# Building and Managing the Example Network

In this section, you will use the SmartServer IoT CMS to first import resources associated with the example network, and then create and provision actual devices.  To follow these steps you should have two or more FT 5000 or FT 6050 EVBs networked and loaded with the provided Simulation applications, as described in Setting up an Internal Application Program Example Network.

This section consists of the following:

- Preparation
- Configuring Your CMS Dashboard
- Next Step

## Preparation

To ensure consistent results, you need to restore your SmartServer IoT to a known starting condition. If you are not clear about the starting condition of the SmartServer, follow these steps:

1. Use **putty.exe** or a terminal emulator of your choice to connect by SSH or Serial console (settings: 115200-8-N-1).

2. Login as user **apollo** with the password marked on the back of the unit, or whatever you changed it to previously.

3. Type: `sudo aollo-reset normal [pwd]`. If you connect to the SmartServer console using SSH, you will be prompted to continue shortly after the re-image script starts.

4. The re-image script will take about 8-10 minutes to complete and concludes with a reboot of the SmartServer.

5. Use the SmartServer IoT configuration interface to enable the RNI for your Lon[n] device connected to your test network.

6. Click the CMS tab to log in to the SmartServer CMS as user **apollo**.

## Configuring Your CMS Dashboard

When you connect to the CMS for the first time after apollo-reset, most of the Widgets will be configured to the user apollo dashboard.

1. Click the Settings button (⚙) and select the **Edit** action to customize your dashboard.

2. Select the following widgets to be displayed on your dashboard:
   a. Devices
   b. Storage
   c. Alarms
   d. Datapoint Properties
   e. Device Types
   f. Datapoint Browser
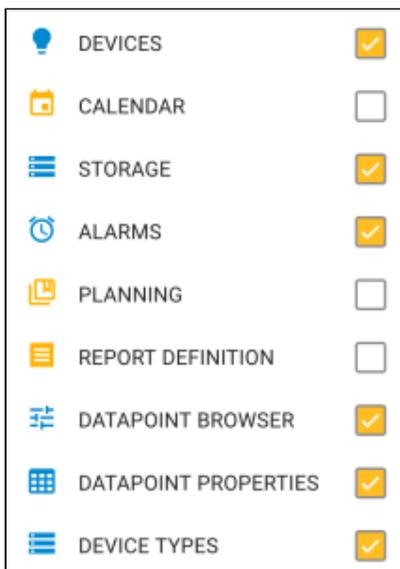


3. Click the Settings button (⚙) and select the **Edit** action to resume normal dashboard activity.

4. Click the Import button (  ) on the Device Types widget.

5. You will see a grey shaded area that can be used for drag-and-drop actions. If you click this drop area, you will see a file explorer dialog that you can use to select a file. As shown in the following figure, a file explorer dialog can be used to navigate to the folder `SmartServer Support` under the local copy of the Izot/SmartServer-IoT repo.  In this step, you are importing the four files from the resource report by dragging-and-dropping to the Device Types widget drop area.
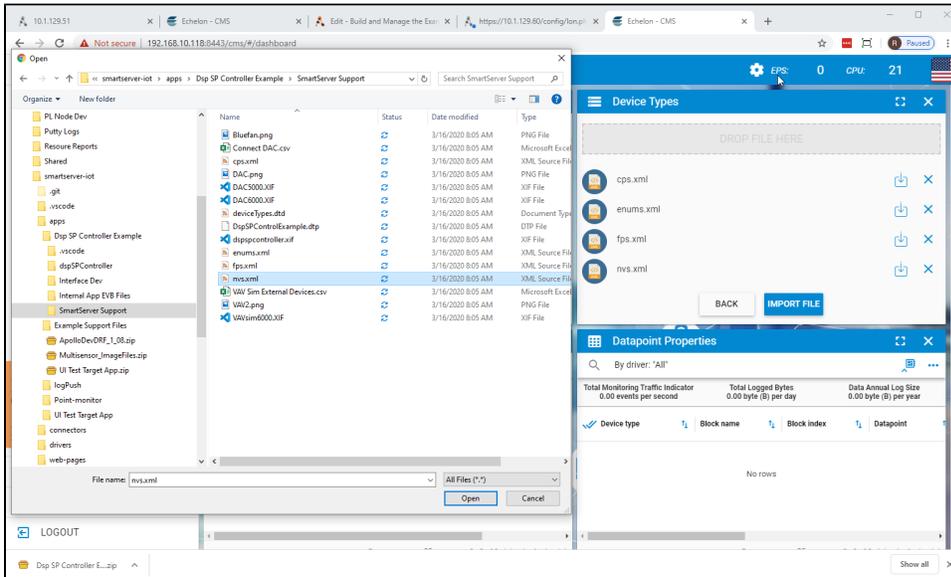


