



Portal 2.4.36

Release Notes

Changes since Portal 2.4.31

Synapse Portal®
Version 2.4.36
October 1, 2012

Revision History

Previous Version	Change	Page(s)
09/06/2012	Initial version of 2.4.32-2.4.34 Release Notes	
09/12/2012	Updated for version 2.4.35	multiple
10/01/2012	Updated for version 2.4.36	multiple

Introduction

This document describes the cumulative changes made to Portal since version 2.4.31.

Portal version 2.4.31 was released to the Synapse Support Forum (<http://forums.synapse-wireless.com>) on December 5, 2011. Version 2.4.31 has its own release notes document, to which you may also want to refer.

Portal versions 2.4.32 and 2.4.33 were only BETA versions, and thus never officially released. Changes made in those versions are included in this document as well.

Version 2.4.34 is a full release, with many improvements and some corrections.

Version 2.4.35 addressed a change in the licensing of Portal and SNAP. **Unfortunately, the wrong license file was incorporated into that release.**

Version 2.4.35 should be discarded, and version 2.4.36 should be used instead.

Version 2.4.36 has the correct license changes. It also corrects an issue with firmware update to SS200 devices, and two menu options were renamed. These release notes are meant to accompany that release.

NOTE – you should also refer to the **Portal Reference Manual**.

Overview

The majority of Portal changes made in a given release can be broken down into five main categories:


- **New Features** – completely new Portal capabilities
- **Enhancements** – improvements to existing features
- **Support for new Platforms** – the SNAP family is growing!
- **Fixes** – corrections to existing features
- **Licensing** – Updates to the licensing of SNAP and Portal

All of these are described in the sections that follow.


New Features

1. Portal now supports *Over-The-Air Firmware Update to ATMEL* ATmega128RFA1-based modules running SNAP version 2.4.32 or higher. This includes the RF200 and RF266 platforms, and as of Portal version 2.4.36 includes the SS200 devices as well.

We also added a warning message about not removing the power during this process.

2. Portal now supports initiating firmware updates (for platforms that support it) from the **Node Info** toolbar. (You can still find this function under the **Options** menu as well.) Look for the new  button on the **Node Info** toolbar.
3. Portal now supports *multi-select* when doing firmware updates (just as it has supported multi-select for script updates for several releases now). Note that all of the nodes to be updated must be of the same type – it would not make sense to try and load the same firmware into an RF200 and an SM700, for example.
4. Portal and its bundled-in SNAP Sniffer are now built using *Python 2.6* instead of *Python 2.5*. This will allow the use of newer third-party libraries with Portal. This also allows us to provide better support on Linux and MAC platforms.

NOTE – because this different Python is used to compile your SNAPpy scripts, your generated script CRCs may change, even though the underlying SNAPpy script source code (and SNAP node firmware) have not. Scripts loaded into nodes using earlier versions of Portal will continue to function as they always have; but Portal may report a “CRC mismatch” warning when viewing the node in the Node Info pane. Simply use Portal to reload the new (recompiled) SNAPpy images into your nodes to get rid of the warning.

5. The “Change Configuration Parameters” tool  can now be used to change the configuration of the internal SNAP Connect instance (when said instance is actually in use).

NOTE – this feature is intended for advanced users only!

Enhancements

1. The RF300, RF301, SM300, and SM301 version of SNAP firmware bundled into Portal was advanced from 2.4.20 to 2.4.31.

Refer to the **SNAP Firmware Release Notes** for more information on the changes to SNAP between versions.

The type of firmware was also changed from “demo” (reboot-limited) to “normal” (unlimited reboots).

The Si100x “chip” builds were removed from Portal. (Not even the “demo” chip builds are included anymore.)

2. The RF200 and SS200 version of SNAP firmware bundled into Portal was advanced to version 2.4.32.

Again, refer to the **SNAP Firmware Release Notes** for more information.

The ATMEL versions of SNAP included with Portal have always been “full” (non-demo) builds.

The ATmega128RFA1 “chip” builds were removed from Portal.

3. The SM700 version of SNAP was advanced from 2.4.21 to 2.4.33.

The type of firmware was also changed from “demo” (reboot-limited) to “normal” (unlimited reboots).

