INSYS icom

Industrial Data Communication

VPN with INSYS Connectivity Service

OpenVPN Connection to INSYS Connectivity Service under Android

Configuration Guide

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1   Introduction

General

The present publication refers to a combination of selected hardware and software components of INSYS icom GmbH as well as other manufacturers. All components have been combined with the target to realize certain results and effects for certain applications in the field of professional data transfer.

All components have been prepared, configured and used as described in this publication. Thus, the desired results and effects have been achieved.

The exact descriptions of all used components, to which this publication refers, are described in the tables *Hardware, Accessories* and *Software* at the end of this publication.

The symbols and formattings used in this publication are explained in the correspondent section at the end of this publication.

Some configurations or preparations, which are precondition in this publication, are described in other publications. Therefore, always refer to the related device manuals. INSYS devices with web interface provide you with helpful information about the configuration possibilities, if you click on "display help text" in the header.

An Android tablet can also participate in the INSYS Connectivity Service via an OpenVPN connection.

Refer to http://www.openvpn.net for further information about OpenVPN.

Use this publication to find out how to include an Android tablet into the INSYS Connectivity Service via an OpenVPN connection. Prerequisite is that the app OpenVPN for Android is installed on the tablet.

The present publication describes the proceeding under Android 4.2 on a Nexus tablet. Please note that you need at least Android 4.0 for OpenVPN for Android. Proceed accordingly for an installation under other versions/devices.

Figure 1: Android tablet with INSYS Connectivity Service via OpenVPN
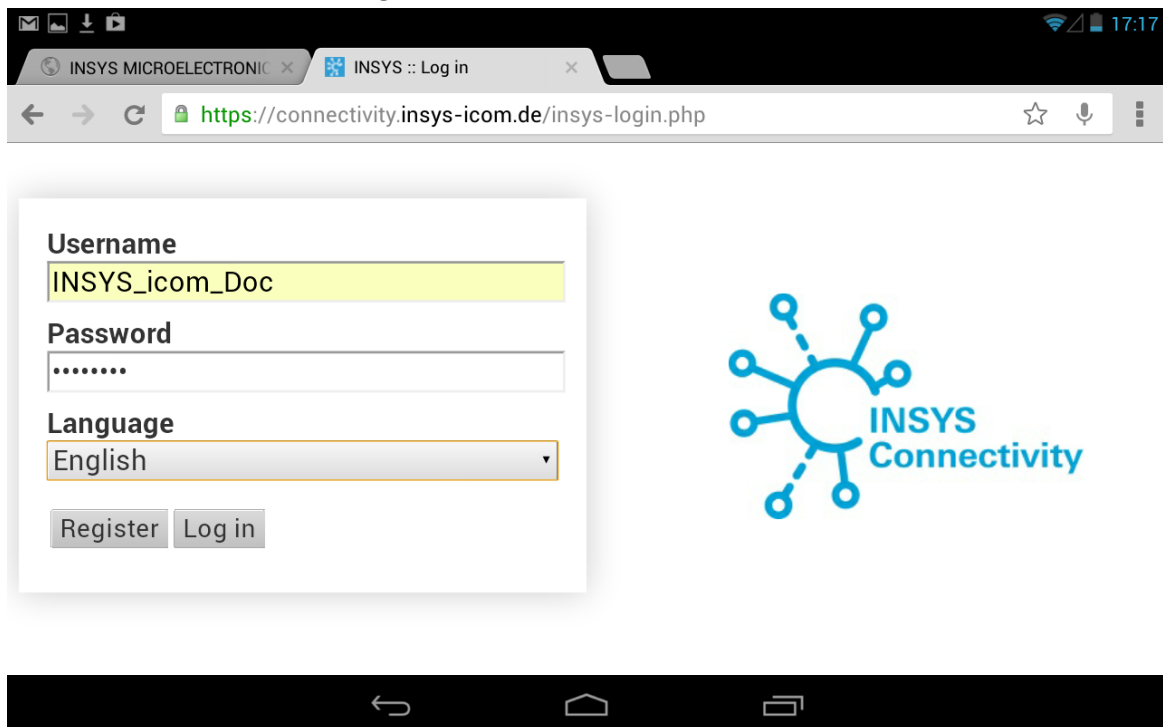
2 Configuration

Configuration

Proceed as follows to configure the OpenVPN connection to the INSYS Connectivity Service.

