



User Guide

Web User Interface for ONP

Tips and Cautions



A TIP indicates important information that helps you make better use of the product.



A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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1. Introduction

This section of ONP WebUI User Guide includes description of the product, core requirements before starting using web user interface, short description of this document and guidelines how to use it, main text conventions, as well as information on support, and access to additional documentation.

1.1 ONP overview

The Open Network Platform (ONP) is a modular and user-configurable Ethernet-based switching platform designed to provide OSI Layer 1 and Layer 2 functionality. The software is integrated with a selection of switching silicon chipsets to provide a wide range of platform options.

You can manage the ONP software and your network with one or more of the following methods:

- Web-based user interface (WebUI)
- Command-Line Interface (CLI)
- Programmatically with XML-RPC calls or CLI calls
- Simple Network Management Protocol (SNMP)

Each method enables you to configure, manage, and control the software locally or remotely.

The management methods are standards-based. The commands and command modes included in a build are based on the included software modules at build-time. The available modules are as follows:

- Main software
- Open vSwitch software module (optional)

Open vSwitch provides support for standard management interfaces and opens the forwarding functions to programmatic extension and control using the OpenFlow protocol. For more information, see www.openflow.org.

1.2 Before you begin

This section includes essential information on WebUI Browser Support and WebUI access requirements.

WebUI Browser Support:

1. WebUI supports the following desktop browsers:
 - 1.1. Internet Explorer version 10 and above (Windows)
 - 1.2. Google Chrome version 31 and above (Windows, Linux, Mac-OS)
 - 1.3. Mozilla FireFox version 24 and above (Windows, Linux, Mac-OS)
 - 1.4. Safari version 7 and above (Mac-OS).
2. WebUI does not require any plug-ins for normal operation.

WebUI access features:

1. Support of both HTTP and HTTPS connections.
2. Support of simultaneous HTTP and HTTPS sessions.
3. Default HTTP port number - 80.
4. Default HTTPS port number - 443.
5. HTTP and HTTPS ports numbers are configurable.
6. Possibility to access via HTTPS out-of-box using default SSL certificate.
7. SSL certificate can be configured by setting a new one.

1.3 Structure of this Guide

This document is for network administrators and operators who configure, manage, and maintain the ONP software. The document provides information on how to access the WebUI, how to use the WebUI, and how to manage the ONS.

This User Guide has the following structure:

- [WebUI structure](#) explains all ins and outs of communication between the platform, web interface, and WebUI main components, as well as the way of logging in into WebUI and necessary steps, which should be performed to start configuring your platform. It also includes information on the features included into [Basic version](#) of ONP software
- [WebUI Screens and parameters](#) provides all necessary information regarding:

- [Basic WebUI layout](#) – all common elements on all the pages, navigation tips, menu and device view;
 - [System](#) – all pages related to configuring platform;
 - [Layer 1](#) – all pages related to physical layer (Layer1), including Ports, SFP (small form-factor pluggable), and so on;
 - [Layer 2](#) – all pages related to configuration of your switch on Data Link Layer (Layer 2);
 - [Platform](#) – all pages related to platform dependent services, including NTP (time provisioning), Syslog (logging support), Users authentication (Radius, Tacacs) etc.
 - [Advanced](#) – all pages containing some extra features that do not fit to any of the previous sections, for example, OVS related pages.
- [Glossary](#) provides list of acronyms and abbreviations mentioned in the User Guide
 - [Index](#) helps easily navigate through the User Guide from any page

1.4 Text conventions

Text style	Example	Description
<i>Bold Italics</i>	<i>Port Capabilities</i>	used to specify names of pages (tables)
<i>Italics</i>	<i>Bridge Priority</i>	used to specify names of variables (column names in the tables)
/ (slash)	Layer 2/ ACL/ Actions	used to specify path to web user interface page (in the example, Layer level– Layer 2, Component level – ACL, Page level – Actions)

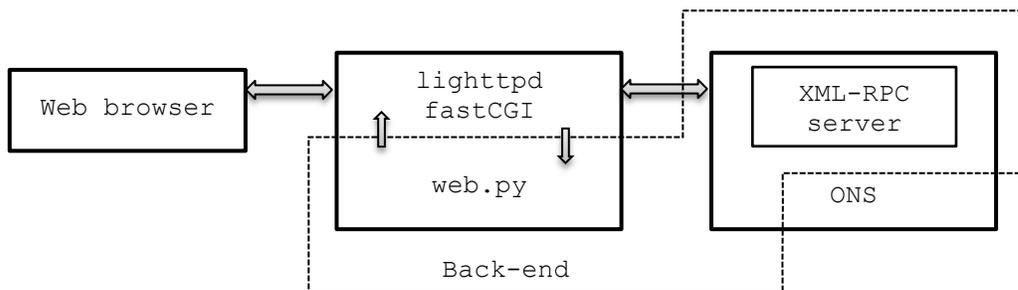
2. WebUI structure

This chapter includes three main sections What is WebUI, How WebUI works, and Basic version of ONP software.

2.1 What is WebUI

WebUI is Web interface, developed for easy and quick access to configuration of your switch. It is more visual interface, what helps user manage the ONP software without having special technical knowledge, compared to, for example, Command-Line Interface (CLI).

2.2 How WebUI works



Structure of WebUI work looks as follows:

- Data or request is sent from Web browser to lighttpd server.
- lighttpd server is connected to web.py (web framework for Python) through FastCGI module and forwards there all data and requests.
- web.py is connected with ONS through XML-RPC server, where it sends request to change or retrieve data.

2.3 Basic version

This section provides description of ONP software Basic features. Detailed information on these features is given in the Table 1 below.

Table 1 Basic features of ONP software version

Basic version of ONP software includes the following features:	
Management	
CLI	+
SNMP	+
XMLRPC	+
Platform Services	
KPI Manager (standard Linux)	+
KPI Manager (H/W Monitoring)	N/A
Network Config (Management Port)	+
NTP	+
Logging	+
Authentication	
Local auth	+
Radius auth	+
TACACS auth	+
User Manager	+
Software Upgrade	+
System Environment	
Fan Speed Control	N/A
Power Supply	N/A
Core Infrastructure	+

Adapter (all features) – not including simswitch	+
L1 Features	
Ports	+
SFP	+
Switch	+
L2 Features	
LAG/LACP	+
xSTP	+
Root and BPDU Guards	+
ErrDisable	+
FDB	+
LACP	+
DCBx/DCB	+
ACL	+
Port Mirroring	+
IGMP Snooping	+
Statistics	+
Storm Control	+
VLAN	+
UFD	+ (Micro Server only)

2.4 Accessing WebUI

Before getting started, click here [WebUI Browser Support](#) to check your browser acceptability.

2.4.1 Warning Page

If you are using not supported Web Browser, you see Warning Page, as in the case with Internet Explorer 8 (IE8) or Internet Explorer 9 (IE9).

2.4.1.1 IE8

In the case you are trying to log in using IE8, you can see the following warning:

The image shows a warning message box with a green header that reads "It appears you're using unsupported browser". Below the header, it says "Below is the list of supported browsers:" followed by a bulleted list: "• Chrome 31+", "• Firefox 24+", "• Internet Explorer 10+", and "• Safari 7+".

In this case you are not permitted to continue your work.

2.4.1.2 IE9

In the case you are trying to log in using IE9, you can see the following warning:

The image shows a warning message box with a green header that reads "It appears you're using unsupported browser". Below the header, it says "Below is the list of supported browsers:" followed by a bulleted list: "• Chrome 31+", "• Firefox 24+", "• Internet Explorer 10+", and "• Safari 7+". At the bottom of the box, there is a green button with the text "CONTINUE ANYWAY" in white capital letters.

In this case you can continue you work, clicking **Continue Anyway** button.

2.4.2 Logging in

To start working with web user interface:

1. In your web browser, open the page <http://<device IP address>> to access WebUI login page. To determine IP address use ONS Configuration guide.
2. Enter your User name in the Username field. The value is case-sensitive.
3. Enter your Password in the Password field. The value is case-sensitive.
4. Click the LOG IN button or press Enter to log in.

As the result of these actions you are forwarded to the [Homepage](#).

In case you get message **Login failed**, check and reenter your User name and/or Password.

Number of login attempts is not limited.

2.4.3 Logging out

To end your administrative session click Logout control button in the page header on any page.

For more information on Control buttons, see [Control buttons](#) section.



For security reasons, it is recommended to log out of web user interface after finishing your session.

3. WebUI Screens and parameters

3.1 Web Pages Types

Every page in WebUI is represented in the form of table. Depending on the page, these tables include one or several rows. Some pages have constant number of rows, while others enable you to add and remove rows.

All pages of the basic version are categorized into the following types:

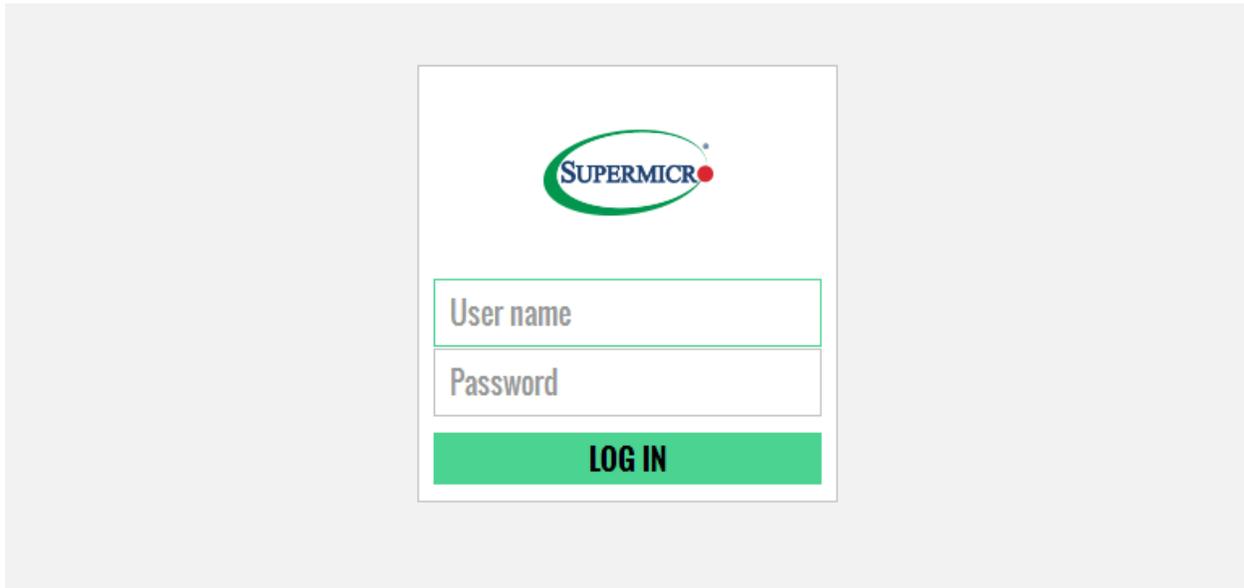
1. [System](#)
2. [Layer 1](#)
3. [Layer 2](#)
4. [Platform](#)
5. [Advanced](#)

Table pages type has subtypes based on access type and components.

Tables are of the following access types:

1. **Read-Only** – user can only view table.
2. **Inline Edit Only** – user can view table and edit some values in it manually.
3. **Add/Remove Rows Only** – user can view table, add new rows, and delete existing rows.
4. **Full Edit** – user can view table, edit some values in it, add new rows, and remove existing rows.
5. **Commands** – applicable only to pages that do not contain tables – user can view data form and issue commands.

3.2 Login page



The image shows a login form for SUPERMICR. At the top center is the SUPERMICR logo, which consists of the word 'SUPERMICR' in a blue, sans-serif font, with a red dot above the 'I' and a green swoosh underneath. Below the logo are two text input fields. The first field is labeled 'User name' and the second is labeled 'Password'. Both fields have a light gray border and a light gray background. Below the password field is a green rectangular button with the text 'LOG IN' in white, uppercase letters.

Input User name, Password and click LOG IN button to enter the Homepage.

3.3 Homepage

Homepage includes:

- [Main menu](#)
- [Shortcuts](#)
- [Control Buttons](#)
- [Device View](#)
- [Quick Start](#)

Homepage allows you to:

- choose layer levels, using Left-side Main Menu or Shortcuts
- refresh Homepage, get User Support, and/or log out using Control Buttons
- read short description of product’s main features and functions
- see link status of all ports

Main Menu and **Shortcuts** allows you to see the whole list of WebUI layers and switch between them easily.

Control Buttons allow you to update the Homepage, get information from Supermicro customer support page, and end your session redirecting you to the Login page.

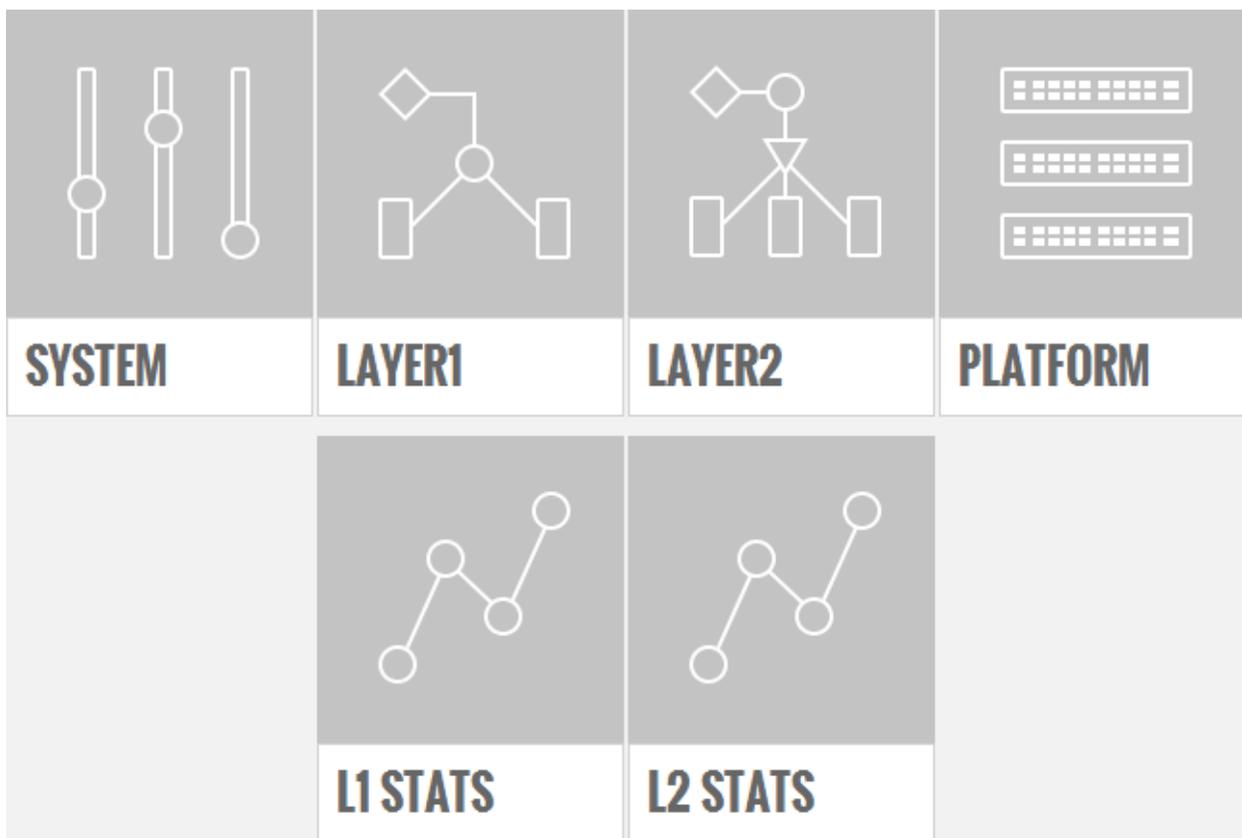
Device View allows you to see link status of all ports. It is not updated automatically. To update port status, you can use Refresh control button from page header, browser reload hotkey or

Refresh button on Device view.



