YANG-PUSH NOTIFICATION CAPABILITIES

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draft-ietf-netconf-notification-capabilities-05/06
A YANG-Push Publisher has a number of capabilities
  - Without declaring these capabilities the interface-contract is uncertain
  - Document these in implementation-time
  - Make them readable in a live running system

Use a YANG model and YANG instance data to specify capabilities

Capabilities for periodic subscriptions
  - supported or not
  - update period
  - max-objects-per-update

Capabilities for on-change subscriptions
  - supported or not
  - dampening period
  - max-objects-per-update
  - excluded-change-type
CAPABILITIES ON MANY LEVELS

› Capabilities can be specified on multiple levels
  – publisher level: valid for all data in all datastores
  – datastore level
  – for specific nodes in a datastore
  – a more specific capability specification always overrides the less specific

› Usual simple use case:

› Special use case: fine-grained specification on data node level needed
  – E.g., on-change interface statistics supported on new high-speed interface cards but not on older ones
CHANGES 02 - 06

› Added capabilities
   – excluded-change-type
   – periodic-notifications-supported

› Restructured YANG module to make the node-selector's usage similar to its use in NACM

› Replaced the term ‘server’ with ‘publisher’

› Indicated that non-NMDA publishers/servers can also use this model

› Updated according to draft-ietf-netmod-yang-instance-file-format

› Had WGLC

› Updates after WGLC published
ro publisher-subscription-capabilities
    +--ro (update-period)?
    |    +--:(minimum-update-period)
    |    |    +--ro minimum-update-period?  uint32
    |    +--:(supported-update-period)
    |        +--ro supported-update-period*  uint32
    +--ro max-objects-per-update?  uint32
    +--ro minimum-dampening-period?  uint32 {yp:on-change}?
    +--ro on-change-supported?  notification-support {yp:on-change}?
    +--ro periodic-notifications-supported?  notification-support
    +--ro supported-excluded-change-type*  union {yp:on-change}?
+--ro datastore-capabilities* [datastore]
    +--ro datastore  -> /yanglib:yang-library/datastore/name
    +--ro per-node-capabilities* [node-selector]
        +--ro node-selector  nacm:node-instance-identifier
        +--ro (update-period)?
        |        +--:(minimum-update-period)
        |        |        +--ro minimum-update-period?  uint32
        |        +--:(supported-update-period)
        |        |        +--ro supported-update-period*  uint32
        +--ro max-objects-per-update?  uint32
        +--ro minimum-dampening-period?  uint32 {yp:on-change}?
        +--ro on-change-supported?  notification-support {yp:on-change}?
        +--ro periodic-notifications-supported?  notification-support
        +--ro supported-excluded-change-type*  union {yp:on-change}?