draft-ietf-core-dynlink

IETF 109

Dynlink developments

- Current draft is at version -11
- Incorporating feedback received for updates, corrections and clarifications

 This slideset describes what is in the editor's copy now, and what the new proposals are (from the OMA)

Updates in dynlink-latest

- Editor's draft is always available in Github as dynlink-latest (https://core-wg.github.io/dynlink/draft-ietf-core-dynlink.html)
- dynlink-latest contains 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

New Proposal: Allow pmin == pmax

- Issue found at https://github.com/core-wg/dynlink/issues/25
- Current wording in Dynlink:
 - "The maximum period MUST be greater than zero and MUST be greater than the minimum period parameter (if present)"
 - pmin: Minimum time between 2 consecutive notifications even if resource state has changed
 - pmax: Maximum time between 2 consecutive notifications even if resource state has not changed
- Suggestion from OMA:
 - Have pmin equal pmax if the client wants the notification to be sent exactly every N seconds
 - Change text to "The maximum period MUST be greater than zero and MUST be greater than or equal to the minimum period parameter (if present)"
- Comments?

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?

Dynlink-latest: Others

 Editorial changes to alter the language in order to reflect notifications as RESTful state changes and state transfer

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Thank you!