Hovering the cursor over the port you can receive the detailed information on the port state, including its Admin Mode, Operational Status and Speed.

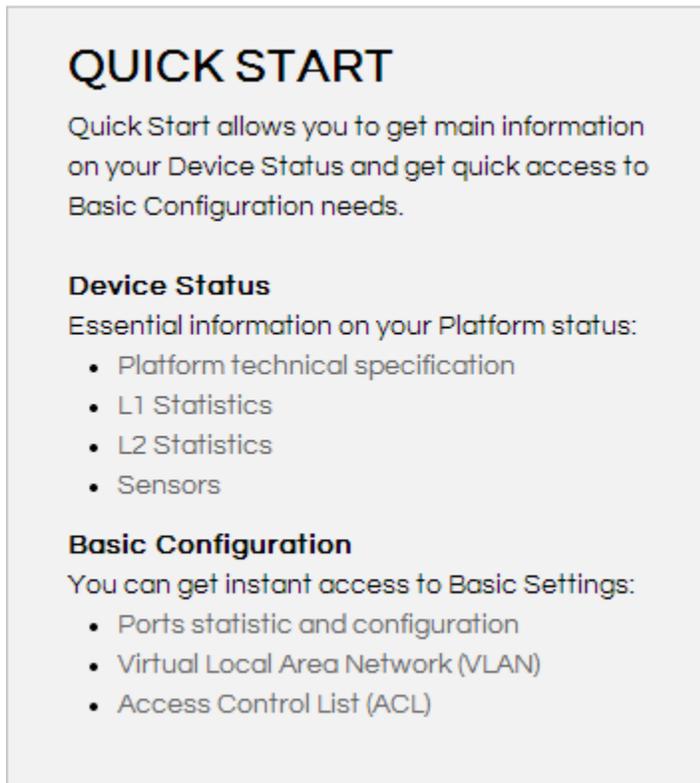
3.3.1 Shortcuts



Shortcuts show you face plate of device main levels. You can use **shortcuts** to get access to the list of pages in [Main Menu](#) and to the lists of statistics pages in Layer1 and Layer2 (**L1 Stats** and

L2 Stats shortcuts forward you to Layer1/Statistics pages and Layer2/Statistics pages accordingly). When you click another shortcut you are forwarded to the first page of the first component level in chosen layer level (e.g. when you click on the System shortcut you are forwarded to System/Core/Domains page).

3.3.2 Quick Start

A screenshot of a 'QUICK START' page. The title 'QUICK START' is in large, bold, black letters. Below it, a paragraph explains that Quick Start allows users to get main information on their Device Status and quick access to Basic Configuration needs. The page is divided into two sections: 'Device Status' and 'Basic Configuration'. Under 'Device Status', there is a sub-heading 'Essential information on your Platform status:' followed by a bulleted list: Platform technical specification, L1 Statistics, L2 Statistics, and Sensors. Under 'Basic Configuration', there is a sub-heading 'You can get instant access to Basic Settings:' followed by a bulleted list: Ports statistic and configuration, Virtual Local Area Network (VLAN), and Access Control List (ACL).

Quick Start allows you to get main information on your Device Status and get quick access to Basic Configuration needs. Information is divided into two sections:

- **Device Status** – Provides you with essential information on your Platform status. It includes 4 main sections, which are clickable and every separate section forwards you to the defined page
- **Basic Configuration** – Provides you with instant access to Basic Settings. It includes 3 main sections, which are clickable and every separate section forwards you to the defined page

3.4 Basic WebUI layout

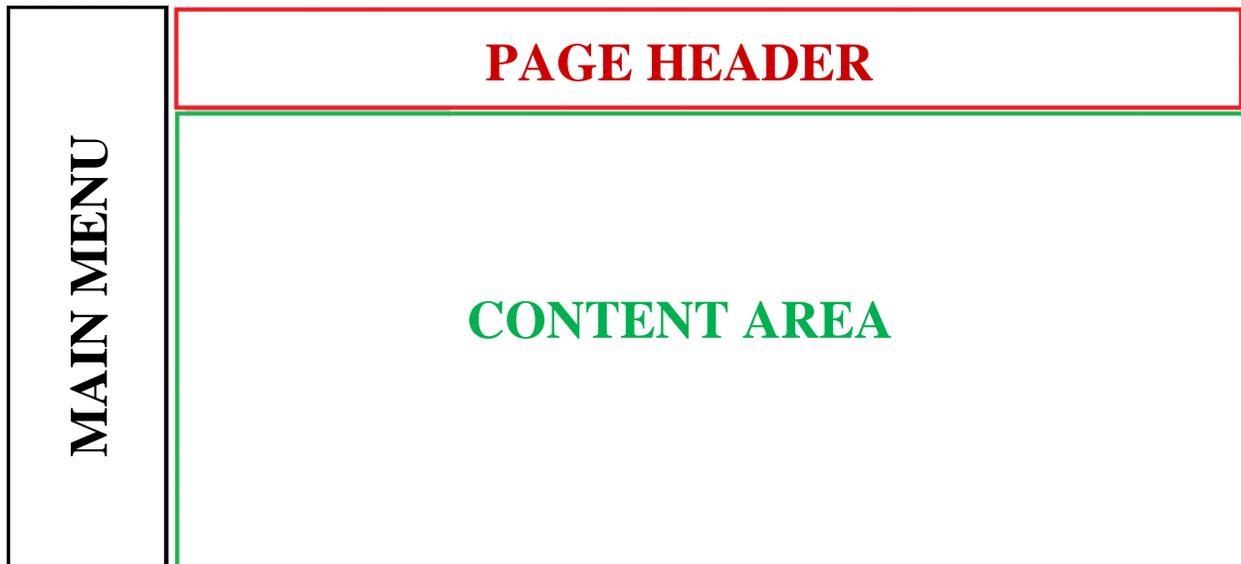
This section describes all common elements of all pages (menu, control buttons, navigation bar, etc.). Description of the Homepage main components you can find in the [Homepage layout section](#).

Basic WebUI layout consists of three areas:

- Main menu
- Page header
- Content area

The screenshot shows the SUPERMICR web interface. On the left is a vertical sidebar menu with the following items: SYSTEM, LAYER 1, LAYER 2, PLATFORM, **ADVANCED**, OVS, Bridges, Controllers, Flow Actions, Flow Qualifiers, Flow Rules, Flow Statistics, Ports, and Resources. The main content area has a top navigation bar with 'Home', 'Refresh', 'Support', 'Help', and 'Logout'. Below the navigation bar is a status bar with a 'Mgmt' indicator and a grid of 65 numbered boxes (1-65) representing ports. The main content area displays a table titled 'Advanced / OVS / Resources' with the following data:

Advanced / OVS / Resources	
Rules Limit	2048
VLANs Limit	1
Untagged VLAN	0
Controller Rate Limit	0



3.4.1 Main menu



Main menu is located on the left side of any page. Menu shows full site map navigation that is collapsed into top level layers that are expanded on user click.

Main menu contains 3 levels:

- Layer level – sets of components
- Component level – group of pages
- Page level – list of pages

Clicking on top and component level items causes them to collapse or expand, while clicking on one of the bottom level items causes it to open chosen page.

Only one expanded layer and component level item can be present at once. When you expand a new item, the previously opened item is collapsed automatically. You can see currently displayed menu item as well as current path in the opened tab caption in different colors.



3.4.2 Page header

In this section you can find description of control buttons and device view.

3.4.2.1 Control buttons



Control buttons in the page header are located at the top of every WebUI page, aligned to the right.

There are five control buttons:

Home forwards you to the Homepage.

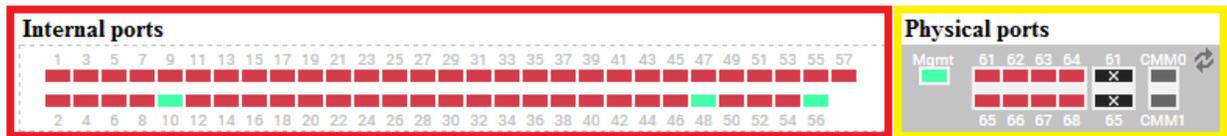
Refresh content area of the current page is refreshed.

Support forwards you to Supermicro support page.

Help provides information regarding opened page and its elements.

Logout ends user session and redirects you to the Login page.

3.4.2.2 Device view



Device view is placed directly under page header.

Device view shows link status of all ports. Internal ports are situated on the left side of Device view, Physical ports are situated on the right side of Device view.



PG (Painted Gorge) specific HW rule: you are allowed to have either four 10 Gig ports

■ ■ ■ ■ or one 40 Gig QSFP port **x x x** ■.

You can change Port Status in Admin Mode column on [Layer 1/Port /Ports](#) page.

Device view is not updated automatically. To update port status, user can use Refresh button  on device view, Refresh control button from page header, or browser reload hotkey.

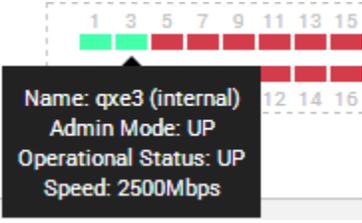
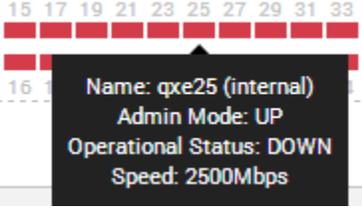
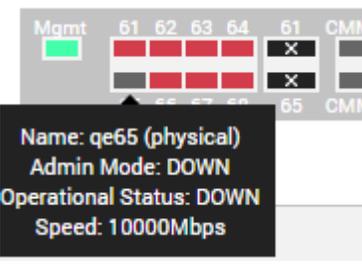
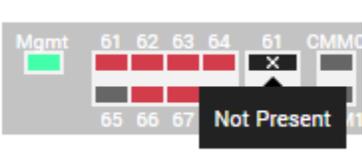


When refresh of content area is finished, device view is updated.



Hovering the cursor over the port you can receive the detailed information on the port state, including its Name, Admin Mode, Operational Status and Speed.

Device view includes four different port statuses:

	<p>The port color is green:</p> <ul style="list-style-type: none">• Admin Mode: UP• Operational Status: UP
	<p>The port color is red:</p> <ul style="list-style-type: none">• Admin Mode: UP• Operational Status: DOWN
	<p>The port color is dark grey:</p> <ul style="list-style-type: none">• Admin Mode: DOWN• Operational Status: DOWN
	<p>The port color is black and crossed:</p> <ul style="list-style-type: none">• Status: Not Present

3.4.3 Content area

3.4.3.1 Current WebUI location

You can easily see your current interface location displayed on the top of content area. On the example picture below you can see the path to the *Platform Users* page: Layer level – Platform, Component level – Users, Page level – Platform users.

Platform / Users / Platform Users

Navigation: ⏪ ⏩ 1 1/1 GOTO 10 Rows Apply Users Configuration + × ↻

Userid	Authentication	Password	Privilege	Shell
admin	Local	[hidden]	Admin	Cli
xmlrpc	Local	[hidden]	Admin	Xmlrpc
admin	Local	[hidden]	Admin	Cli
	Local		Cli	Cli

3.4.3.2 Navigation buttons



For tables with large number of rows, only a specific number of rows is displayed first, and navigation buttons give you the possibility to view next/previous group of rows.

You can choose the number of rows to be displayed on the screen with the button 

Also you can choose necessary group of rows manually, entering necessary page number in the

 field and clicking  button, which forwards you to the chosen group of rows.

3.4.3.3 Editing and managing of records in a table

Full Edit tables allow you to add or remove a record.

Layer 2 / ACL / Expressions

Expression ID	Field	Mask	Data
1	SrcIp	255.255.255.255	99.40.6.1
2	DstMac	FF:FF:FF:FF:FF:FF	01:00:5e:00:00:05
3	SrcMac	FF:FF:FF:FF:FF:FF	00:02:10:00:03:03
	SrcIp6High		

To **add** a record you have to perform the following actions:

- 1) fill in all the necessary columns with corresponding data
- 2) click  button to add a record to the table



In case of incorrectly entered data, the popup window with the information regarding what was entered wrongly appears

To **remove** a record you have to perform the following actions:

- 1) click on the row you want to delete from the table, it will make remove button active
- 2) click  button to remove a record from the table

Inline Edit tables allow you to edit records inside the cells. Clicking on the cell you are allowed to make and save changes in switch configuration or leave it unchanged. Cells, which can be edited are of read-write type; cells, which cannot be edited are of read-only type (an example of read-only cell type is Port ID column).

Layer 2 / QoS / Ports QoS

Navigation: 1 2 3 1/7 GOTO 10 Rows + X Refresh

Port ID	Trust Mode	Sched Mode	CoS Weight 0	CoS Weight 1	CoS Weight 2	CoS Weight 3	CoS Weight 4	CoS Weight 5	CoS Weight 6
1	None	Strict  	0	0	0	0	0	0	0
2	None	Strict	0	0	0	0	0	0	0
3	None	WeightedDeficitRoundRobin	0	0	0	0	0	0	0
4	None	Strict	0	0	0	0	0	0	0
5	None	Strict	0	0	0	0	0	0	0

To edit record inside the cell you can use:



button - allows you to save changes in switch configuration



button - allows you to save switch configuration unchanged and hide variants of possible changes

3.4.3.4 Hints

Layer 1 / Err Disable / Errors Configuration

Navigation: 1 1/1 GOTO 10 Rows

Application Name	Application Error	Enabled	Recovery
L2UfdControlApp	ufd	Enabled	Disabled
L2StpControlApp	bpduGuard	Enabled	Disabled
L2LagControlApp	udld	Enabled	Disabled

Hint: Defines if recovery mechanism is available for this appError.

Hovering the cursor over the cell, you can see **hint** with additional information regarding data in the cell.

3.4.3.5 Scrollbar

Instance	Domain	Name	Application ID	Type	Version	Vendor	Admin State	Operational State
1	1	ONSApplicationServer	1	AppSrv	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run
1	1	ONSSnmpServer	2	Control	1.00	Copyright (C) 2012 Wind River, Inc.	Run	Run
1	1	WEBUIWebuiControlApp	3	Control	1.00	Copyright (C) 2013 Wind River, Inc	Run	Run
1	1	ONSNorthboundServer	4	MgmtSrv	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run
1	1	ONSCoreServer	5	Core	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run
1	1	onsps	6	SysSrv	2.00	Copyright (C) 2013 Wind River, Inc	Run	Run
1	1	LedApp	7	Control	1.00	Copyright (c) 2014 Intel Corporation	Run	Run
1	1	L1SfpControlApp	8	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run
1	1	L1PortControlApp	9	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run
1	1	L1SwitchControlApp	10	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run

You can use a horizontal scrollbar to view hidden columns in the tables if the table is too wide to fit into the content area.



Key columns are shown on the left side and are not affected by horizontal scroll.

3.5 SYSTEM

This is layer level of main menu, which includes Core, Environment, and WebUI items.

3.5.1 Core

This is component level of main menu. It includes Domains, Reboot, System, Configuration Files, File Management, Logs, and Firmware pages.

This set of pages allows you to see the list of all the domains on the system, to reboot the system, to control configuration files (by importing configuration from a specified file to the running configuration, exporting saved configuration files, etc.) Some of the pages provide you with access to Logs (viewing actions performed by administrators and users, adding new syslog messages, etc.).

3.5.1.1 Applications

System / Core / Applications									
⏪	←	1	2	3	→	⏩	1/3	GOTO	10 Rows
Instance	Domain	Name	Application ID	Type	Version	Vendor	Admin State	Operational State	Log
1	1	ONSApplicationServer	1	AppSrv	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	ONSSnmpServer	2	Control	1.00	Copyright (C) 2012 Wind River, Inc.	Run	Run	Not
1	1	ONSNorthboundServer	4	MgmtSrv	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	ONSCoreServer	5	Core	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	L2MirrorControlApp	6	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	L2QosControlApp	7	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	onsp	8	SysSrv	2.00	Copyright (C) 2013 Wind River, Inc	Run	Run	Not
1	1	L1SfpControlApp	9	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	L2VlanControlApp	10	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not
1	1	L2AclControlApp	11	Control	1.00	Copyright (C) 2012 Wind River, Inc	Run	Run	Not

Applications page allows you to see applications on system.

