Architect's meeting, February 16, 2021, 10am MST
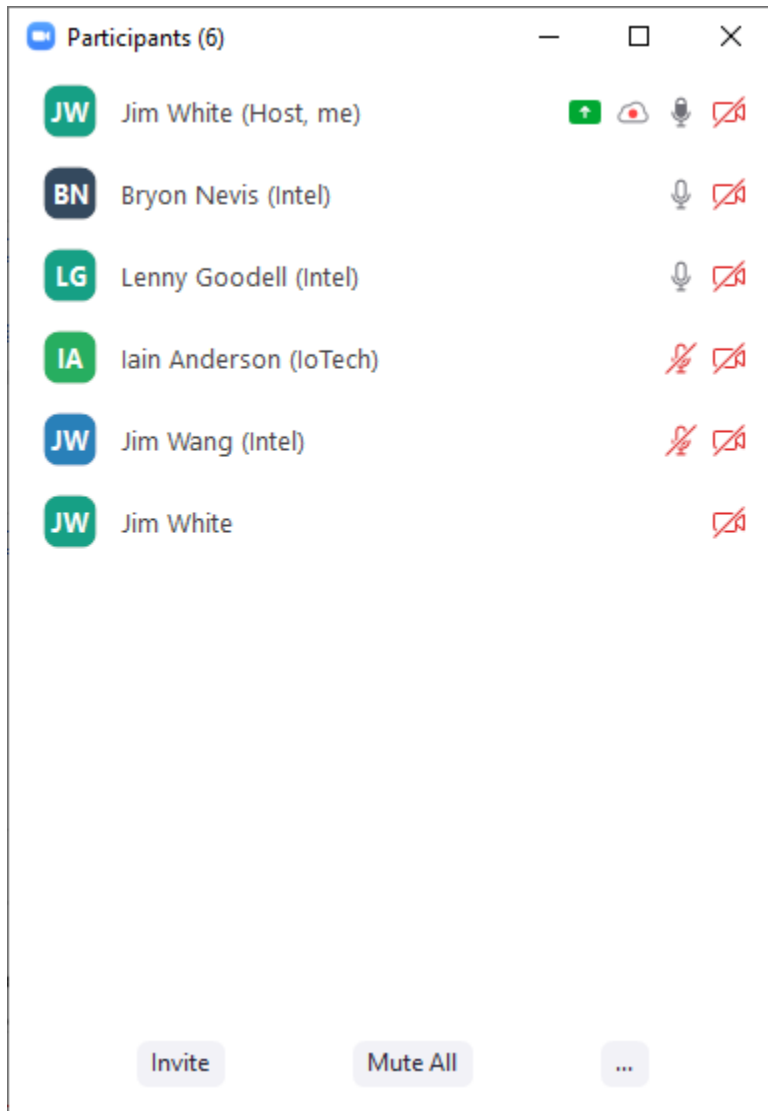
Attendance:

Some attendees may have joined after the call started when this record was captured.

Topics

Completed business

- None

In Work Group for review right now

- Docker naming changes – being worked by DevOps
- Core/High - Ensure that service location data is pulled from trusted source (i.e. not Consul) (Tony's ADR)
    - Covered in Security WG

High priority (priorities per previous meetings)

- V2 API - should we add security foundation added to that (per some of earlier V2 API designs via Dell and Bryon N)?
    - Adding token to authenticate a micro service call (is this in scope for Ireland)
    - May not be needed unless all services are distributed
    - We need to explore alternatives to provide secure / locked out service to service communications
    - Bryon presented from a deck associated to the minutes
    - **Decision**: Everyone felt that we should at least continue the exploration.
    - ADR will be developed/reviewed by Bryon through the security work group
    - There are a number of questions that remain and need to be addressed in the ADR.
    - The scope of work would reach past Ireland and be non-backward compatible, so we will need to have a "feature-flag" implementation to opt in to use this capability.

Medium Priority

- Address how to get device resource info (for app services and Kuiper)
    - Probably not ADR worthy
    - Either provide Lenny's convenience APIs or tool to dig out the device resource information in the (cached) profiles
    - How/when to invalidate the cache if we use the profile-digging approach
    - **Decision**: there is a choice between building a profile cache and adding tools in the app services to pull out device resource details (adding nothing to metadata), or build a device resource cache and add new APIs to metadata to get those device resources from the profiles.
    - This discussion is going to be picked up in core working group with those leading both sides to make their arguments. Inputs from Tony, Iain, Lenny expected.
- Below are other topics not covered in this meeting and pushed to the next meeting.
- Keep commit history from beginning to end (don't squash them until PR approved)
- Standardizing units of measure
- Declarative Kong applicability
    - Allowing us to drop Progress DB
    - But can you configure groups/users ACL
    - Only supports JWT users

Low Priority

- Is the Wiki the best place to document project decisions (those outside of or smaller than ADRs). This was our initial take. Should we revisit?
- (must be done before V2 is done) - Naming scheme changes for config.Clients (key name change)
    - Use consistent name that all other services use for core data
    - Consistency in the naming vs changing all the names to use service name as part of key
    - Related to system management hard coded list of services.
    - Separate issue in arch meeting – high once report back

- o Other naming issues (secret store vs secret service)
  - o Opportunity to make all config/naming consistent
  - o Jim take resp – get WG leads – try to prioritize this survey
- Revisit combine core services at least at all executables in one image
  - o Release would be easier but image would be bigger with more complex compose files
- Digital twin (and LWM2M) applicability
- Time series database support and applicability
  - o Ian Johnson has an example of app service to InfuxDB export (snap in the store)
- Low - where should tool/script for creating new device and application services be placed?
  - o After the architect's meeting of Jan 26, 2021, it was decided that "templates" should be created in all SDKs to allow for the easy creation of new services (removing the old samples in the SDKs). The templates will be a means for users to copy and create a new service with some instruction on how to rename and replace TODOs with necessary code.
  - o After the templates are in place, there is a decision to be made about where automation can be placed to use the templates to create new services (versus a manual copy). In the CLI, in a new tool, in a set of simple scripts?