



YANG-PUSH NOTIFICATION CAPABILITIES

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[draft-ietf-netconf-notification-capabilities-05/06](https://datatracker.ietf.org/draft-ietf-netconf-notification-capabilities-05/06)

THE PROBLEM

A CONTRACT – “MAYBE”

- › 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}?

```