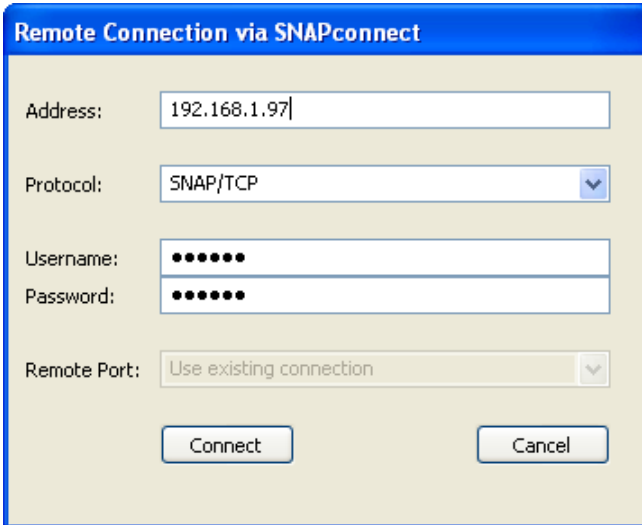
The Freescale MC1322x “chip” build is no longer included with Portal. (Not even the “demo” chip builds are included.)

4. NV Parameter #33 NV_CS_CD_LEVEL was added to the **Multicast** tab of the **Configuration Parameters** dialog. Previously you had to call the loadNvParam() and saveNvParam() functions manually to access this parameter.

NOTE – this parameter is only used on some platforms.

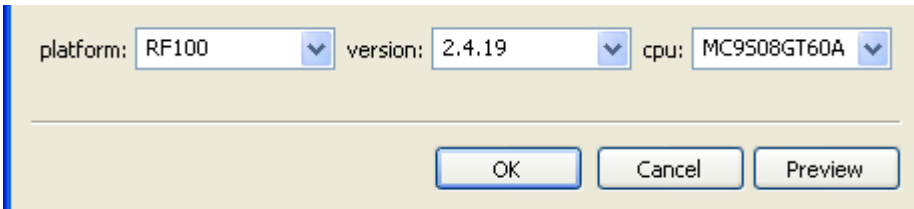
5. Updated USB drivers from FTDI were incorporated for the SS200.
6. The **Script Upload** and **Script Erase** buttons are now disabled (greyed-out) when a SNAP Connect node (such as an E10) is selected.

- The **Remote Connection** dialog (used when connecting to remote SNAP Connect instances, such as a SNAP Connect E10) now allows you to enter custom *username* and *password* values.



In Portal 2.4.31, you could only connect to remote SNAP Connect instances that were using the default settings of username="public", password="public".

- The *version* field of the **Export SNAPpy Script** dialog now auto-fills in many cases (based on the chosen *platform* field).



You can still freely enter any desired value into this field, but since Portal comes with a set of "recommended firmware versions" for each platform, it was decided to auto-fill this information in for the user as a convenience.

Portal has always auto-filled the *version* field when you export a script from a specific node; that behavior remains unchanged. The new behavior is noticeable when you are exporting an arbitrary file.



9. Two choices under the Options menu were renamed for clarity:


“Configure Python Source Directory...” was renamed to “Set Working Directory...”

“Restore Original Source Directory...” was renamed to “Restore Original Working Directory...”

New SNAP Platforms Supported

1. Portal now fully supports the recently introduced *RF266* module.
 - a. RF266 SNAP Firmware is now bundled into Portal
 - b. The RF266 is included in the set of SNAP nodes that Portal can update firmware into (including the new Over-The-Air upload capability)
 - c. You can choose "RF266" as a platform when performing the *Check Script* and *Export SPY File* functions.
2. The SS200 is not a new platform, but Portal now comes with the "factory" SNAPpy script for the SS200 (in case you ever wish to reload this script back into your SS200).
3. As of Portal version 2.4.36, Portal also supports FOTA of SS200s.

