

Digi TX Firmware Release Notes Version 20.2.162.162 (April 2020)

INTRODUCTION

Digi Accelerated Linux is an advanced, high-performance operating system for cellular routers. These are the release notes for the initial Digi Accelerated Linux (DAL) firmware release which supports the Digi TX family of products listed below.

SUPPORTED PRODUCTS

- Digi TX54
- Digi TX64

KNOWN ISSUES

- GRE interfaces and Passthrough mode does not work when the interface name is greater than seven characters. [DAL-2327]

UPDATE CONSIDERATIONS

This release does not support migration of WR54 and WR64 devices running xOS firmware.

UPDATE BEST PRACTICES

Digi recommends the following best practices:

1. Test the new release in a controlled environment with your application before you deploy production devices.
2. Unless otherwise noted, apply updates in the following order:
 - a. Device firmware
 - b. Modem firmware
 - c. Configuration
 - d. Application

Digi recommends Digi Remote Manager for automated device updates. For more information, see the [Digi Remote Manager User Guide](#).

If you prefer manually updating one device at a time, follow these steps:

1. Download the **20.2.162.162** firmware update image from the [Digi support website](#) to your PC
 - TX54:
 - TX54-Dual-Cellular-20.2.162.162.bin

- TX54-Dual-Wi-Fi-20.2.162.162.bin
 - TX54-Single-Cellular-20.2.162.162.bin
 - TX64:
 - TX64-20.2.162.162.bin
2. Log into the Web UI.
 3. Navigate to the **System > Firmware Update** page.
 4. Click **Choose File** and select the appropriate firmware update image.
 5. Click **UPDATE FIRMWARE**.
 6. The device will automatically reboot once the firmware update is complete.

TECHNICAL SUPPORT

Get the help you need via our Technical Support team and online resources. Digi offers multiple support levels and professional services to meet your needs. All Digi customers have access to product documentation, firmware, drivers, knowledgebase, and peer-to-peer support forums. Visit us at <https://www.digi.com/support> to find out more.

CHANGE LOG

VERSION 20.2.162.162 (April 2020)

This is a **recommended** release.

NEW FEATURES

There are no new features in this release.

ENHANCEMENTS

1. The firstnet-broadband APN has been added for AT&T FirstNet SIMs.
2. The Rx and Tx byte counts have been added to the **show modem name <name>** command.
3. The MAC address has been added to the support report filename.

SECURITY FIXES

1. Cross-site scripting (XSS) vulnerabilities on the Web UI configuration, status, terminal and file system pages has been resolved. (DAL-2818, DAL-2819, DAL-2823)
2. A script injection exploit on the Web UI Configuration Maintenance has been resolved. (DAL-2797)
3. A fix to prevent unauthorized read/write access to /op/config and /opt/boot when the interactive shell is disabled. (DAL-2865)
4. An issue where the output of the Analyzer could be written out of the /etc/config/analyzer directory has been resolved. (DAL-2672)

BUG FIXES

1. An issue with the Sierra Wireless EM7511 module firmware update has been resolved. (DAL-2794)
2. An issue with the automatic cellular firmware selection on the Telit LM960 modules for T-Mobile and Sprint SIMs has been resolved. (DAL-2376)

3. An issue that was preventing multicast packets from being sent through a network bridge interface has been resolved. (DAL-2774)
4. An issue with the Digi Remote Manager health metrics reporting the /opt directory as full when it wasn't has been resolved. (DAL-2769)
5. An issue where the device would not automatically reboot after restoring configuration using the Web UI has been resolved. (DAL-2862)
6. An issue with the scheduled reboot always using UTC time rather than the configured timezone has been resolved. (DAL-2859)
7. An issue with stopping the analyzer in the CLI has been resolved. (DAL-2892)
8. An issue with the **show system** command on the TX64 when no Bluetooth module has been fitted has been resolved. (DAL-2871)
9. An issue in reading the status of the accelerometer has been resolved. (DAL-2266)

VERSION 20.2.162.90 (March 2020)

This is a **recommended** release.

NEW FEATURES

10. The Connection Monitoring and Active Recovery support has been rebranded as Surelink.
11. The default Surelink settings for WAN interfaces has been changed so that the interface will do DNS tests against its DNS server to determine if the interface is working.
12. Read only admin access has been added.
13. A new shell access parameter has been added to allow you to prevent shell access from being enabled for a group. When disabled, script access to the shell and custom firewall rules are also restricted. If this parameter is subsequently re-enabled, the device will factory-default.
14. Support for TX64 user partition encryption has been added.
15. Support for USB GNSS devices has been added.

