

Test setup and specification for certification tests

Description

This page describes the quick-start with a per-defined test setup and how-to run tests with this setup.

FCC: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate the equipment.

IC: This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée

aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi,

même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pr-requisites

- Network cable
- Local machine (laptop/PC)
 - Ethernet interface
 - Administration rights (to change the network settings)
 - JAVA Runtime Environment ([JRE](#)), Version 8 or higher

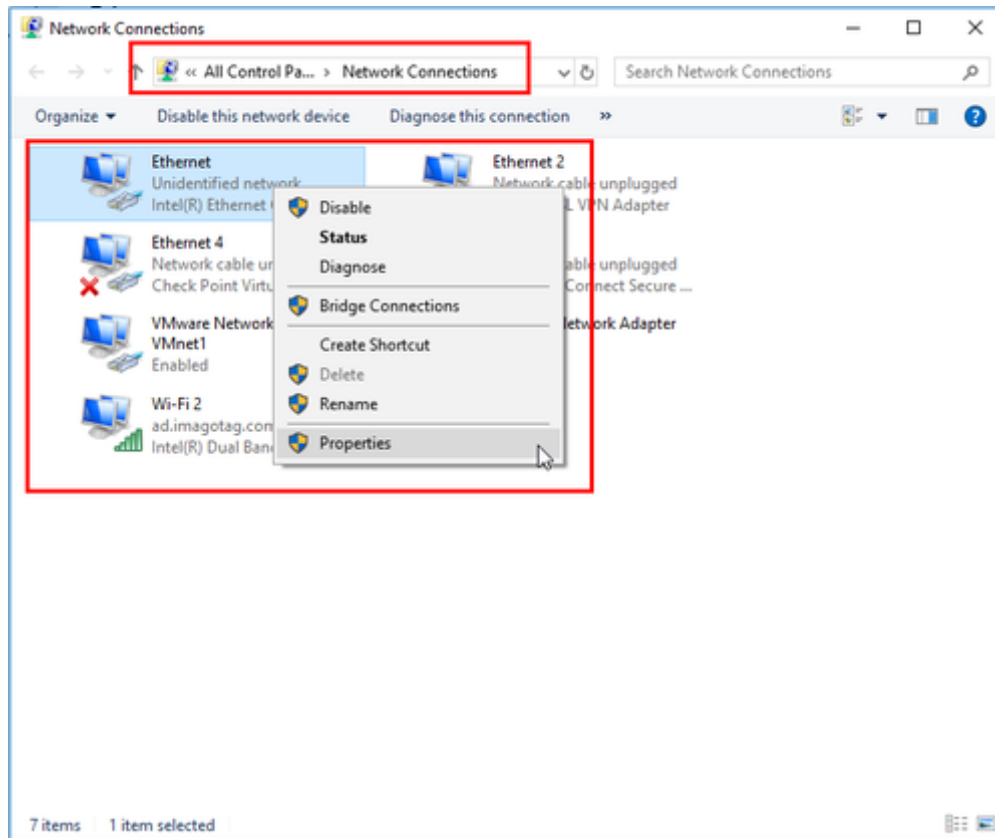
Test setup components

- Core appliance 32GB - ID 52675 - 05CAB002303-I200000720
 - ESL Dongle - ID 50400
 - AP-2010 - ID TBA
 - USB pen drive incl. "Control Center" software
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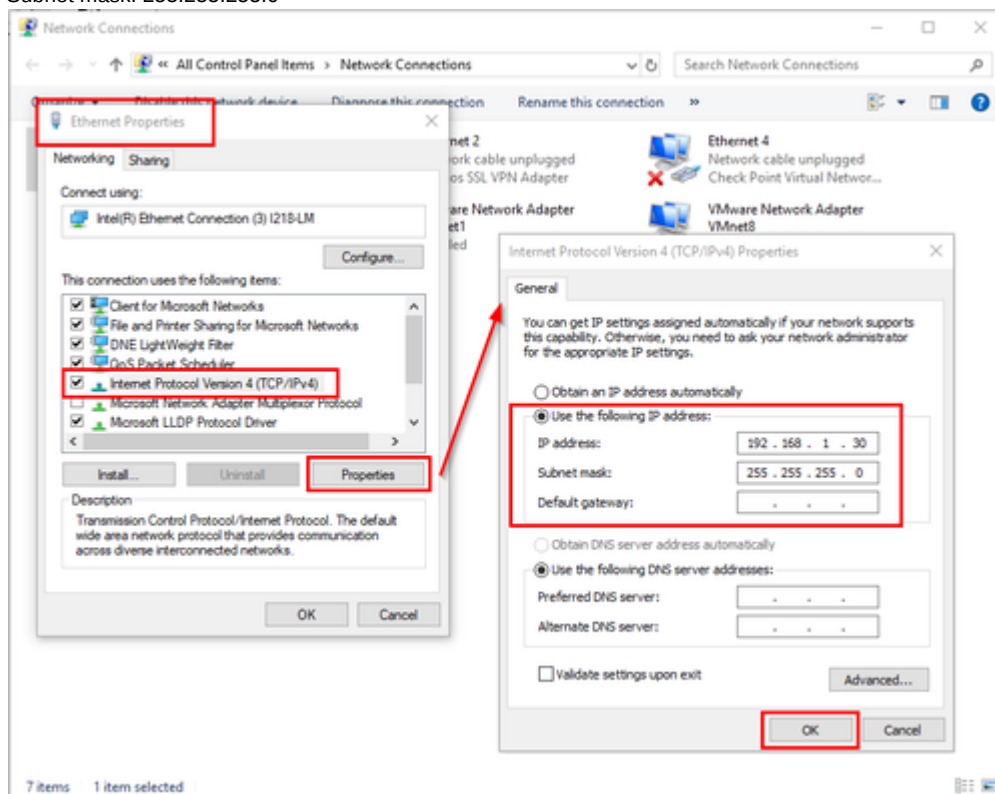
Initial test setup preparation

