

Prepared by Rasmus Sjöström	
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## Legal Information

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## 1 1.9.5.3 (01-07-2024)

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### 1.1 General

This is an enhancement and bug fix release.

- All version of Rev 3 hardware
  - BRD-355 S/N > 03425 BRD355\_HW3\_V1.9.5.3.img
  - MRD-405 S/N > 11325 MRD405\_HW3\_V1.9.5.3.img
  - MRD-415 S/N > 950 MRD415\_HW3\_V1.9.5.3.img
  - MRD-455 S/N > 23425 MRD455\_HW3\_V1.9.5.3.img
- The following versions of Rev 1 and 2 hardware
  - BRD-355 Rev 1&2 S/N < 03424 BRD355\_HW1-2\_V1.9.5.3.img
  - MRD-405 Rev 2 S/N < 11325 MRD405\_HW2\_V1.9.5.3.img
  - MRD-415 Rev 2 S/N < 950 MRD415\_HW1-2\_V1.9.5.3.img
  - MRD-455 Rev 1&2 S/N < 23425 MRD455\_HW1-2\_V1.9.5.3.img
  - ADSL-350 ADSL350\_HW1\_V1.9.5.3.img

\*Note: all Rev 1 & 2 xRD device will need to be updated to version 1.8.8.9 before updating to version 1.9.5.3.

The transition from Version 1.8.8.9 to Version 1.9.5.3 can take up to 15 minutes. The LEDs will flash to indicate the update is still in progress. **DO NOT** power cycle before the LEDs have returned to the normal operational state. Prematurely power cycling will render the xRD inoperable and can only be recovered by a return to factory, which is **not covered** by the warranty.

### 1.2 New Features

- No new features.

### 1.3 Enhancements

- Improved wireless interface error detection on Hardware Rev 1 & 2
- Serial port hardware handshaking improvements.
- Added popup on DSL models to warn when an interface firmware upgrade will occur.

### 1.4 Bug Fixes

- PPPoA fixed issues with PPPoA Authentication.
- Fixed issue with Hardware Handshaking not working on Serial Ports 2 and 3 (MRD-415).
- Fixed issue with Ethernet ports sometimes not working correctly after boot. (Hardware Rev 1 & 2)

## 1.5 Known Issues

- No known issues.

## 2 1.9.5.2 (29-05-2024)

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### 2.1 General

This is an enhancement and bug fix release.

### 2.2 New Features

- No new features.

### 2.3 Enhancements

- **Serial server Modem Emulator:**
  - PCCP437 char set added
  - Hex char set properly added
  - +CSDH support added
  - +CSAS now saves CSMP and CNMI
  - SMSC (+CSAS) improvements
- IPsec key lifetime now has limits
- Reboot improvements

### 2.4 Bug Fixes

- DNP3 CSD not reporting fixed.
- PPPoA fixes on DSL models Hardware Rev 1 & 2.
- Network status LED for Sim2 issue fixed.
- Temperature reporting issue fixed for hardware Rev 3 units.
- Fixed issue with DSL interface firmware upgrade.

### 2.5 Known Issues

- No known issues.



## 3 1.9.5.1 (12-04-24)

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### 3.1 General

### 3.2 New Features

- No new features.

### 3.3 Enhancements

- Improved the upgrade process
- Improved logging
- Improved handling of the network restarts when connection maintenance fails
- Added limit to the number SSH connections

### 3.4 Bug Fixes

- Fixed connectivity issues for MRD-455 Rev 1 units
- Improved handling of MRD-455 Rev 1 GNSS data-
  - Serial server: Fixed Serial Port Control line issues on Rev 1/2 Hardware
  - Improved serial throughput and latency in Rev 3 Hardware
- IPSec:
  - Fixed issues with IPSec routing
  - Fixed issues with IPSec startup/restarts
  - General IPSec improvements
- Fixed issues with email not being sent.
- DSL:
  - Fixed an issue with Rev 2 / Rev 3 hardware upgrades failing causing the DSL interface to fail
  - Add a configuration setting to allow for specific incoming subnet routes via PPPoA
  - Improved Rev 2 / Rev 3 hardware interface handling and stability
  - Fixed issues with some Rev 2 hardware being unable to start up the DSL interface
  - Fixed issues with the MTU settings in a subset DSL configurations
- Fixed issues with Policy routes not functioning correctly
- Fixed issues with SNMP load protection
- LAN2 is now hidden on the firewall webpages unless independent LAN ports is enabled
- Correctly display the Loopback interface on status pages when enabled

## 3.5 Known Issues

- No known issues.