ENHANCEMENTS

1. The default setting for 'SIM failover alternative' on Modem interfaces has been changed to 'reset'.
2. Hotspot performance has been improved by reducing the amount of log entries being produced.
3. IPsec status and Tx/Rx byte deltas have been added to the health metrics.
4. HTTPS support has been enabled from the initial boot up.
5. The Web UI has been updated to display devices connected to a hotspot.
6. The IPsec performance on the TX64 has been improved.

SECURITY FIXES

1. The libcap library has been updated to 1.9.1 (CVE-2017-16808, CVE-2019-15163)
2. The tcpdump application has been updated to 4.9.3 (CVE-2018-14465, CVE-2018-14467 CVE-2018-14470 CVE-2018-14879 CVE-2018-16227 CVE-2018-16452 CVE-2019-15167)
3. The libxml2 library has been update to v2.9.10. (CVE-2018-14567, CVE-2018-9251)
4. The OpenVPN support has been updated to v2.4.4 (CVE-2017-12166)

5. The libldns library has been updated to v1.7.1 (CVE-2017-1000231, CVE-2017-1000232)

BUG FIXES

1. An issue with poor TX54 Wi-Fi client receive speed in bridged configuration has been fixed. (DAL-2353)
2. An issue with the hotspot starting from bootup is has been fixed. (DAL-2446)
3. The health metrics for the TX54 platforms has been fixed. (DAL-2703)
4. The MAC address assignment has been fixed for TX54 and TX64. (DAL-2290)
5. An issue where only the last SSH key configured for a user would work has been fixed. (DAL-2506)
6. An issue with the TX54 (Single Cellular) cellular LEDs has been fixed. (DAL-2659)
7. An issue with the SCEP client handling extra bytes has been fixed. (DAL-2212)
8. An issue with the ping and traceroute commands not routing out of specific interface has been fixed. (DAL-2605)
9. An issue with the TX54 power settings (ignition sense, input voltage, power button behavior) not taking affect has been resolved. (DAL-2734)

VERSION 19.11.72.85 (January 2020)

This is a **recommended** release.

NEW FEATURES

There are no new features in this release.

ENHANCEMENTS

1. The performance for TX54 Wi-Fi client interfaces configured as a bridge has been improved.
2. The MTU is now being displayed with the **show route verbose** CLI command.
3. The Python acl.led module has been moved to the digidevice module.

SECURITY FIXES

There are no security fixes in this release.

BUG FIXES

1. An issue with the Dual APN configuration on the TX54 and TX64 has been resolved. (DAL-2311)
2. An issue with the Active Recovery support on cellular interfaces has been resolved. (DAL-2000)
3. An issue with VLAN support on the TX54 has been resolved. (DAL-2264)
4. An IPsec routing issue when configuring a remote network of 0.0.0.0/0 has been resolved. (DAL-2253)
5. The missing Wi-Fi configuration for the TX54 Dual Wi-Fi variant has been added to support 2.4GHz band. (DAL-2451)
6. An issues enabling the location support for the TX54 platforms has been resolved. (DAL-2226)

7. The MAC address assignment for the TX54 and TX64 Wi-Fi interfaces has been corrected. (DAL-2290)
8. An issue where N/A would be displayed for Network Activity counters on the Web UI dashboard has been resolved. (DAL-2295)

VERSION 19.11.72.53 (December 2019)

The TX54 and TX64 firmware supports the following key features:

- Cellular
 - 4G LTE and 3G support
 - Dual cellular connections
 - SIM prioritization
- Wi-Fi
 - Access Point support
 - Client support
 - Wi-Fi scanner support
 - Wi-Fi hotspot
- Digi Remote Manager
 - Remote Management
 - Device Health Metrics
- VPN
 - IPsec with certificate and pre-shared key authentication
 - HW encryption for IPsec
 - OpenVPN
 - GRE
- SCEP Client support
- Web Filtering / Cisco Umbrella
- Location support
 - On-board GNSS module
 - 3rd party source
 - Forwarding to remote hosts
- IPv4/IPv6
- Routing
 - Static Routes
 - Policy based Routing
 - Routing services (BGP, OSPF, RIP, IS-IS)
 - Multicast
- Port Forwarding
- Packet Filtering
- Packet Analyzer
- IntelliFlow
- Bluetooth scanner support

The following features from earlier Digi xOS firmware are not yet supported in this DAL beta firmware. They will be supported before in the production release later this year:

- VRRP+
- SNMP v1/v2c
- SNMP Enterprise MIB
- SSH Certificates
- DMNR
- DHCP Option User Classes