



## Product Bulletin

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# Ethernet Routing Switch Software version 4.2 for Ethernet Routing Switch 5500 family is Available Now

## Introduction

This bulletin announces the availability of the Ethernet Switch Software v4.2 for Ethernet Routing Switch 5500 family. This software version adds several new features including, IPFIX, Auto Unit Replacement enhancement, Denial of Service protection security Enhancements.

## Hardware compatibility

The Ethernet Switch Software v4.2 is supported on the Ethernet Routing Switch 5510, 5520 and 5530.

## Main Topic

The following new features are available in this release:

- > Flexible stacking of 5500 switches
- > Dual 10 Gigabit Support on the Ethernet Routing Switch 5530-24TFD
- > Auto Unit Replacement enhancement
- > Multiple Spanning Tree Protocol over MultiLink Trunks
- > Many to 1 Port Mirroring
- > IP Flow Information Export (IPFIX)
- > Dual Configuration
- > Per Port BaySecure
- > Port-based Quality of Service Policy Support
- > Quality of Service Wizard
- > QoS Interface Applications Wizard
- > IP Directed Broadcast
- > Domain Naming Services (DNS)
- > New Unit Quick Configuration
- > Universal Serial Bus (USB) Port support on the Ethernet Routing Switch 5530-24TFD

### Flexible stacking of 5500 switches

Using this single Ethernet Switch Software will allow Ethernet Routing Switch 5510, 5520 and 5530 to stack together in any combination. The switches may be stacked together in a mixed stack of eight units with existing Ethernet Routing Switch 5510-24T/48T or 5520-24T/48TPWR or 5530-24TFD.

### Dual 10 Gigabit Support

The Ethernet Routing Switch 5530 has dual built-in 10 Gigabit uplink ports for dedicated uplink connectivity to network core switches such as the Ethernet Routing Switch 8600 (formerly known as Passport 8600). Using the proven Distributed Multi-Link Trunking (DMLT) resiliency feature, up to 16 10-Gigabit XFP ports are available for uplink connectivity in a full stack — among the highest in the market. The higher uplink performance optimizes the Gigabit data traffic from wiring closets to the network core and improves business productivity. IEEE 802.3ae-compliant 10GBASE-LR, 10GBASE-ER and 10GBASE-SR interfaces are supported.

### Auto Unit Replacement enhancement

The Auto Unit Replacement (AUR) feature provides the user with the ability to retain the configuration of a unit in a stack during a unit replacement. The retained configuration from the old unit can be restored to a replacement unit. The Ethernet Switch Software v4.2 introduces an enhancement to the current Auto Unit Replacement functionality and ensures that all units in a stack have the same software image by inspecting units joining a stack and downloading the stack software image to any unit that has a dissimilar image. This feature is only available with Ethernet Switch Software v4.2 or greater.

### Multiple Spanning Tree Protocol over MultiLink Trunks

The Multiple Spanning Tree Protocol over Multilink Trunks (MSTP over MLT) feature will add the capability for a Multilink Trunk to participate in different Spanning Tree Groups.

### Many to 1 Port Mirroring

This feature will add the functionality to mirror multiple ports to a single monitoring port. The user selects the monitor port, the mirrored ports and the type of mirrored traffic.

### IP Flow Information Export (IPFIX)

This feature will allow IP traffic to be sampled and classified into different flows based on certain parameters such as IP protocol, destination IP address and source IP address. This information will be collected by the switch. In a future release of software there will be a process to export this information to a collector device which will assist in interpreting the data.

### Dual Configuration

This feature allows the storage of more than one configuration file in flash memory of the switch or stack. This allows the switch administrator choose the switch or stack configuration to use when booting.

### Per Port BaySecure

This security feature will enable the administrator to authorize a number of MAC addresses that will be allowed to use a specific port.

### Port-based Quality of Service Policy Support

This feature will allow users to assign QoS Policies to ports within a switch or stack.

### Quality of Service Wizard

This wizard will help in configuring quality of service in the following areas:

- > VLANs
- > IP Applications
- > User Defined Flows
- > Access Lists
- > Shaping

### QoS Interface Applications Wizard

This wizard is an enhancement to previous security functionality and will allow a switch administrator to quickly configure defenses against the following network vulnerabilities:

- > ARP Spoofing
- > DHCP Spoofing
- > DHCP Snooping
- > SQLSlam
- > Nachia
- > Xmas
- > TCP SynFinScan
- > TCP FtpPort
- > TCP DnsPort
- > BPDU Blocker

### IP Directed Broadcast

This feature will allow the switch to take an incoming unicast frame and determine if it is a directed broadcast for one of its interfaces. If so, it will then forward the datagram onto the appropriate network using a link-layer broadcast.

### Domain Naming Services (DNS)

Domain Naming Services enhancements will add new name resolution services that will allow for the querying of up to three DNS servers at a time for redundant name lookup. For these services to be available, at least one DNS server must be configured.

### New Unit Quick Configuration

This feature will provide the capability to automatically apply default parameters to a switch when it is added to a stack or when a switch is added to a standalone switch to create a stack. These default parameters will include VLAN ID, Port Speed, Duplex Settings, PVID and Spanning Tree Groups and will be automatically applied to all ports on the new switch when the switch is added to the stack or used to create a stack.

### Universal Serial Bus (USB) Port support

The Ethernet Routing Switch 5530 features USB ports on the front panel adjacent to the console port and on the back panel. The addition of USB ports will enable switch administrators to perform tasks that were previously completed through TFTP with a commonly available USB Mass Storage Device (“flash drive” or “thumb drive”). These tasks include Software Download, ASCII Configuration File Generation and Download and Syslog Copying. This feature is only available on the Ethernet Routing Switch 5530-24TFD.

### Release notes

The release notes for the Ethernet Switch Software v4.2 for Ethernet Routing Switch 5500 family can be downloaded from main Nortel web site [www.nortelnetworks.com](http://www.nortelnetworks.com).

Select **SUPPORT & TRAINING** pull down menu and click on **Technical Documentation**. Then click on **Browse Product Support** tab. Select **Ethernet Routing Switch 5510** and **Documentation** from pull down menus and click on **Go**.

### Ordering Guidelines and Procedures

The Ethernet Switch Software v4.2 for Ethernet Routing Switch 5500 family can be downloaded from main Nortel web site [www.nortelnetworks.com](http://www.nortelnetworks.com).

Select **SUPPORT & TRAINING** pull down menu and click on **Software Downloads**. Then click on **Browse Product Support** tab. Select **Ethernet Routing Switch 5510** and **Software** from pull down menus and click on **Go**.

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