# Running the Azure IoT Hub device management sample for Intel Edison

The following describes how to build and run the sample for the Intel Edison device.

# Preparing the Intel Edison board

* Ensure that [this](http://downloadmirror.intel.com/25028/eng/edison-image-ww25.5-15.zip) Intel Edison Linux OS image has been installed on your device. To do that, follow these instructions on the Intel documentation [portal](https://software.intel.com/en-us/iot/library/edison-getting-started). When prompted for the image to download use the following image: <http://downloadmirror.intel.com/25028/eng/edison-image-ww25.5-15.zip>. Manual steps to download the image are [here](https://software.intel.com/en-us/flashing-firmware-on-your-intel-edison-board-windows).
* After following the standard Intel Edison setup instructions, you will need to establish a [serial connection](https://software.intel.com/en-us/setting-up-serial-terminal-intel-edison-board) to your device from your machine.
* Once you have established a serial connection (command line) run the "configure\_edison --setup" command to set up your board
* Make sure your Intel Edison is online via your local Wi-Fi network and that you setup a name and a password for your device (should occur during configure\_edison setup, you need to password to use SCP or FileZilla). To change wireless setting run the “configure\_edision –wifi” command. For more information on setting up your wireless connection refer to [wi-fi setup](https://software.intel.com/en-us/get-started-edison-windows-step4).
* Proceed to install Azure IoT SDK using the following instructions.

# Downloading the Azure IoT SDK to your Intel Edison

* From you Edison device can use the **wget** command to download the zip to your device and then use the unzip command to expand the zip file.

wget <uri of "azure-iot-sdks.zip"> –O azure-iot-sdks.zip

unzip azure-iot-sdks.zip

* Or you can unzip "azure-iot-sdks.zip" on your PC / Mac / Linux desktop then transfer the files over the network to your Intel Edison using [FileZilla](https://filezilla-project.org/) or SCP. For FileZilla, run "wpa\_cli status" on your Intel Edison to find your IP address, then use "sftp://your.ip.address", use password "root" and your Intel Edison password to establish an SFTP connection via FileZilla. Once you have done that, you can drag and drop files over the network directly.

# Building the Azure IoT device management libraries and running the sample for the Intel Edison

You will build a sample application which relies on the SDK. You first need to update the credentials in the sample app to include a valid Azure IoT device connection string. Edit "/c/iotdm\_client/samples/iothub\_client/samples/iotdm\_edison\_sample/iotdm\_edison\_sample.c" using a text editor such as **vi** as follows: replace the "connectionString" string placeholder with the connection string for your device. When you are finished, the result should look like the connection string shown below, with your own credentials instead of the placeholders in brackets.

**IMPORTANT**: If you don’t replace string in brackets with your own credentials the sample will not function.

static const char\* connectionString = "[Your device connection string]";

* In the **ssh** terminal session, from your root directory where you unzip the device sdk type the following commands:

cd Azure-IoT-Sdks/c/iotdm\_client

mkdir projects

cd projects

cmake ..

make

* To run the sample type:

./samples/iotdm\_edison\_sample/iotdm\_edison\_sample

Now the Edison device is ready to receive and process requests from the device management service.

## Additional information on creating images for the Intel Edison device:

The [Edison BSP User Guide](http://www.intel.com/content/dam/support/us/en/documents/edison/sb/edisonbsp_ug_331188007.pdf) is published by Intel and has detailed instructions on how to make a custom Edison image. Section 4.4 explains how to add a custom software package, and section 4.5 explains how to add a service to the image.