

NMDA Base Notification for Applied Intended Configuration

draft-wu-netmod-base-notification-nmda-01

Qin Wu
Rohit R Ranade
Feng Chong

Update Since IETF 103

- This draft defines 1 NMDA specific notification for additional common system events.
 - Track some configurations that could not be applied to <operational> due to either validation issues, or missing resource etc
 - Help user to know the applying result of <intended> data-store and the reason why the configuration were not applied.
- Move from netconf to netmod before IETF 103 and replace draft-wu-netconf-base-notification-nmda-02
 - Can work together with NMDA diff based on NETCONF discussion
- Presented in netmod session of IETF 103 and got a few feedback from netmod session and mailing list
 - Validation errors cause an error response to the commit RPC.
 - Do We need to use Username in the notification? Clarification: Yes, it is used to identify management session.
 - <intended> MUST be valid config data tree and is usually immediately updated and validated when data is written into <running>.
- Changes since previous version
 - Add module tag support and use additional parameters to identify management session.
 - Remove apply-intended-start and apply-intended-end two notifications since they are not needed based on discussion.

Module ietf-nmda-notifications

notifications:

```
+---n apply-intended-updated
  |--ro username          string
  |--ro session-id       session-id-or-zero-type
  |--ro app-tag?         tags:tag
  |--ro source-host?     inet:ip-address
  |--ro commit-persist-id? string
  |--ro datastore?       identityref
  |--ro (filter-spec)?
  |  +--:(subtree-filter)
  |  |  |--ro subtree-filter? <anydata>
  |  |  +--:(xpath-filter)
  |  |    |--ro xpath-filter? yang:xpath1.0 {nc:xpath}?
  |--ro apply-result?     enumeration
  |--ro fail-applied-target* [edit-id]
    |--ro edit-id         string
    |--ro operation       enumeration
    |--ro target?         ypatch:target-resource-offset
    |--ro value?          <anydata>
    |--ro errors
      |--ro error* []
        |--ro error-type   enumeration
        |--ro error-tag    string
        |--ro error-app-tag? string
        |--ro error-path?  instance-identifier
        |--ro error-message? string
        |--ro error-info?  <anydata>
```

Relation with NMDA diff:

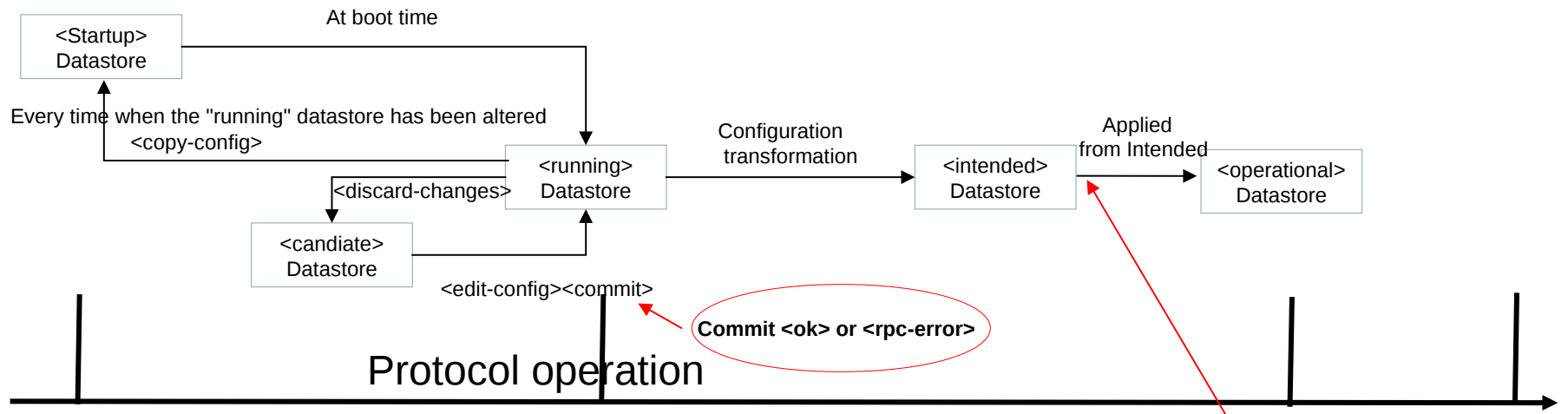
NMDA Diff is used to check which part of intended configuration data is applied or which part of intended configuration data is not applied.

Use additional tag to identify NETCONF session besides source host, session id

Report complete status using errors grouping defined in ietf-restconf module

NMDA specific Notification Position

Datastore workflow



Protocol operation

The sequence of Event Notifications



Next Step

- Request to accept draft as WG item