Prepare local machine

1. Change your Ethernet adapter settings
2. Control Panel - Network Connections
3. Right click on the desired Ethernet interface and select "Properties"



- a.
4. Select "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties"
 5. Use the following IP address and subnet mask
 - a. IP address: 192.168.1.30
 - b. Subnet mask: 255.255.255.0



c.

Prepare core appliance, ESL dongle and/or AP-2010

1. Unpack components
 - a. Unpack core appliance, power supply and ESL dongle.



b.

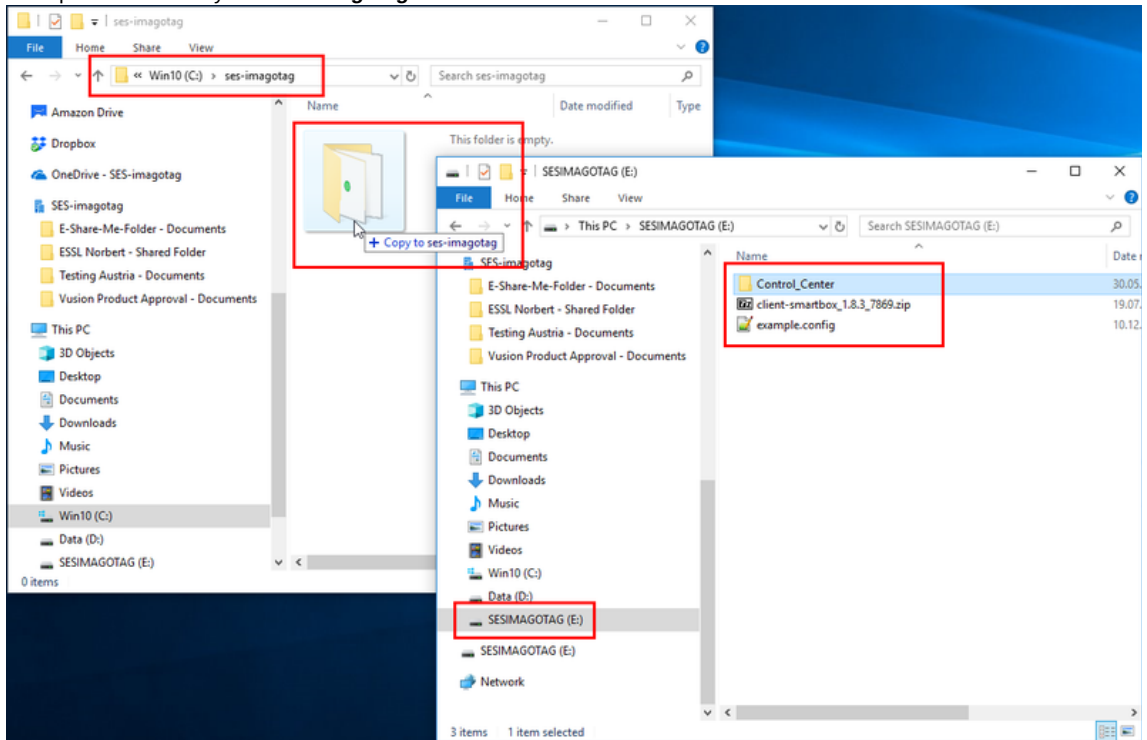


2. Connect components
 - a. Network cable Ethernet port "1" & Ethernet port of your laptop or PC
 - b. Power jack Power socket "**DC+12V**"
 - c. ESL Dongle USB port "1"



d.

