



OS image for UC-1200A and UC-2200A Series (MIL v3.4) Release Notes

Version: v1.3	Build: 25052305
Release Date: Sep 18, 2025	

Applicable Products

UC-1200A Series, UC-2200A Series

Supported Operating Systems

Moxa Industrial Linux 3 (Debian 11)

New Features

- 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.
 - Software Wi-Fi AP support enables remote access to devices.

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.

- Supports "Multi-WAN", a new interface type to route traffic to the interface from which it originates.

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.
- Moxa Computer Interface Manager (MCIM):
 - Adds a snapshot script for the push-button.
 - The auto-mount partition feature provides additional log information to verify the success or failure of the mount operation.
 - 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).

Changes

- Moxa Computer Interface Manager (MCIM): Deprecates the "user-defined" option for a button. Use the "add_action" command to add an action script for unique names.
- Moxa Connection Manager (MCM):
 - 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.
- Disabling "CONFIG_RT_GROUP_SCHED" removes real-time thread restrictions in CGroup v2

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.



Version: v1.2	Build: 250102_031115
Release Date: Feb 19, 2025	

Applicable Products

UC-1200A Series, UC-2200A Series

Supported Operating Systems

Moxa Industrial Linux 3 (Debian 11)

New Features

- Supports encryption of external disk partitions such as a USB drive and SD card.
- UC-2200A Series: Supports Telit LE910C4-WWxD module on Asia-Pacific models.
- MCIM Tool:
 - Supports enable/disable of peripheral interfaces (Ethernet, console port, serial port) with Moxa Computer Interface Manager (MCIM).
 - Supports I/O status settings for UC-8200 Series (U-boot version 3.2 or higher) and UC-1200A/2200A Series (U-boot version 1.2 or higher) with in MCIM.
- MCM Tool:
 - Supports AutoAPN with Moxa Connection Manager (MCM) (enabled when the APN field is left blank).
 - Supports automatic time synchronization with an NTP server, GPS location, or cellular base station with MCM.
 - Supports the "WiFi-p2p" interface with MCM.
 - UC-2200A Series: Supports monitoring of cellular and Wi-Fi signals with MCM to enable accurate triggering of failover.
 - UC-2200A Series: Supports lock-down of cellular 3G/4G/5G connections with MCM.
- MSU Tool:
 - Supports MIL online/ offline updates with Moxa Software Updater (MSU).

Enhancements

- Includes the latest security patches.
- MCM Tool:
 - Supports IPv6 address on LAN1 when the Type changes from "managed" to "none" in Moxa Connection Manager (MCM).
 - Supports monitoring gpsd with MCM to ensure GPS port.
 - Supports SIM activation with MCM to ensure higher success with SIM registrations.
- Supports a serial port to connect to UPort "-G2" Series devices.
- Supports alias name "mg" for "mx-guardian" command.
- MSM Tool:
 - Supports compression function with Moxa System Manager (MSM) to reduce backup file size.
- Supports creating snapshots, replicas, and backups in cold mode that ensures data integrity.
- Increases the log partition size (/var/log) from 256 MB to 1024 MB.

Bugs Fixed

- LAN1 sometimes fails to obtain IPv4 and IPv6 addresses when Type is set to "none" in Moxa Connection Manager (MCM).
- UC-2200A Series: Cellular data usage is displayed as zero in MCM.
- UC-2200A Series: Manually (via CLI) turning off power to the cellular module will restart MCM.

Changes

- Disables the Debian "networking" parameter in "moxa-connection-manager.service".
- The "set to default" option will only reset the configuration file and does not restart MCM.

Notes



- **Known Issue:** The time format of the bootloader log is incorrect (e.g., 20124-mm-dd).
- **UC-1200A/2200A Series Support for Backup File Import:**
 - HW Rev. 1.0.1 and above do not support the import of backup files created by the HW Rev. 1.0.0 of the product.
 - HW Rev. 1.0.1 does not support the reloading of an existing firmware image created by a HW Rev. v1.1 product.

Note: Firmware version v1.1 and the U-boot version 1.0.0S01+2304261458 for UC-1200A/2200A will be removed from the product page and Moxa Repository, respectively, to prevent the accidental occurrence of the abovementioned issue.

- For detailed release notes, including a change list for the packages, visit the Moxa Industrial Linux document center at: <https://docs.moxa.online/mil/>.



Version: v1.1	Build: Build 24020711
Release Date: Sep 18, 2024	

Applicable Products

UC-1200A Series, UC-2200A Series

Supported Operating Systems

Moxa Industrial Linux 3 (Debian 11)

New Features

N/A

Enhancements

N/A

Bugs Fixed

- Low-probability issue where Ethernet ports were not properly enabled after a reboot.
- An issue in the Moxa System Manager's backup creation feature that occurred when using non-standard model names for Moxa computers were used.

Changes

- Adds a check for out-of-bounds interface names in the Moxa Connection Manager (MCM).

Notes

N/A



Version: v1.0	Build: Build 23102515
Release Date: Dec 27, 2023	

Applicable Products

UC-1200A Series, UC-2200A Series

Supported Operating Systems

Moxa Industrial Linux 3 (Debian 11)

New Features

- First release.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A