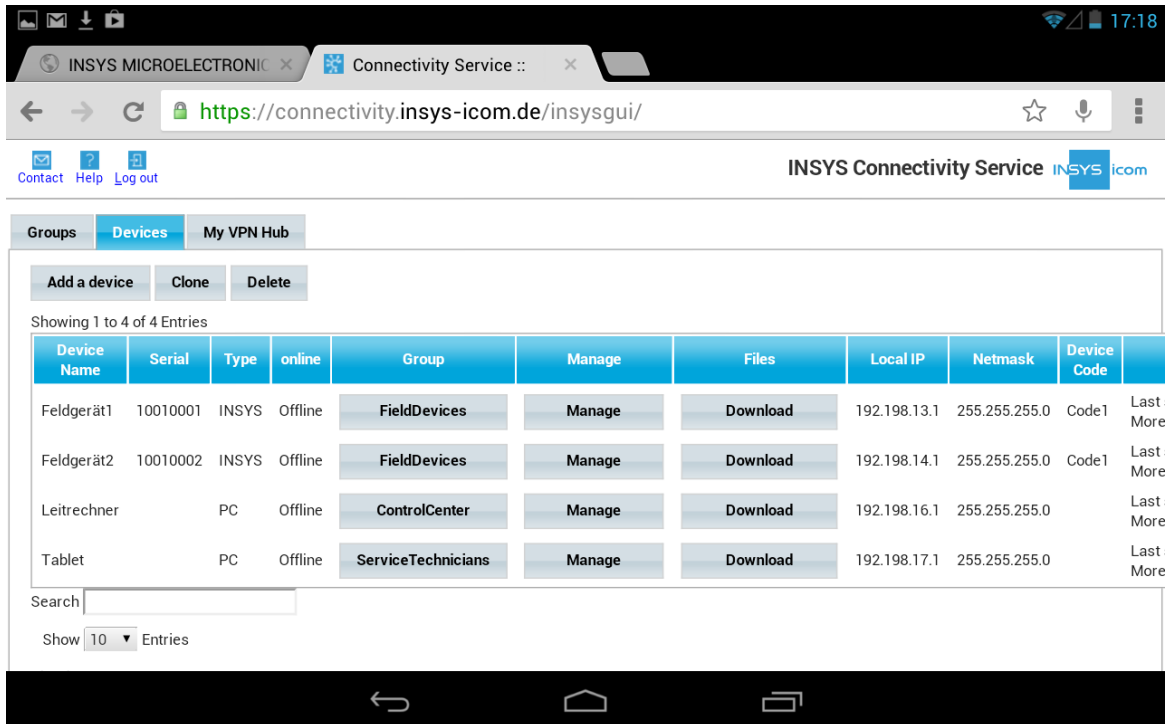■ **Downloading the configuration file from INSYS Connectivity Service**

How to download the OpenVPN configuration file for your tablet from the IN-SYS Connectivity Service.

➜ The tablet is connected to the Internet.

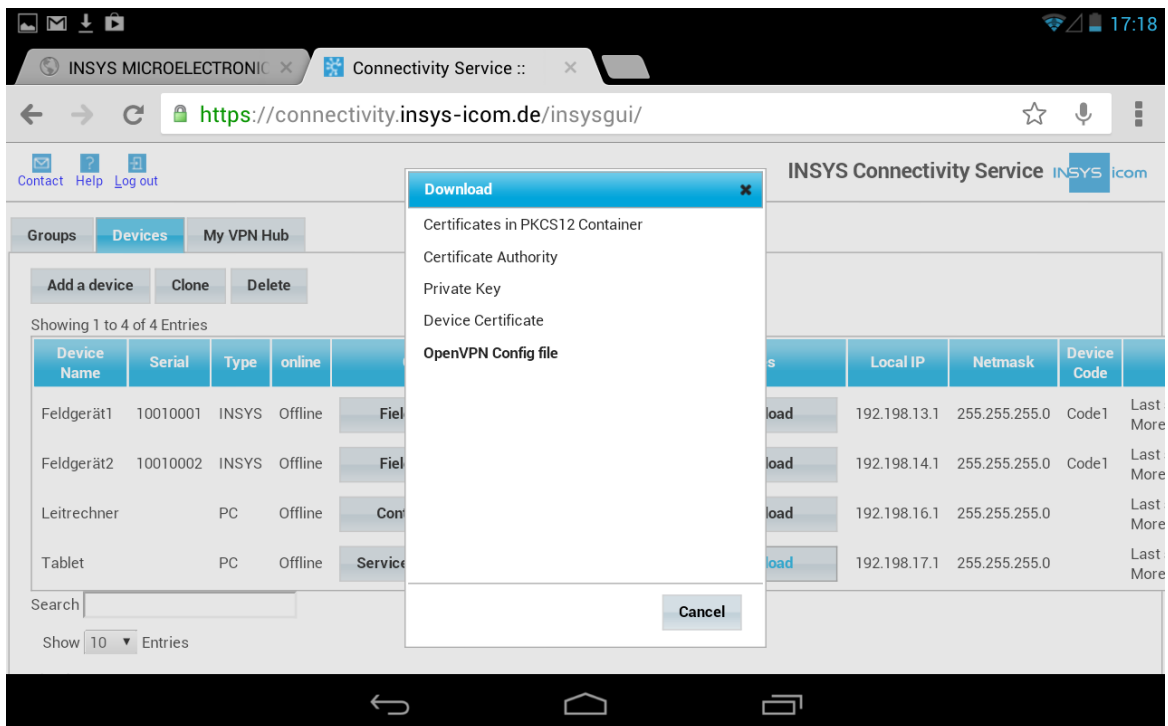➜ The tablet is completely configured in the INSYS Connectivity Service.

1. Open the browser and log in to your account in the INSYS Connectivity.

2. Select the "Devices" tab.

3. Select the "Download" button in the row of the respective device (here "Tablet").

4. Select the "OpenVPN Config File" and download the file.

5. Select "Cancel" and close the browser.

✓ You have downloaded the configuration file from the INSYS Connectivity Service to your tablet with this.