3. Power core appliance Power switch "**ON**"
4. Copy the following folder from the USB pen drive to your local computer: "**Control_Center**"
 - a. Example local directory: "**C:\ses-imagotag**"



b.

- c. Make sure that JAVA is installed on your local machine. (e.g.: Open a windows command prompt and execute "**java -version**" command)

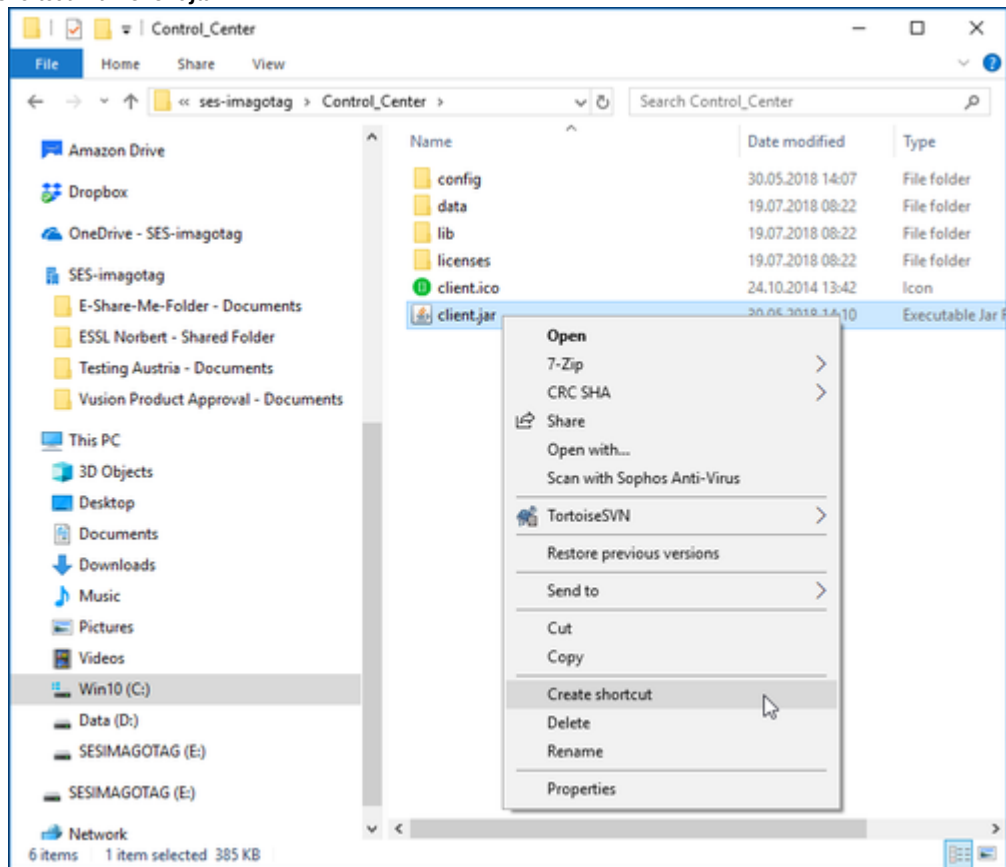
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C:\Users\hak>java -version
java version "1.8.0_172"
Java(TM) SE Runtime Environment (build 1.8.0_172-b11)
Java HotSpot(TM) 64-Bit Server VM (build 25.172-b11, mixed mode)
C:\Users\hak>

```

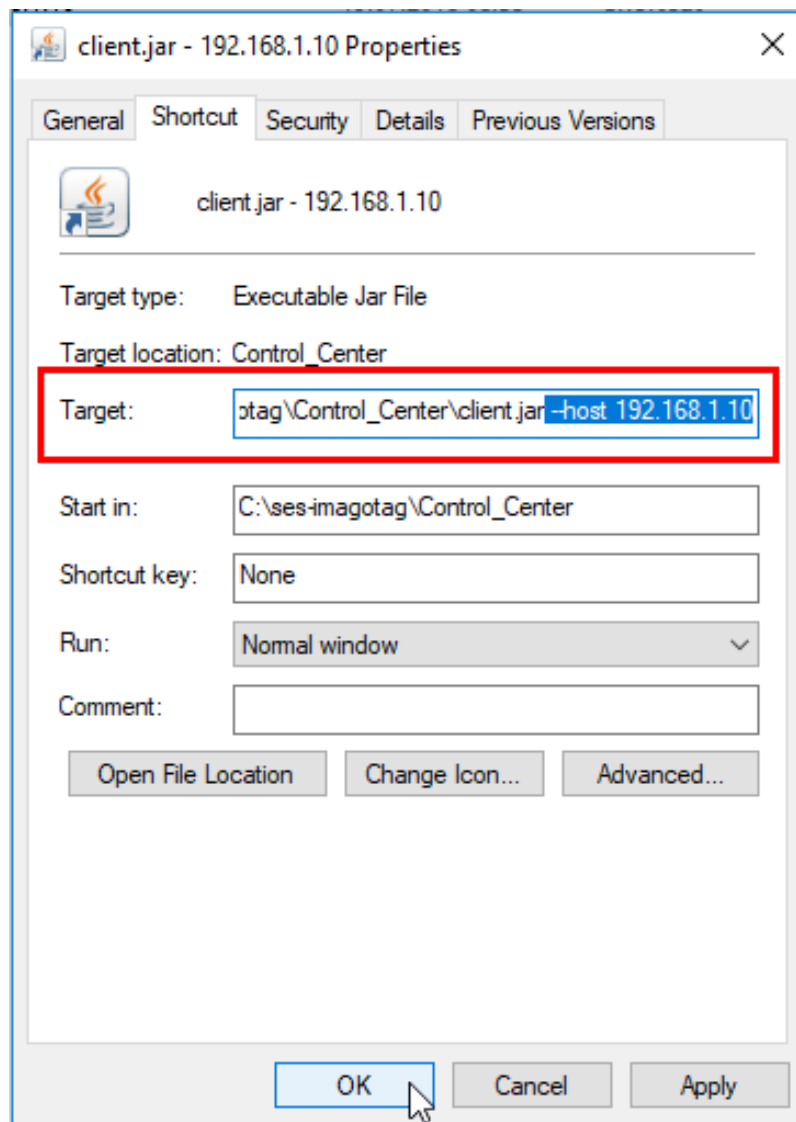
d.

5. Create shortcut with "**client.jar**"



a.

6. Rename shortcut to "**Control Center - 192.168.1.10**"
7. Edit shortcut with right click "**Properties**"
