

SCIM for devices

draft-shahzad-scim-device-model-01.txt

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How do I?

Provision a new device (or many new devices) into infrastructure?

Establish bootstrapping credentials?
... for different L2 and onboarding technologies?

Provide ancillary information (like SBOMs, etc)?

Get application-API information for non-IP-based infrastructure?
... for BLE?
... Zigbee?
... other?

Answer? Use SCIM for devices!

- A normalized set of schemas, starting with a small base schema
- No (onboarding) technology religion
- We provide initial examples
 - Device Provisioning Protocol
 - Blue Tooth Low Energy
 - Zigbee
- Looking for others
- Table Stakes:
 - Sufficient information to bootstrap trust between device and network infrastructure



Why not Other Stuff?

YANG/NETCONF/RESTCONF

- This work is focused on provisioning the **network** about the device, and not the device itself.
- No device config or state shared
- No re-use available for existing models

SNMP?

- Ew. How 1980s.

Basic elements needed

id – from core

meta – from core

adminState

“schemas” – from core

Connectivity

displayName (optional)

mudUrl (optional)

Things to think about

All the comments that Phil and others mentioned.

Are we using the correct schema description method?

What should be normalized into / out of the Device Core?

Example WiFi schema is really DPP schema (we should correct that)

Proposed Work Plan

Discuss now and on list

Github tracker: <https://github.com/iot-onboarding/scim-devices>

Reviewers, co-authors, and
implementations welcome!

Consider adoption early next year?

Discussion