

Westermo Lynx Firmware

Release Notes Version 3.32



| | |
|----------|---------------------------------------------------------|
| Models: | Lynx 100/300/400 1100/1300/1400 Viper 108/408 |
| Date: | 2013-06-19 |
| Version: | 3.32 |
| Tools: | IP Configuration Tool 10.0.0 or later. Web interface |

Note: Firmware 2.15 or later must be loaded on the Lynx that should be upgraded to this firmware. L1100-L1400 units shipped with 3.15 or later cannot be downgraded to 3.12 or below. L100-L400 units shipped with 3.15 or later will not work properly if downgraded to a version before 3.00.
This firmware is not compatible with Westermo 200 series.

Description

The Lynx and viper product range is a series of fully managed rugged industrial grade switches.

- Lynx 100/300/400 series have six 10/100Base-TX and two 100Base-FX ports.
- Lynx 1100/1300/1400 series have six 10/100Base-TX and two 1000Base-FX ports.
- Viper 108/408 is a more rugged version with eight 10/100Base-TX M12 connectors.

The FX ports are based on SFP modules, Small Form-factor Pluggable Transceiver. They must be installed before the switch is powered on. There is no support for hot swap of SFP modules.

Contacting Westermo Technical Support

If you have technical questions about this product that are not answered in this document, go to the homepage at <http://www.westermo.com>, email support support@westermo.se or contact us on phone +46 16428000.

Issues fixed in this release

#9832: [SNMP] Send SNMP trap on logical link down for frnt

#9831: [WEB] Show logical link down in web

#9308: [IpConfig] Ipconfig tool only display physical link down on FRNT ring ports.

In the IP configuration tool will now display which FRNT link that is logically up or down.

#9307: [FRNT] FRNT sends link up when FRNT status is ok.

When there were unstable links in the network FRNT could be stuck in a state sending link up event and that generated high cpu load on the switches.

#7643: [WEB] Not possible to login with newer browser versions

With Firefox 10 and later, Chrome 16 and later and with Internet Explorer 9 it is not possible to login to the switch.

#7464: [WEB] Statistic counter in WEB sometimes report wrong value

#7016: [FRNT] Leakage of FRNT control packets between FRNT rings

When two or more FRNT rings are connected together and one of the rings gets a link down, FRNT control packets can leak over to the other ring and cause a topology change.

#5739: [System] Some MAC addresses are not accepted in macfilter

#5492: [WEB] Spelling errors in information showed when enabling VLAN

#5491: [WEB] "Reset to default" button on VLAN page does not reset IPToS setting

#5195: [RSTP] Edge-port in permanent block after reboot

This issue is only relevant if RSTP is enabled on the switch. During start up of the switch a port could on rare occasions be stuck in a blocking state.

#4469: [FRNT] When enable FRNT, alarm on port 2

#4441: [SNMP] dot1dTpFdbStatus only report learned

#4004: [Ports] Viper: Shielded Cable can't be enabled for port 7, 8

#3931: [FRNT] Swapped FRNT ports fails

FRNT ports can now be connected in arbitrary order.

Newly added functionality

Support for ring bridging, release 3.32

In WeOS 4.12.0 the new ring bridging function was introduced to create redundant connections between FRNT rings. The ring bridging function is only implemented for products running WeOS and not in this ranged of Lynx products. Firmware 3.32 has support for ring bridging so the Lynx products can coexist with WeOS 4.12 or later running ring bridging but the function has not been implemented in 3.32.

FRNT ports can be connected in arbitrary order, release 3.32

In previous releases it was required to connect FRNT ports in M-N order, from release 3.26 the FRNT ports can be connected in arbitrary order (e.g., port M on one switch to port M on another switch) and will not lead to degraded fail-over performance.

Lynx and FSR208

This firmware is not tested with Westermo 200 series so compatibility is not guaranteed.

Known Issues

It is recommended that all web releases 3.00-3.11 are upgraded. This is because of an error in the database that can cause a reboot of the system and even worse that the settings are lost.

Web browser

Firmware 3.11-3.25 have problem with newer web browsers, it is not possible to login to the switch with https, http will still work. This problem exists with Firefox 10 and later and Internet Explorer 9. This is an issue when trying to upgrade from web, see chapter on upgrade for more information.

Hostname and location

When entering hostname and location some characters can cause problems so valid characters for hostname are 0-9, a-z, A-Z, _(underscore) and -(minus), other characters should not be used.

FRNT

It is not possible to configure other FRNT ports then 7 and 8 in the IP Configuration Tool. When other FRNT ports are used VLAN should not be configured with the IP Configuration Tool because this can cause configuration problems.

The preferred ports are 5 and 6 when FRNT is configured to use copper ports.

IGMP & VLAN

When IGMP and VLAN are activated and port 1 is set to IGMP trunk port is not possible to access the switch with IP Configuration Tool or from the WEB interface. This is not a recommended setting.