The table is [Inline edit Only](#).

3.5.1.2 Reboot

System / Core / **Reboot**

Reboot the switch.

REBOOT

Reboot page allows you to reboot the switch.

Click the **Reboot** button to reboot the switch and then click **OK** to confirm your actions. It takes 1 minute for the system to reboot, after which you should reload the page pressing F5 button on your keyboard, or clicking the reload button in your browser.



Page does not reload automatically.

After reloading the current page you are forwarded to the Homepage.

3.5.1.3 System

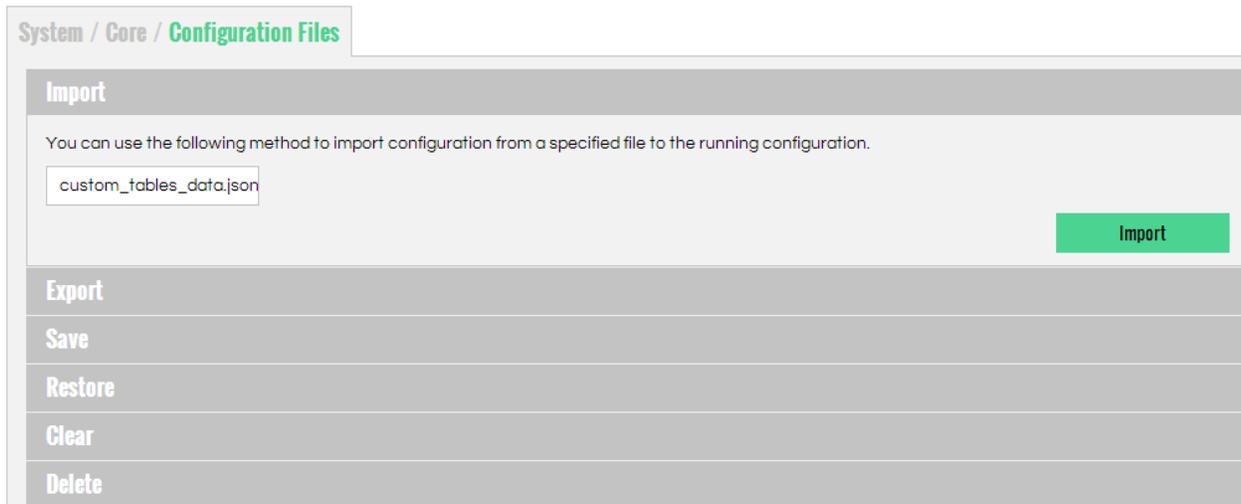
System / Core / **System**

Admin State	Run
Operational State	Run
Configuration Action	None
Configuration Directory	/persistent
Configuration File Name Extension	.stored-cfg
Platform Configuration Directory	/etc/ons

System page is a single entry page that provides you with interface for controlling global configurations.

The table is [Inline edit Only](#).

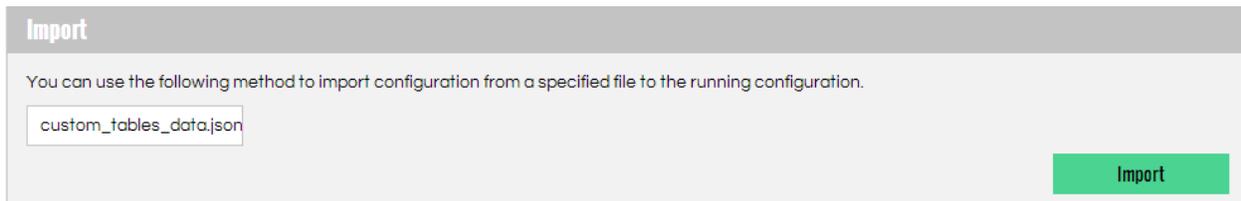
3.5.1.4 Configuration Files



The screenshot shows a web interface for configuration files. At the top, there is a breadcrumb trail: "System / Core / Configuration Files". Below this, there is a section titled "Import". The text in this section reads: "You can use the following method to import configuration from a specified file to the running configuration." Below the text is a text input field containing the filename "custom_tables_data.json". To the right of the input field is a green button labeled "Import". Below the "Import" section, there is a vertical list of buttons: "Export", "Save", "Restore", "Clear", and "Delete".

Configuration Files page provides you with interface for controlling system configuration files. The table is of [Commands](#) type.

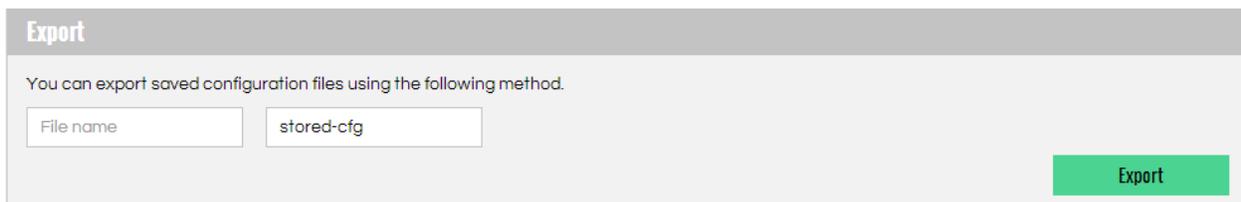
List of buttons you can use to control system configuration files is listed below:



This is a detailed view of the "Import" section. It features a header "Import" in a grey bar. Below the header, the text says: "You can use the following method to import configuration from a specified file to the running configuration." There is a text input field with the value "custom_tables_data.json". To the right of the input field is a green button labeled "Import".

Import field allows you to import configuration from a specified file (taken from the list of /dropbox folder files) to the switch.

After clicking **Import** button you have to confirm your action clicking **OK** button or cancel your actions clicking **Cancel** button.



This is a detailed view of the "Export" section. It features a header "Export" in a grey bar. Below the header, the text says: "You can export saved configuration files using the following method." There are two text input fields: the first is labeled "File name" and is empty; the second contains the value "stored-cfg". To the right of the input fields is a green button labeled "Export".

Export field allows you to export saved configuration files. To export files you should choose file name in the field **File name**, indicate file version in the neighboring window and click **Export** button. To finish, click **OK** button to confirm your actions or **Cancel** button to cancel them.

Save

You can save the current configuration using the following method.

Save

Save field allows you to save system state from persistent database on disk (saves current configuration). To save current configuration click **Save** button.

Restore

To restore the configuration from a saved configuration file, use the following method:

Restore

Restore field allows you to restore the configuration from a saved configuration file. To restore the configuration, click **Restore** button.

Clear

To reset the platform configuration to the default configuration:

Clear

Clear field allows you to send a clear configuration request to the entire ONS system. To send clear configuration request, click **Clear** button.

Delete

You can use the following method to delete previously saved configuration files:

Delete

Delete field allows you to remove files with the specified suffix from the persistent storage area (deletes previously saved configuration files). To perform this action enter suffix in the blank field and click the **Delete** button. To confirm your actions click **OK** button, to cancel them click **Cancel** button.

3.5.1.5 File management

System / Core / File Management

Download

Protocol:	<input type="text" value="SCP"/>
Server:	<input type="text" value="127.0.0.1"/>
Username:	<input type="text" value="Username"/>
Password:	<input type="text" value="Password"/>
Path:	<input type="text" value="/"/>
File name:	<input type="text" value="ons-basic-1.2.0.xxxx-x-upgrade.tar.gz"/>

Upload

Delete

File Management page allows you to control local files.

The table is of [Commands](#) type.

List of buttons you can use to control local files is listed below:

Download

Protocol:	<input type="text" value="SCP"/>
Server:	<input type="text" value="127.0.0.1"/>
Username:	<input type="text" value="Username"/>
Password:	<input type="text" value="Password"/>
Path:	<input type="text" value="/"/>
File name:	<input type="text" value="ons-basic-1.2.0.xxxx-x-upgrade.tar.gz"/>

Download field allows you to download file on the switch from the remote computer using SCP or FTP protocols. To download file choose type of protocol in the **Protocol** field, enter IP address of the remote computer in the **Server** field, enter username and password from the remote computer in the fields **Username** and **Password** correspondently, enter file path in the field **Path**, choose file name in the field **File name** and click **Download** button. After clicking the Download button, file will be saved on the switch in the /dropbox folder.



In the case you choose FTP protocol, Username and Password are not requested.

Upload

Protocol:	SCP
Server:	127.0.0.1
Username:	Username
Password:	Password
Path:	/
File name:	ons-basic-1.2.0.xxxx-x-upgrade.tar.gz

Upload field allows you to send file from the switch on the remote computer using SCP or FTP protocols. To send file, choose type of protocol in the **Protocol** field, enter IP address of the remote computer in the **Server** field, enter username and password from the remote computer in the fields **Username** and **Password** correspondently, enter file path in the field **Path** (all the files are located in the /dropbox folder), choose file name from the dropdown list in the field **File name** and click **Upload** button. After clicking the Upload button, file will be send to the remote computer.

Delete

Name	Size	
custom_tables_data.json	59 Kb	<input style="background-color: #008000; color: white; width: 20px; height: 20px;" type="button" value="x"/>
xmlrpc_proxy.py	15 Kb	<input style="background-color: #008000; color: white; width: 20px; height: 20px;" type="button" value="x"/>

Delete field allows you to delete files located in the /dropbox folder. To delete file choose any of the available files from the list and click button. To confirm deleting of the files, click **OK** button, to cancel deleting click **Cancel** button.

3.5.1.6 Firmware

System / Core / **Firmware**

Please select a file to upgrade:

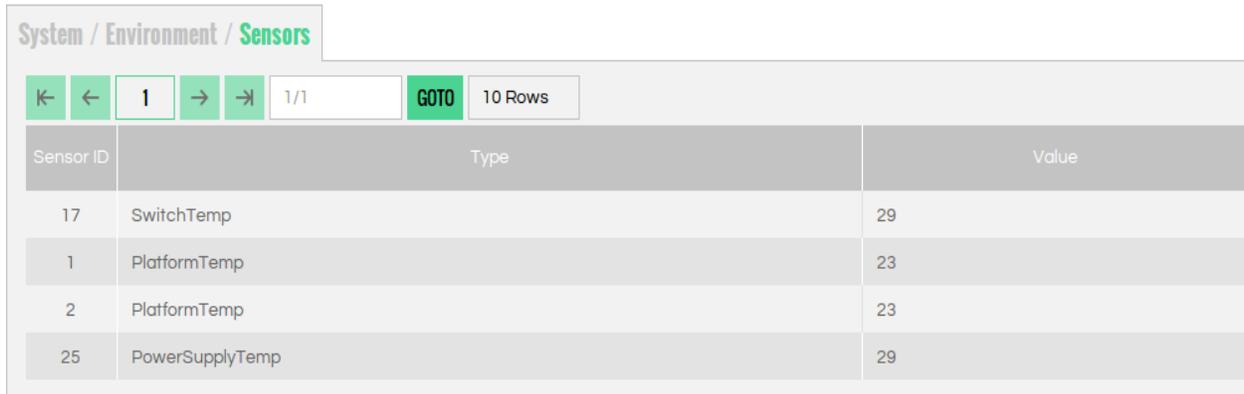
pg-firmware-upgrade.tar.gz

Firmware page provides you with the interface for managing firmware. The table is of [Commands](#) type.

3.5.2 Environment

This set of pages gives you the possibility to configure and monitor sensors of hardware environment.

3.5.2.1 Sensors



Sensor ID	Type	Value
17	SwitchTemp	29
1	PlatformTemp	23
2	PlatformTemp	23
25	PowerSupplyTemp	29

Sensors page includes operational sensor data for all types of sensors in a single table.

Table is [Read Only](#).

3.5.3 Web UI

This is component level of main menu, which includes WebUI page.

3.5.3.1 Web UI

System / WebUI / WebUI

Valid From	20140414125811Z
Valid To	20150414125811Z
Issuer	C=TS, ST=TS, L=Test, O=Test
Signature Algorithm	sha1WithRSAEncryption
Serial Number	16668709983162418130
Certificate Name	server.pem
HTTP Admin Mode	Enable
HTTP Port	80
HTTPS Admin Mode	Disable
HTTPS Port	443
Certificate text	

APPLY CERTIFICATE

WebUI page allows you to enable/disable Web Server, to configure secure mode and HTTP/HTTPS ports, to upload new certificate, or get information regarding current certificate. The table is [Inline edit Only](#).

3.6 LAYER1

This is layer level of main menu, which includes Port, Err Disable, SFP and Switch components.

3.6.1 Port

This set of pages provides you with information on capabilities of all the ports and allows you to configure these ports (by changing MAC Address, Admin Mode status, Port Name, Speed, etc.).

3.6.1.1 Ports

Layer 1 / Port / Ports

← 1 2 3 → → 1/6 GOTO 10 Rows

Port ID	MAC Address	Admin Mode	Auto Negotiate	Duplex	Flow Control	Ingress Filtering	Loopback	Max Frame Size	Name	Pvid	Pvpt	S
1	00:08:A2:08:F1:DB	Up	Disabled	Full	None	Disabled	None	1524	Some	5	0	11
2	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe2	1	0	11
3	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe3	1	0	11
4	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe4	1	0	11
5	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe5	1	0	11
6	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe6	1	0	11
7	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe7	1	0	11
8	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe8	1	0	11
9	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe9	1	0	11
10	00:08:A2:08:F1:DA	Up	Disabled	Full	None	Disabled	None	1524	xe10	1	0	11

Ports page allows you to configure all types of ports in a single table.

The table is [Inline edit Only](#), although there is no way for users to add or delete ports via web user interface.



To differentiate between ports, there is the *Type* column. When the port type is Physical, it is normal physical port. A CPU port will be CPU type. When port is part of LAG, it is a LAGMember type, and if the port is a LAG it will be LAG type.

3.6.1.2 Port Capabilities

Layer 1 / Port / Port Capabilities

Port ID	FD 10 M	FD 100 M	FD 1000 M	FD 2500 M	FD 10 G	FD 20 G	FD 30 G	FD 40 G	GMI	HD 10 M	HD 100 M	HD 1000 M
1	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
2	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
3	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
4	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
5	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
6	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
7	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
8	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
9	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled
10	Disabled	Enabled	Enabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enabled	Disabled

Port Capabilities page provides you with information about the capabilities of every port. LAG ports and CPU ports will not be shown here. For information on LAG and CPU ports, go to [Layer 1/Port/Ports](#).

The table is [Read Only](#).

3.6.2 SFP

This is component level of main menu, which includes Port SFP page.

3.6.2.1 Port SFP

Layer 1 / SFP / Port SFP

Port ID	Identifier	Type Code	Compatibility Code	Encoding Code	Bit Rate	Link Length Pairs	Vendor Name	Vendor OUI	Vendor PART Number	Vendor Revision	Wavelength
33	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
34	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
35	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
36	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
37	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
38	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
39	SFP/SFP+	21	1000Base-CX	n/a	10000	2m	ELPEUS.	141BBD	CB23123-2	B	0nm
40	SFP/SFP+	21	Unknown	n/a	10300	3m	Amphenol	415048	571540002	M	256nm

Port SFP page allows you to define port SFP connector information per port. The fields and their definitions are in compliance with the INF-8077i definitions by the SFF committee.

The table is [Read Only](#).

3.6.3 Statistics

3.6.3.1 IEEE 802.3 Statistics

Layer 1 / Statistics / IEEE 802.3 Statistics

Port ID	Control In Unknown Opcodes	In Pause Frames	Out Pause Frames	Alignment Errors	Carrier Sense Errors	Deferred Transmissions	Excessive Collisions	FCS Errors	Frame Too Long	Internal MAC Receive Errors	Internal MAC Transmit Errors	Late Collisions
1	0	0	0	1	0	0	5	0	0	0	0	0
2	0	0	0	0	0	0	5	0	0	0	0	0
3	0	0	0	0	0	0	7	0	0	0	0	0
4	0	0	0	0	0	0	2	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0

IEEE 802.3 Statistics page provides you with information regarding **IEEE 802.3** statistics.