8. Add "**--host 192.168.1.10**" after "**client.jar**" as target link and apply the changes



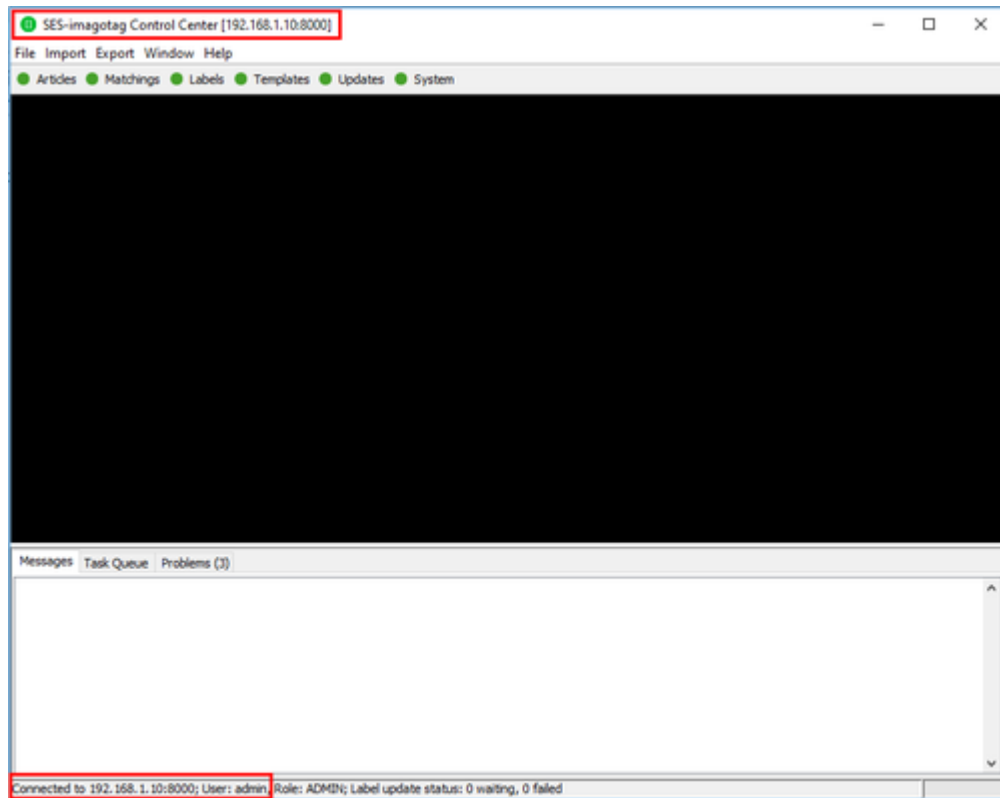
a.

9. Rename the shortcut to "client.jar - 192.168.1.10"

config	30.05.2018 14:07	File folder
data	19.07.2018 08:22	File folder
lib	19.07.2018 08:22	File folder
licenses	19.07.2018 08:22	File folder
client.ico	24.10.2014 13:42	Icon
client.jar	30.05.2018 14:10	Executable Jar File
client.jar - 192.168.1.10	03.08.2018 09:28	Shortcut

a.

10. Execute the shortcut and use the following username/password combination to login:
- Username: admin
 - Password: admin
11. Wait until the "Control Center" window opens



a.

Your system's now ready to start working with labels (register, send images, switch pages, ...)

Your current ESL channel is 10 (ESL dongle LED is **blue**)

Working with labels

