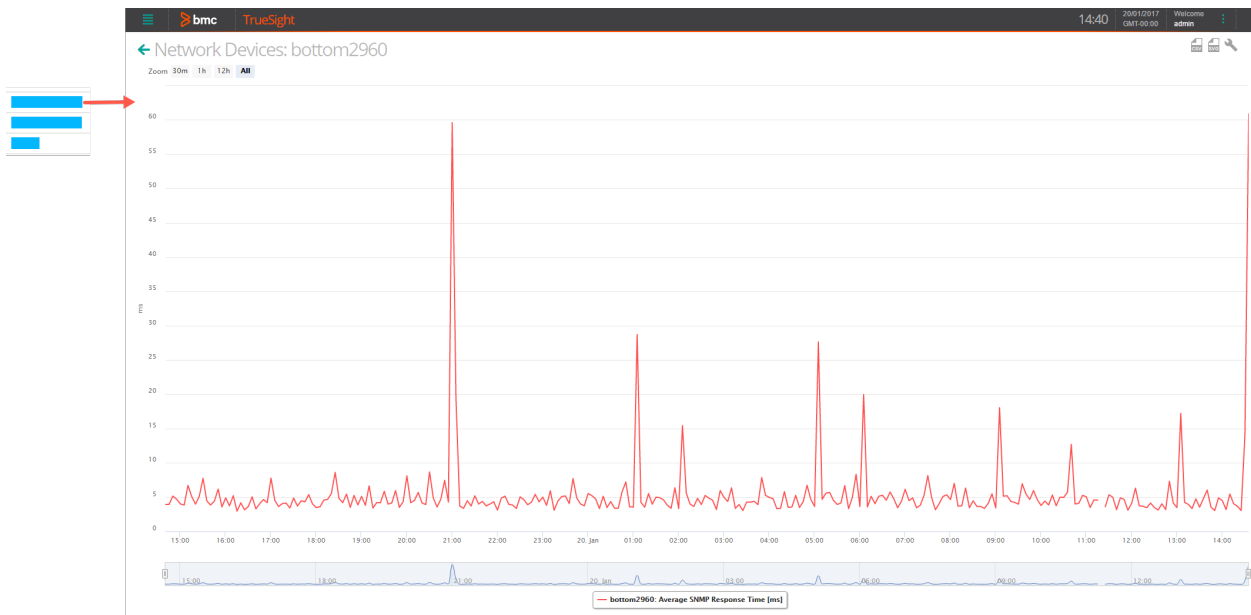
- Inbound Fault
- Outbound Fault
- Top Listeners
- Top Talkers
- Inbound Utilization
- Outbound Utilization
- Inbound Discards
- Outbound Discards
- CPU Utilization
- Memory Utilization
- Response Time



Clicking on the **Device** or **Port** name will take you to the Device or Port summary details page. The summary details page provides a summary of the **Key Metrics**, a list of components and **Ports** related to the device, and **General Information** on the device.



Clicking on a bar of a chart will load the object's chart.



## Event Forwarding

When forwarding events to the BMC TrueSight Operations Management Presentation Server, by default the event URL will include the details of the Entuity server that originally raised the event.

### Configuring the incident forwarding callback URL

In order to change the callback URL to allow users of Presentation Server dashboards to display event source component details in the Presentation Server rather than the standard Entuity user interface, you can optionally add the following parameters to the **[bem]** section of **entuity\_home\etc\entuity.cfg**:

```
ps_server_name=truesight_presentation_server_name
ps_server_web_port=443
ps_redirect_enabled=true
```

`ps_server_name` is the name of the TrueSight Operations Management Presentation Server where the Entuity Network Component is installed.

`ps_server_web_port` is the port number of the TrueSight server.

`ps_redirect_enabled` is the flag that needs to be set to true to enable this feature.

#### After the parameters have been added to the entuity.cfg file:

1. Stop the Entuity server: `entuity_home\bin\stopeye`
  2. Run: `entuity_home\install\configure.exe`
  3. After the configuration process finishes, start the Entuity server: `entuity_home\bin\starteye`
- \*entuity\_home is the installation directory of Entuity.

After installing the patch, a new event project will be created as a draft in the Event Management System. You will need to deploy the draft project or merge it with an existing project.