6. Click **IMPORT FILE**. A series of blue toast notifications in the upper-right area will appear indicating that these files were imported successfully. You can dismiss each of these messages.
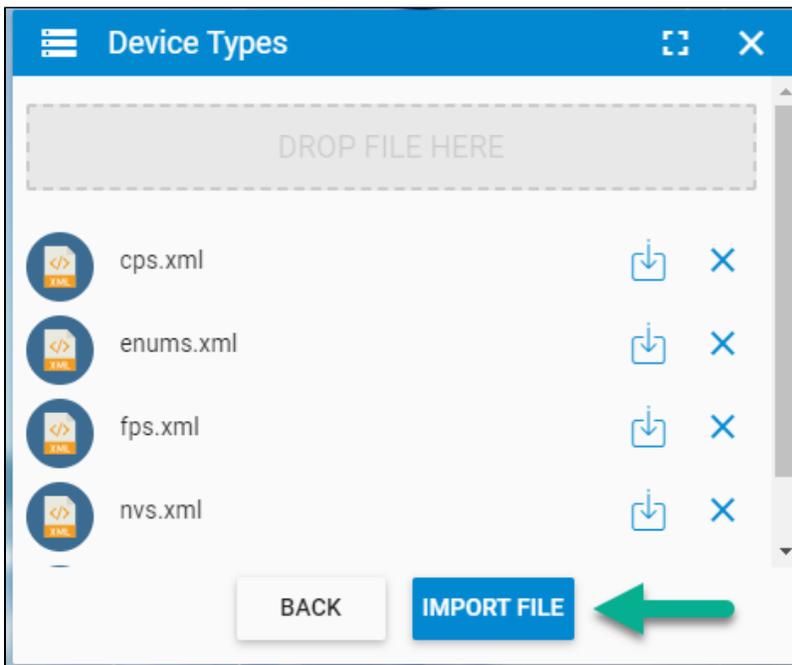