## 4 1.9.5.0 (15-11-23)

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### 4.1 General

### 4.2 New Features

- No new features.
- 

### 4.3 Enhancements

- Support added for Hardware Rev 1 and 2 models.
- Improved logging
- Roaming:
  - Rotate SIMs when roaming temporary deny list is full and sim rotate is enabled.
  - Timed roaming rescan capability added.

#### SNMP:

- Added SIM and IMEI information to the MIB.

### 4.4 Bug Fixes

- Fixed issue with Model 455 not starting up correctly under some circumstances.
- Fixed potential connection poller memory leak.
- LLDP: Chassis ID fix.
- Fixed issue where if LAN gateway was configured it did not appear as a default route option.
- Modem emulator: AT parsing error fix.
- Resolved Firewall connection tracking issue.
- BRD355 Rev3: ADSL improvement when using separated LAN ports

#### IPsec:

- Resolved issue with IPsec restarting before wireless/dsl connection is up.
- Resolved issue with IPsec routes sometimes being dropped.
- Certificate import improvements.
- 3DES now works for phase 2 (ESP).

### 4.5 Known Issues

- Routing issue as a consequence of running PPPoA which affects the loopback. Issue occurs when there is more than one hop to the PPPoA instance.

- Some very old Rev1 device will not update due to the file system being uncompressed. This issue will be addressed in a later release.

## 5 1.9.4.0 (12-5-23)

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### 5.1 General

- All version of Rev 3 hardware
  - BRD-355
  - MRD-405
  - MRD-410
  - MRD-455

### 5.2 New Features

- No new features.

### 5.3 Enhancements

- SNMP: Improvements to interface consistency.
- Temperature: Added temperature support.
- Dynamic DNS: Added support for DuckDNS
- GNSS: Added support for 3V3 Active Power GPS to MRD-415 Rev 3 and MRD-455 Rev3 models

### 5.4 Bug Fixes

Diagnostics: Fixed issue with being unable to download TCPDump diagnostics.

- IPSEC:
  - Fixed issues with XAuth not authenticating correctly.
  - Fixed an issue with IPSec stability while using AES128.
- Fixed issue where occasionally the technical support file was zero bytes.
- Upgrade: Fix an issue where some upgrades would result in unexpected reboot
- Logs: Improved logging messages for better readability.
- LLDP:
  - Fixed incorrect start up issue.
  - Improved the information reported via SNMP
- Interfaces: Fix an issue where sometimes routing between LAN ports wasn't enabled when selected.
- LED indicators: Improved the timings for greater consistency across products.
- Dynamic DNS: Fix an issue with EasyDNS interaction

5.5 Known Issues

## 6 1.9.3.6 (2023-3-28) BRD-355 only

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### 6.1 New Features

- No new features.

### 6.2 Enhancements

#### 6.2.1 Support OPENreach MCT compatibility testing

Support for BT BT Openreach MCT Compatibility test , and defaults for BT Openreach SoGEA lines

### 6.3 Bug Fixes

#### 6.3.1 Logging

- Fixed an issue with excessive and unnecessary logging of marks on the firewall..

#### 6.3.2 SCEP

- Fixed an issue where certificates could report the wrong date. Mainly relating to certificates handled by SCEP.

#### 6.3.3 General

## 7 1.9.3.5 (2023-3-13)

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### 7.1 New Features

- No new features.

### 7.2 Enhancements

### 7.3 Bug Fixes

#### 7.3.1 Logging

- Fixed an issue with excessive and unnecessary logging of marks on the firewall..

#### 7.3.2 SCEP

- Fixed an issue where certificates could report the wrong date. Mainly relating to certificates handled by SCEP.

#### 7.3.3 General



## 8 1.9.3.4 (2023-02-06)

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This is an enhancement and bug fix release.

### 8.1 New Features

- No new features.

### 8.2 Enhancements

#### 8.2.1 Openreach

- Improvement in handling of OAM and CFM protocol in Openreach mode.

#### 8.2.2 IPSec

- DES, Blowfish and Twofish support reintroduced.
  - This was done for firmware Version 1.8.x.x compatibility. It should be noted that these encryption methods are considered deprecated.

#### 8.2.3 General

- Logging clean-ups.

### 8.3 Bug Fixes

#### 8.3.1 Serial Server

- PPP Server and PPP Dialout Client startup fixed.