Signature with backup image

If the upgrade goes wrong the switch will restart with a backup image that has firmware version 0.00 or 0.01 and the signature will be L100 independent of the actual model.

Scrambling

Scrambling is a protocol to reduce radiated emission and this should not be activated for fibre connections. Previously scrambling could be enabled on fibre ports but in this release this is not possible.

Web interface

1. To access the web interface on the switch the option TLS 1.0 has to be enabled. On Internet Explorer 6 this option is not enabled and this is done from the following menu: Tools->internet options->Advanced enable "Use TLS 1.0"
2. When using Internet Explorer 7 to access the switches a page with the following message: "There is a problem with this website's security certificate". This happens because the certificate is not approved by a third party.

Upgrading

To be able to upgrade the switch firmware the user must install and run an FTP server or a TFTP server. If the upgrade is done from the web interface the server does not have to be on the same computer as the web browser but if the IP Configuration Tool is used for the upgrade the server must be on the same computer.

When upgrading a redundant network remove the redundant links to prevent any storm of multicast and broadcast packets.

If your organization does not have this type of software, contact support@westermo.se for help.

Upgrading from web browser

Firmware 3.11-3.25 have problems with newer web browsers, Firefox 10 and later and Internet Explorer 9 and later. With those browsers it is not possible to login to the switch from web with https but if http is used it will work. This is fixed in 3.26 but will cause problem when upgrading the switch from web on firmware version 3.11-3.25 so use http or the IP configuration tool instead.

When upgrading the switch from the web interface and the upgrade is finished do not press reload because then a new upgrade will start. Instead access the start page by the link on the upgrade page or with the `https://<ip number>` in the address field of the web browser.

Downgrade from 3.15 or later

L100-L400 units shipped with 3.15 or later will not work properly if downgraded to a version before 3.00. They can be downgraded to 3.00-3.11 but that is not recommended and should only be used for testing. It is possible to downgrade to firmware version 3.12.

L1100-L1400 units shipped with 3.15 or later cannot be downgraded to 3.12 or below.

Upgrading from 2.08 or later

A switch with firmware 2.08 to 2.16 can only be upgraded through the IP Configuration Tool. Firmware 3.00 and later can be upgraded through both the web interface and the IP Configuration Tool.

Upgrading from an image between 2.00 and 2.07

IP Configuration Tool can only be used. To upgrade to the newest version there are a two step procedure. First you have to upgrade to an image between 2.08 to 2.15 and after that you can upgrade to the newest version.

Upgrade firmware 2.06 or later

When upgrading from releases 2.06 and higher takes a lot longer than with previous releases. This is due to the CPU bandwidth limitation introduced in 2.06. So, even if the IP Configuration Tool, version 9.6.9 or lower versions, loses contact with the switch or reports that the upgrade has completed, please let the device continue since it can take several minutes for the upgrade to complete. Rely on the "SW Ver" field in the "Device list" of IP Configuration Tool for determining if the upgrade was OK.

Upgrading from 1.07 or earlier

IP Configuration Tool can only be used. Upgrading an old switch to version 2.X requires that v1.08 is first installed. See the release notes included with v1.08 for the complete upgrade procedure.

Upgrade from the backup image 0.01

If something was wrong and the switch is restarted with firmware version 0.01 the switch has started with the backup image. The switch will not function as it should with this firmware and has to be upgraded to the correct firmware version as described in above. Backup image version 0.01 can be upgraded to any new firmware image. It does not have to be upgraded to image 2.15 as needed for backup image 0.00.

Upgrade from the backup image 0.00

If something went wrong and the switch is restarted with firmware version 0.00 the switch has started with the backup image. Upgrade of the switch has to be done in two steps, first the switch has to be upgraded to firmware 2.15 and then to the latest firmware as described below.