Fixes

1. When turning off "Intercept Node Output"  Portal now references the same settings (under **Preferences**) that turning "Intercept Node Output" on already uses. Previously Portal was only cancelling interception of STDOUT, even if STDERR had also been intercepted, and even if STDOUT had *not* been intercepted.
2. Now when you close a remote connection (a connection to a remote SNAP Connect instance), the connection is really closed *even if you used a TCP/IP port number other than the default*. Previously *if you used a custom TCP/IP port*, the connection would not really be closed.
3. The script CRC reported by the **Script Check** function (the one on the **Script Editor** pane) now matches what the actual node would report. This problem only occurred when firmware version numbers greater than 2.2 (i.e., 2.3 or 2.4) were specified.
4. Fixed an issue where "dragging" tabs to new locations onscreen, and then later closing them, could sometimes result in misrenderings in the GUI.
5. Portal no longer generates errors if the up or down arrow is hit while focus is set on an empty **Event Log**.
6. The CANCEL buttons for both single (pre-existing feature) and multi-select (new feature added this release) firmware upload now actually cancel the upload-in-progress.
7. Custom node icons are now shown when you restart Portal. Previously you would see the default icon, and it would not update to the custom icon until after Portal actually communicated with the node.
8. Multi-select operations, including Script Upload, Firmware Upload, and Refresh Upload, now work properly on nodes that have had custom node icons applied.
9. Data Mode now works through/in conjunction with SNAP Connect 3.1.
10. Trace Route now works through/in conjunction with SNAP Connect 3.1.
11. AT128RFA1, MC1322x, and STM32W108xB platforms can all support 128 globals (versus the usual 64), but Portal was only allowing more

than 64 globals on the AT128RFA1. Portal now allows up to 128 global variables on STM32W108xB and MC1322x platforms too.

12. Portal now honors any *manually entered* platform when exporting a SPY file from a SNAPpy script. Prior to this fix, only entries chosen from the drop-down list actually worked.
13. Portal now says "1 reboot remaining" instead of "1 reboots remaining" when approaching end-of-life for demo firmware builds.
14. Portal now correctly provides a horizontal scroll bar for the Data Logger window when there is sufficient data to require one.
15. In version 2.4.36 a correction was made to allow Firmware Over-The-Air (FOTA) updates of SS200 devices.



Licensing

1. The license for Portal and SNAP has been updated. Please refer to the license displayed while installing Portal, or to the License.pdf file included in the docs directory of your Portal installation directory.

Installation and Upgrade Notes

There were changes to the license text presented as you install Portal with the 2.4.36 release.

It is required that you uninstall your current version of Portal before installing the latest version. (The installer will prompt you to do this if it finds an existing installation.) Any settings from version 2.0 or later will automatically be saved and migrated to the new version. Also, any Synapse Wireless Network (SWN) files from version 2.0 or later are compatible.

Minimum System Requirements

System Processor: 500 megahertz (MHz) x86 architecture based processor or higher

System Memory: 512 megabyte (MB) RAM or higher

Free Disk Space: 512 megabyte (MB) or more

Operating System: Microsoft Windows 2000 or later
(Linux and MAC versions have been created and are currently undergoing QA testing)

Networking: Remote connection functionality requires a TCP/IP connection

Portal version 2.4 requires that all SNAP nodes are running the included SNAP 2.4 or later firmware version for all features to be supported. SNAP 2.1, 2.2, and 2.3 nodes can be managed via Portal 2.4, but newer features such as Trace Route and serial encryption will not work.

NOTE - The 2.4 series of firmware has now been out for more than two years – you are very unlikely to encounter versions 2.1.x through 2.3.x “out in the wild.”

Known Problems and Workarounds

Problem: The Channel Help function is not currently supported with nodes using the 900 MHz or 868 MHz bands. (The usual notion of “channel” does not apply to these frequency bands, due to their use of frequency hopping.)

Workaround: Refer to the SNAP Reference Manual’s description of channel usage in the description of the `getChannel()` function to understand frequency distribution based on the channel selected, and use the Channel Analyzer to indicate where the most radio interference in your environment is.

Related Documents

SNAP Firmware 2.4 Release Notes

Portal Reference Manual

Portal 2.4.31 Release Notes

SNAP Connect Python Package Manual

SNAP Reference Manual

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