Subscription Drafts
IETF #101 - NETCONF WG
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NETCONF WG Subscription Drafts addressed in the session...

Custom Subscription to Event Streams
draft-ietf-netconf-subscribed-notifications

YANG Datastore Subscription
draft-ietf-netconf-yang-push

NETCONF Support for Event Notifications
draft-ietf-netconf-netconf-event-notifications

RESTCONF & HTTP Transport for Event Notifications
draft-ietf-netconf-restconf-notif

Notification Message Headers and Bundles
draft-ietf-netconf-notification-messages

WG Last Call underway
draft-ietf-netconf-subscribed-notifications

Updated with WGLC so far...

• v10 to v11: based on review comments
  – Filtering of event records within streams based on NACM permissions of event type added
  – Security considerations updated based on YANG template
  – Dependency QoS made non-normative on HTTP2 QoS
  – Tree diagrams referenced for each figure using them
  – Reference numbers placed into state machine figures
  – Broke configured replay into its own section
  – Trees and YANG model reconciled where deltas existed
  – Many wording clarifications

• Unresolved
  – Several questions in coming slides.
  – More could evolve out of existing discussions.
Review Question to WG #1:

Do we use an integer object as an index for receiver instead of address+port?

Current: 
```
---rw receiver* [address port]
  ---rw address  inet:host
  ---rw port
```

Preference: 
```
---ro receiver* [name]
  ---ro name    string
  ---ro address  inet:host
  ---ro port
```

Option 1: 
```
---rw receiver* [address port]
```

Option 2: 
```
---ro receiver* [name]
```

Option 3: 
```
---ro receiver* [name]
```

allows for future augmentation of leafref to:
- `draft-ietf-netconf-netconf-client-server`
- `draft-ietf-netconf-restconf-client-server`
- `other?`
Should we have the “subscription-state-notif” extension?

1. Yes (current solution)

2. Hardcode these notifications so none will ever go on the NETCONF stream
DSCP: an optional feature on its own, or should it be mainline

```
+--rw subscriptions
   +--rw subscription*
      +--rw dscp?
      +--rw weighting?
      +--rw dependency?
   {qos}?
   {qos}?
   {qos}?
{dscp}?
{qos}?
{qos}?
{qos}?
```

Current:

- Option 1
- Option 2
- Option 3
subscribed-notifications (sn) & yang-push (yp)

Question 4:

yang-data containers in rpc-error replies, what names to use:

Option 1 (current)
- establish-subscription-error-stream (sn)
- modify-subscription-error-stream (sn)
- delete-subscription-error (sn)
- establish-subscription-error-datastore (yp)
- modify-subscription-error-datastore (yp)

Option 2
- stream-establish-subscription-error-info (sn)
- stream-modify-subscription-error-info (sn)
- delete-subscription-error-info (sn)
- datastore-establish-subscription-error-info (yp)
- datastore-modify-subscription-error-info (yp)
draft-ietf-netconf-yang-push

Updated with WGLC so far...

- v15 to v16: based on review comments
  - On-change dampening period and excluded change becomes a feature

- Other minor items, still being worked.

- FYI: on-change capability marking deferred
  - draft-lengyel-netconf-notification-capabilities (later this session)
Updated with WGLC so far...

• v15 to v16: based on review comments
  – Wording updates per LC. Proposed fixes still to be ok’ed.
  – Tweaks to non-normative examples. A script to validate examples loaded onto git.

• Unresolved
  – Wording for Abstract and Intro (Several alternatives exist, will take whatever the reviewers prefer.)
Current status

• v03 to v04
  – Minor tweaks. Many updates still needed.
  – A main focus after other drafts complete WGLC
Updates since IETF #100

-v02 to -v03

- Reduced to a single bundled notification format. Will revisit as the work completes.

- New message structure puts the signature at the end (signs the header & body)

- Upcoming: dialogs on specific headers
  - Signatures, attestation, others
  - Implications of COMI, CBOR, UDP
  - Capabilities of receivers
Thank you!