7. Click the drop area of the Device Types widget again, and this time drag each file with **.png** and **.xif** extensions to the drop area and click **IMPORT FILE**.
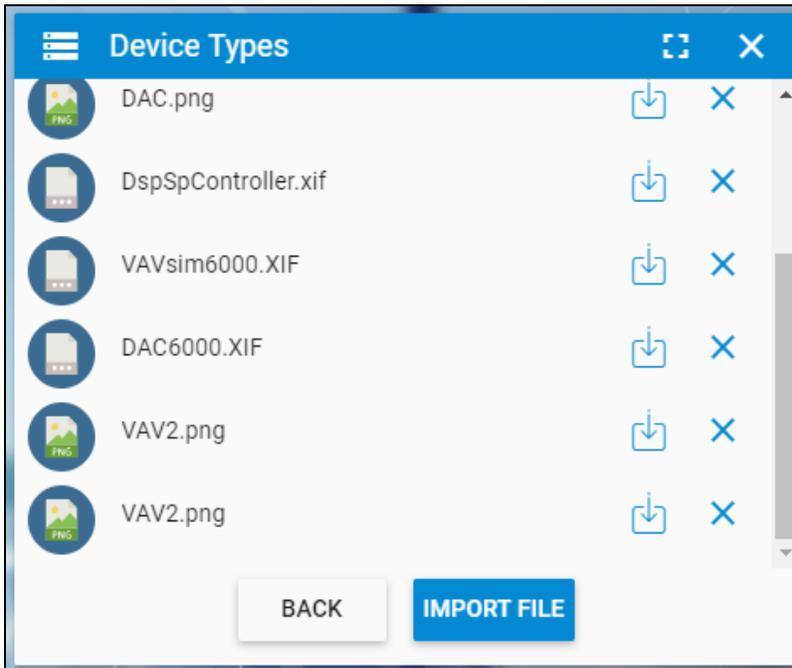
8. Allow time for the CMS to create device types. For each XIF file imported, it will take 20-30s to complete the device type creation. You may need to scroll to the toast notification area to see this, but you are looking for messages confirming the operation is completed/loaded.

9. Click **BACK** to return to the Device Types widget. If you like, for each device type shown, you can click the Action button and assign one of the imported .png images. Once you have completed this work, you can create a package which includes XIFs, PNGs and the definition of these device types by selection all of the devices and using the Export Selected Device Types action to create a DTP file that can be reused in future projects that use these device types.
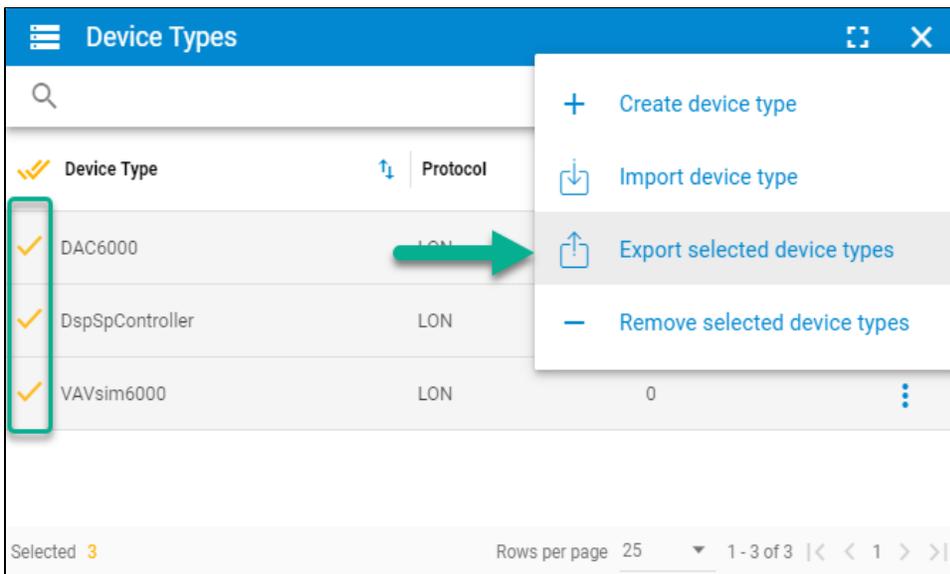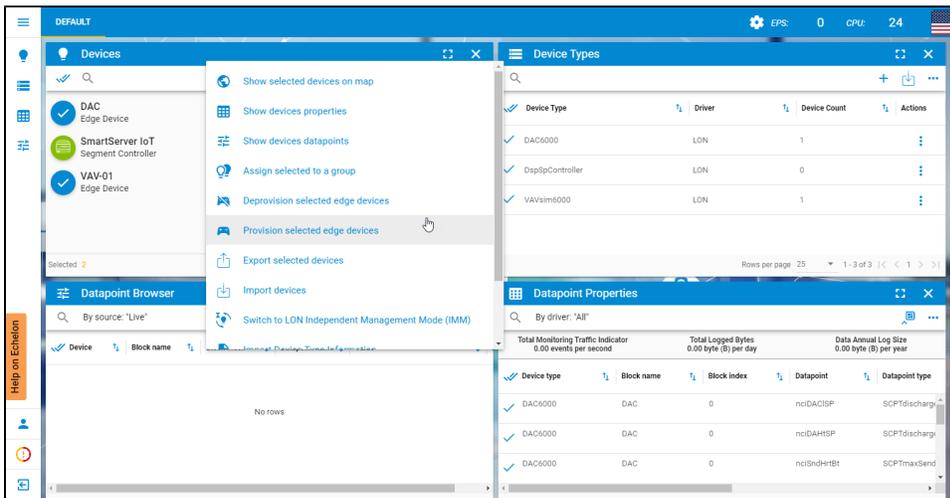