Firmware History

| Version | Description | Date |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 3.32 | General release for Lynx100-1400 and Viper 108/408 | 2013-06-19 |
| : : : | Customer specific release. | |
| 3.28 | Customer specific release. | 2012-10-15 |
| 3.27 | Customer specific release. | 2012-07-03 |
| 3.26 | Customer specific release. | 2012-05-23 |
| 3.25 | Customer specific release. | 2011-11-14 |
| 3.24 | Customer specific release. | 2011-09-22 |
| 3.23 | Customer specific release. | 2010-11-25 |
| 3.22 | Customer specific release. | 2010-08-19 |
| 3.21 | Customer specific release. | 2010-03-01 |
| 3.20 | RSTP and IGMP software fix. | 2009-11-09 |
| 3.19 | General bug fixes. | 2009-10-16 |
| 3.18 | Release for a specific customer. | 2009-08-20 |
| 3.17 | Fixed some minor bug fixes | 2009-06-11 |
| 3.16 | Release for a specific customer | 2008-12-08 |
| 3.15 | Fixed some minor bug fixes | 2008-12-08 |
| 3.14 | Release for a specific customer. | 2008-04-18 |
| 3.13 | Mostly fixes for IGMP and some minor bug fixes | 2008-04-18 |
| 3.12 | First general web release for production | 2007-11-08 |
| 3.11 | | 2007-08-22 |
| : : : | Customer specific release. | |
| 3.03 | VLAN+IGMP improvement, improved health packets, Mac filter on L1400 | 2007-02-12 |
| 3.02 | The first official web release. | 2006-12-18 |
| 3.01 | Pre-release where SNMP was not fully supported. | 2006-10-26 |
| 3.00 | A web release that was only distributed use for internal testing | 2006-10-05 |
| | | |
| 2.16 | Auto-neg on fibre and SNMP fixes | 2006-09-19 |
| 2.15 | Bug fixes on VLAN and SNMP | 2006-06-07 |
| 2.14 | Bug fixes on VLAN | 2006-05-19 |
| 2.13 | Release to a specific customer | 2006-05-15 |
| 2.12 | Factory reset function and bug fixes. | 2006-05-09 |
| 2.11 | Release to a specific customer. | 2006-05-08 |
| 2.10 | Release to a specific customer. | 2006-05-04 |
| 2.09 | Release to a specific customer. | 2006-04-28 |
| 2.08 | Fixed problem with FRNT and high broadcast load. IGMP now takes care to use updated port settings. RSTP now works correctly with VLAN's. Add safety hatch in SNMP so that not all ports can be disabled. Support future firmware versions with FW images > 1.9 MiB. L1400: RSTP blocked port indications (yellow led) now work correctly. | 2006-04-20 |
| 2.07 | Fix port 1 & 2 mismatching in IP Configuration Tool and IGMP. L1X00: Fixed fibre autoneg. problem. Fix bad 2.06-only bug where clicking Set in the Port Config dialog of one 2.06 switch retrained all ports on all 2.06 switches. | 2006-03-24 |

| | | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| | Fix IEEE1588 port filtering bug in IGMP. Fix wrong port numbers on SNMP link even traps. | |
| 2.06 | Auto negotiate disable/enable of 1000BASE-FX ports, FX scrambling disable/enable support for L100/300/400, SNMP update (Private MIB is now supported, Status and link up/down traps is supported), IGMP SPR fixed, FRNT high load SPR fixed. | 2006-03-09 |
| 2.05 | Support for Gigabit L1100/1300/1400. RSTP is now supported. FLHP is now supported. | 2005-12-07 |
| 2.04 | The SNMP agent is now configurable for the Lynx100. | 2005-12-02 |
| 2.03 | An IP-address validation is performed before setting the new IP- address. The FRNT port swap function is now working even when the user swaps back to standard port setting. The frntparam variable is now handled correct. | 2005-10-24 |
| 2.02 | The fibre ports configuration has change. NOTE the 2.02 can't communicate with older version on the fibre channels. FRNT edge bug is solved. Switches with only one fibre SFP could have communication problem with the fibre modules. IP Configuration Tool default gateway setting problem is now fixed in the version 2.02. | 2005-09-06 |
| 2.01 | Change the reserved VLAN ID's from 100-300 to 4020-4080. Open up the white VLAN. Change the IGMP query interval in runtime. FRNT port status in IP Configuration Tool is now correct. | 2005-05-17 |
| 2.00 | Lynx400 is released. IGMP and VLAN are supported in Lynx400. The image has faster start-up time. Faster upgrade with the one-file image. Improved upgrade handling, now with real double image support. | 2005-04-21 |
| | | |
| 1.06 | Handle FRNT port on other ports than port 7 and 8. | 2005-03-30 |
| 1.05 | Same as 1.04 but without FRNT and SNMP. | 2005-03-15 |
| 1.04 | Correct a memory leak problem. Add support for TFTP upgrades. Upgrades of the productions software. | 2005-03-15 |
| 1.03 | SNMP system mib is upgrade with a text correction. 1.03 will handle upgrade from version 0.50. The Gateway address bug is now fixed. | 2005-01-31 |
| 1.02 | Same as 1.01 but with no support for SNMP and FRNT. | 2005-01-24 |
| 1.01 | IP Configuration Tool upgrade error message is not shown any more. | 2005-01-21 |
| 1.0 | First 1.0 release | 2005-01-18 |
| 0.56 | Correct some IP Configuration Tool related SPR's. | 2005-01-14 |
| 0.55 | Updated SNMP agent. Missing link downs. | 2005-01-04 |
| 0.54 | Release for L100 only. | 2004-12-17 |
| 0.53 | Release for L100 Lite only. | 2004-12-13 |
| 0.52 | Updated and faster FRNTv0 and better port setting. | 2004-11-30 |
| 0.51 | Better support to IP Configuration Tool. Ring fail gives LED ON red. | 2004-11-16 |
| 0.50 | First version. | 2004-10-28 |