Device and Device SDK Working Group

Notes for December 9 2019

Status updates

• Go SDK
  ◦ 1.1.1 is released, re-release of device services in progress (PRs raised)
  ◦ SDK updating lastConnected attribute
    ▪ Noted that core-data updates lastConnected when an Event is pushed; the SDK therefore should not. PR should be rejected
    ▪ Post-meeting note: PR had been merged during the week. Relevant issue re-opened to request reversion of this change
  • Tony is reviewing device-rest-go and expects to conclude today

Device migration

• Trevor presented possible operation sequences for a scenario where a device moves between the discoverability areas of two device services, and is automatically re-assigned via dynamic discovery
  • Slides are attached to the WG wiki page along with the materials for this meeting
  • Could the system be temporarily in an inconsistent state while migration occurs?
    ◦ Possibly but this may not matter, eg. a DS attempts to read from a device which it should have removed – the operation fails without further consequence
  • What about a scenario where a device is discoverable by two DS instances simultaneously?
  • We also wish to support migration via direct updates from a management application
  • Note that we don’t plan to implement auto-migration in the Geneva timeframe
    ◦ However we also don’t want to have to make a v3 API, so it’s worth considering any breaking API changes that we would wish to introduce for v2 even without a migration solution.

Dynamic Discovery

• Issue #212 against CSDK
  ◦ Should the discovery implementation function in the driver return a list of discovered devices, or (as now) use a device addition callback function?
  ◦ The github issue is implementation-specific and is framed in the context of what is already done, so is not an ideal starting point for design discussion
    ▪ **Iain** to produce a design document for discovery. Also to discuss offline with Jim and Tony the future of the DS/SDK requirements doc