Nuvation Energy Multi-Stack Controller Butterscotch Software

Release Notes

Document ID: NE-RN-011 | Revision: 1.2, 2025-06-12

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Revision History

Version	Details	Date
1.0	Initial release for Multi-Stack Controller Butterscotch Preview 1	2025-03-12
1.1	Initial release for Multi-Stack Controller Butterscotch Preview 2	2025-04-15
1.2	Initial release for Multi-Stack Controller Butterscotch	2025-05-27

1. Introduction

This document provides a summary of software changes for the Multi-Stack Controller Software releases. The Multi-Stack Controller has two upgradable systems outlined below:

- Multi-Stack Controller Bundle: contains all upgradable application software which changes high level behaviour of the Multi-Stack Controller. These have file extension `.fns` or `.fnz`. These upgrades do not always require a reboot.
- Platform: contains all platform software at the low level which changes core system features and functionality. These upgrades have file extension `.nup` or `.nosp`. These upgrades always require a reboot.

> **Finding the currently installed version**
>
> To find the current version of software installed on your product:
>
> - Platform versions can be found on the pages at `/platform/settings`
> - Function versions can be found at the pages at `/platform/functions`

This document lists the changes of each Multi-Stack Controller Release in separate sections. Functionality defined in prior releases will apply to the subsequent releases unless explicitly mentioned otherwise. It is suggested to read all the release notes to capture the full capabilities of a specific release.

2. Multi-Stack Controller Bundles

2.1. Bundle 22.2.0

Availability of this package starts on 2025-05

2.1.1. What's New

- Added support for writing to Configurable Modbus points

2.1.2. Resolved Issues

- #13846: Configurable Modbus returns list of bytes instead of words

2.2. Bundle 22.1.0

Availability of this package starts on 2025-04

2.2.1. What's New

▪ Supports Authentication using Basic Auth on the nPlatform

2.2.2. Resolved Issues

▪ #12080: Faraday Update 2 MSC logger has incorrect bitfield map

▪ #13456: Galileo MSC logger has incorrect bitfield map

▪ #13613: SunSpec Modbus point `StrSt` is inaccurately reporting the contactor position for the group `string` in model 803 and point `St` model 804.

▪ #13629: MSC aggregation may report battery level invalid data during a brief period of time while transitioning from electrically disconnected to electrically connected

2.3. Bundle 22.0.0

Availability of this package starts on 2025-03

This Bundle is required to have the Platform 2.3.7 or later installed.

2.3.1. What's New

▪ Adds support for the latest version of firmware for the G5 High-Voltage BMS with Faraday version 5.9.3

▪ Add configurable modbus function

▪ Support CI 36 feature on BMS

▪ SunSpec map generation includes device maps

▪ Add nameplate SOC information to SunSpec

▪ Add additional SOC/SOH/Short-Shunt logging

▪ Updated exposed SoC value to comply with SunSpec units (%WHRtg)

2.3.2. Resolved Issues

▪ #12846: MSC upgrade from 21.4.0 to 21.8.0 causes the MSC application to crash

▪ #13072: MSC full flag showing incorrect value

▪ #13102: MSC watchdog fault and warning should be configured to disabled (enable: false) since the MSC watchdog fault/warning is not working and will cause a fault/warning unexpectedly

▪ #13135: Incorrect units used for SoC value exposed in SunSpec

▪ #13258: BMS version warning trigger showing error with accepted latest version

2.3.3. Known Issues

▪ #12080: Faraday Update 2 MSC logger has incorrect bitfield map

- #13408: VPN function stuck in boot loop caused by openssl dropped support
- #13456: Galileo MSC logger has incorrect bitfield map
- #13846: Configurable Modbus returns list of bytes instead of words

3. Platform

3.1. Platform 2.3.8

3.1.1. What's New

- Authentication using Basic Auth is now supported on the nPlatform

3.2. Platform 2.3.7

ⓘ | Availability of this package starts on 2025-03

It contains a number of stability improvements.

3.2.1. Resolved Issues

- #11519: Incompatibility with pre 2.3.0 Service Pack restores causing the UPS Manager function to fail

3.3. Known Issues

- #5545: Failed updates requiring system rollback

3.4. Platform 2.3.9

ⓘ | Availability of this package starts on 2025-05

This accompanies the MSC Butterscotch release and includes the basic authentication security feature.

3.5. Platform 2.3.5

ⓘ | Availability of this package starts on 2025-01

No customer-facing changes were made in this release.

3.6. Platform 2.3.2

ℹ️ Availability of this package starts on 2024-08

Fixed mDNS being unresponsive after factory restore from Platform v2.3.0 or v2.3.1

3.6.1. Resolved Issues

- #11991: Factory restore after 2.3.0 breaks mDNS

3.7. Platform 2.3.1

ℹ️ Availability of this package starts on 2024-05

It contains a number of stability improvements.

3.7.1. Resolved Issues

- #11544: Broken platform upgrades after factory restore
- #11519: Incompatibility with pre 2.3.0 Service Pack restores causing the UPS Manager function to fail

3.8. Platform 2.3.0: Service Pack 2

ℹ️ Availability of this package starts on 2024-05

This is a major public release of the platform for the nController products. It contains a number of new features, stability improvements and security updates.

❗ Updating to Platform version 2.3.0 is a one-way, non-downgradable update.

❗ Attempting to restore backups created on previous versions will only restore functions/bundles but not previous Platform versions.

3.8.1. What's New

- Added backup restore and log download to emergency web service
- Fixed restore partition status being possibly incorrect after restoring a backup
- Corrupted boot entries no longer initiate a factory restore
- Improved robustness of factory restore after a previous factory restore failure
- Mitigated Terrapin attack vulnerability
- Improved boot speed on Rack Mount Form Factor
- Minor security updates

3.8.2. Resolved Issues

- #10793: Multi-Stack Controller power loss without proper shutdown can prevent device from starting up in rare cases
- #10975: Internal network bridge not forwarding packets between other devices
- #9770: Function installation fails after an uninstall following a previous upgrade

3.8.3. Known Issues

- #5545: Failed updates requiring system rollback
- #11519: Incompatibility with pre 2.3.0 Service Pack restores causing the UPS Manager function to fail

From time to time Nuvation Energy will make updates to products in response to changes in available technologies, client requests, emerging energy storage standards, and other industry requirements. The product specifications in this document, therefore, are subject to change without notice.

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