The table is [Read Only](#).

3.6.3.2 Ethernet Statistics

Layer 1 / Statistics / Ethernet Statistics

Port ID	Rx Oversize Packets	Broadcast Packets	Collisions	CRC Align Errors	Drop Events	Fragments	Jabbers	Multicast Packets	Octets	Oversize Packets	Packets	Packets 64 Octets	Packets 65-127 Octets
1	0	1024	0	0	0	0	0	0	0	0	0	0	0
2	0	2570	0	0	0	0	0	0	0	0	0	0	0
3	0	3570	0	0	0	0	0	0	0	0	0	0	0
4	0	2343	0	0	0	0	0	0	0	0	0	0	0
5	0	5465	0	0	0	0	0	0	0	0	0	0	0
6	0	6364	0	0	0	0	0	0	0	0	0	0	0
7	0	63634	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0

Statistics page provides you with information regarding *Ethernet* per port statistics counters. The table is [Read Only](#).

3.6.3.3 Interface 64 Bit Statistics

Layer 1 / Statistics / Interface 64 Bit Statistics									
← ← 1 2 3 → → 1/6 GOTO 10 Rows Clear Port Statistics Clear All Statistics									
Port ID	64 bit In Octets	64 bit In Unicast Packets	64 bit In Multicast Packets	64 bit In Broadcast Packets	64 bit Out Octets	64 bit Out Unicast Packets	64 bit Out Multicast Packets	64 bit Out Broadcast Packets	
1	0	0	27	0	0	0	0	0	
2	0	0	350	0	0	0	0	0	
3	0	0	770	0	0	0	0	0	
4	0	0	780	0	0	0	0	0	
5	0	0	790	0	0	0	0	0	
6	0	0	234	0	0	0	0	0	
7	0	0	133	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	
9	0	0	0	0	0	0	0	0	
10	0	0	0	0	0	0	0	0	

Interface 64 Bit Statistics page provides you with information regarding *Interface 64 Bit* per port statistics counters.

The table is [Read Only](#).

3.6.4 Switch

This set of pages allows you to configure the bridge across multiple protocols and view all the relevant information about the hardware platform that <Switch++> is running on.

3.6.4.1 Bridge Info

Layer 1 / Switch / Bridge Info	
System Name	Some_NAME
System Description	Open Network Software
Aging Time	300
Default VLAN ID	1
Inband Enabled	Enabled
Inband IP Address	10.1.1.1
Inband IP Net Mask	255.255.255.0
Inband Default Gateway	Empty
MAC Address	00:08:A2:08:F1:D6
Queue Count	8

Bridge Info page allows you to configure the bridge across multiple protocols. It contains administratively modifiable variables.

The page allows you to set system name and description, aging Time (the time, in seconds, that an entry in the FDB is maintained before being removed), the default VLAN ID, IP address, MAC address and subnet mask to use for the switch.

The table is [Inline edit Only](#).

3.6.4.2 Chassis Configuration

Layer 1 / Switch / Chassis Configuration	
Active Controller	N/A
HW Revision	N/A
Switch Slot ID	2
Active Physical Management Port	N/A

Chassis Configuration page contains information on chassis configuration data, CMM active slot and details on Switch Hardware Version.

The table is [Read Only](#).

3.6.4.3 Platform

Layer 1 / Switch / Platform	
Api Version	FocalPoint 3.3.5_00268148 + wr-snapshot-4
Chip Name	paintedGorge
Chip Sub Type	fm6000
Chip Version	Board:01
CPU	x86_64
CPU Architecture	x86_64
Model	ONS
Name	ONS CoreSwitch
Os Type	Linux
Os Version	3.4.43-WR5.0.1.10_standard
Serial Number	N/A
Switchpp Version	1.2.1_a.1435-4
Ethernet Switch Type	Fulcrum Switch
Uptime	0:06:29
Clock	2014-08-29 UTC 02:17:27
Active Controller	0
HW Revision	0
Switch Slot ID	2
Active Physical Management Port	N/A

Platform page allows you to view all the relevant information about the hardware platform that <Switch++> is running on.

The table is [Read Only](#).

3.6.5 Err Disable

If the configuration shows a port to be enabled, but software on the switch detects an error situation on the port, the software shuts down that port. In other words, the port is automatically disabled by the switch operating system software because of an error condition that is encountered on the port.

This set of pages allows you to configure and view all errdisable (error disabled) errors that can cause your ports to go into errdisable port state. When a port is error disabled, it is effectively shut down and no traffic is sent or received on that port. Here you can set recovery interval, a specified amount of time after which the errdisable ports automatically re-enable.

3.6.5.1 Configuration

Layer 1 / Err Disable / Configuration

Recovery Interval	300
-------------------	-----

Errdisable Configuration page allows you to set per-system Errdisable settings – recovery interval.

The table is [Inline edit Only](#).

3.6.5.2 Errors Configuration

Layer 1 / Err Disable / Errors Configuration

Navigation: 1 / 1, GOTO, 10 Rows

Application Name	Application Error	Enabled	Recoverable	Recovery
L2UfdControlApp	ufd	Enabled	False	Disabled
L2StpControlApp	bpduGuard	Enabled	True	Disabled
L2LagControlApp	udld	Enabled	True	Disabled

Errdisable Errors Configuration page allows you to configure per-error Errdisable settings – the reason why a port can go into errdisable state.

The table is [Inline edit Only](#).

3.6.5.3 Ports

Layer 1 / Err Disable / Ports

Navigation: 1 / 1, GOTO, 10 Rows

Port ID	Application Name	Application Error	Time
2	L2StpControlApp	bpduGuard	500
50	L2StpControlApp	bpduGuard	4026
20	L2UfdControlApp	ufd	99

Errdisable Ports page provides information about a reason of each disabled port.

The table is [Read Only](#).

3.7 LAYER2

The Layer 2 category of pages allows you to configure your switch and view all related information on Data Link Layer (Layer 2), including ACL, DCBx, FDB, LAG, LLDP, Mirror, Multicast, QinQ, QoS, Statistics, Storm, STP, UFD, and VLAN components.

3.7.1 FDB

Forwarding Database (FDB) set of pages is component level of main menu, which includes FDB and Static MAC pages.

3.7.1.1 FDB

Layer 2 / FDB / FDB

⏪ ⏩ 1 ⏪ ⏩ 1/1 GOTO 10 Rows Clear Port FDB Entries Clear All FDB Entries

MAC Address	VLAN ID	Port ID	Type
00:01:10:00:03:01	1	3	Dynamic
00:02:55:36:22:41	2	3	Dynamic
00:11:22:33:44:55	3	3	Dynamic
00:03:25:77:69:12	4	23	Dynamic
00:04:25:64:88:19	5	23	Dynamic
00:03:10:00:03:03	6	24	Dynamic
00:03:11:00:03:03	7	25	Dynamic
00:03:12:00:03:03	8	26	Dynamic

FDB page provides management interface over the forwarding database. The FDB (forwarding database) table is used by a Layer 2 device (switch/bridge) to store the MAC addresses that have been learned and which ports that MAC address was learned on. The MAC addresses are learned through transparent bridging on switches and dedicated bridges.

The table is [Read Only](#).



Types of the entries in this table are Static and Dynamic.

3.7.1.2 Static MAC

Layer 2 / FDB / Static MAC

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

MAC Address	VLAN ID	Port ID
00:00:00:11:11:11	1	2
00:00:00:11:22:11	1	3
00:00:00:11:33:11	1	4
00:00:00:11:44:11	1	5
00:00:00:11:55:11	1	6
00:00:00:11:55:22	1	7

Static Mac page provides control over Static MAC entries of FDB.

The table is [Full edit](#).

3.7.2 VLAN

This is component level of main menu, which includes Ports to VLANs and VLANs pages.

3.7.2.1 Ports to VLANs

Layer 2 / VLAN / Ports to VLANs

Navigation: 1, 2, 3, 1/6, GOTO, 10 Rows, +, X, Refresh

Port ID	VLAN ID	Tagged
1	1	Untagged
2	1	Untagged
3	1	Untagged
4	1	Untagged
5	1	Untagged
6	1	Untagged
7	1	Untagged
8	1	Untagged
9	1	Untagged
10	1	Untagged
		Untagged

Ports to VLANs page provides you with an ability to control physical and logical port assignment to VLANs.

The table is [Full edit](#).

3.7.2.2 VLANs

VLAN ID	Name
1	Default VLAN

Vlans page provides you with management interface over the Virtual LAN features.



VLAN (Virtual Local Area Network) is a logical local area network (or LAN) that extends beyond a single traditional LAN to a group of LAN segments, given specific configurations.

Vlans are identified by IDs that should be unique. Vlan name uniqueness is optional.

Range of VLANs can be configured in the following way:

- 1) In VLAN ID column you can enter, for example:
 - ‘1-100’ – to create VLAN’s with ID’s from 1 to 100
 - ‘2-4, 10’ – to create VLAN’s with ID’s 2, 3, 4 and 10
- 2) In Name column you can use macro %id%, which will be changed to corresponding VLAN ID. For example:
 - Test VLAN %id%
 - %id%_vlan

The table is [Full edit](#).

3.7.3 STP

This is component level of main menu, which includes MSTP Ports, RSTP Ports, Spanning Tree, STP Instances, and VLANs to STP Instance pages.

3.7.3.1 MSTP Ports

Layer 2 / STP / MSTP Ports

Navigation: 1 2 3 1/6 GOTO 10 Rows

MSTI	Port ID	Admin Edge Port	Admin State	Internal Cost	External Cost	MAC Enabled	MCheck	Port Hello Time	Priority	Restricted Role	Restricted Topology Change Notification	Admin Point to Point MAC
0	1	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	2	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	3	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	4	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	5	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	6	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	7	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	8	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	9	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru
0	10	Disabled	Enabled	2000	2000	Enabled	Disabled	2	128	Disabled	Disabled	ForceTru

MSTP Ports page allows you to see all pertinent information for a Port operation under the MSTP Protocol. This includes administratively modifiable variables to affect the topology of your network. These variables are described in the Help for this table.

The table is [Inline edit Only](#).

3.7.3.2 RSTP Ports

Layer 2 / STP / RSTP Ports

Navigation: 1 2 3 1/6 GOTO 10 Rows

Port ID	Admin Edge Port	Admin State	Auto Edge Port	Cost	MAC Enabled	MCheck	Priority	Operational Point To Point MAC	Admin Point to Point MAC	Port Fast	BPDU Guard	Ro Gu
1	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
2	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
3	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
4	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
5	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
6	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
7	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
8	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
9	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat
10	Disabled	Enabled	Enabled	2000	Enabled	Disabled	128	True	ForceTrue	Disabled	Disabled	Disat

RSTP Ports page allows you to get all pertinent information for a Port operation under the RSTP Protocol. This includes administratively modifiable variables to affect the topology of your network. These variables are described in the Help for this table.

The table is [Inline edit Only](#).

3.7.3.3 STP Instances

Layer 2 / STP / STP Instances

⏪ ⏩ 1 → ↩ 1/1 GOTO 10 Rows + × ↻

MSTI	Bridge Priority	Bridge ID	Designated Root	Designated Root Priority	Mst Port Configuration Table	Root Path Cost	Root Port ID	Root Times Forward Delay	Root Times Max Age
0	32768	00:00:00:00:00:00	00:08:A2:08:F1:DA	32768	000000000000000000	0	0	15	20

STP Instances page displays and manages all the MSTIs (including the CIST) that exist in the system. The priority of the switch is manageable on a per instance basis via the *Bridge Priority* variable.

The table is [Full edit](#).

3.7.3.4 Spanning Tree

Layer 2 / STP / Spanning Tree	
Aging Time	300
Bridge Priority	32768
Force Version	2
Forward Delay	15
Global Enable	Enabled
Hello Time	2
Max Age	20
Max Hops	20
Migration Time	3
Mode	RSTP
MSTPci Name	Switch++ Configuration
MSTPci Revision Level	17
Tx Hold Count	6
Bridge ID	00:08:A2:08:F1:D6
Designated Root	00:08:A2:08:F1:D6
Designated Root Priority	32768
MSTPcid Format Selector	0
MSTPci Digest Signature Key	0000000000000000
BPDU Guard	Disabled
Root Path Cost	0
Root Port ID	0
Root Times Forward Delay	15
Root Times Hello Time	2
Root Times Max Age	20
Tc	False
Tc Count	1
Time Since Tc	382

Spanning Tree table contains system-wide information about the operation xSTP protocol on the bridge.

It contains administratively modifiable variables for configuring your spanning tree topology.

They are described in the Help for this Table.

The table is [Inline edit Only](#).

3.7.3.5 VLANs to STP Instance

MSTI	VLAN ID
50	2
60	1
70	3
80	4
90	5
95	6
100	7
150	8
200	9
250	10

VLANs to STP Instance page provides you with information about all VLAN to msti relationships.

The table is [Full edit](#).

3.7.4 Storm

This is component level of main menu, which includes Control page.

3.7.4.1 Control

Port ID	Port Stage	Frame Type	Capacity Limit	Rate Limit
-1	Ingress	Bpdu	16384	1000
	Ingress	Broadcast		

Control page provides management interface over the switch storm-control (rate policing) features.

The table is [Full edit](#).

3.7.5 LAG

This is component level of main menu, which includes LAG Admin, LAG Local, LAG Remote, Link Aggregation, Ports to LAG Admin, Ports to LAG Local, and Ports to LAG Remote pages.

3.7.5.1 LAG Admin

Layer 2 / LAG / LAG Admin

Navigation: [Back] [Left] [1] [Right] [Forward] [1/1] [GOTO] 10 Rows [Add] [Close] [Refresh]

LAG ID	Name	Actor Admin LAG Key	LAG Control Type	Hash Mode
3802	lag2	0	Dynamic	None
3801	lag1	1	Static	None
			Static	

LAG Admin page provides a management interface for a given LAG.

The table is [Full edit](#).



All parameters affecting single LAGs that may be administratively modified are described in Help for this page.

3.7.5.2 LAG Local

Layer 2 / LAG / LAG Local

Navigation: [Back] [Left] [1] [Right] [Forward] [1/1] [GOTO] 10 Rows

LAG ID	LAG MAC Address	Actor Operational LAG Key	Receive State	Transmit State	Ready
3801	00:11:22:33:44:55	0	Disabled	Disabled	False

LAG Local page presents you all non-administratively modifiable information about a given LAG that is local (i.e. Information about the LAG on this switch).

The table is [Read Only](#).

3.7.5.3 LAG Remote

Layer 2 / LAG / LAG Remote

Navigation: 1 / 1, GOTO, 10 Rows

LAG ID	Partner System ID	Partner System Priority	Partner Operational LAG Key
3801	00:00:00:00:00:00	0	0

LAG Remote page presents all non-administratively modifiable information about a given LAG that is remote (i.g. Information about the LAG on the other end of the wire).

The table is [Read Only](#).

3.7.5.4 Link Aggregation

Layer 2 / LAG / Link Aggregation

MAC Address	00:08:A2:08:F1:D6
Priority	32768
Collector Max Delay	10
Global Enable	Enabled
Global Hash	Enabled
Global Hash Mode	None
Lacp Enable	Enabled

Link Aggregation page gives you all information that affects multiple lags (system wide variables).

The table is [Inline edit Only](#).

3.7.5.5 Ports to LAG Admin

Layer 2 / LAG / Ports to LAG Admin

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

Port ID	LAG ID	Actor Port Priority	Actor Admin Port Key	Admin Aggregation	Admin Active	Admin Timeout	Admin Synchronization	Admin Collecting	Admin Distributing	Admin Default
1	3801	32768	0	Multiple	Passive	Long	False	False	False	False
		128		Multiple	Passive	Long	False	False	False	False

Ports to LAG Admin page provides you with information on all administratively manageable variables for each port under a LAG.

