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# **Product Change Notification**

MultiConnect<sup>®</sup> eCell (MTE and MTE2) MultiConnect<sup>®</sup> rCell 500 Series (MTR5) MultiConnect<sup>®</sup> rCell 600 Series (MTR6) MultiConnect<sup>®</sup> CBRS Wi-Fi AP (MTCAPW)

# **Updated Firmware Available**

Date: April 6, 2022

Product Change Notification (PCN) Number PCN 04062022-001 (Firmware Update)

### **Overview**

In June 2022, an updated firmware version will be available to resolve <u>CVE-2022-0778</u> and other openSSL CVE (<u>openSSL release notes</u>)

• See part numbers impacted for details

## **Suggested Action Plan**

## Customers

- 1. Recognize that impacted devices require a firmware update to resolve a security vulnerability
- 2. Evaluate the new firmware version and update deployed devices if needed
- 3. Additional information
  - Technical inquiries: support.multitech.com
  - Sales inquiries: email <u>sales@multitech.com</u>

#### Distributors

- Forward this announcement to others in your organization who are actively involved in the sale or support of access points, routers, and Ethernet bridges
- Encourage customers to evaluate the new firmware version in their environment.



## Firmware Overview

New firmware versions include the following operating system component update

## Updated OpenSSL

- OpenSSL updated to version 1.1.1n
- Resolution to <u>CVE-2022-0778</u> and other openSSL CVE (<u>openSSL release notes</u>)
- Additional information available at: <a href="http://www.multitech.com/landing-pages/security">http://www.multitech.com/landing-pages/security</a>

### Schedule

New firmware versions will be available for download in June 2022.

## **Ordering Part Numbers Impacted**

The following ordering part numbers are impacted by these updates:

- MultiConnect<sup>®</sup> eCell
  - MTE-LAT6-B07-US
  - MTE-LEU6-B07-EU-GB-AU
  - MTE2-L12G2-B07-US
- MultiConnect<sup>®</sup> rCell 500 Series
  - MTR5-LEU2-B04.R1-EU-GB
- MultiConnect<sup>®</sup> rCell 600 Series
  - MTR6-L12G1-B04-US
- MultiConnect<sup>®</sup> CBRS Wi-Fi AP
  - MTCAPW-L12G2-A600VA-CUA

## **Upgrade Process**

Updated firmware is available at <u>www.multitech.com</u>.

- 1. Select the category and product family of interest
- 2. Locate and select the correct model number from the Product Listing
- 3. Visit the DOWNLOADS tab for the list of available firmware downloads
- MultiConnect® eCell
  - o MTE-LAT6-B07-US https://www.multitech.com/models/92507165LF
    - DOWNLOADS tab, MTE-LAT6-v211
  - o MTE-LEU6-B07-EU-GB-AU https://www.multitech.com/models/92507166LF
    - DOWNLOADS tab, MTE-LEU6-v211
  - o MTE2-L12G2-B07-US https://www.multitech.com/models/92507163LF
    - DOWNLOADS tab, MTE-Lxxx-v308
- MultiConnect<sup>®</sup> rCell 500 Series
  - o MTR5-LEU2-B04.R1-EU-GB https://www.multitech.com/models/92507337LF
    - DOWNLOADS tab, MTR5-LEU2-v420
- MultiConnect<sup>®</sup> rCell 600 Series
  - o MTR6-L12G1-B04-US https://www.multitech.com/models/92507338LF
  - DOWNLOADS tab, MTR6-L12G1-v506
- MultiConnect<sup>®</sup> CBRS Wi-Fi AP
  - o MTCAPW-L12G2-A600VA-CUA https://www.multitech.com/models/92507151LF
    - DOWNLOADS tab, MTCAPW-L12G2-v405



## **Additional Information**

If you have any questions regarding this Product Change Notification, please contact your MultiTech sales representative or visit the technical resources listed below:

## World Headquarters – USA

+1 (763) 785-3500 | <u>sales@multitech.com</u>

## EMEA Headquarters – UK

+(44) 118 959 7774 | <u>sales@multitech.co.uk</u>

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### www.multitech.com/landing-pages/security

MultiTech monitors industry news and announcements to identity security issues that may impact our devices and operating systems and strive to provide the information and tools to keep your deployments secure and online.

