Use configuration mode

IoT DevKit has the configuration model that you can configure settings like WiFi, IoT Hub connection string and security feature for it.

Before you begin

- Connect IoT DevKit to the computer.
- Download SSH and Telnet client like Putty (https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html) for Windows.

Platform: Windows macOS

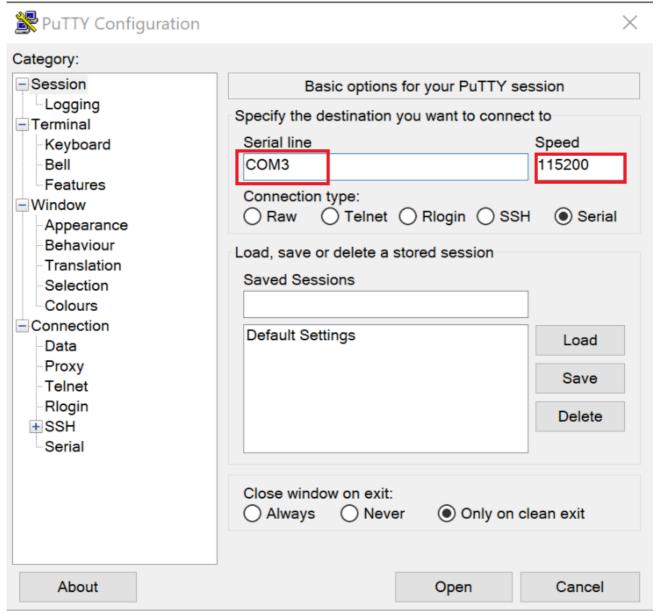
Windows

Enter Configuration Mode

1. Open VS Code and identify the COM port on the status bar.



2. Download and open Putty, type the right COM port and 115200 for Speed.



3. Click Open. A serial monitor window will open.

4. On the device, hold down button A, then push and release the reset button. Observe the screen displays your device MAC address and 'Configuration'.



5. Serial monitor window displays command list available.

```
nrF | \vh t^ ^, b | \text{ for vin } -a | \
# help
Configuration console:
    help: Help document.
    version: System version.
    exit: Exit and reboot.
    scan: Scan Wi-Fi AP.
    set wifissid: Set Wi-Fi password.
    set_az_iothub: Set IoT Hub device connection string.
    set_dps_uds: Set DPS Unique Device Secret (UDS) for X.509 certificates..
    set_az_iotdps: Set DPS Symmetric Key. Format: "DPSEndpoint=global.azure-devices-provisioning.net;IdScope=XXX;DeviceId=XXX;SymmetricKey=XXX".
    enable_secure: Enable secure channel between AZ3166 and secure chip.
```

Commands

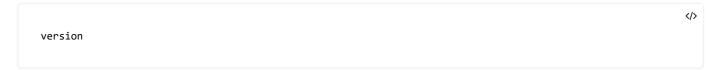
Commands for the IoT DevKit Configuration Mode.

help



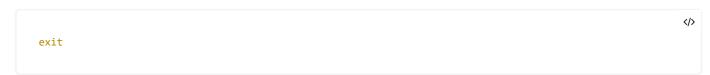
Display the commands list

version



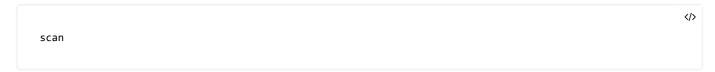
Display DevKit SDK, Mico, mbed-os, mbed TLS lib and WiFi lib version details.

exit



Exit Configuration Mode and reboot into normal mode.

scan



Scan and list all available WiFi SSID.

set_wifissid

```
set_wifissid [SSID]
```

Connect specific WiFi SSID.

set_wifipwd

```
set_wifipwd [password]
```

Set password for WiFi SSID you connected with command set_wifissid.

set_az_iothub

```
set_az_iothub [device connection string]
```

Set device connection string for Azur IoT Hub. View Understand Different Connection Strings in Azure IoT Hub (https://blogs.msdn.microsoft.com/iotdev/2017/05/09/understand-different-connection-strings-in-azure-iot-hub/) to learn more.

set_dps_uds

```
set_dps_uds [unique device secret]
```

Set Unique Device Secret that is used as device unique key to be used for calcuation by Device Identifier Composition Engine (DICE) (https://trustedcomputinggroup.org/work-groups/dice-architectures/) and be used to register on IoT Hub Device Provisioning Service (https://docs.microsoft.com/en-us/azure/iot-dps/about-iot-dps).

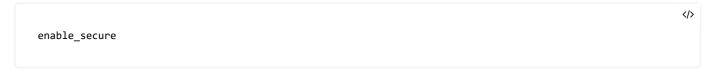
set_az_iotdps

set_az_iotdps [DPS Symmetric Key]

Set Symmetric Key (https://docs.microsoft.com/azure/iot-dps/concepts-device) based on the shared access signature (SAS) token that is supported by DPS. The Symmetric Key format is

"DPSEndpoint=global.azure-devices-provisioning.net;IdScope=XXX;DeviceId=XXX;SymmetricKey=XXX" .

enable_secure



Enable secure channel on STSAFE secure chip.

Here are what will happen when enabling the security feature:

- A symmetric key initiated by the chip will be set and stored on the secure chip.
- All existing data stored in EEPROM (e.g. WiFi password) will be automatically encrypted.
- Once enabled, all data reading and writing on the device will be encrypted from that moment.

See Understand security chip (https://microsoft.github.io/azure-iot-developer-kit/docs/understand-security-chip/) for more details.

Problems and feedback

If you encounter problems, you can find FAQs (https://microsoft.github.io/azure-iot-developer-kit/docs/faq/) if you encounter problems or reach out to us from our Gitter channel (https://gitter.im/Microsoft/azure-iot-developer-kit).

Was this documentation helpful?



Updated: January 08, 2018