Information Model for LMAP

draft-ietf-lmap-information-model-04

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Motivation

Overall Purpose

- Guide standardisation of one or more control and reporting protocols
- Enable high-level interoperability between protocols
- Clarify MA information and functionality

Structure

- Assist protocols in breaking information down into separate messages that can be delivered at different times over different protocols
- Aid readability

Information Model Sections

Pre-Configuration

Minimal set of information necessary for an MA to securely contact an initial Controller

Configuration

Information configured by the Controller pertaining to Controller communication or general MA settings such as MA and Group ID

Instruction

Configuration by the Controller of what Measurement Tasks to perform, when to perform them, and where/when to report the results

Logging

Information transmitted back to the Controller with configuration or instruction errors and general failure notices

Capability & Status

Information available to be fetched by the Controller such as the Measurement Tasks supported by the MA or interface configuration

Reporting

Information sent to the Collector regarding the Measurement Task results including MA context and Task Configuration

Changes in 03

- Output from Scheduled Tasks now goes to other
 'Destination' Scheduled Tasks
- Parameters to be set specifically for a Scheduled Task as well as within Task Configuration (appended)

Output to.

- Number of elements now become general task parameters: channel, role, reporting control (e.g. send empty reports, include headers)
- Removed calendar defaults but added wildcard '*'
- Re-instated separate Pre-Configuration Information to support for device dependent persistence

See interim slides for further detail and smaller changes

Changes in 04

As agreed during Feb Interim and on list

- Minor corrections and spell checked
- Add YANG IM reference
- Re-instated role in capabilities
- Standardised well-known options for Channel and Role
- Moved to per-task status information
 - E.g. last-invocation, last-completion for report task rather than last-report
 - As suggested in YANG IM implementation
- Moved to per-task condition codes (in addition to per MA)
 - As suggested in YANG IM implementation
- Clarified that scheduled task options are appended to task configuration options
- Moved to 'Int' condition codes

Proposals for 05

- Provide more explanation with information model objects
- Synchronise with chosen data model (and protocol)
 - Implementation and refinement of Data Model will reveal new suggestions/requirements for Information Model
 - Still keep IM general allowing for multiple protocol implementations