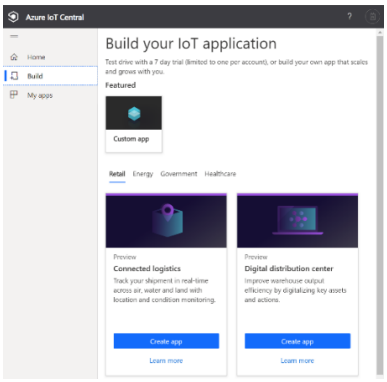
Azure IoT Central

Key Links

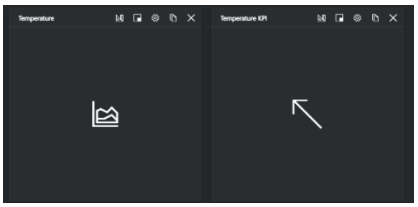
IoT Central - https://apps.azureiotcentral.com
IoT Central Documentation - https://docs.microsoft.com/en-us/azure/iot-central/
IoT Central MXChip Model - https://aka.ms/MTC-MXChip-Model

Setting up your IoT Central Application



1. Go to https://apps.azureiotcentral.com and login with your Microsoft Account by clicking on the icon in the top right.
2. One the left, click on the Build button to create a new application.
3. Select the "Healthcare" tab in the "Build your IoT application" view and create a "Continuous Patient Monitoring" app.
4. Configure the Application with the following options.
    a. Enable '7 day free trial' if available, otherwise select your subscription.
    b. Remaining properties can be freely chosen or left as defaults.
5. Once the IoT Central Application has been provisioned click on the "Device Templates" sidebar item and hit "New".
6. Select "IoT Device", hit "Next", give it a useful name (MXChip) and complete the creation.
7. Open and "Save As" on your PC aka.ms/MTC-MXChip-Model then in IoT Central "Import a Model" and find the downloaded JSON.

Creating a new view and publishing the model



1. Head over to "Views" in the 2nd sidebar and hit "Visualize Device".
2. Name it "Temperature" and select the "Temperature" Telemetry. Hit "Add Tile".
3. Copy the "Temperature" Panel by hitting the Copy icon at the top right.
4. Change the type of the new panel to KPI and modify the settings to your likings.
5. When you're done, hit "Publish" in the top bar.

Creating a new device

1. Click the button on the left to expand the menu and select 'Devices'.
2. Make sure 'MXChip' is selected as the template on the left.
3. Add a new device with button and leave the defaults, press 'Create'.
4. The device is created, click on the device and you will see a blank dashboard.
5. Click on Connect and copy the Scope Id, Device ID and Primary Key into Notepad
6. You should now ping the Device Owner on Teams and send him the content of the notepad. (You can view the status of your device in the top right of your device dashboard, the status should show "Status: Provisioned" after some minutes)

Triggering a Command

1. Still in your device dashboard, head over to the "Commands" tab.
2. By triggering the "MXChip Full / Echo" command, you can display a message on the device:
3. Enter a text of your choice in the "Displayed Value" Tab and hit "Run"

Editing Device Properties

1. Head over to "Device Templates" in the left sidebar and click on your created template in the list.
2. Click on "Views" in the 2nd left sidebar and press "Editing device and cloud data":
    a. Expand the "Properties" list and select "Activate IR", "Set Current" and "Set Voltage".
    b. Hit "Add Section" on the bottom and "Save" on the top side afterwards.
    c. Hit "Publish" on the top to roll out the created Form to all devices.
3. Head over to your Device again (Left Sidebar "Devices" and click on your device) and inspect the "Form" tab, try out setting the current to 200 and hitting "Save" afterwards.

Creating a Rule

1. Navigate to "Rules" in the left sidebar and press "New".
2. Choose the previously created Device Template and fill out the Conditions paragraph: "Temperature", "greater than", "27.0".
3. Freely Chose an action, e.g., E-Mail (Use the Mail address your logged in with)