### MultiTech Developer Resources:

### www.multitech.net

An open environment where you can ask development related questions and hear back from MultiTech engineering or a member of this community.

### Knowledge Base:

### http://www.multitech.com/kb.go

Immediate access to support information and resolutions for all MultiTech products.

## MultiTech Support Portal:

<u>support.multitech.com</u> Create an account and submit a support case directly to our technical support team.

## MultiTech Website:

www.multitech.com

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## ATTACHMENT I Identifying Firmware Version

When logging into the device via the user interface, the user can easily identify the version of firmware on their device.

MULTITECHO	Firmware version 405 MTCAPW-L12G2-v405
MultiConnect® CBRS Wi-Fi AP v4.05	
Username:	
Password.	
Login	
This system is for the use of authorized users only. Individuals using this system without	
authority, or in excess of their authority, are subject to having all their activities on this system monitored and recorded by system personnel. Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal	
activity, system personnel may provide the evidence of such monitoring to law enforcement officials.	



## **Revision History**

Version	Author	Date	Change Description
-001	DT	04/04/2022	Original version



# Security Advisory 04042022-002

# CVE-2022-0778

## **Initial Publication Date: April 4, 2022**

Vulnerability Details:

- <u>CVE-2022-0778</u>
- The BN\_mod\_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form.
- OpenSSL advisory <a href="https://www.openssl.org/news/secadv/20220315.txt">https://www.openssl.org/news/secadv/20220315.txt</a>

CVVS Version 3.X Score: 7.5 - High

### Summary

This issue affects OpenSSL version 1.1.1m and older. All versions of OpenSSL 1.0.2 that support elliptic curve ciphers are also affected. It was addressed and fixed in OpenSSL 1.1.1n on March 15, 2022.

mPower<sup>™</sup> and mLinux operating systems and device-specific firmware versions include OpenSSL and are being updated to OpenSSL 1.1.1n.

- mPower versions prior to mPower 5.3.0 and mPower MTR 5.3.0 are built on OpenSSL 1.0.2X and not supported with upgrades. An upgrade to mPower 5.3.8s-s1 or mPower MTR 5.3.6s-s1 is required.
- mLinux versions prior to mLinux 5.3.0 are built on OpenSSL 1.0.2X and are not supported with upgrades. An upgrade to mLinux 6.0 is required.

## Devices and Operating Systems Impacted by CVE-2022-0778

The following table summarizes the devices and operating systems impacted by <u>CVE-2022-0778</u> and the operating system versions in which this vulnerability will be fixed.

	Device <sup>(1)</sup> (Model)	Currently Shipping Operating Systems	Updated Operating Systems (including fix)
Bridge	MultiConnect <sup>®</sup> eCell (MTE)	MTE-LAT6-v208 MTE-LEU6-v208	MTE-LAT6-v211 MTE-LEU6-v211
Dridge	MultiConnect <sup>®</sup> eCell (MTE2)	MTE-Lxxx-v208	MTE-Lxxx-v308
Doutor	ter MultiConnect <sup>®</sup> rCell (MTR)	mPower MTR 5.3.0 mPower MTR 5.3.6	mPower MTR 5.3.6s-s1 mPower MTR 6.0.X
Router		mLinux 5.3.31	mLinux 6.0.X
Router	MultiConnect <sup>®</sup> rCell (MTRE)	-	-
Router	MultiConnect <sup>®</sup> rCell 500 Series (MTR5)	MTR5-LEU2-v417	MTR5-LEU2-v420