The table is [Full Edit](#).



This table is used to change variables on a per port basis. It only contains entries for ports that are currently added to a LAG.

3.7.5.6 Ports to LAG Local

Layer 2 / LAG / Ports to LAG Local

Navigation: [Back] [Left] [1] [Right] [Next] [1/1] [GOTO] 10 Rows

Port ID	LAG ID	Operational Conflict	Actor Operational Port Key	Actor Operational Port State	LACP Operating	Actor Churn	Ready	Port Enabled	Selected	Rx Counter	Tx Counter
1	3801	True	0	00000100	Disabled	False	False	Disabled	Unselected	0	0

Ports to LAG Local page gives you all non-Administrative information pertaining to a port under a LAG that is local (i.e. regarding this switch/LAG).

The table is [Read Only](#).



This does not account for ports that are not attached to any lags. None of the Variables are Read/Write.

3.7.5.7 Ports to LAG Remote

Layer 2 / LAG / Ports to LAG Remote

Navigation: [Back] [Left] [1] [Right] [Next] [1/1] [GOTO] 10 Rows

Port ID	LAG ID	Partner Operational System	Partner Operational System Priority	Partner Operational Port State	Partner Operational Port Number	Partner Operational Key	Partner Operational Port Priority	Partner Churn
1	3801	00:01:00:01:01:00	32768	00000000	1	0	32768	False

Ports to LAG Remote page gives you all non-administrative information about a port under a LAG that is remote (i.e. pertaining to the LAG that this LAG is connected too).

The table is [Read Only](#).

3.7.6 Multicast

This is component level of main menu, which includes IGMP Snooping Global Admin, IGMP Snooping Global Operational, IGMP Snooping Ports Admin, IGMP Snooping Ports Operational, L2 Multicast, and Static L2 Multicast pages.

3.7.6.1 IGMP Snooping Global Admin

Layer 2 / Multicast / IGMP Snooping Global Admin	
Mode	Disabled
Query Interval	125
Querier Robustness	2
Unknown IGMP Behavior	Broadcast
Router Alert Enforced	Enabled

IGMP Snooping Global Admin page provides you with global configuration of IGMP snooping.

The table is [Inline edit Only](#).

3.7.6.2 IGMP Snooping Global Operational

Layer 2 / Multicast / IGMP Snooping Global Operational	
Number Router Ports	0
Groups Number	0

IGMP Snooping Global Operational table includes global operational parameters of IGMP snooping.

The table is [Read Only](#).

3.7.6.3 IGMP Snooping Ports Admin

Layer 2 / Multicast / IGMP Snooping Ports Admin									
←	←	1	2	3	→	→	1/6	GOTO	10 Rows
Port ID	IGMP Enabled		Router Port Mode						
1	Disabled		Auto						
2	Disabled		Auto						
3	Disabled		Auto						
4	Disabled		Auto						
5	Disabled		Auto						
6	Disabled		Auto						
7	Disabled		Auto						
8	Disabled		Auto						
9	Disabled		Auto						
10	Disabled		Auto						

IGMP Snooping Ports Admin table provides per port configuration of IGMP snooping.

The table is [Inline edit Only](#).

3.7.6.4 IGMP Snooping Ports Operational

Layer 2 / Multicast / **IGMP Snooping Ports Operational**

← ← 1 2 3 → → GOTO 10 Rows Clear Interface IGMP Statistics

Port ID	Router Port	Host Port	Groups Number	Rx IGMP Queries V1	Rx IGMP Queries V2	Rx IGMP Queries V3	Rx IGMP Reports V2	Rx IGMP Reports V1	Rx IGMP Reports V3	Rx IGMP Leaves
1	False	False	0	0	0	0	0	0	0	0
2	False	False	0	0	0	0	0	0	0	0
3	False	False	0	0	0	0	0	0	0	0
4	False	False	0	0	0	0	0	0	0	0
5	False	False	0	0	0	0	0	0	0	0
6	False	False	0	0	0	0	0	0	0	0
7	False	False	0	0	0	0	0	0	0	0
8	False	False	0	0	0	0	0	0	0	0
9	False	False	0	0	0	0	0	0	0	0
10	False	False	0	0	0	0	0	0	0	0

IGMP Snooping Ports Operational page includes per port operational of IGMP snooping.

The table is [Read Only](#).

3.7.6.5 L2 Multicast

Layer 2 / Multicast / **L2 Multicast**

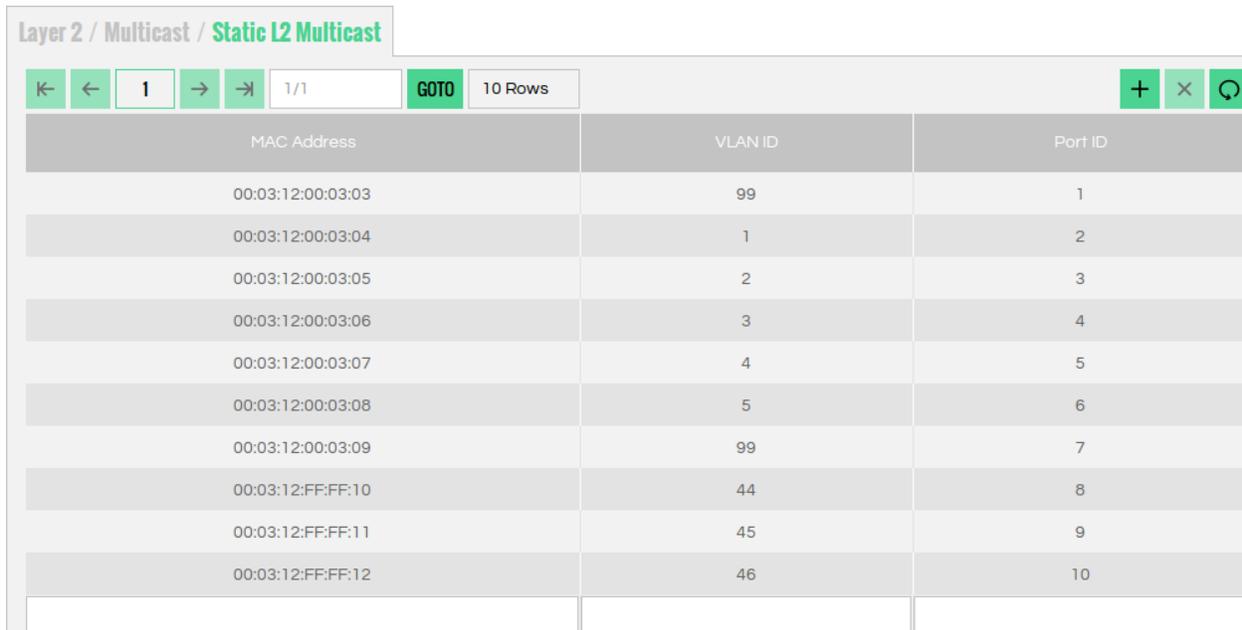
← ← 1 → → GOTO 10 Rows Clear L2 Multicast Dynamic Entries

Port ID	MAC Address	VLAN ID	Type
2	01:00:5E:00:09:B0	1	Dynamic
2	01:00:5E:00:09:B1	1	Dynamic
2	01:00:5E:00:09:B2	1	Dynamic
2	01:00:5E:00:09:B3	1	Dynamic
2	01:00:5E:00:09:B4	1	Dynamic
2	01:00:5E:00:09:B5	1	Dynamic
2	01:00:5E:00:09:B6	1	Dynamic
2	01:00:5E:00:09:B7	1	Dynamic
2	01:00:5E:00:09:B8	1	Dynamic
2	01:00:5E:00:09:B9	1	Dynamic

L2 Multicast page contains all multicast forwarding entries, dynamic or statically created.

The table is [Inline edit Only](#).

3.7.6.6 Static L2 Multicast



MAC Address	VLAN ID	Port ID
00:03:12:00:03:03	99	1
00:03:12:00:03:04	1	2
00:03:12:00:03:05	2	3
00:03:12:00:03:06	3	4
00:03:12:00:03:07	4	5
00:03:12:00:03:08	5	6
00:03:12:00:03:09	99	7
00:03:12:FF:FF:10	44	8
00:03:12:FF:FF:11	45	9
00:03:12:FF:FF:12	46	10

Static L2 Multicast page is used to manage administratively created multicast forwarding entries.

The table is [Full edit](#).

3.7.7 QoS

This is component level of main menu, which includes Ports IEEE P802.1p to CoS, Ports DSCP to CoS, and Ports QoS pages.

3.7.7.1 Ports DSCP to CoS

Layer 2 / QoS / Ports DSCP to CoS

Navigation: 1 2 3 1/7 GOTO 10 Rows + X Refresh

Port ID	DSCP	CoS
-1	0	0
-1	1	0
-1	2	0
-1	3	0
-1	4	0
-1	5	0
-1	6	0
-1	7	0
-1	8	1
-1	9	1

Ports DSCP to CoS page describes mapping of Differentiated Service Code Point value to CoS per port or per switch. By default this table is empty and only values that differ from default system values should be stored in this table. If any existing entry is deleted from this table this means that default mapping value will be restored for this DSCP value.

The table is [Full edit](#).

3.7.7.2 Ports IEEE P802.1p to CoS

Layer 2 / QoS / Ports IEEE P802.1p to CoS

Navigation: 1 1/1 GOTO 10 Rows + X Refresh

Port ID	IEEE P802.1p	CoS
-1	0	0
-1	1	1
-1	2	2
-1	3	3
-1	4	4
-1	5	5
-1	6	6
-1	7	7

Ports IEEE P802.1p to CoS page describes mapping of ingress VLAN priority to CoS per port or per switch. By default this table is empty and only values that differ from default system values should be stored in this table. If any existing entry is deleted from this table this means that default mapping value will be restored for this 802.1p value.

The table is [Full edit](#).

3.7.7.3 Ports QoS

Layer 2 / QoS / Ports QoS

Port ID	Trust Mode	Sched Mode	CoS Weight 0	CoS Weight 1	CoS Weight 2	CoS Weight 3	CoS Weight 4	CoS Weight 5	CoS Weight 6	CoS Weight 7	CoS 0 Bandwidth	CoS 1 Bandwidth
1	None	Strict	0	0	0	0	0	0	0	0	-1	-1
2	None	Strict	0	0	0	0	0	0	0	0	-1	-1
3	None	Strict	0	0	0	0	0	0	0	0	-1	-1
4	None	Strict	0	0	0	0	0	0	0	0	-1	-1
5	None	Strict	0	0	0	0	0	0	0	0	-1	-1
6	None	Strict	0	0	0	0	0	0	0	0	-1	-1
7	None	Strict	0	0	0	0	0	0	0	0	-1	-1
8	None	Strict	0	0	0	0	0	0	0	0	-1	-1
9	None	Strict	0	0	0	0	0	0	0	0	-1	-1
10	None	Strict	0	0	0	0	0	0	0	0	-1	-1

Ports QoS page describes the per-port QoS settings.

The table is [Inline edit Only](#).

3.7.8 ACL

Access control list (ACL) set of pages allows you to configure access list to control access to your network: access lists define rules that deny or allow traffic to be forwarded from/to a port based on specified parameters.

This is component level of main menu, which includes Actions, Expressions, Policers, Rules, and Statistics pages.

3.7.8.1 Actions

Action ID	Action	Parameter
1	Drop	Empty
2	Allow	Empty
	Normal	

Actions table provides you with an interface to configure ACL action set.

The table is [Full edit](#).



An action set is a group of actions that are executed on the matched packets.

3.7.8.2 Expressions

Expression ID	Field	Mask	Data
1	SrcIp	255.255.255.255	99.40.6.1
2	DstMac	FF:FF:FF:FF:FF:FF	01:00:5e:00:00:05
3	SrcMac	FF:FF:FF:FF:FF:FF	00:02:10:00:03:03
	SrcIp6High		

Expressions page gives you the possibility to configure ACL expression entries. You can specify a complicated Boolean logic to be applied as deny or allow egress and ingress traffic.

The table is [Full edit](#).



An expression set is a multiple (at least 1) logical field-operation-result of the form:

field & mask == data, with logical AND between the field-operation-results.

This table maps multiple logical field-operation-results into a set of expressions in an N:1 relations. In this table you can see, for example:

- expressionSetId=1 field1, mask1, expectedResult1

- expressionSetId=1 field2, mask2, expectedResult2
- expressionSetId=1 field5, mask5, expectedResult5 and so on.

This will give you one rule that is the following compounded expression Set for expressionSetId==1: expressionSetId defined as: field1 & mask1 == expectedResult1 && field2 & mask2 == expectedResult2 && field5 & mask5 == expectedResult5.

3.7.8.3 Policers

Layer 2 / ACL / Policers

Policer ID	CIR Capacity Limit	CIR Rate Limit	CIR Action	CIR Action Parameter	EIR Capacity Limit	EIR Rate Limit	EIR Action	EIR Action Parameter
1	1500	1000	Drop	1000	1500	1500	Drop	1000
			DoNothing				DoNothing	

Policies page provides an interface to configure ACL traffic policer that can be associated with an ACL using the Set Policer ACL action.

The table is [Full edit](#).



Associating a policer with ACL causes the policer to be applied on all ACL matched packets, and applying the policer action on these packets if traffic exceeded the specified policer limits.

3.7.8.4 Rules

Layer 2 / ACL / Rules

Rule ID	Expression ID	Action ID	Stage	Enabled	Priority
1	1	1	Egress	Enabled	0
			PermitDenyIngress	Disabled	

Rules page provides an interface for defining an ACL and its associated expression/action sets.

This table helps you associate unique Rule ID with an Expression ID previously defined on the **Expressions** page ([Layer 2/ ACL/Expressions](#)) and an Action ID previously defined in the **Actions** table ([Layer 2/ACL/Actions](#)).

The table is [Full edit](#).

3.7.8.5 Statistics

Layer 2 / ACL / Statistics

Navigation: 1 / 1, GOTO, 10 Rows

Rule ID	Match Packets	Match Octets
1	0	0

Statistics page provides monitoring interface to read the ACL hit counters.

The table is [Inline edit Only](#).



ACL must include Count action, in order for its counters to incremented upon hit.

3.7.9 QinQ

This is component level of main menu, which includes Customer VLAN Mapping, Ports, Provider VLAN Mapping, and VLAN Stacking pages.

3.7.9.1 Customer VLAN Mapping

Layer 2 / QinQ / Customer VLAN Mapping

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

Port ID	Customer VLAN ID	Provider VLAN ID	Provider VLAN Priority
5	20	200	4
6	21	201	5
7	22	202	6
8	25	203	5
10	30	100	3
11	30	300	4
12	31	301	5
13	32	302	6
14	35	303	5
15	40	400	3

Customer VLAN Mapping page contains an entry for each mapping of customer ports and their ingress-VLAN mapping (customer-VLAN to provider-VLAN mapping) services.

The table contains [Add / Remove rows only](#).

3.7.9.2 Ports

Layer 2 / QinQ / Ports									
←	←	1	2	3	→	→	1/6	GOTO	10 Rows
Port ID	Mode		TP ID						
1	None		33024						
2	None		33024						
3	None		33024						
4	None		33024						
5	None		33024						
6	None		33024						
7	None		33024						
8	None		33024						
9	None		33024						
10	None		33024						

Ports table provides you with interface for controlling logical ports (physical port or LAG) Q-in-Q mode and TPID.

The table is [Inline edit Only](#).

This table contains an entry for each port in Ports table.

Port mode can be set to:

- None
- ProviderStacked
- ProviderMapped
- CustomerStacked
- CustomerMapped.



The TPID is the EtherType of 802.1Q tag, which should be 0x8100 for customer/none ports and 0x88a8 for provider ports.