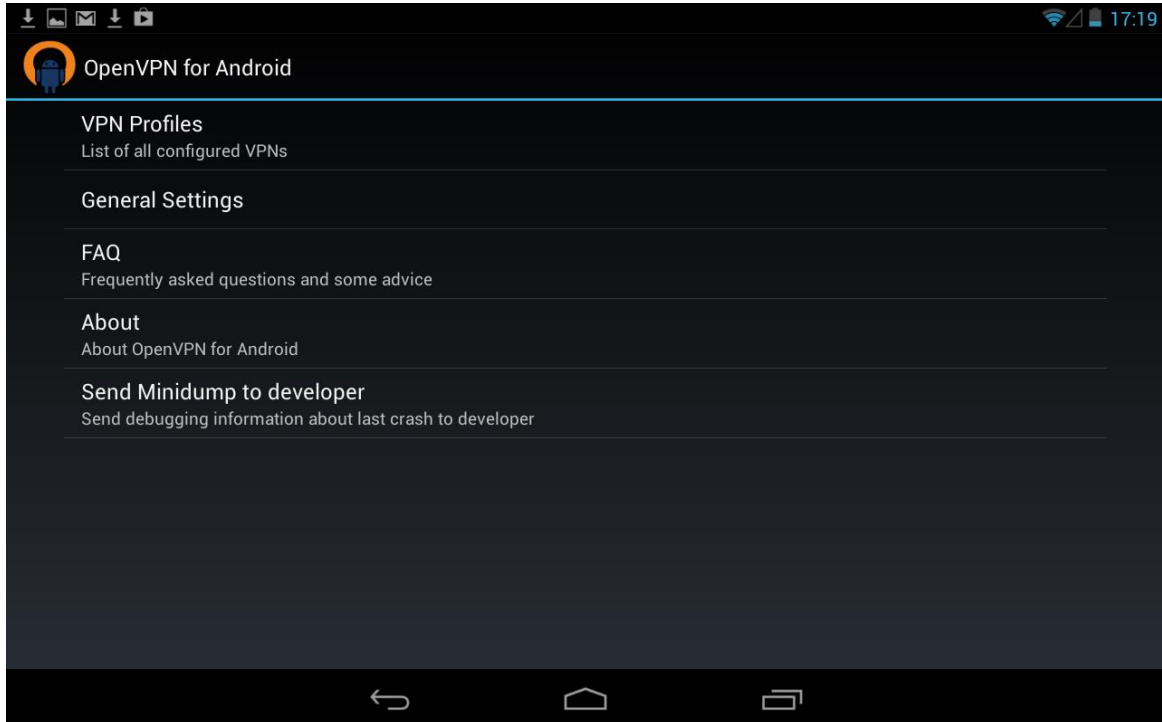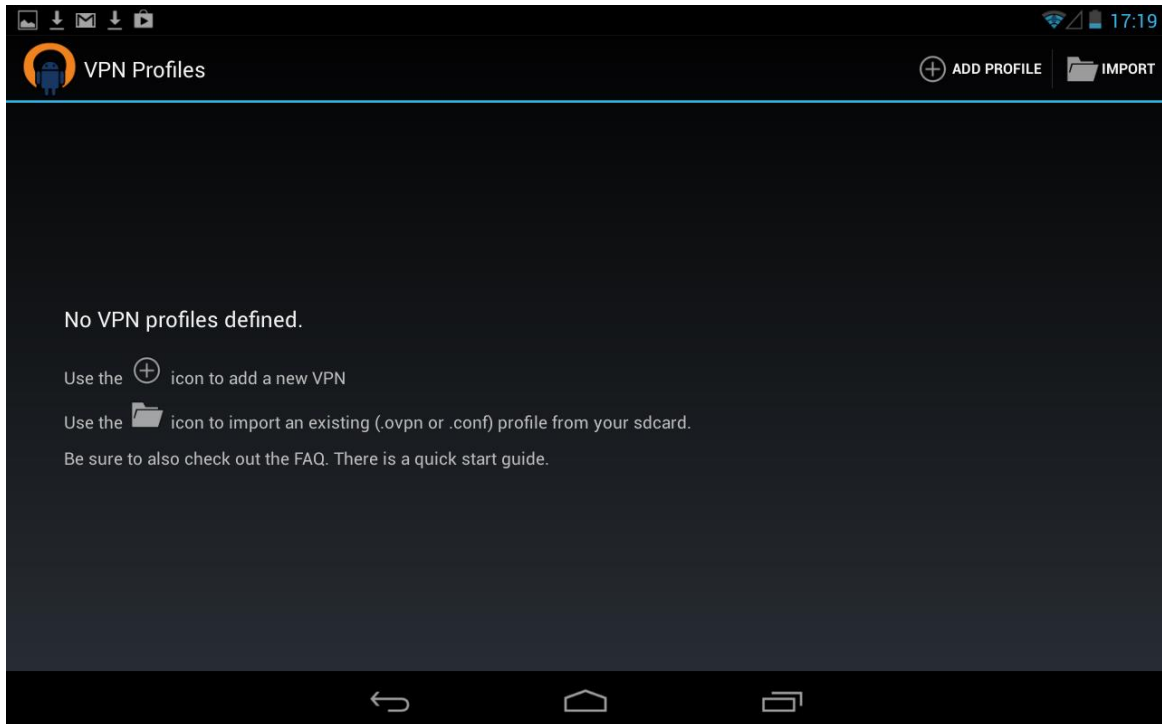■ **Configuring the OpenVPN package for the INSYS Connectivity Service**

How to configure the OpenVPN package under Android for a connection to the INSYS Connectivity Service.

→ The OpenVPN package is installed on the tablet.

→ The configuration file has been downloaded from the INSYS Connectivity Service.