**a) To deploy the event draft project:**

1. In the Entuity Server, go to **Administration > Events > Event Administration**
2. Click the **View all projects** link to show the Project History page

**Event Administration : Initial installation (Live)**  
 Description: Initial installation  
 Status: Live  
 Version: 1  
 Deployed By:  
 Deployed Time: 30 Mar 2017 15:39  
 Valid: Yes

**System Overview**

The diagram illustrates the event processing pipeline. On the left, five categories of events (System, Trap-based, Syslog, Custom Poller, and Custom) feed into the first 'Event Processing (Pre-Storage Rules)' stage. This stage performs 'Suppression, Escalation, Enrichment, Forwarding, etc.' and outputs to an 'Events' database. A dashed line labeled 'Derived Events' connects the output of the first stage to the input of the second 'Event Processing (Post-Storage Rules)' stage. The second stage also performs 'Suppression, Escalation, Enrichment, Forwarding, etc.' and outputs to an 'Incident Processing' stage. The final stage performs 'Escalation, Enrichment, Forwarding, etc.' and outputs to an 'Incidents' database.

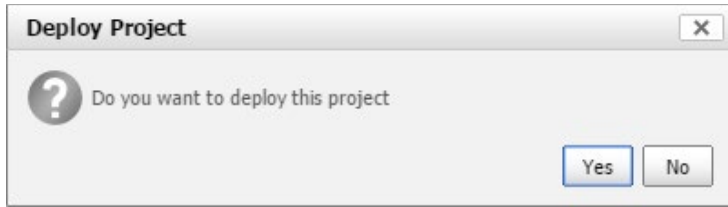
3. Select the draft project and click **Deploy**

**Event Administration : Project History**

Status	Valid	Description	Version	Deployed Time	Deployed By	Updated Time	Updated By
Live	Yes	Initial installation	1	30 Mar 2017 15:39		30 Mar 2017 15:39	
Draft	Yes	Upgrade: new version	0			31 Mar 2017 12:12	

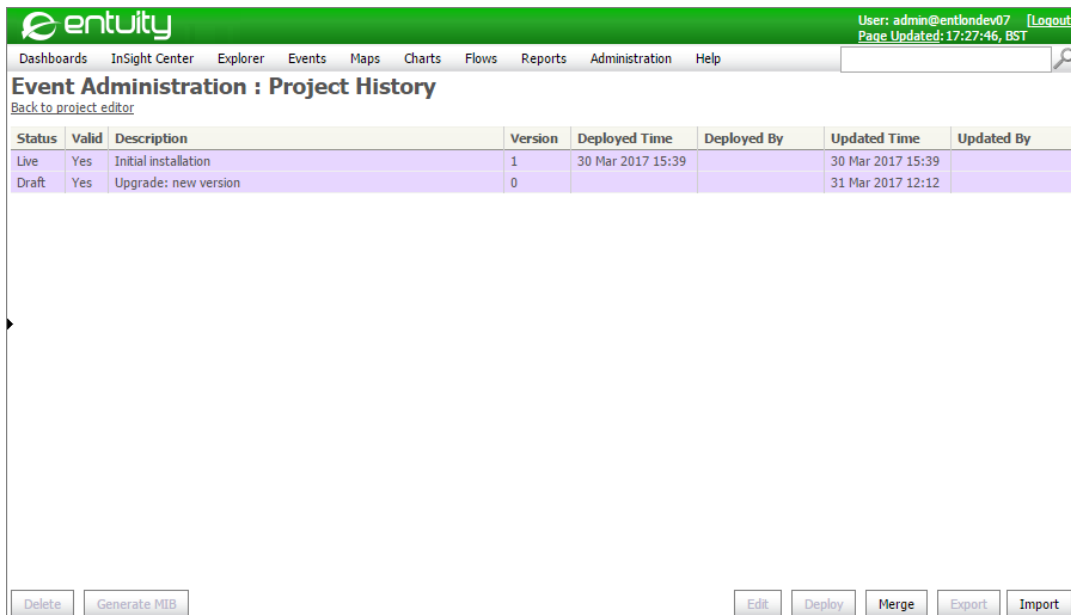
Buttons: Delete, Generate MIB, Edit, Deploy, Merge, Export, Import