	Device <sup>(1)</sup> (Model)	Currently Shipping Operating Systems	Updated Operating Systems (including fix)
Router	MultiConnect <sup>®</sup> rCell 600 Series (MTR6)	MTR6-L12G1-v505	MTR6-L12G1-v506
Gateway	Conduit <sup>®</sup> 300 Series (MTCDT3AC)	mPower 5.4.0	mPower 6.0.Y <sup>(2)</sup>
Gateway	Conduit <sup>®</sup> Programmable (MTCDT) Conduit <sup>®</sup> IP67 Base Station (MTCDTIP)	mPower 5.3.5 mPower 5.3.7	mPower 5.3.8s-s1 mPower 6.0.X
		mLinux 5.3.31	mLinux 6.0.X
Base Station		mPower 5.3.5 mPower 5.3.7	mPower 5.3.8s-s1 mPower 6.0.X
Base Station	Conduit <sup>®</sup> IP67 200 Series Base Station (MTCDTIP2)	mLinux 5.3.31 mPower 5.3.5 mPower 5.3.8	mLinux 6.0.X mPower 5.3.8s-s1 mPower 6.0.X
Access	Conduit <sup>®</sup> AP Access Point (MTCAP, MTCAP2)	mPower 5.3.5 mPower 5.3.8	mPower 5.3.8s-s1 mPower 6.0.X
Point		mLinux 5.3.0 mLinux 5.3.4	mLinux 6.0.X mLinux 6.0.X
Access Point	MultiConnect <sup>®</sup> CBRS Wi-Fi AP (MTCAPW)	-	MTCAPW-L12G2-v405
Hot Spot	MultiConnect <sup>®</sup> Hotspot (MTHS)	Under Investigation	-

(1) Only MultiTech devices expressly listed in this table are impacted by this advisory

(2) mPower 6.0.Y is for use on the Conduit 300 only

## Services Impacted by CVE-2022-0778

- MultiTech DeviceHQ<sup>®</sup> Cloud-based IoT Device Management Under Investigation
- MultiTech LENS<sup>®</sup> LoRaWAN<sup>®</sup> Optimized Embedded Network Server and Key Management Toolset Under Investigation



## Schedule

Operating systems can be updated using a full image or differential image.

	Downloadable	Device Shipments ***
mLinux 6.0.X	April 2022 *	July 2022
mPower™ 5.3.6s-s1	April 2022 **	April 2022
mPower™ 5.3.8s-s1	April 2022 *	April 2022
mPower™ 6.0.X	April 2022 *	July 2022
mPower™ 6.0.Y	June 2022 *	June 2022
MTE-LAT6-v208	June 2022 **	TBD
MTE-LEU6-v208	June 2022 **	TBD
MTE-Lxxx-v208	June 2022 **	TBD
MTR5-LEU2-v420	June 2022 **	TBD
MTR6-L12G1-v506	June 2022 **	TBD
MTCAPW-L12G2-v405	June 2022 **	TBD

(\*) Full image updates are downloadable on DeviceHQ and at <a href="http://www.multitech.net/developer/downloads/">http://www.multitech.net/developer/downloads/</a>

(\*\*) Full image updates are downloadable on device product pages on www.multitech.com

(\*\*\*) Devices that ship from MultiTech will include the updated operating system

Differential image updates are available through the MultiTech Product Support Portal

- Visit https://support.multitech.com/
- Create a support case and request access to differential file updates
- Not all firmware versions include a differential image update

## **Customer Action Plan**

Devices/Operating Systems: MultiTech recommends updating to the updated operating systems listed above. Services: Under Investigation.



### **Additional Information**

If you have any questions regarding this Security Advisory, please contact your MultiTech sales representative or visit the technical resources listed below:

## World Headquarters – USA

+1 (763) 785-3500 | sales@multitech.com

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## **Revision History**

Version	Author	Date	Change Description
-001	DT	04/04/2022	Published version
-002	DT	04/06/2022	<ul> <li>Updates made for the following devices:</li> <li>MultiConnect<sup>®</sup> eCell (MTE)</li> <li>MultiConnect<sup>®</sup> rCell 500 Series (MTR5)</li> <li>MultiConnect<sup>®</sup> rCell 600 Series (MTR6)</li> <li>MultiConnect<sup>®</sup> CBRS Wi-Fi AP (MTCAPW)</li> </ul>