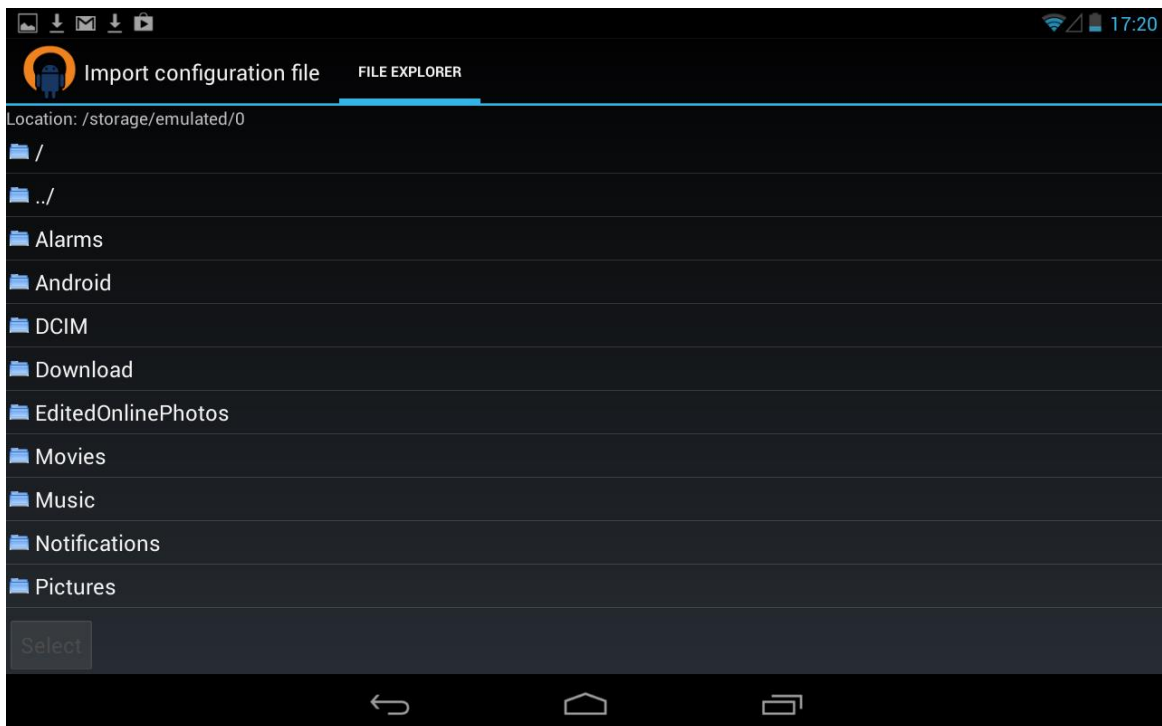→ The tablet is connected to the Internet.
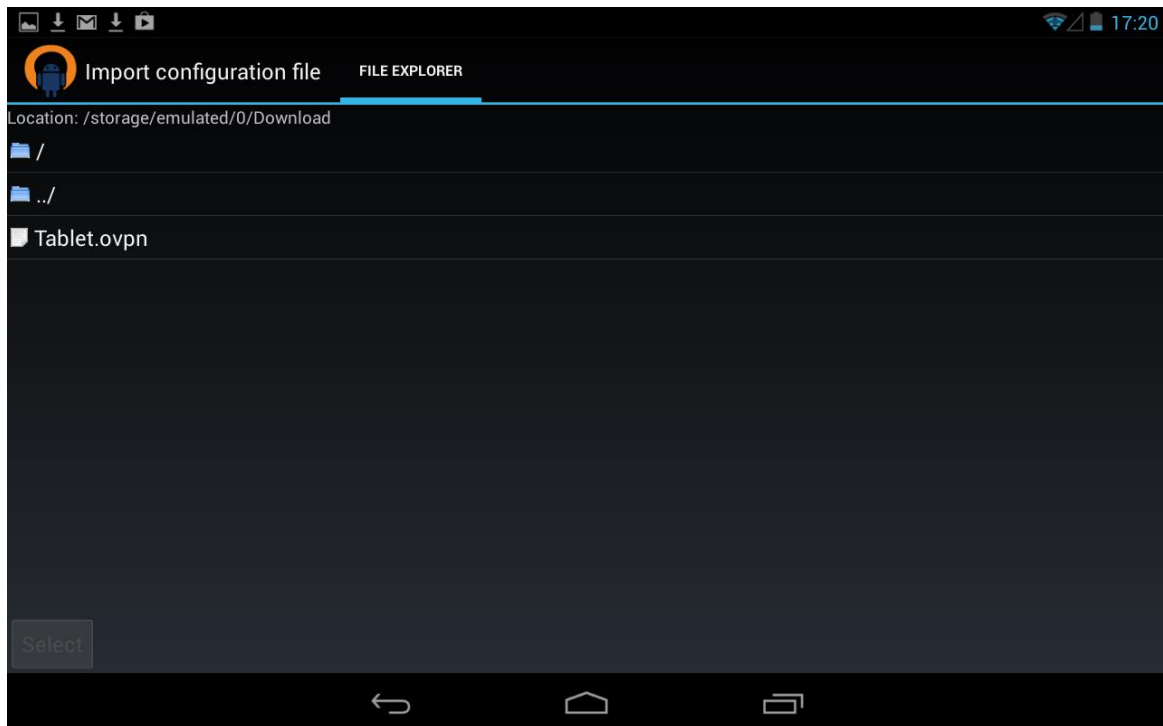
1. Open OpenVPN for Android.
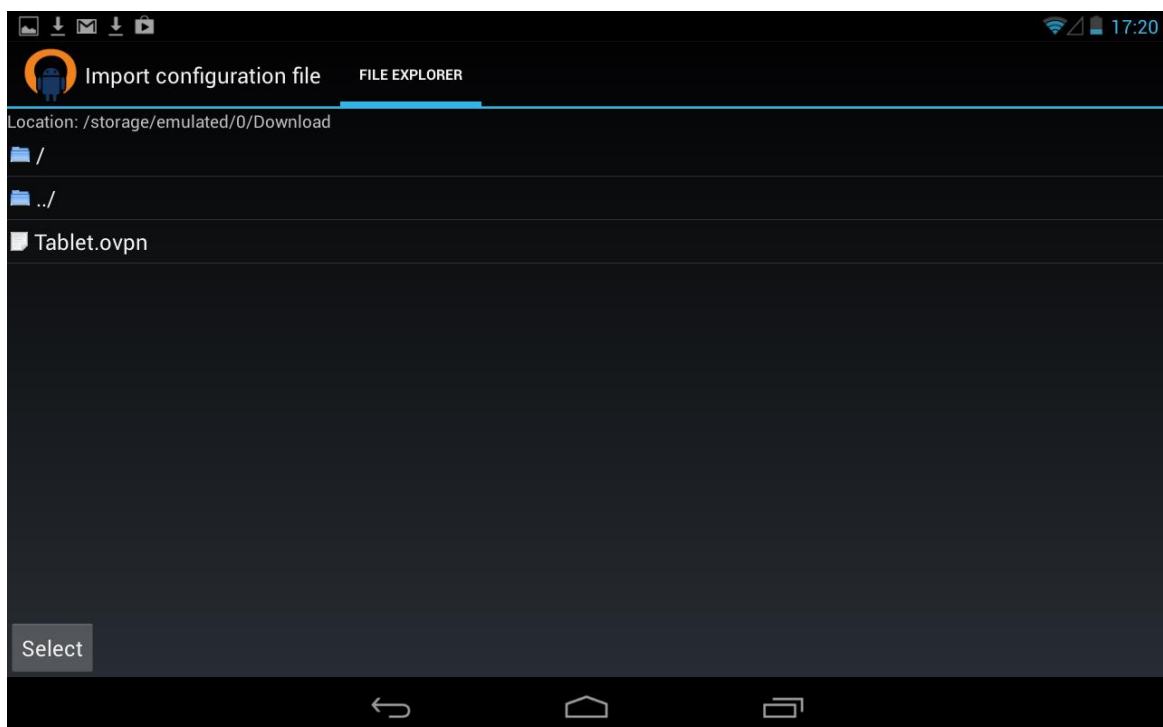
2. Select "VPN Profiles".

