REVOLUTION PI

Release Notes
Buster for RevPi Core, RevPi Connect, RevPi Compact and RevPi Flat

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Support for RevPi Flat and RevPi Module MIO

Starting with this release, our new members of the RevPi family, the RevPi Flat and the Multi-IO expansion module RevPi MIO are supported. Both devices can be configured in PiCtory, and with the methods you already know, values can be written or read via the process image.

The RevPi Flat supports WLAN and Bluetooth. Both are enabled by default. For deactivation, there are two more buttons in the Web Status, one for WLAN and one for Bluetooth.

Raspberry Pi OS Buster

The image is derived from Raspberry Pi OS 2021-03-04, a Buster-based image, and includes all package updates released until March 2021. Our image still comes with kernel 4.19.95-rt38. Node.JS, npm and Node-RED are still preinstalled, but no longer with the packages from the Debian Buster repository. Instead, they were installed using the script "https://raw.githubusercontent.com/node-red/linux-installers/master/deb/update-nodejs-and-nodered".

Node.JS, npm and Node-RED not from Debian Repository

Two reasons led us to the decision not to pre-install Node-RED from the Debian repository anymore.

1. Due to the stretch backports concerning Node.JS, npm and Node-RED there are problems with the package versions, because the Debian packages in our stretch backports repository have higher version numbers than the corresponding packages in the buster repository. As a result, when upgrading from Stretch to Buster, these packages cannot be upgraded.

2. Since up-to-date modules from the npm repository are likely to be installed for Node-RED projects, it can happen that, when updates are applied from the Buster repository, the modules installed globally via npm are deleted and then reinstalled from the Buster repository. However, if the version differences in the modules are too large, Node-RED projects can be destroyed.

This now has implications when upgrading from Stretch to Buster. At this point, manual rework is required in order to enjoy a clean Node-RED installation and Node-RED projects that are still functioning.

We have created scripts for this to help you clean up the old Node.JS, npm and Node-RED packages and install the latest version after upgrading to Buster. It is also important to know that the Debian package "node-red-contrib-revpi-nodes" no longer exists in Buster. "node-red-contrib-revpi-nodes" is now only made available via the npm repository and must be installed accordingly via npm.

Very important: Backup all Node-RED projects and configurations to an external medium or directory, especially the projects in the directory "/home/pi/.node-red". This directory will be overwritten when reinstalling Node-RED.

Once you have finished backing up your Node-RED projects and configurations, you can run the script with `sudo /usr/sbin/revpi_buster_upgrade_fix_nodered.sh`, which is part of the Debian package "revpi_tools". The script will guide you through the process of cleaning up the package and reinstalling Node-RED. When the script is finished, you have to install the project relevant modules manually with the help of npm and may need to adjust or configure your projects.

Third-party Software

logi.RTS is now available in version 5.0.0, TeamViewer in version 2.14.13.

PiCtory

PiCtory is available in version 2.0.2 and now supports the RevPi Flat and the RevPi MIO. The colors of the layout were changed to our typical KUNBUS orange. Furthermore, PiCtory is no longer installed in "/var/www" but is now completely located in the directory "/var/www/revpi". Also, PiCtory is now configured to port 41080 by default. HTTP requests on port 80 are now forwarded to port 41080 per redirect rule. If your project requires port 80, you can use Apache's rewrite rules accordingly to call PiCtory, or simply remove the redirect rules and include the port in the URL to reach PiCtory.

piSerial 2.0.0

piSerial has undergone a refactoring for Buster and is now available in version 2.0.0. Visible changes are:

1. New parameters -c and -t added.
   "-c" specifies to use the ATECC508A crypto chip which is in our RevPi Core, RevPi Connect and RevPi Compact.
   "-t" specifies to use the TPM2 device which is in the RevPi Flat.

2. The standard output of piSerial has changed. This is important to know if you parse the output of piSerial in one of your applications. The new format of the default output is now <serial number> <default password>. We have removed the hostname here. It can be queried with Linux on-board tools.