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3M IoT Platform Guides

Welcome to the public documentation on guides that cover common activities of working with the platform.

Managing Devices



OVERVIEW

This is what a card might look like.

User Manual



FIRST SECTION

This is what a card might look like.



Overview of IoT Devices on Azure

Conceptually, there are two types of devices that can be used in Azure: 1) Simulated and 2) Real.

Simulated devices are used to test connectivity and offer a quick way to evaluate functionality without needing to procure any hardware.

There are two types of real devices: IoT Edge device and IoT device.

If you'd like to learn more about the types of devices that can work with Azure check out Microsoft's [Device Catalog](#)

Device Registration

Before you can use a real or simulated device, you must first register it. Use the following links to get started:

- [Register a device](#)
- [Register a simulated device](#)

How to Register a Device

For a device to connect to the solution accelerator, it must identify itself to IoT Hub using valid credentials. You have the opportunity to save the device connection string that contains these credentials when you add the device to the solution. You include the device connection string in your client application later in this tutorial.

To add a device to your Remote Monitoring solution, complete the following steps on the Device Explorer page in the solution:

1. Choose + **New device**, and then choose **Real** as the **Device type**:

The screenshot shows the '3M Serenity IoT DEV Platform' interface. On the left is a sidebar with navigation links: Dashboard, Device Explorer (selected), User Management, Rules, Packages, Deployments, and Maintenance. The main area is titled 'Device Explorer' and contains a search bar and a table of devices. The table has columns: Device name, Simulated, Device type, Firmware, Telemetry, and Status. The devices listed are BridgetteDemo, DemoDevice, groupTest2, joetest, rule_test, sah_test, sah_test1, sah_test, and VisTest. A 'New device' modal is open on the right side of the screen. It has a 'Device' section with radio buttons for 'IoT Edge device' and 'IoT device' (selected). Below that is 'Number of devices' set to 1. The 'Device ID' section has radio buttons for 'Enter device ID' (selected) and 'System generated device IDs'. The 'Authentication type' section has radio buttons for 'Symmetric key' (selected) and 'X.509'. The 'Authentication key' section has radio buttons for 'Auto generate keys' (selected) and 'Enter keys manually'. There are input fields for 'Primary Key' and 'Secondary Key'. At the bottom is a 'Provision summary' section showing '1 Devices to provision' and 'Apply' and 'Cancel' buttons.

1. Enter a Device ID you wish to use to reference this device or allow the system to generate one for you. The value must be unique and connect include spaces.
2. Select the desired authentication type and either have the system generate authentication keys for you or provide your own. CRSL generally uses a Symmetric Key but your organization might prefer x509. Chose whichever is the most appropriate.
3. Select the preferred option for how to define keys. You have the choice between:
 - o Providing your own
 - o Auto Generating



How to Register a Simulated Device