3. Select "Import".

4. Change to the "Download" folder.

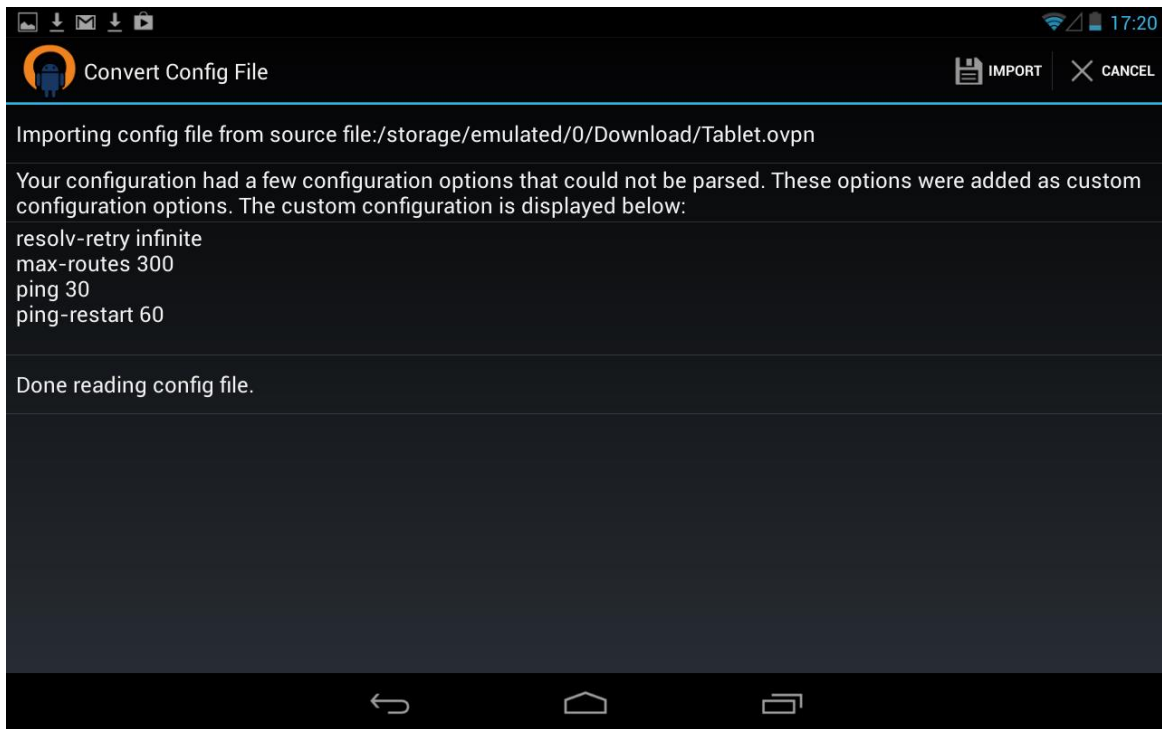5. Select the previously downloaded configuration file (here "Tablet.ovpn") and select the "Select" button.