3.7.9.3 Provider VLAN Mapping

Layer 2 / QinQ / Provider VLAN Mapping

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

Port ID	Provider VLAN ID	Customer VLAN ID	Customer VLAN Priority
1	200	20	4
2	201	21	5
3	202	22	4
4	203	23	3
5	204	24	2
6	300	30	4
7	301	31	5
8	302	32	4
9	303	33	3
10	304	34	2

Provider VLAN Mapping page contains an entry for each mapping of customer ports and their egress-VLAN mapping (provider VLAN to customer-VLAN mapping) services.

The table includes [Add / Remove rows only](#).

3.7.9.4 VLAN Stacking

Layer 2 / QinQ / VLAN Stacking

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

Port ID	Provider VLAN ID	Provider VLAN Priority
1	200	1
2	201	1
3	202	2
4	203	2
5	204	3
6	205	3
7	206	4
8	207	4
9	208	5
10	209	5

VLAN Stacking page contains an entry for each mapping from customer port to provider stacked q-in-q network.

The table includes [Add / Remove rows only](#).



Table is indexed by **portId** which is a customer port.

3.7.10 DCBx

Data Center Bridging Capabilities Exchange Protocol (DCBx) eliminates the need to configure a large number of switches in the network. This set of pages allows you to:

- see if the local system is willing to accept the Application Priority configuration of the remote system and configure this item (using [Application Ports Admin page](#)),
- see if the local system is willing to accept the Application Priority configuration of the remote system or see if a configuration error alarm is active (using [Application Ports Local page](#))
- see if CNPV is supported and ready for the corresponding priority (using [Congestion Notification Ports Local page](#))
- see if the local system is willing to accept the ETS configuration recommended by the remote system, if the credit-based shaper Traffic Selection Algorithm is supported on the local system, see the number of Traffic Classes supported on the local system, and make some configurations of these items (using [ETS Ports Admin page](#))
- see if the local system is willing to accept the ETS configuration recommended by the remote system, if the credit-based shaper Traffic Selection Algorithm is supported on the local system, the number of Traffic Classes supported on the local system, if a configuration error alarm is active (using [ETS Ports Local page](#))
- see if the local system is willing to accept the PFC configuration of the remote system, if the local system is capable of bypassing MACsec processing when MACsec is disabled, and make some configurations of these items (using [PFC Ports Admin page](#))
- see if the local system is willing to accept the PFC configuration of the remote system, if the local system is capable of bypassing MACsec processing when MACsec is disabled, if a configuration error alarm is active (using [PFC Ports Local page](#))

- control port specific DCBx configuration and monitor the port specific statistics data (using [Ports page](#)).

For more information, see description of these tables below or hints online.

3.7.10.1 Application Maps Admin

Layer 2 / DCBx / **Application Maps Admin**

Port ID	Selector	Protocol	Priority
1	Ethertype	34825	2
2	TcpUdp	17	3
3	Tcp	21	4
4	Udp	68	7
	Ethertype		

Application Maps Admin page provides you with interface for controlling port specific data-center-bridging Application-Priority entries configuration.

The table is [Full edit](#).

3.7.10.2 Application Maps Local

Layer 2 / DCBx / **Application Maps Local**

Port ID	Selector	Protocol	Priority
1	Tcp	884	0
2	Tcp	884	0
3	Tcp	884	0
4	Udp	884	0
5	Udp	884	0
6	Ethertype	34825	2
7	TcpUdp	17	3
8	Tcp	21	4
9	Tcp	21	5
10	Ethertype	34825	4

Application Maps Local page provides you with interface for monitoring the current port Application-Priority entries state.

The table is [Read Only](#).

3.7.10.3 Application Maps Remote

Layer 2 / DCBx / Application Maps Remote

Navigation: 1 / 1, GOTO, 10 Rows

Port ID	Selector	Protocol	Priority
1	Tcp	884	1
2	Udp	53	2
3	Ethertype	884	3

Application Maps Remote page provides monitoring interface to view the remote peer ports Application-Priority entries information.

The table is [Read Only](#).



Each entry in this table describes a management address.

3.7.10.4 Application Ports Admin

Layer 2 / DCBx / Application Ports Admin

Navigation: 1, 2, 3, 1/6, GOTO, 10 Rows

Port ID	Willing
1	Disabled
2	Disabled
3	Disabled
4	Disabled
5	Disabled
6	Disabled
7	Disabled
8	Disabled
9	Disabled
10	Disabled

Application Ports Admin page provides you with interface for controlling port specific data-center-bridging Application-Priority configuration.

The table is [Inline edit Only](#).

3.7.10.5 Application Ports Local

Layer 2 / DCBx / Application Ports Local

Navigation: 1 2 3 1/6 GOTO 10 Rows

Port ID	Willing	Error Alarm	Statistics Tx TLVs
1	Disabled	Cleared	0
2	Disabled	Cleared	0
3	Disabled	Cleared	0
4	Disabled	Cleared	0
5	Disabled	Cleared	0
6	Disabled	Cleared	0
7	Disabled	Cleared	0
8	Disabled	Cleared	0
9	Disabled	Cleared	0
10	Disabled	Cleared	0

Application Ports Local page provides you with interface for monitoring the current port specific data-center-bridging Application-Priority state.

The table is [Read Only](#).

3.7.10.6 Application Remotes

Layer 2 / DCBx / Application Remotes

Navigation: 1 1/1 GOTO 10 Rows

Port ID	Valid	Willing	Error Alarm	Statistics Rx TLVs
33	Enabled	Disabled	Cleared	839
34	Enabled	Disabled	Cleared	839
35	Enabled	Disabled	Cleared	839
36	Enabled	Disabled	Cleared	839
37	Enabled	Disabled	Cleared	839
38	Enabled	Disabled	Cleared	839
39	Enabled	Disabled	Cleared	839
40	Enabled	Disabled	Cleared	839
1	1	1	1	1

Application Remotes page provides monitoring interface to view the remote peer ports Application-Priority information.

The table is [Read Only](#).

3.7.10.7 Congestion Notification Ports Admin

Layer 2 / DCBx / Congestion Notification Ports Admin

Navigation: 1 2 3 1/6 GOTO 10 Rows

Port ID	CNPV Supported	CNPV Ready
1	0,0,0,0,0,0,0	0,0,0,0,0,0,0
2	0,0,0,0,0,0,0	0,0,0,0,0,0,0
3	0,0,0,0,0,0,0	0,0,0,0,0,0,0
4	0,0,0,0,0,0,0	0,0,0,0,0,0,0
5	0,0,0,0,0,0,0	0,0,0,0,0,0,0
6	0,0,0,0,0,0,0	0,0,0,0,0,0,0
7	0,0,0,0,0,0,0	0,0,0,0,0,0,0
8	0,0,0,0,0,0,0	0,0,0,0,0,0,0
9	0,0,0,0,0,0,0	0,0,0,0,0,0,0
10	0,0,0,0,0,0,0	0,0,0,0,0,0,0

Congestion Notification Ports Admin page provides interface for controlling port specific data-center-bridging CN configuration.

The table is [Inline edit Only](#).

3.7.10.8 Congestion Notification Ports Local

Layer 2 / DCBx / Congestion Notification Ports Local

Navigation: 1 2 3 1/6 GOTO 10 Rows

Port ID	CNPV Supported	CNPV Ready	Error Alarm	Statistics Tx TLVs
1	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
2	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
3	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
4	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
5	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
6	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
7	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
8	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
9	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0
10	0,0,0,0,0,0,0	0,0,0,0,0,0,0	Cleared	0

Congestion Notification Ports Local page provides interface for monitoring the current port specific data-center-bridging CN state.

The table is [Read Only](#).

3.7.10.9 Congestion Notification Remotes

Layer 2 / DCBx / Congestion Notification Remotes

← 1 → 1/1 GOTO 10 Rows

Port ID	Valid	CNPV Supported	CNPV Ready	Error Alarm	Statistics Rx TLVs
1	Disabled	1,0,1,0,0,0,1,0	0,0,0,0,0,1,0,0	Raised	1
2	Disabled	1,0,1,0,0,0,1,0	0,0,0,0,0,1,0,0	Raised	1
3	Disabled	1,0,1,0,0,0,1,0	0,0,0,0,0,1,0,0	Raised	1

Congestion Notification Remotes table provides monitoring interface to view the remote peer ports Application-Priority information.

The table is [Read Only](#).



Each entry in this table describes a remote peer port.

3.7.10.10 ETS Ports Admin

Layer 2 / DCBx / ETS Ports Admin

← 1 2 3 → 1/6 GOTO 10 Rows

Port ID	Willing	Credit-based shaper	Max TCs	Configured Bandwidth	Configured Algorithm	Configured Priority Assignment	Recommended Bandwidth	Recomm Algorithm
1	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
2	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
3	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
4	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
5	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
6	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
7	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
8	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
9	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	
10	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	

ETS Ports Admin page provides interface for controlling port specific data-center-bridging ETS configuration.

The table is [Inline edit Only](#).

3.7.10.11 ETS Ports Local

Layer 2 / DCBx / ETS Ports Local										
← ← 1 2 3 → → 1/6 GOTO 10 Rows										
Port ID	Willing	Credit-based shaper	Max TCs	Configured Bandwidth	Configured Algorithm	Configured Priority Assignment	Configured Error Alarm	Configured Statistics Tx TLVs	Recommend Band	
1	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
2	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
3	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
4	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
5	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
6	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
7	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
8	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
9	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	
10	Disabled	Disabled	0	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	-1,-1,-1,-1,-1,-1,-1,-1	Cleared	0	-1,-1,-1,-1	

ETS Ports Local page provides interface for monitoring the current port specific data-center-bridging ETS state.

The table is [Read Only](#).

3.7.10.12 ETS Remotes

Layer 2 / DCBx / ETS Remotes											
← ← 1 → → 1/1 GOTO 10 Rows											
Port ID	Configuration Valid	Willing	Credit-based shaper	Max TCs	Configured Bandwidth	Configured Algorithm	Configured Priority Assignment	Configured Error Alarm	Configured Statistics Rx TLVs	Recommend Valid	
1	Disabled	Enabled	Disabled	3	50,50,0,0,0,0,0,0	2,2,2,2,2,2,2,2	0,1,2,3,3,3,3,3	Raised	1	Enabled	
2	Disabled	Enabled	Disabled	3	50,50,0,0,0,0,0,0	2,2,2,2,2,2,2,2	0,1,2,3,3,3,3,3	Raised	1	Enabled	
3	Disabled	Enabled	Disabled	3	50,50,0,0,0,0,0,0	2,2,2,2,2,2,2,2	0,1,2,3,3,3,3,3	Raised	1	Enabled	

ETS Remotes page provides monitoring interface to view the remote peer ports ETS information.

The table is [Read Only](#).



Each entry in this table describes a remote peer port.

3.7.10.13 PFC Ports Admin

Layer 2 / DCBx / PFC Ports Admin

Port ID	Willing	MBC	Capability	Enabled
1	Disabled	Disabled	1	0,0,0,0,0,0,0
2	Disabled	Disabled	1	0,0,0,0,0,0,0
3	Disabled	Disabled	1	0,0,0,0,0,0,0
4	Disabled	Disabled	1	0,0,0,0,0,0,0
5	Disabled	Disabled	1	0,0,0,0,0,0,0
6	Disabled	Disabled	1	0,0,0,0,0,0,0
7	Disabled	Disabled	1	0,0,0,0,0,0,0
8	Disabled	Disabled	1	0,0,0,0,0,0,0
9	Disabled	Disabled	1	0,0,0,0,0,0,0
10	Disabled	Disabled	1	0,0,0,0,0,0,0

PFC Ports Admin page provides you with interface for controlling port specific data-center-bridging PFC configuration.

The table is [Inline edit Only](#).

3.7.10.14 PFC Ports Local

Layer 2 / DCBx / PFC Ports Local

← ← 1 2 3 → → 1/6 GOTO 10 Rows

Port ID	Willing	MBC	Capability	Enabled	Error Alarm	Statistics Tx TLVs
1	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
2	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
3	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
4	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
5	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
6	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
7	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
8	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
9	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0
10	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	0

PFC Ports Local page provides you with interface for monitoring the current port specific data-center-bridging PFC state.

The table is [Read Only](#).

3.7.10.15 PFC Remotes

Layer 2 / DCBx / PFC Remotes

← ← 1 → → 1/1 GOTO 10 Rows

Port ID	Valid	Willing	MBC	Capability	Enabled	Error Alarm	Statistics Rx TLVs
33	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
34	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
35	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
36	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
37	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
38	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
39	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842
40	Enabled	Disabled	Disabled	1	0,0,0,0,0,0,0	Cleared	842

PFC Remotes page provides monitoring interface to view the remote peer ports PFC information.

The table is [Read Only](#).



Each entry in this table describes a remote peer port.

3.7.10.16 Ports

Layer 2 / DCBx / Ports

Navigation: 1 2 3 1/6 GOTO 10 Rows

Port ID	Admin Status	TLV PFC Tx Enable	TLV ETS Conf Tx Enable	TLV ETS Reco Tx Enable	TLV Application Priority Tx Enable	TLV Congestion Notification Tx Enable	Multiple Peers	Active Protocol Version	Admin Protocol Version
1	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
2	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
3	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
4	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
5	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
6	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
7	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
8	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
9	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee
10	Enabled	Enabled	Enabled	Disabled	Enabled	Enabled	Disabled	leee	leee

Ports page provides you with interface for controlling port specific DCBx configuration and for monitoring the port specific statistics data.

The table is [Inline edit Only](#).

3.7.10.17 Remotes

Layer 2 / DCBx / Remotes

Navigation: 1 1/1 GOTO 10 Rows

Port ID	Valid	Remote ID	Time Mark	MAC Address
33	Enabled	9	1405158136	00:11:22:33:44:55
34	Enabled	10	1405158137	00:11:22:33:44:55
35	Enabled	11	1405158137	00:11:22:33:44:55
36	Enabled	12	1405158110	00:11:22:33:44:55
37	Enabled	13	1405158111	00:11:22:33:44:55
38	Enabled	14	1405158111	00:11:22:33:44:55
39	Enabled	15	1405158111	00:11:22:33:44:55
40	Enabled	16	1405158111	00:11:22:33:44:55
1	Enabled	4	1396269990	00:11:16:13:14:15
2	Enabled	5	1396269990	00:11:17:13:14:15
3	Enabled	6	1396269990	00:11:18:13:14:15

Remotes table provides monitoring interface to view the remote peer ports information.

The table is [Read Only](#).



Each entry in this table describes a remote peer port.

3.7.11 LLDP

Link Layer Discovery Protocol (LLDP) is component level of main menu, with set of pages that allows you to:

- get information on the string value used to identify the management address component associated with the local system; the enumeration value that identifies the interface numbering method used for defining the interface number, associated with the local system; the integer value used to identify the interface number regarding the management address component associated with the local system; the OID value used to identify the type of hardware component or protocol entity associated with the management address advertised by the local system agent (using [Ports Management Addresses page](#))
- get information on the administratively desired status of the local LLDP agent, determine whether the system management address instance will be transmitted on the ports, get information on the type of port identifier encoding used in the associated “lldpLocPortId” object, on the string value used to identify, on the number of LLDP frames received or transmitted by this LLDP agent on the indicated port, and then discarded for any reason, on the number of valid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled, on the number of LLDP TLVs discarded for any reason by this LLDP agent on the indicated port, the number of LLDP TLVs received on the given ports that are not recognized by this LLDP agent on the indicated port, on a count of all LLDPDUs received at the port with one or more detectable errors, on the counter that represents the number of age-outs that occurred on a given port, information regarding the internal state representing if something has changed on remote or locally, but was still not processed, on the number of peers, remote management addresses detected on the port (using [Ports page](#))
- get information regarding the index value used to identify the port component associated with this entry, the type of management address identifier encoding used in the associated “lldpRemManagementAddr” object, get information on the string value used to identify the management address component associated with the remote system, the enumeration value that identifies the interface numbering method used for defining the interface number, associated with the remote system, the integer value used to identify the

interface number regarding the management address component associated with the remote system, the OID value used to identify the type of hardware component or protocol entity associated with the management address advertised by the remote system agent (using [Remotes Management Addresses page](#))

- get information on the remote MAC address, remote ID, remote Time Mark, remote Local Port Number, remote Chassis ID Subtype (the type of encoding used to identify the chassis associated with the remote system), remote Chassis ID (the string value used to identify the chassis component associated with the remote system), remote Port ID Subtype (the type of port identifier encoding used in the associated “lldpRemPortId” object), Remote Port Description (the string value used to identify the description of the given port associated with the remote system), remote System Name (the string value used to identify the system name of the remote system), remote System Description (the string value used to identify the system description of the remote system), information on the bitmap value used to identify which system capabilities are supported/enabled on the remote system (using [Remotes page](#))
- get information regarding the interval at which LLDP frames are transmitted on behalf of this LLDP agent, the string value used to identify the chassis component associated with the local system, system description and name, to identify which system capabilities are enabled on the local system (using [LLDP page](#))

3.7.11.1 LLDP

Layer 2 / LLDP / LLDP	
Message Tx Interval	30
Message Tx Hold Multiplier	4
Reinit Delay	2
Tx Credit Max	5
Tx Fast Init	4
Message Fast Tx	1
Local Chassis ID Subtype	4
Local Chassis ID	A0:36:9F:30:41:76
Local System Name	ONS
Local System Description	Open Network Software
Local System Cap Supported	20
Local System Cap Enabled	20
Statistics Remote Last Change Time	22675
Statistics Remote Inserts	8
Statistics Remote Deletes	0
Statistics Remote Drops	0
Statistics Remote Ageouts	0

LLDP page is a single entry table that provides you with interface for controlling LLDP protocol global configurations. In addition this table contains global statistics data.