You'll find information about working with labels in the "**Core Service Quick Start Guide**"

10.1 Register labels

11.2 Sending images to labels

Sources:

- <https://portal.imagotag.com/get/documentation>
- https://portal.imagotag.com/files/all/docs/it_quick-start-guide_en.pdf

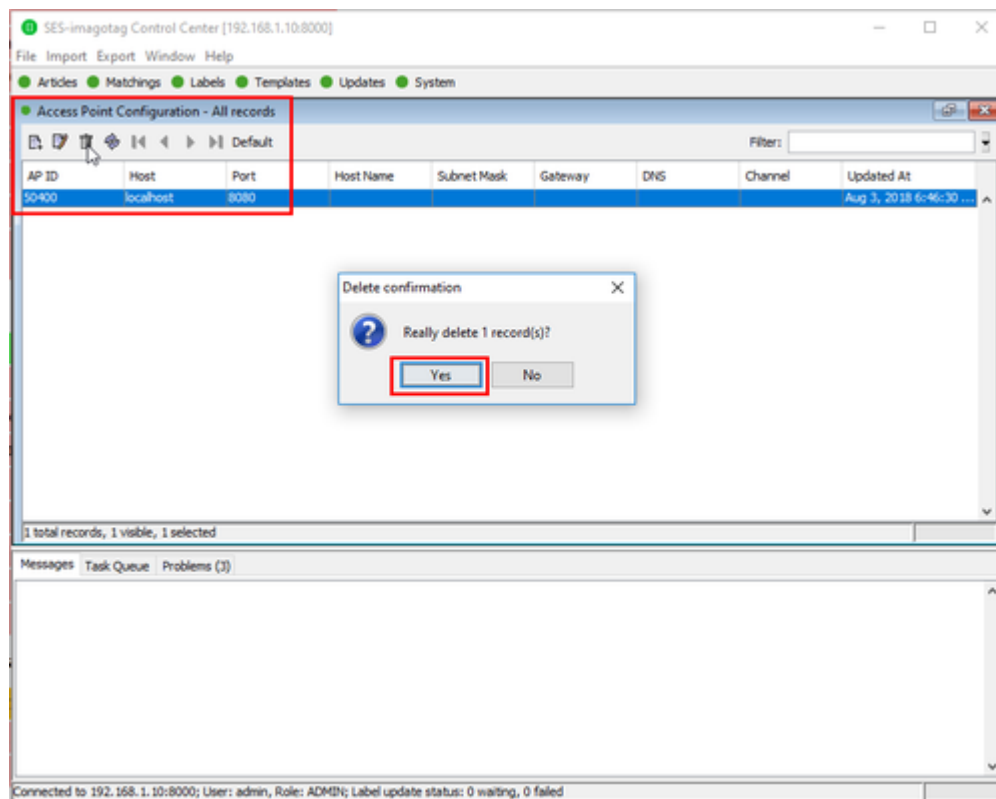
Example images

The USB stick contains a collection of test images that can be sent to the labels.

Operate the system with an AP-2010

This section describes how to change the operation from an ESL dongle to an AP-2010.

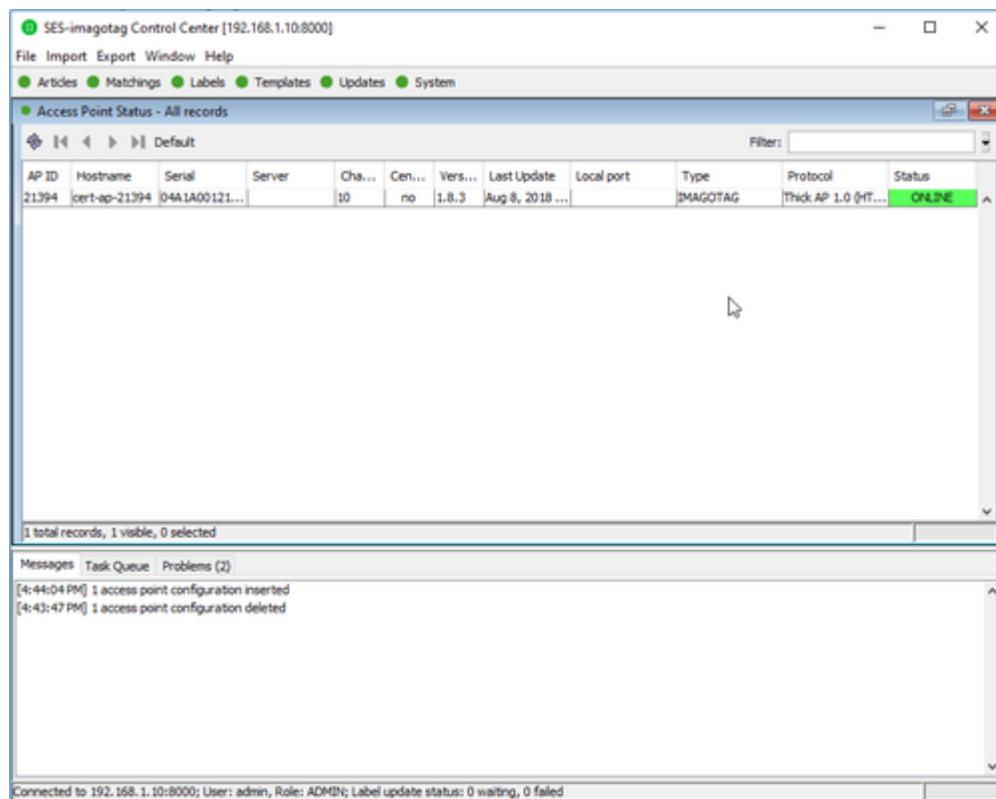
1. Unplug the ESL dongle
2. Delete the configuration of AP-ID "50400" via Control Center: "*System Access Point Configuration*"



- a.
3. Connect the Ethernet interface of the AP-2010 with the **Ethernet port 2** of the core appliance
 - a. Use the included network cable