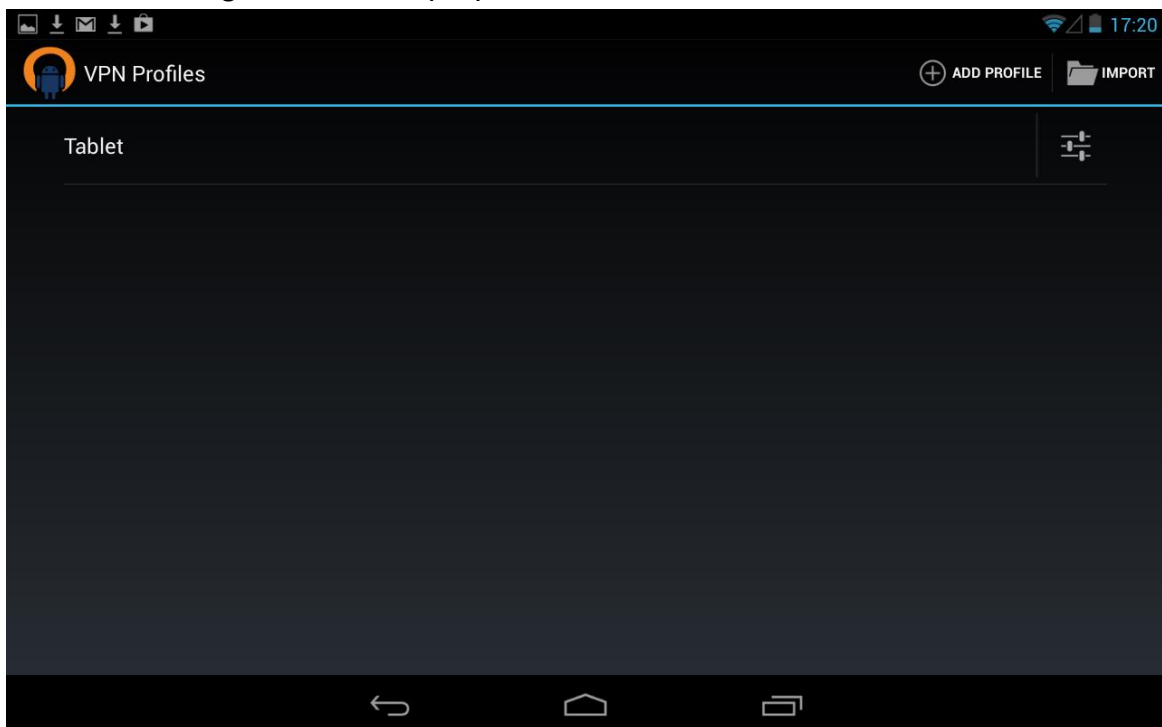

✓ The configuration file is being imported.

6. Select "Import".

✓ The configuration is displayed in the VPN Profiles.

✓ You have configured the OpenVPN package for a connection to the IN-SYS Connectivity Service with this.

Connection Establishment

Establish an OpenVPN connection to the INSYS Connectivity Service now. The following steps are necessary for this:

■ **Establishing an OpenVPN connection to the INSYS Connectivity Service**

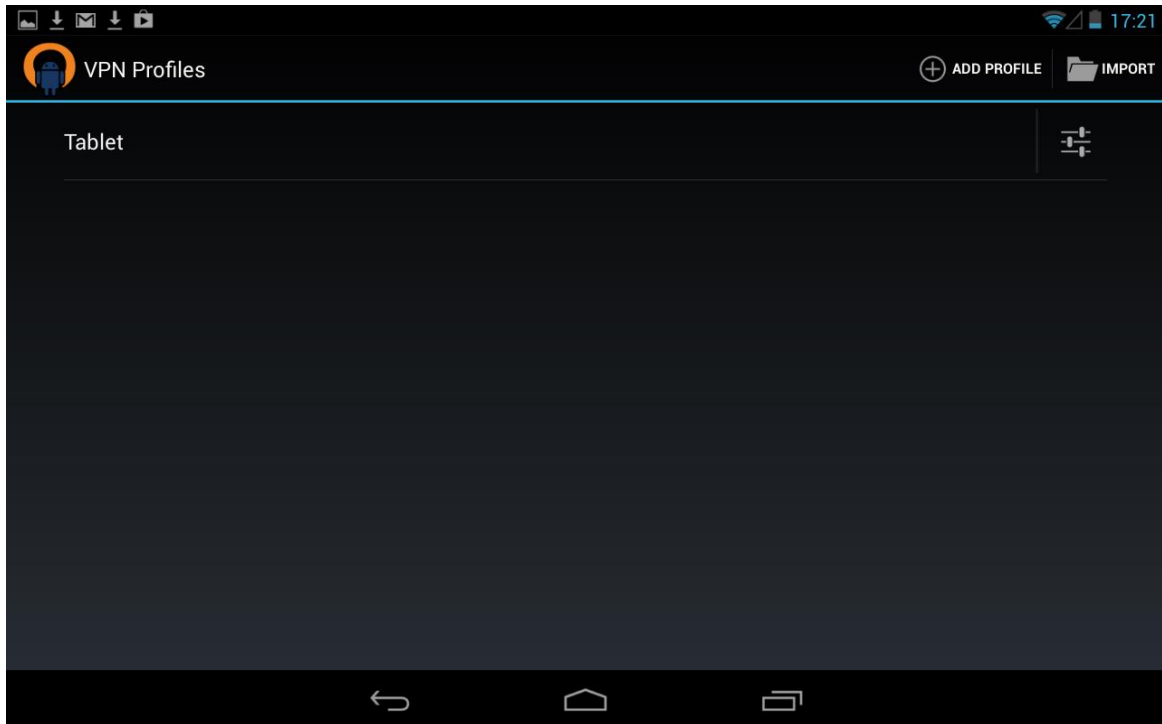How to establish an OpenVPN connection to the INSYS Connectivity Service.