10. In the Devices widget, click the Devices widget Action button ( ••• ) and select the **Import Devices** action. In the SmartServer Support folder, there is a file VAV Sim External Devices.csv you can used to create a system with one DAC device, and three simulated VAVs. You must delete what does not exist on your bench and modify the UIDs to match your target network.
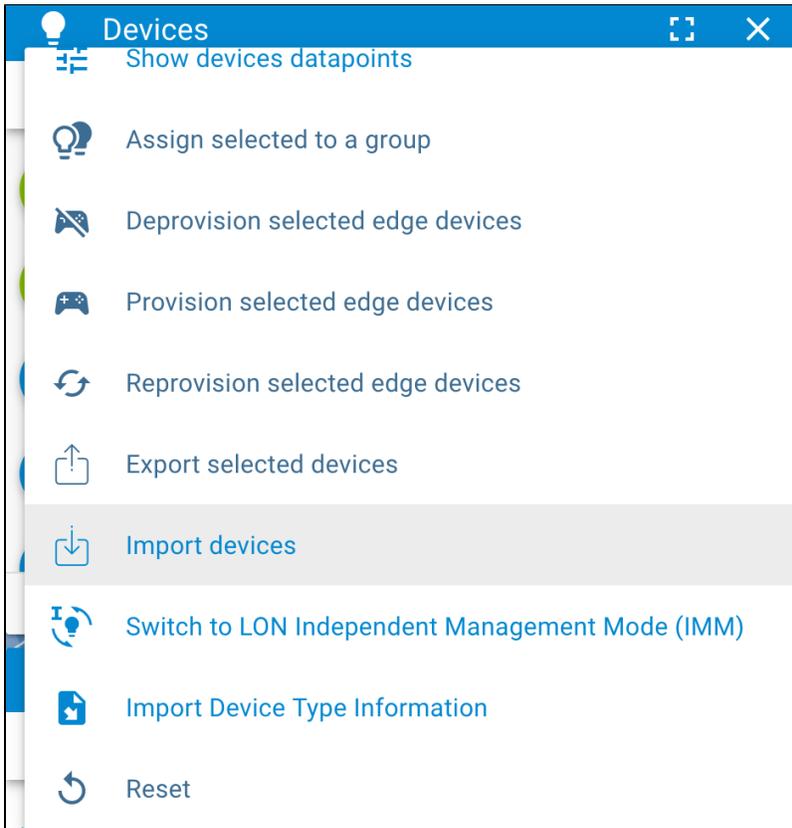
11. For each imported device, use the Devices widget to add the UIDs for each EVB board:
    a. Click the device in the list.
    b. Click **NEXT** to edit and save the UIDs as they exist in your system.

12. Select the target devices by clicking their icons, and then click the Devices widget Action button ( ••• ) to select the **Provision Selected Edge Devices** action.



At this point, you have the external LON devices provisioned and ready, so you can continue developing an internal device. Each device icon in the Devices widget should have a green fill.

# Next Step

Return to Internal LON Application Example.