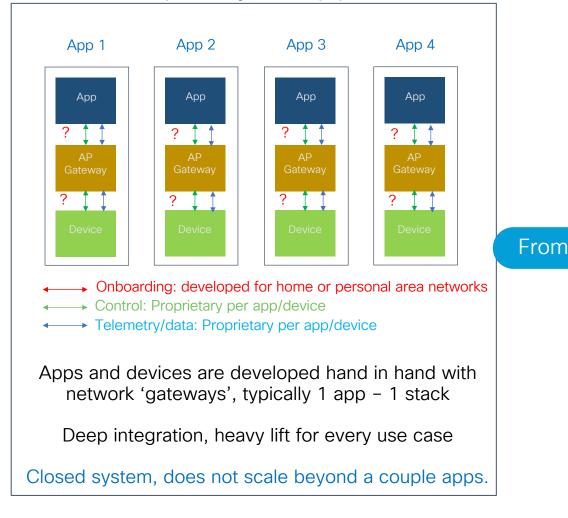
NIPC non-IP control

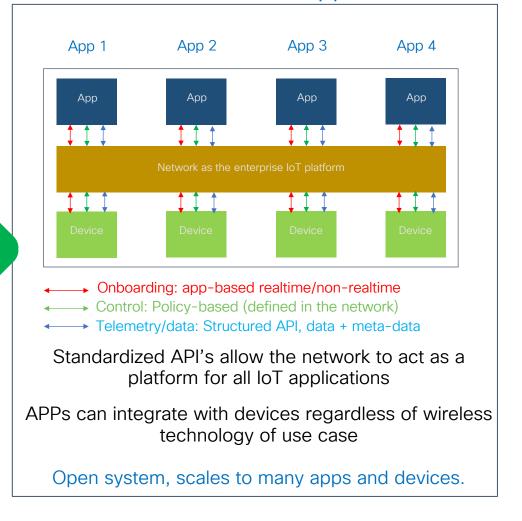
Bart Brinckman Rohit Mohan Braeden Sanford