→ The OpenVPN package is installed on the tablet.
→ The configuration file has been imported into the OpenVPN package.
→ The tablet is connected to the Internet.

1. Open OpenVPN for Android.
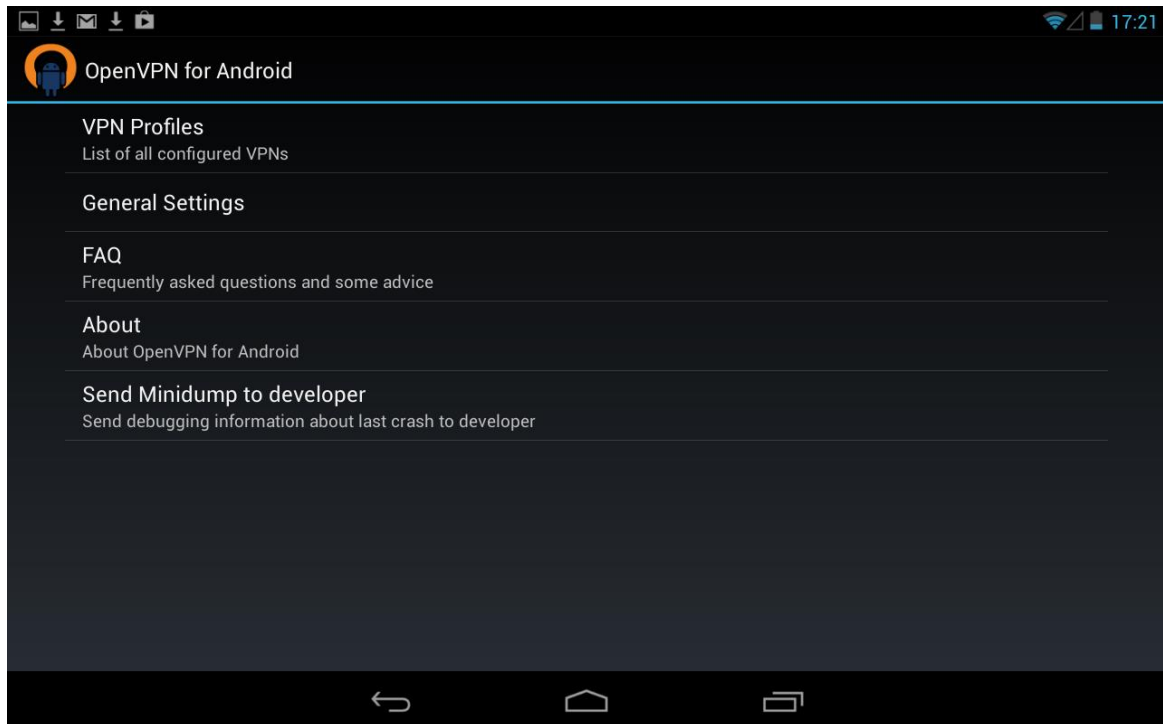
2. Select "VPN Profiles".
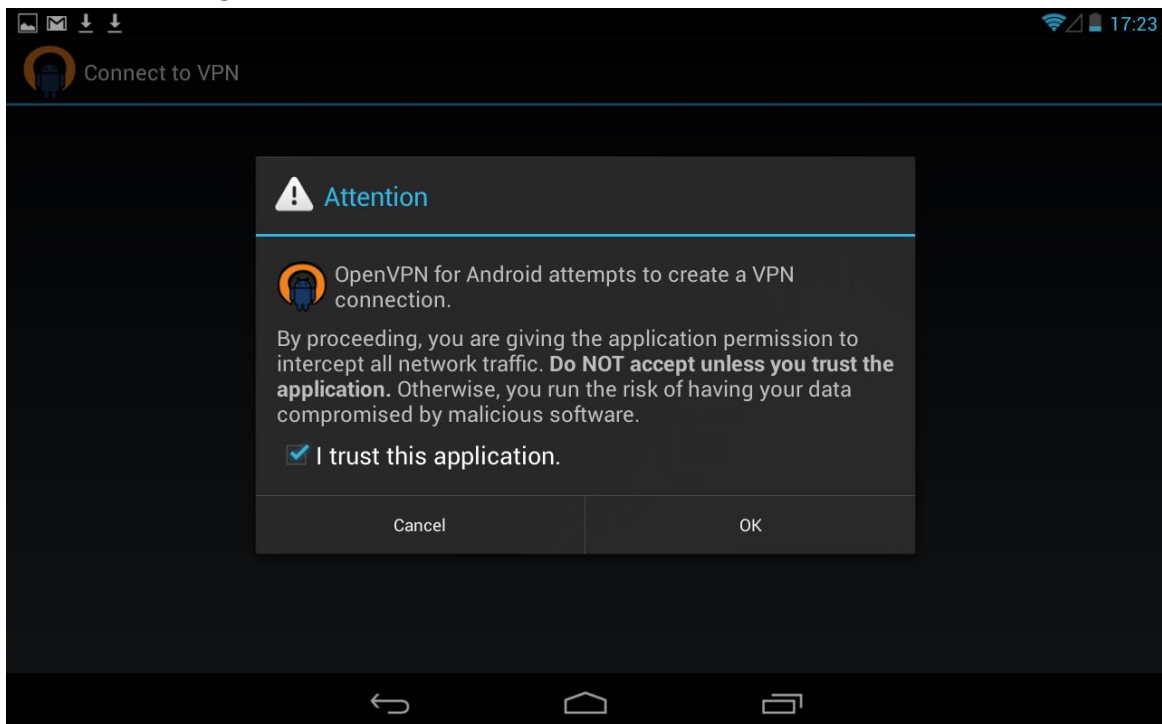

3. Select the previously created configuration (here "Tablet").
   - ✓ A warning is displayed with the first connection establishment.

