

Title: New Version: FlexNet Unified Operating System Date: August 13, 2025

Distribution: Sensus Internal & Sales: ☒ Distributors & Agents: ☒ Customers: ☒

New Version of the FlexNet® Base Station Operating System Is Now General Availability (GA)

New software for the M400, M420, R100NA, and S50/S100

Unified Operating System (OS) software version 3.2.1 is the latest release in the Unified Base Station OS 3.X series. Its primary purpose is to provide improved operation, and to support the R100NA Daughter Card.

Unified OS 3.2.1 is for the M400, M420, R100NA, and S50/S100 series of Base Stations.

The Unified 3.2.1 release is a patch update and includes all fixes included in earlier releases. New enhancements include:

- M420 Firmware Enhancements: Improved firmware and update handling for M420 devices
- R100NA Daughter Card: Updated support and functionality enhancements
- Alarm Input Filtering: Added digital low-pass filtering to alarm input pins to reduce spurious noise
- Database Recovery: Improved resilience and recovery from corruption in the btsconfigd database (R100NA)
- Local User Access: Enabled tadmin user to execute bts-setup
- RNI Reconnection Logic: Smarter backoff strategy for reconnect attempts to RNI
- Update Robustness: Enhanced handling of chunk decompression errors during software updates
- U2 to U3 Upgrade Improvements: Fixed S100 CPC1 receiver handling, and improved bootloader recovery during Unified 2 to Unified 3 upgrades
- Security Fix (S100): Disabled HID drivers to address CVE-2024-50302

Further details on the features and capabilities can be found in the [Unified 3.2.x Software Reference Manual](#) and the [Unified 3.2.1 Release Notes](#). These documents are available on the Distributor or My Sensus Portals.

Compatibility Requirements:

- Unified 3.2.1 requires a minimum Network Command Suite (NCS) version of 2.0 or later, 2.2 preferred.
 - Unified 3.2.1 requires NCS 2.0 (includes NetConfigure), NCS 2.2 preferred, to manage certificates, keys, and remote connectivity. The M420 XCVR hardware platform only operates with the Unified 3.X operating system.
- NCS 2.0 requires a minimum RNI version of 4.13 or higher.
 - NCS 2.0 is a requirement for managing Unified 3.X and greater base stations. NCS 2.0 is still compatible with Unified 2.X for all other NCS functionality outside of base station configuration. Please ensure you have NCS 2.0 or higher installed before upgrading base stations to Unified 3.X.

Support:

- The new OS supports FlexNet V2 on M400, M420, R100NA, and S50/S100 base stations. S50/S100 base stations require Tomcat processors and CPC2 cards. FlexNet V2 modulations are not supported on S100s with CPC1 cards.
- Upgrading to Unified 3.2.1 requires that either Unified 2.9.x or an earlier Unified 3.X be installed.

- All SaaS customers have been upgraded to NCS 2.1.2.
- For Unified 3.2.1 upgrades, SaaS customers are being actively supported by the AMI Operations Team and Upgrade Services. SaaS customers should contact Technical Services if they would like the upgrade scheduled as soon as possible.
- Licensed customers are being actively supported by Technical Services, VARs and Field Personnel (AEs, MTSs, RFEs).
- Licensed customers should submit an upgrade request ticket through Technical Services or work with their Sensus contact to schedule the upgrade.

We encourage all customers running Unified OS U3.X, or legacy OS r6.3.8 (M400) or earlier, or r21 (S100) or earlier, to upgrade to Unified OS 3.2.1. Customers interested in upgrading should work with their Sensus sales representative or distributor. Distributors can find the reference manual(s), release notes, and configuration guides on the Distributor Portal. Once logged in to the Distributor Portal, you can find the [Base Station Updates: Unified 3.2.1](#) by navigating to the Collateral library and then clicking “Browse Programs”.

For additional details, please contact your Sensus sales representative or distributor.

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