draft-ietf-core-dynlink

Virtual Interim 4 Feb 2021

Dynlink developments

- Current draft is at version -12

- Incorporating feedback received for updates, corrections and clarifications

- This slideset contains ongoing editorial work, what has changed from version -11, and solicits WG feedback for the next changes

Changes from -11 to -12

- Issue found at https://github.com/core-wg/dynlink/issues/25

- Wording in -11:
  - "The maximum period MUST be greater than zero and MUST be greater than the minimum period parameter (if present)"
- Wording in -12:
  - "The maximum period MUST be greater than zero and MUST be greater than **or equal to** the minimum period parameter (if present)"
- Basis:
  - Suggested by OMA, to allow a client wanting the notification to be sent exactly every N seconds

- Implications:
  - Should -13 have text to qualify this specific use case as the only instance where pmin == pmax?

Changes from -11 to -12

- Two new attributes, epmin and epmax
  - epmin: *the minimum evaluation period indicates the minimum time, in seconds, the client recommends to the server to wait between two consecutive measurements of the conditions of a resource*
  - epmax: *the maximum evaluation period indicates the maximum time, in seconds, the server MAY wait between two consecutive measurements of the conditions of a resource*
- Separation between conditional notification and conditional control attributes

Changes being made from -12 to -latest

- Editorial changes being made to reflect notifications as RESTful state changes and state transfer, instead of sending new values

- Rewrite current text in pmin, pmax and st about "sampled values"
  - Restrict text regarding server sampling and evaluation to epmin and epmax

- Impact on behaviour from the possible presence of (multiple) proxies

Proposal: New Attribute "edge"

- Issue found at https://github.com/core-wg/dynlink/issues/22

- OMA LwM2M Core Spec:
  - The Edge Attribute indicates either the falling edge ("0") or the rising edge ("1") transition of a Boolean Resource. When this Attribute is present, the LwM2M Client MUST notify the Server each time the Observed Resource value goes from "true" to "false" (edge = "0"), or from "false" to "true" (edge = "1") with respect to the pmin parameter and valid "Change Value Conditions"

- Comments?

Proposal: New Attribute "con"

- Issue found at https://github.com/core-wg/dynlink/issues/23
- OMA LwM2M Core Spec:
  - The Notification Confirmable Attribute indicates whether a Notification resulting from an Observation of a specific Object, Object Instance, Resource, Resource Instance MUST be sent over confirmable transport. If a Notification includes several Objects or Object Instances or Resources or Resource Instances or a combination thereof, then this Notification MUST be sent over confirmable transport if at least one of the Notification components has con=1."
- Comments?

Proposal: New attribute "hqmax"

- Issue found at https://github.com/core-wg/dynlink/issues/24
- OMA LwM2M Core Spec:
  - "The Maximum Historical Queue Attribute indicates how many entries of historical data resulting from an Observation of a specific Object, Object Instance, Resource, Resource Instance MUST be stored, e.g. while the LwM2M Client is offline, or, the LwM2M Server account is disabled. If this attribute is present, only the data of Objects, Object Instances, Resources, Resource Instances with hqmax>0 will be included in notifications which were stored while disabled or offline. Historical notifications MAY be sent in a format as described in Section [SenML JSON] (). If the queue size reaches hqmax and a new reading is received, the oldest reading MUST be dropped. The LwM2M Client SHOULD empty the queue as soon it becomes aware that connectivity has been restored. The use of "hqmax" is dependent on notification storing being enabled via the "Notification Storing When Disabled or Offline" Resource of the LwM2M Server Object."

- Comments?

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Thank you!