HISTORY

› Draft dormant to let other important work finish first
  – chairs request

› Restarted now that Yang-Push is in the IESG’s hands
THE PROBLEM

A CONTRACT – “MAYBE”

› Publishers generally supporting on-change notifications will not always be able to push on-change updates for some object types
  - Frequent change (inOctets counter)
  - Meaningless small change (temperature changing 0.1 degrees)
  - Not implemented
  - Resource limitation (missing HW)
  - Small constrained network node

› Support for on-change does not mean that notifications are sent for any specific object
Document notification capabilities
Yang module ietf-notification-capabilities
  - On-change capability per data node (yes or no)
    - Practically 2 top level default values + a few exceptions for specific data nodes
    - Inherited down the data tree
  - Other capacity related capabilities

- Capabilities readable via Netconf/Restconf
- Capabilities available off-line as Yang Instance data
module: ietf-notification-capabilities

  +--ro yangpush-notification-capabilities
    +--ro minimum-dampening-period? "uint32"
    +--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 notification-sent-for-config-default? "boolean"
    +--ro notification-sent-for-state-default? "boolean"
    +--ro on-change-notification-capability* [node-selector]
      +--ro node-selector "nacm:node-instance-identifier"
      +--ro on-change-notification-sent "boolean"
EXAMPLE CAPABILITIES

Blue items send on-change notifications

module: ietf-interfaces
  +--rw interfaces
    +--rw interface* [name]
      +--rw name string
      +--rw type identityref
      +--rw enabled? boolean
    +--ro oper-status enumeration
    +--ro statistics
      +--ro in-octets? counter64
      +--ro in-broadcast-pkts? counter64
      +--ro in-multicast-pkts? counter64
      +--ro out-octets? counter64

yangpush-notification-capabilities

notification-sent-for-config-default = true (by default)

notification-sent-for-state-default = true

/interfaces/interface/statistics:
  on-change-notification-sent = false

/interfaces/interface/statistics/out-octets:
  on-change-notification-sent = true

/interfaces/interface/statistics/in-octets:
  on-change-notification-sent = true
Changes 00 - 01

› Added more capabilities – capacity related
  – not just for on-change method

› General
  – max-number of objects per update

› Periodic subscriptions
  – minimum update period
  – supported update period values

› On-Change subscriptions
  – minimum dampening period,
OPEN ISSUES

› Shall we specify on-change capabilities separately for each datastore?