4. Check the checkbox "I trust this application." and select "OK".

✓ The OpenVPN tunnel is being established. Then, the OpenVPN symbol is displayed in the task bar.

▶ *To close a connection, select "Cancel" and confirm the dialog with "OK".*
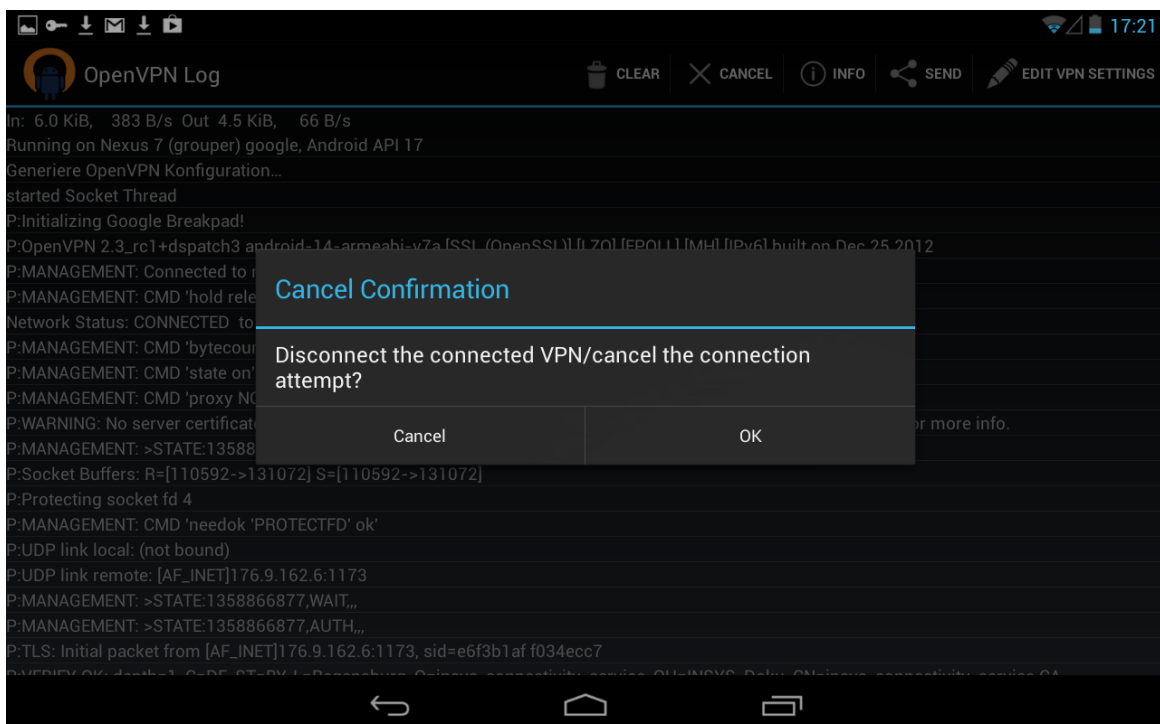
3   Used Components

Hardware and software

Description	Manufacturer	Type	Version
Tablet	Google	Nexus 7	-
OpenVPN pa-cket	Open Source	OpenVPN for Android	0.5.28 or higher
Operating sys-tem	Google	Android	4.0 or higher

Table 1: Used hardware and software

4 Further Information

4.1 Literature

OpenVPN

Das Praxisbuch

ISBN: 978-3-8362-1197-0

Publisher: Galileo Computing

OpenVPN

Grundlagen, Konfiguration, Praxis

ISBN: 978-3-89864-396-2

Publisher: dpunkt.verlag

4.2 Web Links

OpenVPN Technologies, Inc.:

http://www.openvpn.net

OpenVPN e.V.:

http://www.openvpn.eu

5 Symbols and Formattings

Uniform formattings and intuitive symbols are meant to help you find and read the information relevant to you. The following text explains the symbols and formattings of this publication and corresponds in its structure with the structure of this publication.

Activity description for 1 to n operations

Use the activity target here to find out the target of this activity and the individual operations, which compose this activity. You can decide whether this activity is relevant to you.

■ **Operation description of 1 to n operations of an activity**

Use the operation target here to find out the target of this operation. This operation target is achieved by the following numbered operation steps.

➜ An arrow will indicate prerequisites which must be fulfilled to be able to process the subsequent steps in a meaningful way.

1. A single operation step describes what you need to do at this point. Arrows describe a sequence for selecting menu items → File → Print.

   ✓ A result which you will receive after performing an operation step will be marked with a check mark. At this point, you can check if the previous operation step(s) was or were successful.

2. An operation step describes an operation to be completed simultaneously.

3. Process all steps in the sequence of the numbering.

   ⓘ *Additional information which you should take under consideration are marked with a circled "i". You are pointed to possible error sources and their avoidance on the one hand here; on the other hand, you will find interesting context and background information about the respective topic.*

   ```
   Console dialogues (e.g. Windows prompts) are highlighted in grey.
   Your inputs/commands are highlighted in blue.
   C:\Programme\OpenVPN\easy-rsa>build-key-server SERVER_1
   ```

   ▶ *Alternative results and operation steps are marked with a solid triangle pointing to the right. This will tell you how to reach the same results performing different steps, or what you could do if you didn't reach the expected results at this point.*

4. Each operation has a last step.

   ✓ With htis, you have successfully read Symbols and Formattings.

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