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# ModusToolbox® 2.2.1 Patch Release Notes

Production Release

## Overview

ModusToolbox software is a set of tools that enable you to integrate Cypress devices into your existing development methodology. ModusToolbox software consists of various libraries and middleware on GitHub, as well as an IDE and tools package installed on your computer. For more details about what is included with ModusToolbox software, refer to the [ModusToolbox User Guide](#).

This release is a patch to the ModusToolbox 2.2 tools installation package. You must have already installed ModusToolbox 2.2 before installing this patch.

This document describes the features and known limitations for tools included with this patch.

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## Installation

If you do not already have the ModusToolbox 2.2 tools package installed, refer to the [ModusToolbox Installation Guide](#) for instructions.

- For **Windows** and **macOS**, launch the installer and follow the instructions.
- For **Linux**, extract the ModusToolbox\_2.2.1.xxxx-linux-install.tar.gz file into the existing directory where the ModusToolbox 2.2 tools package was installed.

## What's Included/Changed

This patch release is an update to various tools provided with the ModusToolbox tools package version 2.2 release. This release includes the following updates:

- New Secure Policy Configurator version 1.0. New tool to open, create, change policy configuration files for the Secure MCU devices.
- Updated python version 3.7.7.3 (from 3.7.7.2). Updated to support Secure Policy Configurator.
- Updated CySecureTools version 3.0.0 (from 2.0.0). Updated to support Secure Policy Configurator.
- Updated make version 1.3 (from 1.2). Updated to support for opening the secure-tool-configurator through the Eclipse IDE for ModusToolbox.
- Updated Bluetooth Configurator version 2.21 (from 2.20). Updates include:
  - Added a General tab for 43xxx devices.
  - Added a possibility to disable the GATT database for 43xxx devices.
  - Added new parameters for 43xxx devices: Maximum remote server and client connections, and Maximum attribute length.
  - Changed the maximum limit of the MTU Size parameter from 512 to 517 for 43xxx devices.
  - Fixed the issue with the CY\_BT\_L2CAP\_MTU\_SIZE value for 43xxx devices. In case when L2CAP logical channels were disabled, the default value generated for this define was 23 instead of 512 if the configurator's output files were generated by the build script (not GUI itself).
  - Fixed the issue that the Peripheral GAP role was restored after the configurator reopening even when previously removed (43xxx devices).
  - Advertisement packet configuration: in case when the GATT Settings tab is disabled, the GATT services configured previously on the GATT Setting tab are not available for selection for the Advertisement packet Service UUID and Service Data AD types.
  - The configurations with characteristics of length 0 produced empty arrays in the generated code for 20xxx and 43xxx devices. This could cause build warnings on some compilers. Added an extra '0' element to the empty arrays to avoid that.
  - Removed duplicated CY\_BT\_HIGH\_DUTY\_CONN\_SCAN\_WINDOW define.
  - GAP scan connection parameters: removed possibility to disable Connection interval minimum/maximum and Connection supervision timeout.
  - GAP scan interval settings for 43xxx: corrected values of the following defines: CY\_BT\_HIGH\_DUTY\_SCAN\_DURATION, CY\_BT\_LOW\_DUTY\_SCAN\_DURATION, CY\_BT\_HIGH\_DUTY\_CONN\_SCAN\_DURATION, CY\_BT\_LOW\_DUTY\_CONN\_SCAN\_DURATION.
  - When the GAP role is non-connectable (Broadcaster or Observer), the server\_max\_links field in the wiced\_bt\_cfg\_settings struct is set to 0 instead of 1.
- Updated Device Configurator version 2.21 (from 2.20). Updates include:
  - Added Search feature to Code Preview.
  - Updated to allow analog routing from the SAR to any analog resource or pin.
  - Implemented various performance improvements.
  - Fixed an issue with multiple font sizes in the GUI.
  - Fixed the PDL display name when using the MTB flow.

- Updated Configurator Back-end CLI version 2.21 (from 2.20) to support new analog routing options. The following tools were updated to use the modified back-end.
  - Smart I/O Configurator version 2.21 (from 2.20).
  - Segment LCD Configurator version 1.21 (from 1.20).
  - CapSense Configurator and Tuner version 3.11 (from 3.10).

## Known Issues/Limitations

This section lists the known issues/limitations of this release:

Problem	Workaround
When using the modus-shell with the ModusToolbox 2.2.1 patch and cysecuretools, modus-shell does not point to the correct version of python, and thus does not use the correct version of cysecuretools (v3.0.0).	<p>After starting modus-shell, use the following command to call the correct version of python for use with cysecuretools:</p> <pre>&lt;path&gt;/ModusToolbox/tools_2.2/python-3.7.137/python.exe -m cysecuretools</pre> <p><b>Note</b> This issue is fixed in ModusToolbox version 2.3.0 and later. Also, the post-build tools and secure-policy-configurator are not impacted by this issue. They use the system variable CY_TOOL_python_BASE, which points to the correct version of python and cysecuretools.</p>

## Open Source

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<http://www.cypress.com/documentation/software-and-drivers/free-and-open-source-software-download-page>

## Further Reading

For more information about what was changed for a specific tool in this patch release, refer to that tool's documentation. For more information about ModusToolbox software in general, refer to the following:

- [ModusToolbox 2.2 Tools Package Release Notes](#)
- [ModusToolbox Installation Guide](#)
- [ModusToolbox User Guide](#)

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