

Device Shadow

Each Device has a DeviceState object in the cloud that contains a collection of current device's states (key/value pairs). States have definitions similar to Telemetry Item Types. State is NOT property/configuration. Many states are just "controllable" telemetry items although sometimes it's ok to define a state as non-controllable. Example of states

- Accelerometer ON/OFF flag (iPhone device)
- LED ON/OFF flag (thunderboard device)
- Temperature value of a thermostat
- Rotation speed (RPM) of a motor
- Light Level of a dimmable light
- Magnetic flag (SenseAbility 2)

Data flows

- Device should monitor and publish new states to cloud when state changes (via REST currently, could support MQTT in the future)
- Device should support state change request from cloud (via MQTT) and apply the change if possible. Status of change request should be sent back to cloud (via REST currently, could support MQTT in the future)