#### 8.3.2 SNMP

- Issue with selecting v3 fixed.
- Issue when restarting or reconfiguring fixed.
- Fixed issue with DSL units without sync not reporting correctly in MIB.

#### 8.3.3 General

- MRD-415 not correctly reporting hardware revision issue fixed.
- Logging clean-up.

## 9 1.9.3.3 (2023-01-18)

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This is a bug fix release.

### 9.1 New Features

- No new features.

### 9.2 Enhancements

- No enhancements.

### 9.3 Bug Fixes

#### 9.3.1 General

- Resolved an issue with P12 certificate where there was only a common name entry as the subject.
- Resolved an issue with common names not always being read properly for OpenVPN configurations that contain certificates.
- Resolved an issue with some MRD-415 units sometimes showing a POST fault on startup.
- Resolves an issue with the DSL firmware version not being displayed correctly.

## 10 1.9.3.2 (2023-01-04)

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This is an enhancement release.

### 10.1 New Features

- No new features.

### 10.2 Enhancements

#### 10.2.1 Openreach

- OAM loopback added to BRD-355.

### 10.3 Bug Fixes

- No bug fixes.

## 11 1.9.3.1 (2022-12-21)

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This is a bug fix release.

### 11.1 New Features

- No new features.

### 11.2 Enhancements

- No new enhancements

### 11.3 Bug Fixes

#### 11.3.1 Ethernet

- The correct MAC Address is assigned to LAN and LAN2 when using independent port mode. Previous versions incorrectly had the MAC addresses swapped.
- The correct MAC Address is assigned when the ports are in standard/switch mode. Previously there was a chance it would use the 2nd MAC address not the first.
- The switch ports being reversed on the MRD455 units in version 1.9.2.x has been resolved. If the configuration was saved with firmware version 1.9.2.x the “functional config” will persist as the reversal can be detected and the ports assigned correctly.

#### 11.3.2 Serial Server

- Modem emulator: response time improvements.
- Modem emulator: multi phonebook server disconnect fix.

## 12 1.9.3.0 (2022-12-01)

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This release adds support for new hardware versions.

### 12.1 New Features

- Added support for MRD-405 HW revision 3.0.
  - Serial number 11325 and higher.

### 12.2 Enhancements

- No enhancements.

### 12.3 Bug Fixes

- No bug fixes.

## 13 1.9.2.1 (2022-10-12)

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This is a bug fix release.

### 13.1 New Features

- No new features.

### 13.2 Enhancements

- No enhancements.

### 13.3 Bug Fixes

#### 13.3.1 General

- Remote syslog fixes
- CLI log fix
- Fixed configuration reset switch issue.
- DSL upgrade improvements

## 14 1.9.2.0 (2022-10-06)

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This release adds support for new hardware versions.

### 14.1 New Features

- Added support for MRD-415 HW revision 3.0.
  - Serial number 00950 and higher.

### 14.2 Enhancements

- No enhancements.

### 14.3 Bug Fixes

- No bug fixes.

## 15 1.9.1.1 (2022-10-05)

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This is a feature and enhancement release.

### 15.1 New Features

#### 15.1.1 Openreach network acceptance

- Initial support added.

### 15.2 Enhancements

#### 15.2.1 IPsec

- Remove strict encryption checkbox from IPsec settings (always behaves strict now).
- Improved importing of certificates into IPsec

### 15.3 Bug Fixes

- No bug fixes.



## 16 1.9.1.0 (2022-09-01)

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This release adds support for new hardware versions.

### 16.1 New Features

- Added support for BRD-355A/B HW revision 3.0.
  - Serial number 03425 and higher.

### 16.2 Enhancements

- No enhancements.

### 16.3 Bug Fixes

- No bug fixes.

## 17 1.9.0.1 (2022-08-19)

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This is an enhancement and bug fix release.

### 17.1 New features

- No new features.

### 17.2 Enhancements

#### 17.2.1 IPsec

- Added fragmentation support
- MODP768 support added back in

### 17.3 Bug Fixes

#### 17.3.1 IPsec

- Fixed restart issue
- Fixed IKEv2 active redundancy issue

#### 17.3.2 General

- OpenVPN certificate fix
- TechSupport file clean-up
- Dynamic routing fixes
- CLI command fixes

## 18 1.9.0.0 (2022-08-11)

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This is the first release on the 1.9 firmware branch.

### 18.1 New Features

- Added support for MRD-455 HW revision 3.0.
  - Serial number 23425 and higher.

### 18.2 Enhancements

- No enhancements.

### 18.3 Bug Fixes

- No bug fixes.