Silofication in IoT deployments

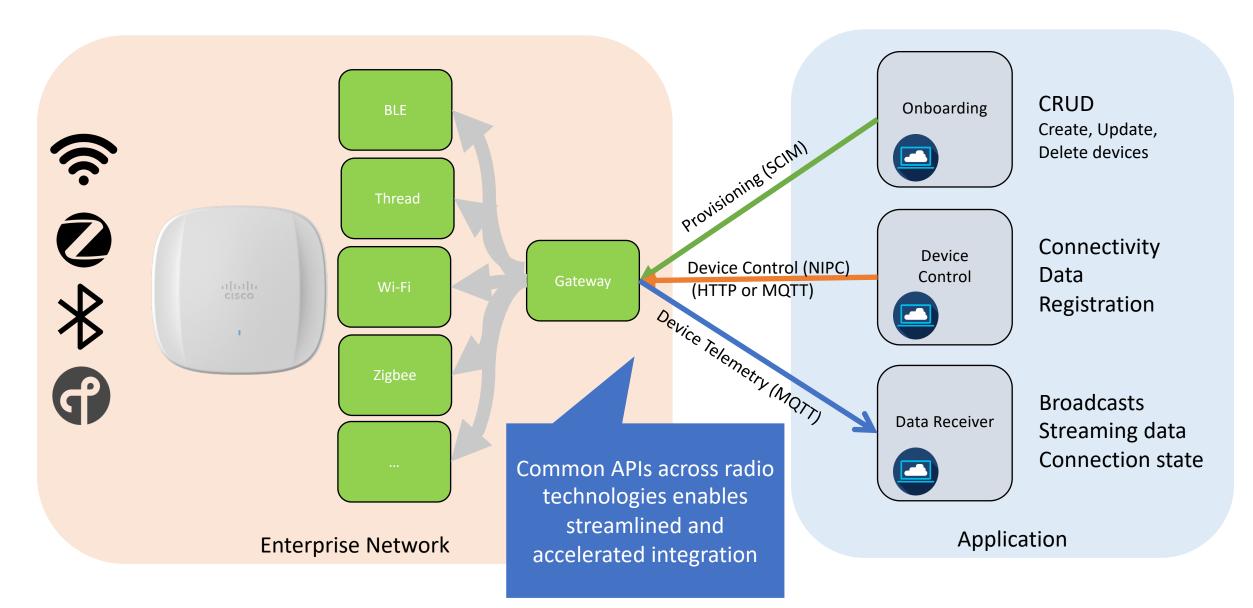
Proprietary stovepipes



Standards-based approach

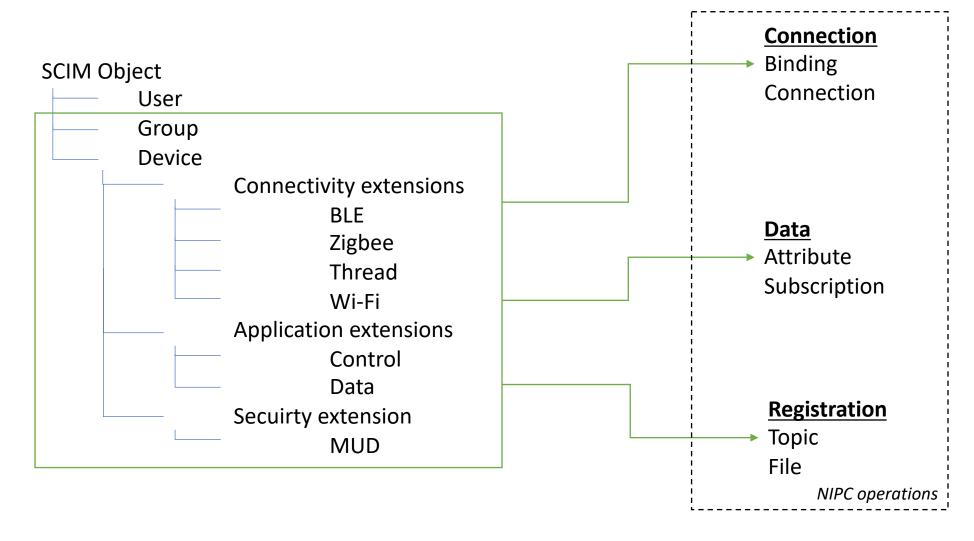


Approach

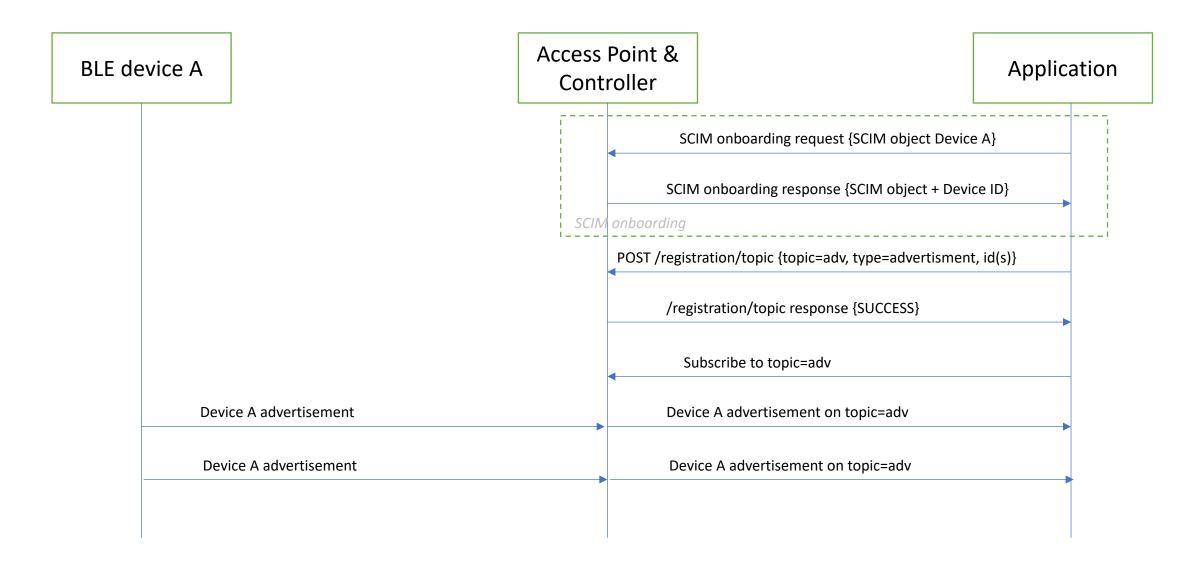


Non IP Control (NIPC)

Perform operations on SCIM-provisioned devices or groups objects



Example: BLE Advertisement (broadcast) from device A



Example: Attribute read/write from BLE device A

Access Point & BLE device A **Application** Controller POST /connectivity/connection {id} **BLE Connect {device MAC}** BLE Connection established {device MAC, connection handle} BLE Service discovery {connection handle} /connectivity/connection response {SUCCESS, id, services} BLE Service discovery {connection handle, services} BLE read {connection handle, characteristic} GET /data/attribute {id, attribute} BLE read response {connection handle, charateristic, value} /data/attribute response {SUCCESS, id, attribute, value} BLE write {connection handle, characteristic, value} PUT /data/attribute {id, attribute, value} BLE write response {connection handle, charateristic, value} /data/attribute response {SUCCESS, id, attribute, value} BLE Disconnect (connection handle) DELETE /connectivity/connection {id} BLE Disconnect response {connection handle} /connectivity/connection response {SUCCESS, id}}

Example: Attribute read/write from Zigbee device B

