## SUTD 2022 50.046 Lab 0

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Task 1: AWS IoT Architecture



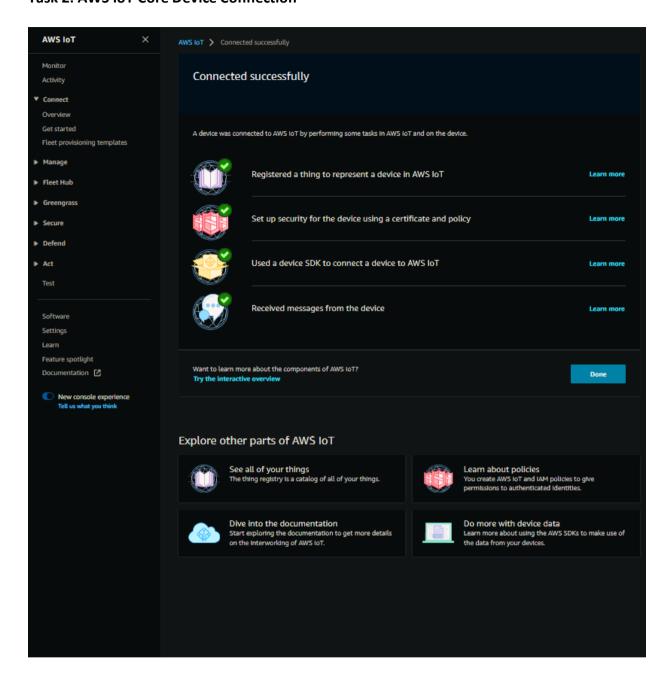
• What is the role of AWS IoT in the architecture?

The AWS IoT Core is a cloud service that connects devices with AWS services and other devices through its device gateway and message broker. Devices can publish messages that contain a current or requested state. Devices can subscribe to messages to be notified of changes to the current and requested states of other devices. The AWS IoT Core device gateway receives published messages and the message broker sends them to the devices that have subscribed to them.

What is a device shadow and what is it used for?

When a device is not always connected, AWS IoT Device Shadows store and communicate a device's desired and last-reported state.

Task 2: AWS IoT Core Device Connection



• How does AWS verify your credentials?

AWS verifies your credentials via the certificate and private key provided via the connection kit given during setup.

What is the topic in this example?

## sdk/test/Python

How can you connect a real IoT device to the IoT core in the future?

By following the specified setup procedure as specified in the tutorial for the Device Shadow/Digital Twin version of the device (i.e., by downloading the files in the connection kit and running the start.sh script).