- b.
4. Plug in the power supply of the access point
5. Wait until the AP-2010's LED turns **blue**
6. Check the Access Point status via Control Center: "System Access Point Status"

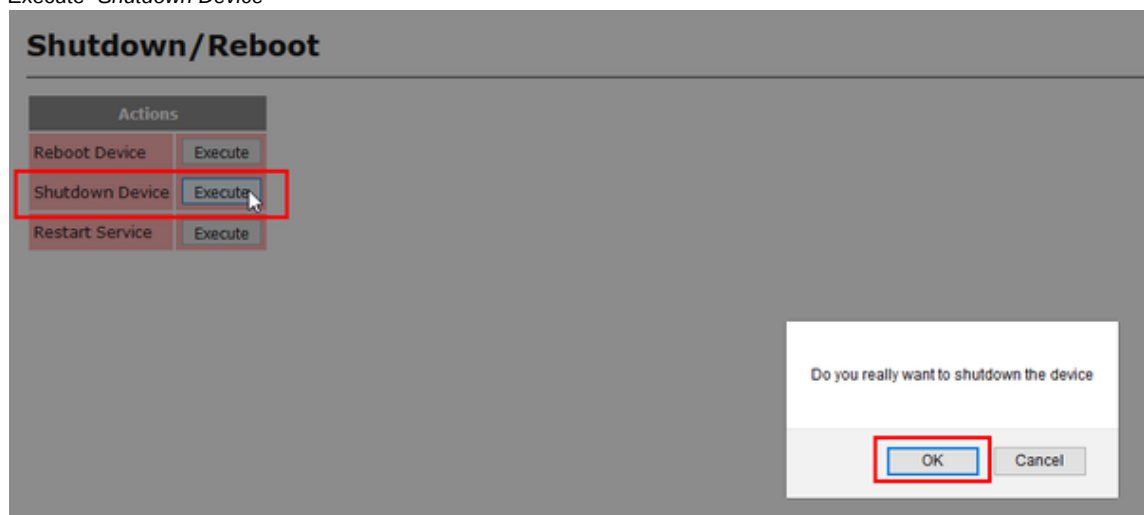


a. Connected to 192.168.1.10:8000; User: admin, Role: ADMIN; Label update status: 0 waiting, 0 failed

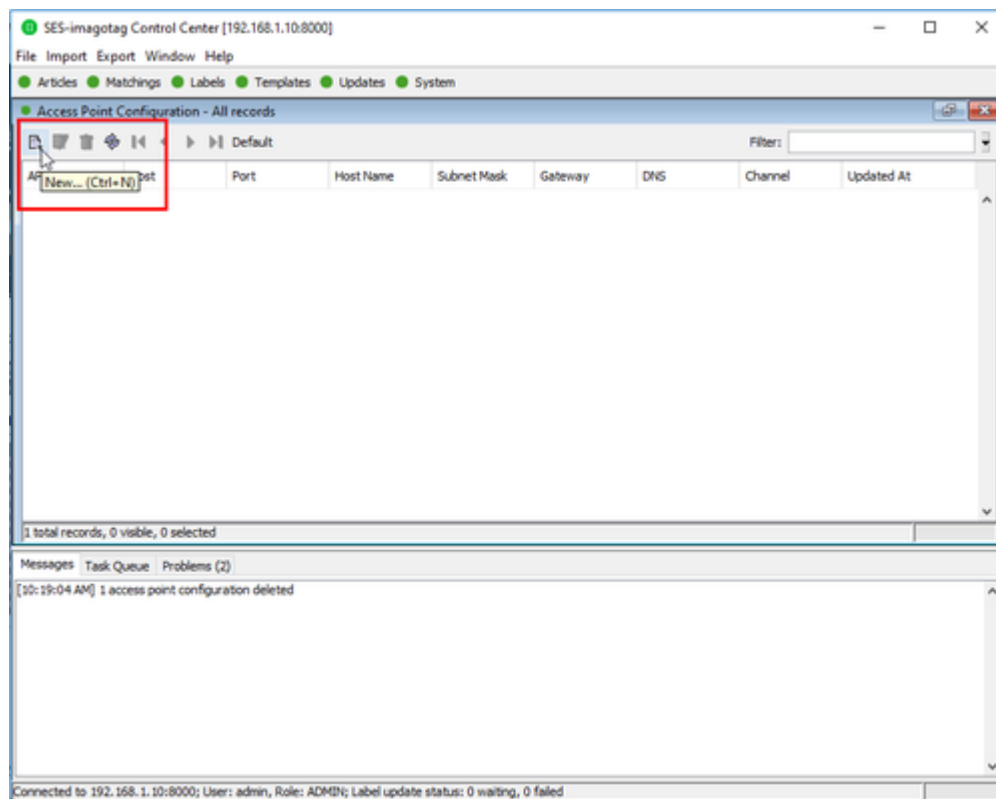
Change back to the operation with ESL dongle

This section describes how to change the operation from an AP-2010 to an ESL dongle

1. Switch off the AP-2010
 - a. <http://192.168.1.20/admin/shutdownReboot.xml> Execute "Shutdown Access Point"
 - b. Wait until the LED turns **RED**
 - c. Plug out power supply
2. Turn off the core appliance
 - a. <http://192.168.1.10/admin/shutdown.xml>
 - b. Execute "Shutdown Device"

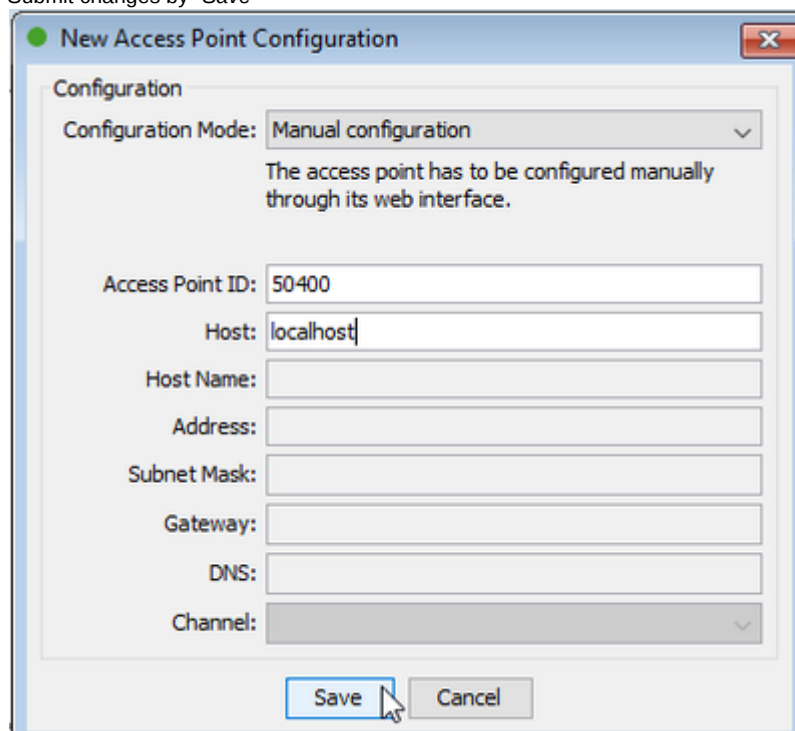


