



Portal 2.2

Release Notes

Synapse Portal
Version 2.2.23
September 25, 2009

Revision History

Previous Version	Change	Page(s)
7/27/2009	Initial version of 2.2 Release Notes	
8/6/09	Added changes between 2.2.17 and 2.2.18	6,7
9/9/09	Added changes between 2.2.18 and 2.2.21	3,7
9/25/09	Added changes between 2.2.21 and 2.2.23	4

Introduction

Portal version 2.2 expands on the already easy to use SNAP development environment.

This update adds several major new features. It also corrects some issues with the initial release, based on feedback from the field.

Portal version 2.2 is now also available for Ubuntu Linux.

NOTE!

Always update your SNAP nodes when you update your Portal.

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This is why Portal always comes bundled with the latest version of SNAP.

What's New

1. There is now an option to restore the tabs to their default settings
2. Portal scripts being edited now display autocomplete information. Also, Portal scripts can be checked to see if they will compile
3. It is now possible to configure Portal to not automatically scan all ports
4. Added an option to suppress sending a global PING at startup
5. When multi-selecting nodes and performing an action, there is more indication if the action was successful for each node



6. An option has been added to create a topology.dot file of what nodes can see each other. See the SNAP Reference Manual for more details
7. We now indicate if we discover a node and do not have a local copy of the script or if it contains an error
8. An option to see the route a message took to reach a node is now available from the Node Info toolbar
9. It is now indicated when a node is running a demonstration version of the SNAP firmware, and how many reboots remain in the trial period
10. Scripts now support Python decorators to connect hooks, such as:

```
@setHook(HOOK_STARTUP)
def on_start():
    pass
```

The original set hook syntax is also still supported:

```
def on_start():
    pass
snappyGen.setHook(SnapConstants.HOOK_STARTUP, on_start)
```
11. More indications are given when files are unable to be written when Portal is being installed
12. The node finder now has an option to search for a specific network address
13. If the node's name is changed via the configuration parameters dialog, the change is automatically reflected in Portal
14. The locations of code editor windows are now saved and restored when Portal starts
15. Portal can be configured to not retrieve the node's information automatically upon discovery
16. Better support for displaying line numbers on errors in SNAPpy scripts
17. Improved auto indentation in the code editor
18. SNAPpy scripts now support conditionally importing modules by platform or version, such as:

```
from synapse.snapsys import *
```



```
if platform == "RFEngine":  
    from synapse.pinWakeupRFEngine import *  
elif version == "2.2.17":  
    from Version2217Module import *
```

19. Included in Portal is the option to install a copy of the new SNAP Sniffer. This software enables you to see the packets that your nodes are transmitting. To use the SNAP Sniffer a node will have to be converted to a sniffer with the included Sniffer SFI file. Once a node has been converted it will only act as a Sniffer until the normal SNAP firmware is reloaded.
20. The included USB driver is now signed with the Synapse Wireless certificate which enables the driver to be installed on 64-bit Microsoft Windows operating systems
21. The SNAP Node Flash Upgrader has been enhanced to provide upgrade capabilities for ZIC2410 based nodes

Installation and Upgrade Notes

It is required that you uninstall your current version of Portal before installing the latest version. 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 backwards 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 higher

Operating System: Microsoft Windows 2000 or later; Ubuntu 8.04

Networking: Remote connection functionality requires a TCP/IP connection

Portal 2.2 requires that all SNAP nodes are running the included SNAP 2.2 firmware version for all features to be supported. SNAP 2.1 nodes can be managed via Portal 2.2, but new features like Trace Route will not work.

Recent Changes

1. Better reporting if a node calls a function but the number of parameters does not match
2. If a script contained an underscore (“_”) as it’s first character, the CRC might not match.
3. Functions with a name starting with an underscore are also no longer clickable in the list of functions for a node
4. HTTP persistent connections are now used when connecting to SNAPconnect
5. Portal now uses Python 2.5.4 and wxPython 2.8.10.1
6. In the channel analyzer all the channels are now listed on the x-axis
7. The channel analyzer’s “channel help” option displays results more clearly
8. The File “Save” and “Save As” options now work for the current file in the script editor
9. Better updating of the node’s name
10. When connecting to SNAPconnect the remote port is now editable
11. Autocomplete should no longer appear when typing in a comment
12. Timeouts have increased to better account for mesh discovery
13. An install.log file is generated when Portal is installed
14. More retries have been added when uploading a script to a node
15. Transparent mode (aka Data mode) packets can now be sent while connected through SNAPconnect
16. Better handling of finding and moving nodes in Node Finder
17. When we receive a transparent mode packet from an unknown node we automatically add it to the list of nodes and query for its information

18. Fixed an issue where the code editor would save a blank file if the text contained a Unicode character
19. Pressing F3 while searching in the code editor will highlight the next instance
20. Double-clicking on an error in the event log that occurred in an import now displays the correct file
21. The channel analyzer now displays the number of packets it has received from the bridge node
22. Fixed an issue with the channel analyzer trying to start when no connection was made
23. The feature bits are no longer editable in the Configuration Parameters dialog
24. Better support for detecting changes in a script that imports another script
25. Only one instance of Portal running at a time is supported
26. Portal scripts now work with different line endings
27. Fixed an issue with sorting in Node Finder
28. Sending the value -32768 in an RPC is now supported
29. Better warning when closing Portal and you are connected to the SNAP network
30. The suggested channel list in the Channel Analyzer is now sortable
31. Better indications of why a file was unable to be opened
32. The Linux version of Portal now shows Node Info toolbars disabled like the Windows version
33. The address of the node that did not respond within the timeout period is now indicated
34. Fixed an error that could occur when closing the Connect dialog while a COM port scan was in progress



35. When clicking on a function name on multiple nodes in the Node Info panel, the multi-node dialog is now shown
36. Negative numbers are now passed correctly to Portal scripts
37. Improved searching for a string in the code editor
38. A warning is now displayed if you assign to a local variable in your SNAPpy script that matches the name of a global variable
39. COM ports are now scanned in the correct order
40. Portal script errors display in a message box along with an event log entry
41. An error will no longer be displayed if you have a comment on the last line of your SNAPpy script
42. Portal now includes SFI files for all supported platforms, because of this the SFI is not automatically selected during a firmware upgrade
43. A warning is displayed if there is insufficient space on the node to upload the SNAPpy script
44. The event log will automatically scroll if it has been cleared of all entries
45. Fixed an issue where node names would sometimes skip number instead of being sequential
46. A warning is now displayed if you try to upload a script to a node that does not support that functionality. Also, the available space is checked before uploading to the node
47. The code editor now automatically uses the correct line endings for your OS
48. The SNAP version 1 migrator was removed

Known Problems and Workarounds

None at the time of release

Related Documents

Synapse SNAP 2.2 Release Notes

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For further information on any Synapse product or service, contact us at:

Synapse Wireless Inc.

132 Export Circle
Huntsville, Alabama 35806

256.852.7888
877-982-7888
256.852.7862 (fax)

www.synapse-wireless.com