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Product Change Notification—PCN# **PCN001148**

September 15, 2025

Dear Valued Customer,

We would like to inform you that Moxa is going to update Moxa Industrial Linux to v3.4 for the Moxa UC Series computers on August 22, 2025.

Please review the details below to determine how these changes will affect your products and/or Operations.

What will change in Moxa Industrial Linux 3.4?

New features:

- Software Wi-Fi AP support enables remote access to devices with Moxa Industrial Linux (MIL) 3.4 and higher.
  The software Wi-Fi AP supports up to three clients, operates only on the 2.4 GHz frequency, and is recommended for troubleshooting purposes rather than critical data transmission or essential functions. This feature is currently supported only for UC-2200A, UC-4400A, and UC-8200 Series.
- Supports **Multi-WAN,** a new interface type to route traffic to the interface from which it originates.
- Supports mDNS for device discovery with the default port 5353 enabled.
- Moxa Connection Manager (MCM):
  - Adds the **dyn_conf** option to the **moxa-connect-manager** command to modify the configuration cache.
  - Adds the **mx-connect-mgmt debug diag** command to UC-445xA models with a 5G module.
- Supports Wi-Fi Enhanced Open™ based on the Opportunistic Wireless Encryption (OWE) standard; only for UC-445xA models at 6 GHz.

Enhancements:

- EN 18031-1 (RED) compliant wireless cybersecurity.
  To comply with EN 18031-1 wireless cybersecurity, the standard version of Moxa Industrial Linux (MIL) 3.4 includes the following changes:
  - Adds a PAM login policy
    The pam_tally2 mechanism locks the account for 300 seconds after five failed login attempts.
  - Disables SNMPv1 and SNMPv2.
  - Moxa Guardian (MG): Adds a new mode 4 in **moxa-guardian**.

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- Moxa Computer Interface Manager (MCIM):
  - Adds a snapshot script for the push-button.
  - The auto-mount partition feature provides additional log information to verify if the mount operation succeeded or failed in the **moxa-computer-interface-manager**.
  - Supports new DIO commands: add/delete/list/set hook scripts.
  - Supports new button commands: add/delete/list action scripts.
- Moxa Connection Manager (MCM):
  - Adds RSSI and RSRQ signal values.
  - Supports up to two IP target hosts for the ping mechanism.
  - Supports recovery of the cellular module when it unexpectedly stops responding.
- Moxa System Decommission (MSM): Enhances the **moxa-system-manager** decommission workflow to improve resilience against interruptions, such as power failures, ensuring reliable system decommissioning.
- All tools: Adds a **-J** command option to support JSON format output for Moxa tools, including MCIM, MCM, MBM, and MSU.
- The Ethernet DHCP client ID, previously fixed to the client's MAC address, can now be configured/modified.
- The username and password fields are auto-populated when the credentials are available in the APN profile data.
- The log-rotate strategy for standard models has been adjusted to apply daily rotation with 14 logs retained in the rsyslog group.

Bugs fixed:

- Configuring eth0 as a Docker interface causes the MCM tool to fail.
- Moxa Bootloader Manager (MBM): The bootloader log is displayed incorrectly in cases where it wraps (e.g., in a circular buffer).
- A case of the USB ports in the UC-8200 Series failing to detect USB devices.

Changes:

- Deprecates the DIO reload command for UC-4400A and UC-8200 Series.
  The active status is now automatically updated.
- Deprecates the **user-defined** option for a button.
  Use the **add_action** command to add an action script for unique names.
- The software Wi-Fi AP and Wi-Fi P2P mode cannot be enabled simultaneously.
- The DHCP server will be enabled by default when the Ethernet interface is configured as a LAN.
- The USR LED on the UC-8200 Series is modified to change from Green to Yellow when the FN button is pressed.
- Disabling CONFIG_RT_GROUP_SCHED removes real-time thread restrictions in CGroup v2 for the UC-1200A, UC-2200A, and UC-8200 Series.

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Notes:

- The standard models of the UC-1200A, UC-2200A, UC-3400A, UC-4400A, and UC-8200 Series can achieve EN 18031-1 (RED) compliant wireless cybersecurity via two methods:
  - Clean OS installation: The default system is preconfigured to comply with EN 18031-1 (RED) compliant wireless cybersecurity requirements.
  - System upgrade: After upgrading to the latest OS version, execute the **mx-guardian red set** command to ensure EN 18031-1 (RED) compliant wireless cybersecurity.
- The SNR metric has been renamed to SINR for LTE/NR cellular interfaces in both the CLI and D-Bus interfaces.

Known issues:

- Using the command **mx-sw-updater upgrade --local** to upgrade the system may fail if the device does not have Internet access.
  The root cause is that the default installation strategy of moxa-software-updater (aligned with APT package management tool) also includes "Recommends" (not mandatory for the standard releases) packages, which may need Internet access to install.
  Workaround: Before performing the upgrade, run the command **echo 'APT::Install-Recommends "false";' | sudo tee /etc/apt/apt.conf.d/99no-recommends** to exclude the "Recommends" packages from the installation process. After the upgrade is complete, run the command **sudo rm -f /etc/apt/apt.conf.d/99no-recommends** to remove this temporary setting.

Which products can apply Moxa Industrial Linux v3.4?

Product Name	Latest OS Image	New OS Image	Latest Bootloader	New Bootloader
UC-1200A Series	v1.2	v1.3	v1.3	v1.4
UC-2200A Series	v1.2	v1.3	v1.3	v1.4
UC-3400A Series	v1.0	v1.1	v1.2	v1.3
UC-4400A Series	v1.1	v1.2	v1.0	v1.1
UC-8200 Series	v1.3	v1.4	v3.2	v3.3

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When will the new versions be available?

Product Name	New OS Image	Available for Download
UC-1200A Series	v1.3	August 29, 2025
UC-2200A Series	v1.3	
UC-3400A Series	v1.1	
UC-4400A Series	v1.2	
UC-8200 Series	v1.4	

If you have any questions, please contact Alfred Li (alfredfh.li@moxa.com), or contact your regional sales representative.