4. Confirm that you want to deploy the project

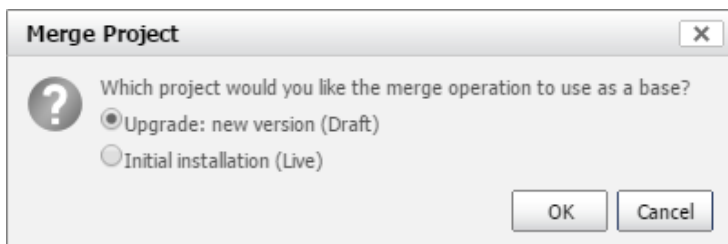


**b) To merge the event draft project with an existing project:**

1. Select the draft and the other project you wish to merge together by clicking on each project while holding CTRL, then click on **Merge**

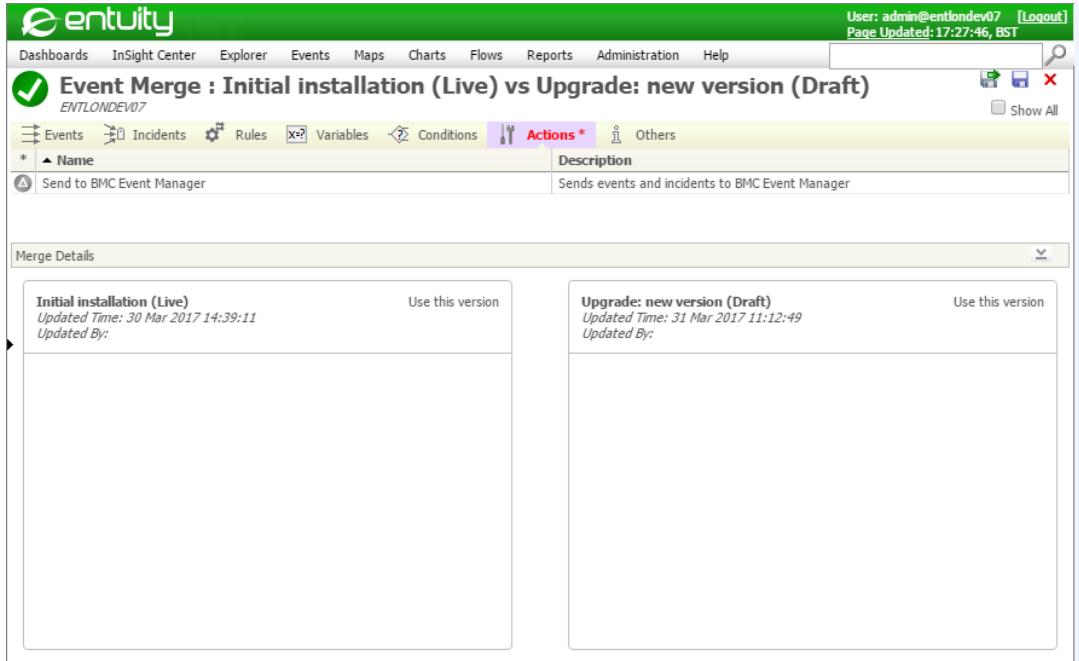


2. Select a project to use as a base

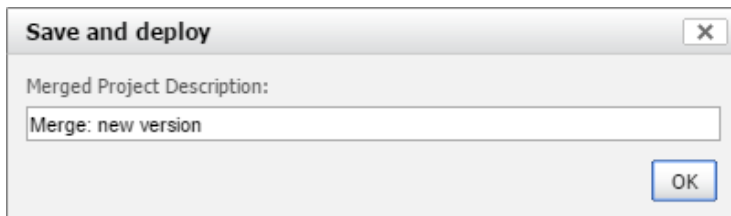




- The merge utility compares both projects and will highlight the changes. If there are any conflicts, the utility will ask you to select the required version of each conflict



- Once you are done resolving the conflicts, click on the Save and deploy button
- Finally, choose a name for the Merged project and click OK



## Drilling down into Events

In the **Events** dashboard, you can click on an event that was forwarded from Entuity. This will open the **Event Details** page.

In the **Event Details** page, click the **Object** tab and click on the **Object URI**: this will open the object's summary page. Clicking the timestamp on an event will open the **Details** page.



The **Object** Tab contains information about the object that triggered the event. The object could be a Device, Port, Module, Service, System, etc. The **Object** Tab will display details of the object's name, type, host, IP address etc.