ROBOTICS TXT Controller Security Information Firmware Version >=4.4.3

The root and ROBOPro accounts

The TXT controller is equiped with an embedded Linux system. The root account allows full access to the Linux system. Root access allows arbitrary system configuration and extension, but also allows to destroy the system with a single command. The interface application for ROBOPro does not run under the root account, but under the ROBOPro account. This is a normal limited user account without administrative rights.

The ROBOPro account is sufficient for most applications, including running C/C++ applications. The ROBOPro account has direct access to the graphics frame buffer /dev/fb0 as well as to the touch and keyboard input devices /dev/input/event0 and event1.

For this reason, it is recommended to use the ROBOPro account unless there is a good reason to switch to the root account. The password for the ROBOPro account is ROBOPro.

The root password

Introduction

In the new TXT controller firmware version >= 4.4.3 each TXT root password consists of random unique 16 characters. In the new root mechanism there exist no routine, which retrieves the root password. Instead of that the user, who has physical access to the TXT display can generate a new random root password every time.

Creating a new random root password

We want to give our customers full access to the capabilities of the TXT, so there is a way to regenerate the root password. The root password can be generated and made visible on the TXT display. For regenerating and displaying the new root password, login as user ROBOPro (password ROBOPro) via ssh. The IP numbers used by the TXT are 192.168.7.2 for USB, 192.168.8.2 for WLAN and 192.168.9.2 for Bluetooth connection. As windows ssh client putty is recommended, which can be downloaded for free at:

```
http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html
```
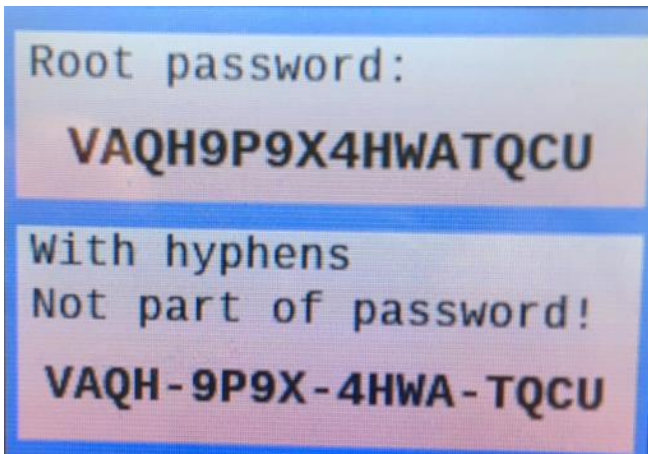
After ssh login as ROBOPro, execute the following command:

```
sudo /usr/sbin/new_root_password.sh 60
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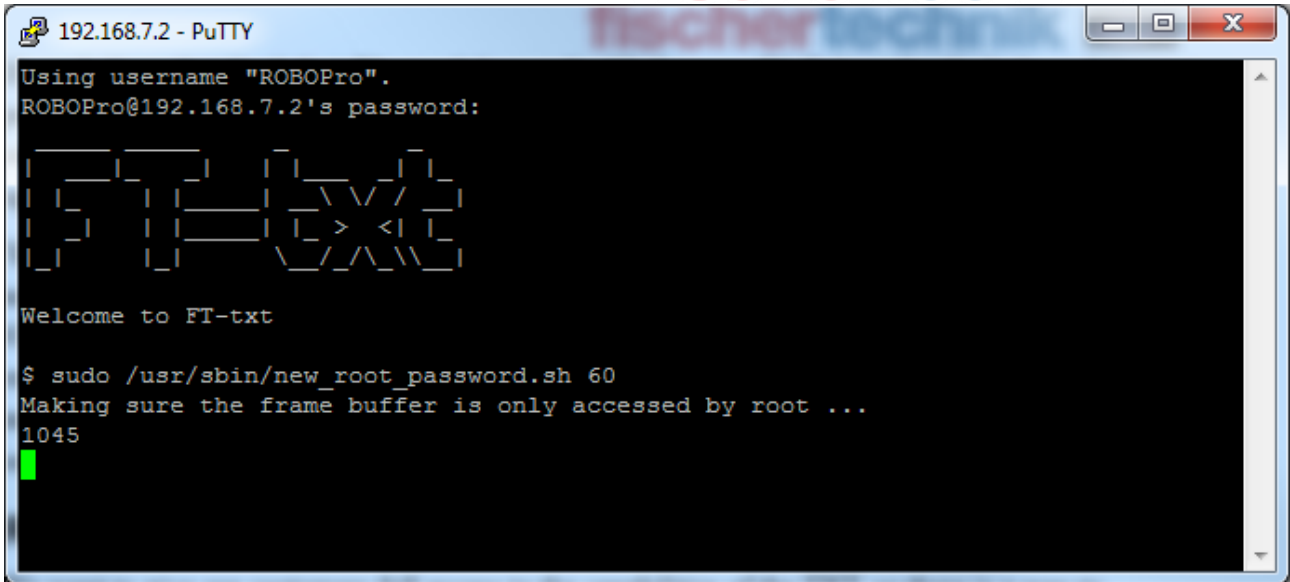
After a waiting time about 30 seconds, the new root password is shown on the TXT display for 60 seconds.

Whenever the root password has been forgotten, a new password can be regenerated.