The table is [Inline edit Only](#).

3.7.11.2 Ports

Layer 2 / LLDP / Ports

⏪ ⏩ 1 2 3 → ↔ GOTO 10 Rows

Port ID	Admin Status	TLV Port Description Tx Enable	TLV System Name Tx Enable	TLV System Description Tx Enable	TLV System Cap Tx Enable	TLV Man Address Tx Enable	Local Port ID Subtype	Local Port ID	Local Port Description	Statistics Rx Frames Discarded Total	Statistics Rx Frames Total	StatS Rx TLV S DiScarde Total
1	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe1	xe1	0	0	0
2	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe2	xe2	0	0	0
3	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe3	xe3	0	0	0
4	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe4	xe4	0	0	0
5	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe5	xe5	0	0	0
6	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe6	xe6	0	0	0
7	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe7	xe7	0	0	0
8	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe8	xe8	0	0	0
9	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe9	xe9	0	0	0
10	TxAndRx	Enabled	Enabled	Enabled	Enabled	Enabled	1	xe10	xe10	0	0	0

Ports page provides you with interface for controlling port specific LLDP configuration and for monitoring the port specific statistics data.

The table is [Inline edit Only](#).

3.7.11.3 Ports Management Addresses

Layer 2 / LLDP / Ports Management Addresses

⏪ ⏩ 1 2 3 → ↔ GOTO 10 Rows + × ↻

Local Man Port ID	Local Man Address Subtype	Local Man Address	Local Man Address Interface Subtype	Local Man Address Interface ID	Local Man Address OID
1	1	10.1.1.1	3	1	1.3.6.1.4.1.731.3.2.30.1.1.7
2	1	10.1.1.1	3	2	1.3.6.1.4.1.731.3.2.30.1.1.7
3	1	10.1.1.1	3	3	1.3.6.1.4.1.731.3.2.30.1.1.7
4	1	10.1.1.1	3	4	1.3.6.1.4.1.731.3.2.30.1.1.7
5	1	10.1.1.1	3	5	1.3.6.1.4.1.731.3.2.30.1.1.7
6	1	10.1.1.1	3	6	1.3.6.1.4.1.731.3.2.30.1.1.7
7	1	10.1.1.1	3	7	1.3.6.1.4.1.731.3.2.30.1.1.7
8	1	10.1.1.1	3	8	1.3.6.1.4.1.731.3.2.30.1.1.7
9	1	10.1.1.1	3	9	1.3.6.1.4.1.731.3.2.30.1.1.7
10	1	10.1.1.1	3	10	1.3.6.1.4.1.731.3.2.30.1.1.7

Ports Management Addresses page provides interface for defining the LLDP ports management addresses.

The table includes [Add / Remove rows only](#).



Each entry in this table describes a unique management address and its association to a local port-id.

3.7.11.4 Remotes

Layer 2 / LLDP / Remotes

⏪ ⏩ 1 → ⏪ 1/1 GOTO 10 Rows

Remote Port ID	Remote MAC Address	Remote ID	Remote Time Mark	Remote Local Port Number	Remote Chassis ID Subtype	Remote Chassis ID	Remote Port ID Subtype	Remote Port Description	Remote System Name	Remote Description
xe33	00:11:22:33:44:55	9	26031	33	4	00:11:22:33:44:55	1	xe33	ONS	Open Net
xe34	00:11:22:33:44:55	10	26032	34	4	00:11:22:33:44:55	1	xe34	ONS	Open Net
xe35	00:11:22:33:44:55	11	26032	35	4	00:11:22:33:44:55	1	xe35	ONS	Open Net
xe36	00:11:22:33:44:55	12	26035	36	4	00:11:22:33:44:55	1	xe36	ONS	Open Net
xe37	00:11:22:33:44:55	13	26036	37	4	00:11:22:33:44:55	1	xe37	ONS	Open Net
xe38	00:11:22:33:44:55	14	26036	38	4	00:11:22:33:44:55	1	xe38	ONS	Open Net
xe39	00:11:22:33:44:55	15	26036	39	4	00:11:22:33:44:55	1	xe39	ONS	Open Net
xe40	00:11:22:33:44:55	16	26036	40	4	00:11:22:33:44:55	1	xe40	ONS	Open Net

Remotes page provides monitoring interface to view the remote per ports information.

The table is [Read Only](#).



Each entry in this table describes a remote peer port.

3.7.11.5 Remotes Management Addresses

Layer 2 / LLDP / Remotes Management Addresses

Remote ID	Remote Local Port Number	Remote Management Address Subtype	Remote Management Address	Remote Management Address Interface Subtype	Remote Management Address Interface ID	Remote Management Address
5	2	1	10.1.1.1	3	1	1.3.6.1.4.1.7
6	1	1	10.1.1.1	3	2	1.3.6.1.4.1.7
7	4	1	10.1.1.1	3	3	1.3.6.1.4.1.7
8	3	1	10.1.1.1	3	4	1.3.6.1.4.1.7
1	2	1	10.1.1.1	3	1	1.3.6.1.4.1.7
2	1	1	10.1.1.1	3	2	1.3.6.1.4.1.7
3	4	1	10.1.1.1	3	3	1.3.6.1.4.1.7
4	3	1	10.1.1.1	3	4	1.3.6.1.4.1.7
5	6	1	10.1.1.2	3	5	1.3.6.1.4.1.7

Remotes Management Addresses page provides monitoring interface to view the remote management addresses as learned from the remote LLDP peer.

The table is [Read Only](#).

3.7.12 UFD

This is component level of main menu, which includes Configuration, Groups, and Ports to Groups pages.

3.7.12.1 Configuration

Layer 2 / UFD / Configuration

Enable	Disabled
Hold On Time	10

Configuration page provides management interface for global UFD feature configuration.

The table is [Inline edit Only](#).

3.7.12.2 Groups

Layer 2 / UFD / **Groups**

← ← 1 → → 1/1 GOTO 10 Rows + × ↻

Group ID	Threshold	Enable	Active	Counter	Status
1	1	Disabled	0	0	Disabled
2	1	Disabled	0	0	Disabled
3	3	Disabled	0	0	Disabled
4	4	Enabled	0	0	Disabled
5	5	Enabled	0	0	Disabled
6	6	Enabled	0	0	Disabled
7	7	Enabled	0	0	Disabled
8	8	Disabled	0	0	Disabled
9	9	Enabled	0	0	Disabled
10	10	Disabled	0	0	Disabled
		Disabled			

Groups page enables you to configure a group of uplink interfaces to be monitored and downlink interfaces to be brought down.

The table is [Full edit](#).

3.7.12.3 Ports to Groups

Layer 2 / UFD / **Ports to Groups**

← ← 1 → → 1/1 GOTO 10 Rows + × ↻

Port ID	Type	Group ID	Status
1	LtM	8	UfdDown
2	LtM	8	UfdDown
3	LtD	9	UfdDown
4	LtD	9	UfdDown
5	LtD	10	UfdDown
6	LtD	9	UfdDown
7	LtD	10	UfdDown
8	LtD	10	UfdDown
9	LtM	10	UfdDown
10	LtM	10	UfdDown
	LtM		

Ports to Groups page enables you to configure uplink and downlink interfaces.

The table includes [Add / Remove rows only](#).

3.7.13 Mirror

This is component level of main menu, which includes Ports Mirroring page.

3.7.13.1 Ports Mirroring

Source Port ID	Destination Port ID	Mirroring Mode
1	2	IngressAndEgress
3	4	Ingress
5	6	Egress
7	8	EgressOrg
		Ingress

Ports Mirroring table indicates the hardware what type of mirror group are configured and which source/destination ports are added to that group.

The table contains [Add / Remove rows only](#).

3.7.14 Statistics

This is component level of main menu, which includes IEEE 802.1D Statistics, Interface Multicast Statistics, Interface Unicast Statistics, and Other Statistics pages.

3.7.14.1 IEEE 802.1D Statistics

Layer 2 / Statistics / IEEE 802.1D Statistics

← ← 1 2 3 → → 1/6 GOTO 10 Rows Clear Port Statistics Clear All Statistics

Port ID	Base Port Delay Exceeded Discards	Base Port MTU Exceeded Discards	Transparent Bridge Port In Discards	Transparent Bridge Port In Frames	Transparent Bridge Port Out Frames
1	5	0	0	0	0
2	4	0	0	0	0
3	4	0	0	25	0
4	4	0	0	34	0
5	4	0	0	24	0
6	4	0	0	657	0
7	4	0	0	234	0
8	4	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0

IEEE 802.1D Statistics page provides you with information regarding *IEEE 802.1D* per port statistics counters.

The table is [Read Only](#).

3.7.14.2 Interface Multicast Statistics

Layer 2 / Statistics / Interface Multicast Statistics

← ← 1 2 3 → → 1/6 GOTO 10 Rows Clear Port Statistics Clear All Statistics

Port ID	In Broadcast Packets	In Multicast Packets	Out Broadcast Packets	Out Multicast Packets
1	0	0	20	0
2	0	0	234	0
3	0	0	345	0
4	0	0	456	0
5	0	0	543	0
6	0	0	221	0
7	0	0	214	0
8	0	0	588	0
9	0	0	0	0
10	0	0	0	0

Interface Multicast Statistics page provides you with information regarding *Interface Multicast* per port statistics counters.

The table is [Read Only](#).

3.7.14.3 Interface Unicast Statistics

Layer 2 / Statistics / Interface Unicast Statistics

Port ID	In Discards	In Octets	In Errors	In Non-Unicast Packets	In Unicast Packets	In Unknown Protos	Out Discards	Out Errors	Out Non-Unicast Packets	Out Octets	Out Queue Len	Out Unicast Packets	IP Da
1	1	0	1	0	11	0	0	0	0	1538	0	101	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0

Interface Unicast Statistics page provides you with information regarding *Interface Unicast* per port statistics counters.

The table is [Read Only](#).

3.8 PLATFORM

This is layer level of main menu, which includes DNS Configuration, KPI, Network Configuration, NTP, Radius, SNMP, Syslog, Tacacs, and Users components.

3.8.1 DNS Configuration

This is component level of main menu, which includes Platform DNS Configuration page.

3.8.1.1 Platform DNS Configuration

Platform / DNS Configuration / Platform DNS Configuration	
Search Suffix 1	Empty
Search Suffix 2	Empty
Search Suffix 3	Empty
Name Server 1	0.0.0.0
Name Server 2	0.0.0.0
Name Server 3	0.0.0.0
Search Suffix 1	Empty
Search Suffix 2	Empty
Search Suffix 3	Empty
Name Server 1	8.8.8.8
Name Server 2	8.8.4.4
Name Server 3	0.0.0.0

Platform DNS Configuration page provides you with interface for specifying DNS server information for the system.

The table is [Inline edit Only](#).

3.8.2 KPI

This is component level of main menu, which includes Thresholds and Data pages.

3.8.2.1 Thresholds

Platform / KPI / Thresholds																	
←		←		1		→		→		1/1		GOTO		10 Rows		Apply KPI Configuration	
Subsystem	Instance	Indicator	Warning Min	Warning Max	Failure Min	Failure Max	Invert	Persist	Hits	Hysteresis	Enabled						
Cpu	0	Idle	15	-1	-1	-1	False	False	0	0	True						
Cpu	0	Interrupt	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Nice	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Softirq	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Steal	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	System	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	User	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Wait	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	ShortTermLoadAvg	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	MidTermLoadAvg	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Idle	15	-1	-1	-1	False	False	0	0	True						
Cpu	0	Interrupt	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Nice	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Softirq	-1	-1	-1	-1	False	False	0	0	False						
Cpu	0	Steal	-1	-1	-1	-1	False	False	0	0	False						

Thresholds page specifies the thresholds to be applied when gathering system statistics; these thresholds are applied when raising alarms, logs and notifications.

To ensure that configuration data is applied to the running system, restart KPI processes clicking the **Apple KPI Configuration** button.

The table is [Inline edit Only](#).

