Conditional Attributes for Constrained RESTful Environments

draft-ietf-core-conditional-attributes

(https://github.com/core-wg/conditional-attributes)

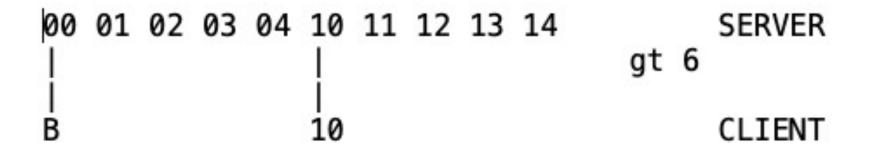
IETF Core WG Interim Meeting 2021-09-29

Latest developments

- Continuing to incorporating feedback received for updates, corrections and clarifications
- 3 Github issues remain
 - 2 technical issues
 - 1 editorial issue

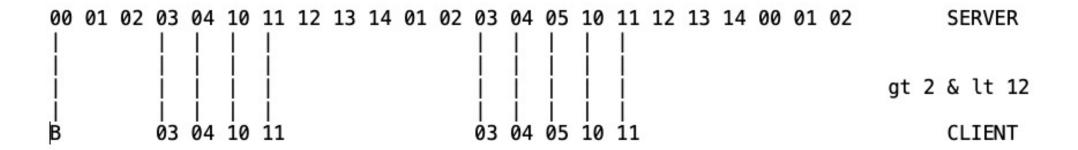
Technical Issue 1: Value of "Band" attribute

 Conditional attributes "It" and "gt" indicates the limits where the value of the resource SHOULD cross before triggering 1 (and only 1) notification



Technical Issue 1: Value of "Band" attribute

Band enabled and gt=2 and lt=12

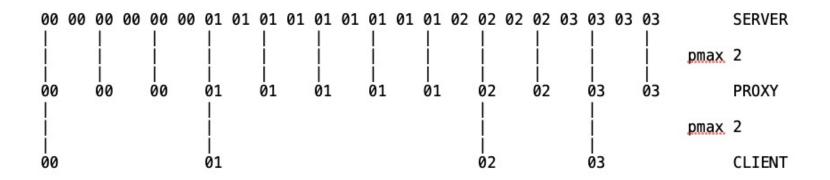


Technical Issue 1: Value of "Band" attribute

- Band is an xs:Boolean but is its value significant?
 - Github Comment 1: "The band attribute is defined as a boolean type, but the use of the band attribute is determined by its presence, not its value. We should probably explicitly explain that."
 - Accept both band=1 and band=0 as setting the notification band
 - Github Comment 2: "Do we need the band attribute to have a value to begin with? This query component can simply be a name, instead of name-value pair (i.e band does not have any datatype)."
 - Example: /temperature?band>=30<=35
- Alternative: Don't have "band" at all, and allow "gt" and "lt" to trigger ALL notifications after threshold is crossed (instead of just once)
- How do we set/unset band and have multiple bands (as described in the draft)?
- Opinions?

Technical Issue 2: Proxy considerations

- Proposed text for Implementation Considerations:
 - "This specification defines conditional attributes that can be used with CoRE Observe relationships between CoAP clients and CoAP servers. However, it is recognised that the presence of 1 or more proxies between a client and a server can interfere with clients receiving resource updates, if a proxy does not supply resource representations if the value remains unchanged (eg if pmax is set, and the server sends multiple updates when the resource state contains the same value). A server MAY use the Max-Age option to mitigate this by setting Max-Age to be less than or equal to pmax."
- Comments?



Conditional Attributes for Constrained RESTful Environments

Thank you!