- c.
- d. Wait for the device to shut down (LEDs off)
- e. Power switch "**OFF**"
3. Plug in the ESL dongle to **USB port "1"**
4. Turn on core appliance Power switch "**ON**"
5. Add the configuration for the ESL dongle with ID "50400" via Control Center: "System Access Point Configuration"



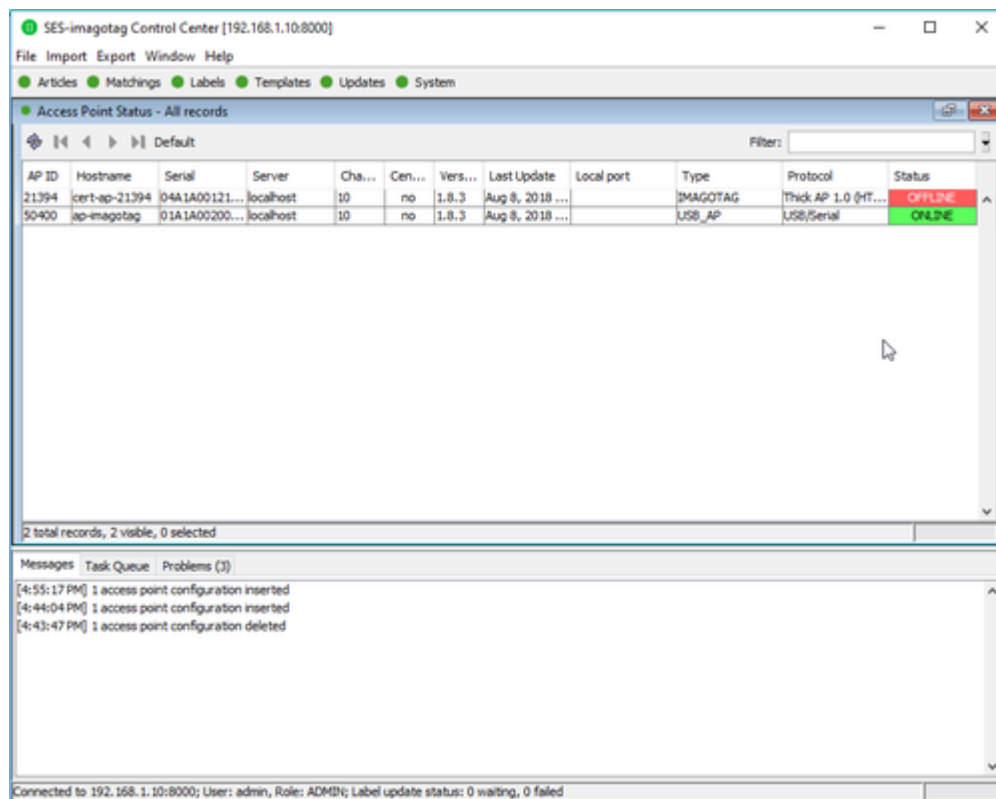
Connected to 192.168.1.10:8000; User: admin, Role: ADMIN; Label update status: 0 waiting, 0 failed

- a.
- b. Fill "Access Point ID" with "50400" and
- c. "Host" with "localhost"
- d. Submit changes by "Save"



- e.

6. Wait until the ESL dongle's LED turns **blue**
7. Check the Access Point status via Control Center: "System Access Point Status"
 - a. AP-2010 is "**OFFLINE**"
 - b. ESL dongle is "**ONLINE**"



C. Connected to 192.168.1.10:8000; User: admin, Role: ADMIN; Label update status: 0 waiting, 0 failed

Operate EMC Test

1. Take the prepared Sample with the channel you want to evaluate (CH 0, 4, 10)
2. Prepare the prepared counterpart with the same channel you chose (CH 0,4, 10)
3. Plug-in the power supply of the counterpart and put in the batteries of the EUT
4. The AP and the Label now start automatically to permanently exchange packets
5. If the transmission is OK, the LED will remain OFF. If a transmission fails the LED will be ON until the next successful transmission of data.
6. You can check the functionality if a you unplug the counterpart The LED of the EUT should light up within 2 seconds.

Modulated/Unmodulated Output test

1. Take the EUT and put in the batteries
2. the label will send continuously with maximum output power
3. You can start all required measurements for the certification report