3.8.2.2 Data

Platform / KPI / Data					
Indicator	Instance	Subsystem	Time	Value	
idle	0	Cpu	12/02/15 04:26:16 PM	9.626702e+01	
interrupt	0	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	0	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	0	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
steal	0	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	0	Cpu	12/02/15 04:26:16 PM	8.666704e-01	
user	0	Cpu	12/02/15 04:26:16 PM	2.300000e+00	
wait	0	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
idle	1	Cpu	12/02/15 04:26:16 PM	9.603194e+01	
interrupt	1	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	1	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	1	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
steal	1	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	1	Cpu	12/02/15 04:26:16 PM	5.333213e-01	
user	1	Cpu	12/02/15 04:26:16 PM	2.733297e+00	
wait	1	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
idle	2	Cpu	12/02/15 04:26:16 PM	8.929918e+01	
interrupt	2	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	2	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	2	Cpu	12/02/15 04:26:16 PM	9.999916e-02	
steal	2	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	2	Cpu	12/02/15 04:26:16 PM	5.333255e-01	
user	2	Cpu	12/02/15 04:26:16 PM	5.666586e+00	
wait	2	Cpu	12/02/15 04:26:16 PM	3.333304e-02	
idle	3	Cpu	12/02/15 04:26:16 PM	9.736586e+01	
interrupt	3	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	3	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	3	Cpu	12/02/15 04:26:16 PM	3.333304e-02	
steal	3	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	3	Cpu	12/02/15 04:26:16 PM	2.999975e-01	
user	3	Cpu	12/02/15 04:26:16 PM	1.933318e+00	
wait	3	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
idle	4	Cpu	12/02/15 04:26:16 PM	9.676585e+01	
interrupt	4	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	4	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	4	Cpu	12/02/15 04:26:16 PM	6.66610e-02	
steal	4	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	4	Cpu	12/02/15 04:26:16 PM	3.666636e-01	
user	4	Cpu	12/02/15 04:26:16 PM	2.499978e+00	
wait	4	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
idle	5	Cpu	12/02/15 04:26:16 PM	9.613251e+01	
interrupt	5	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	5	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	5	Cpu	12/02/15 04:26:16 PM	9.999909e-02	
steal	5	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	5	Cpu	12/02/15 04:26:16 PM	4.333296e-01	
user	5	Cpu	12/02/15 04:26:16 PM	2.966641e+00	
wait	5	Cpu	12/02/15 04:26:16 PM	3.333305e-02	
idle	6	Cpu	12/02/15 04:26:16 PM	9.789908e+01	
interrupt	6	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	6	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	6	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
steal	6	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	6	Cpu	12/02/15 04:26:16 PM	3.666633e-01	
user	6	Cpu	12/02/15 04:26:16 PM	1.566652e+00	
wait	6	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
idle	7	Cpu	12/02/15 04:26:16 PM	8.09905e+01	
interrupt	7	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
nice	7	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
softirq	7	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
steal	7	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
system	7	Cpu	12/02/15 04:26:16 PM	2.333311e-01	
user	7	Cpu	12/02/15 04:26:16 PM	1.499986e+00	
wait	7	Cpu	12/02/15 04:26:16 PM	0.000000e+00	
freeBytes	boot	Disk	12/02/15 04:26:16 PM	4.321935e+08	
reservedBytes	boot	Disk	12/02/15 04:26:16 PM	2.495595e+07	
usedBytes	boot	Disk	12/02/15 04:26:16 PM	2.621542e+07	
freeBytes	persistent	Disk	12/02/15 04:26:16 PM	4.461527e+08	
reservedBytes	persistent	Disk	12/02/15 04:26:16 PM	2.500813e+07	
usedBytes	persistent	Disk	12/02/15 04:26:16 PM	1.319117e+07	
freeBytes	root	Disk	12/02/15 04:26:16 PM	2.174235e+09	
reservedBytes	root	Disk	12/02/15 04:26:16 PM	1.753211e+08	
usedBytes	root	Disk	12/02/15 04:26:16 PM	1.101750e+09	
readOpsMerged	sda	Disk	12/02/15 04:26:16 PM	0.000000e+00	
writeOpsMerged	sda	Disk	12/02/15 04:26:16 PM	1.533309e+00	
readBytes	sda	Disk	12/02/15 04:26:16 PM	0.000000e+00	
writeBytes	sda	Disk	12/02/15 04:26:16 PM	1.733973e+04	
readOperations	sda	Disk	12/02/15 04:26:16 PM	0.000000e+00	
writeOperations	sda	Disk	12/02/15 04:26:16 PM	2.699965e+00	
readTimeAvg	sda	Disk	12/02/15 04:26:16 PM	0.000000e+00	
writeTimeAvg	sda	Disk	12/02/15 04:26:16 PM	3.666608e-01	
shortTermLoadAvg	all	Cpu	12/02/15 04:26:16 PM	1.090000e+00	
midTermLoadAvg	all	Cpu	12/02/15 04:26:16 PM	1.340000e+00	
longTermLoadAvg	all	Cpu	12/02/15 04:26:16 PM	1.370000e+00	
bufferedMemory	all	Memory	12/02/15 04:26:16 PM	6.526566e+07	
cachedMemory	all	Memory	12/02/15 04:26:16 PM	5.91177e+08	
freeMemory	all	Memory	12/02/15 04:26:16 PM	7.110144e+09	
usedMemory	all	Memory	12/02/15 04:26:16 PM	5.912166e+08	

Data page provides you with information regarding key performance indicator (KPI).

The table is [Read Only](#).

3.8.3 NTP

This is component level of main menu, which includes NTP Servers page.

3.8.3.1 NTP Servers

Platform / NTP / NTP Servers

Address	Command	IP Version	Autokey	Burst	lburst	Key	Minimum Poll Interval	Maximum Poll Interval	Noselect	Association as Preemptable	Prefer
67.227.252.196	Server	Ipv4	0	1	1	0	0	0	0	0	0
66.11.35.2	Server	Ipv4	0	1	1	0	0	0	0	0	0
199.4.29.166	Server	Ipv4	0	1	1	0	0	0	0	0	0
	Server	Ipv4	0	0	0	0	0	17	0	0	0

NTP Servers page provides you with interface for specifying NTP server information for the system.

To ensure the application of NTP configuration data, restart the NTP subsystem clicking the **Apply NTP Configuration** button.

The table is [Full edit](#).

3.8.4 Network Configuration

This is component level of main menu, which includes Hostname and Management Port pages.

3.8.4.1 Hostname

Platform / Network Configuration / Hostname

ifname	eth0
Hostname	eth0

Hostname page gives you additional details required to conduct administrative functions on the system.

The table is [Inline edit Only](#).

3.8.4.2 Management Port

Platform / Network Configuration / Management Port

Apply Management Port Configuration Get Management Port Operstate

Ifname	eth0
Address	128.224.30.129/24
Gateway	128.224.30.1
Adminstate	Up
Mode	Static
Speed	1000
Duplex	Full
Autoneg	On
MTU	1500

Management Port page provides you with configuration details enabling port access to the system for conduct of administrative functions.

To ensure that configuration data is applied to the running system, bring management port down-up clicking the **Apply Management Port Configuration** button.

To retrieve the current state of the management port, either "up" or "down", click **Get Management Port Operstate** button.

The table is [Inline edit Only](#).

3.8.5 Radius

This is component level of main menu, which includes Radius Servers page.

3.8.5.1 Radius Servers

Platform / Radius / Radius Servers

← 1 → 1/1 GOTO 10 Rows + × ↻

Host	Timeout	Shared Secret
192.168.1.1	10	Empty

Remote Authentication Dial In User Service (RADIUS) is a networking protocol that provides centralized Authentication, Authorization, and Accounting (AAA) management for computers that connect and use a network service.

The table is [Full edit](#).

3.8.6 SNMP

This is component level of main menu, which includes Authentication Community, Authentication Group, Authentication User, Community to Security, Group, System, Trap Forward, Trap Generator, Trap Handle, User, and View pages.

3.8.6.1 Authentication Community

Type	Name	Action	Source	OID	View	Context
Std	public	read	Empty	Empty	Empty	Empty
Std	COMM1	read,write	Empty	Empty	Empty	Empty
Std						

Authentication Community page creates and defines access for SNMPv1/SNMPv2c community.

The table is [Full edit](#).

3.8.6.2 Authentication Group

Type	Name	OID	View	Action	Security Model	Security Level	Context
Std	GROUP1	Empty	Empty	read,write	V3	Auth	Empty
Std					Any	Noauth	

Authentication Group page gives you access control for a defined group.

The table is [Full edit](#).

3.8.6.3 Authentication User

Platform / SNMP / Authentication User

Navigation: 1 / 1, GOTO, 10 Rows, Apply SNMP Configuration + X Refresh

Type	Name	Action	Security Model	Security Level	OID	View	Context
Std	USER1	read,write	Usm	Auth	Empty	Empty	Empty
Std			Tsm	Noauth			

Authentication User page gives you access control for a SNMPv3 user.

The table is [Full edit](#).

3.8.6.4 Community to Security

Platform / SNMP / Community to Security

Navigation: 1 / 1, GOTO, 10 Rows, Apply SNMP Configuration + X Refresh

Name	Source	Community	Context	Type
comtosec	172.20.150.15/24	TESTCOMMUNITY	Empty	Ipv4
Security1	187.92.58.30/24	public	Empty	Ipv4
				Ipv4

Community to Security page maps an SNMPv1/v2c community string to a security name, either from a particular range of source addresses, or globally.

The table is [Full edit](#).

3.8.6.5 Group

Platform / SNMP / Group

Navigation: 1 / 1, GOTO, 10 Rows, Apply SNMP Configuration + X Refresh

Name	Security Model	Name
GROUP1	Usm	USER1
	V1	

Group page maps a security name (in the specified security model) into a named group.

The table is [Full edit](#).

3.8.6.6 System

Platform / SNMP / **System**

Apply SNMP Configuration

System Location	Empty
System Contact	Empty
System Name	Empty
System Description	Empty
System Location	Empty
System Contact	Empty
System Name	Empty
System Description	Empty

System page includes SNMP MIB-2 (Management Information Base) system.

The table is [Inline edit Only](#).

3.8.6.7 Trap Forward

Platform / SNMP / **Trap Forward**

⏪ ⏩ 1 ⏪ ⏩ 1/1 GOTO 10 Rows Apply SNMP Configuration + × ↻

OID	Address	Port	Transport
1.12.23.12.123.23.2	1.1.1.1	162	Tcp
2.3.4	1.1.1.1	162	Tcp
default	1.1.1.1	162	Ssh
1.12.23.12.123.23.2,2.3.4	1.1.1.1	162	Dtlsudp
			Udp

Trap Forward page forwards notifications that match the specified OID to another receiver.

The table is [Full Edit](#).

3.8.6.8 Trap Generator

Platform / SNMP / Trap Generator

← ← 1 → → 1/1 GOTO 10 Rows Apply SNMP Configuration + × ↻

Host	Notification Type	Notification Version	Community	User Name	Sec Level	Authentication Protocol	Authentication Password	Priv Protocol	Priv Password	Port
192.168.27.30	Trap	V1	public	user1	Noauth	None	Empty	None	Empty	10230
172.77.23.15	Trap	V1	COMM1	user1	Auth	MD5	Empty	None	Empty	1024
	Trap	V1			Noauth	None		None		

Trap Generator page provides a generic mechanism for defining notification destinations.

The table is [Full edit](#).

3.8.6.9 Trap Handle

Platform / SNMP / Trap Handle

← ← 1 → → 1/1 GOTO 10 Rows Apply SNMP Configuration + × ↻

OID	Program	Args
1.3.6.1.2.1.11.27	Empty	Empty
1.3.6.1.2.1.11.11	Empty	Empty
1.3.6.1.2.1.11.20	Empty	Empty
1.3.6.1.2.1.11.30	Empty	Empty
1.3.6.1.2.1.11.1	Empty	Empty

Trap Handle page passes the notification to an external program for specialized processing.

The table is [Full edit](#).

3.8.6.10 User

Platform / SNMP / User

← ← 1 → → 1/1 GOTO 10 Rows Apply SNMP Configuration + × ↻

Name	Authentication Privilege	Authentication Password	Privilege Password
USER1	Md5_aes	Empty	Empty
	Md5_des		

User page gives you information for the administration of SNMPv3 users.

The table is [Full edit](#).

3.8.6.11 View

Name	OID	Type	Mask
VIEW1	1.12.23.12.123.23.2	Included	Empty
		Included	

View page creates a named view corresponding to a subset of the overall OID tree.

The table is [Full edit](#).

3.8.7 Syslog

This is component level of main menu, which includes Syslog Remotes page.

3.8.7.1 Syslog Remotes

Type	Address	Port	Localport	Transport	Facility	Severity
Syslog	192.168.5.10	8092	8080	Tcp	1	Emerg
Syslog				Tcp		Emerg

Syslog Remotes page contains details facilitating export of local logs to remote systems.

To ensure the application of syslog configuration data, restart Syslog subsystem clicking the

Apply Syslog Configuration button

The table is [Full edit](#).

3.8.8 Tacacs

This is component level of main menu, which includes Tacacs Servers page.

3.8.8.1 Tacacs Servers

Host	Timeout	Shared Secret
192.168.1.1	20	Empty

Tacacs Servers page provides you with interface for specifying Tacacs server information for the system.

3.8.9 Users

This is component level of main menu, which includes Platform Users page.

3.8.9.1 Platform Users

Userid	Authentication	Password	Privilege	Shell
admin	Local	[hidden]	Admin	Cli
xmlrpc	Local	[hidden]	Admin	Xmlrpc
admin	Local	[hidden]	Admin	Cli
	Local		Cli	Cli

Platform Users page allows you to manage users, including their access and privilege level.

To restart Users subsystem and apply Users configuration data click **Apply Users**

Configuration button

The table is [Full edit](#).

3.9 ADVANCED

This is layer level of main menu, which includes OVS component.

3.9.1 OVS

This is component level of main menu, which includes Bridges, Controllers, Flow Actions, Flow Qualifiers, Flow Rules, Flow Statistics, Ports, and Resources pages.

3.9.1.1 Bridges

Advanced / OVS / Bridges

Navigation: [Back] [Left] 1 [Right] [Forward] 1/1 [GOTO] 10 Rows [Add] [Close] [Refresh]

Bridge ID	Name	Type
0	spp0	switchpp

OVS Bridges page provides you with management interface for creating/deleting OVS bridges.

The table is [Full edit](#).

3.9.1.2 Controllers

Advanced / OVS / Controllers

Navigation: [Back] [Left] 1 [Right] [Forward] 1/1 [GOTO] 10 Rows [Add] [Close] [Refresh]

Bridge ID	Controller
0	tcp:10.0.37.245:1024

OVS Controllers page provides you with information about configured OpenFlow controllers.

Each entry in this table describes a single Controller. The controller is of the OpenFlow controller address.

The table is [Full edit](#).

3.9.1.3 Flow Actions

Advanced / OVS / Flow Actions

Navigation: [Back] [Left] 1 [Right] [Forward] 1/1 [GOTO] 10 Rows [Add] [Close] [Refresh]

Bridge ID	Table ID	Flow ID	Action	Parameter
0	0	150	Normal	Empty
			Normal	

Flow Actions page provides you with interface for configuration of flow Action set.

An Action set is a group of actions that are executed on the matched packets.

The table is [Full edit](#).

3.9.1.4 Flow Qualifiers

Advanced / OVS / Flow Qualifiers

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

Bridge ID	Table ID	Flow ID	Field	Data
0	0	150	EthType	0x800
			InPort	

Flow Qualifiers page provides you with interface for configuration of flow expressions set (qualifiers). This table maps multiple logical Field-operation-results into a set of expressions in an N:1 relations.

The table is [Full edit](#).

3.9.1.5 Flow Rules

Advanced / OVS / Flow Rules

Navigation: 1 / 1, GOTO, 10 Rows, +, X, Refresh

Bridge ID	Table ID	Flow ID	Priority	Enabled
0	0	150	1	Disabled
				Disabled

Flow Rules page provides you with interface for defining a flow and its associated qualifier/action sets.

The table is [Full edit](#).

3.9.1.6 Flow Statistics

Advanced / OVS / Flow Statistics

Navigation: 1 / 1, GOTO, 10 Rows

Bridge ID	Table ID	Flow ID	Duration	IDle Age	Packets	Bytes
0	0	-2147483643	180	180	0	0

Flow Statistics page provides you with interface for flow counters monitoring.

The table is [Read Only](#).

3.9.1.7 Ports

Advanced / OVS / Ports

⏪ ⏩ 1 ⏪ ⏩ 1/1 GOTO 10 Rows + × ↻

Port ID	Bridge ID	Name	Type
1	0	spp0-1	switchpp

Ports page provides you with management interface for creating/deleting OVS ports.

The table is [Full edit](#).

3.9.1.8 Resources

Advanced / OVS / Resources

Rules Limit	2048
VLANs Limit	1
Untagged VLAN	0
Controller Rate Limit	0

Resources page is a single entry table (one row) which provides control over the OVS resource control.

The table is [Inline edit Only](#).

4. Glossary

This section includes the list of acronyms and glossary of basic terms used in this User Guide.

ABR	Area Border Router
ACL	Access Control List
ARP	Address Resolution Protocol
BPDU	Bridge Protocol Data Unit
CBS	Credit-based Shaper
CLI	Command Line Interface
CNPV	Congestion Notification Priority Value
CoS	Class of Service
DCB	Data Center Bridging
DCBx	Data Center Bridging eXchange
DSCP	Differentiated Services Code Point
ETS	Enhanced Transmission Selection
IGMP	Internet Group Management Protocol
LACP	Link Aggregation Control Protocol
LACPDU	Link Aggregation Control Protocol Data Unit
LLDP	Link Layer Discovery Protocol
LSA	Link State Advertisement
MACsec	IEEE MAC Security standard
MD5	Message-Digest Algorithm

MLS	Multilayer Switching
MTU	Maximum Transmission Unit
NSSA	Not So Stubby Area
NTP	Network Time Protocol
OSPF	Open Shortest Path First
PFC	Priority-based Flow Control
QoS	Quality of Service
RFC	Request for Comments
RSTP	Rapid Spanning Tree Protocol
STP	Spanning Tree Protocol
TCP	Transmission Control Protocol
TLV	Type-length-value
UDP	User Datagram Protocol
VLAN	Virtual local area network.
WRR	Weighted Round Robin

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