

Comparison of NMDA datastores

draft-ietf-netmod-nmda-diff-00

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Updates from IETF 102

- This draft defines an RPC that allows to compare NMDA datastores
 - Report only discrepancies without needing to upload entire datastores
 - Use to troubleshoot conditions due to unexpected failures or time lags of change propagation
- Now adopted as a WG item – thank you!
- Draft-ietf-netmod-nmda-diff-00 posted
(replacing draft-clemm-netmode-nmda-diff)
- Next revision will add support for different encoding schemes
 - Leaf will allow to specify which encoding

Module ietf-nmda-compare

rpcs:

```
+---x compare
+---w input
| +-w source          identityref
| +-w target          identityref
| +-w all?            empty
| +---w (filter-spec)?
| | +--:(subtree-filter)
| | | +-w subtree-filter? <anydata>
| | +--:(xpath-filter)
| | | +-w xpath-filter?  yang:xpath1.0 {nc:xpath}?
| +-w format?        string
+--ro output
+--ro (compare-response)?
+--:(no-matches)
| +-ro no-matches?    empty
+--:(differences)
+--ro differences
+--ro yang-patch ?
+--ro patch-id        string
+--ro comment?        string
+--ro edit* [edit-id]
+--ro edit-id         string
+--ro operation        enumeration
+--ro target           target-resource-offset
+--ro point?          target-resource-offset
+--ro where?          enumeration
+--ro value?          <anydata>
```

Proposed new format specifier

Allow for other output formats

Open issue

- Current YANG-Patch format does not include the values from both datastores but may sometimes be useful
- Suggestion 1: define an additional format not based on YANG-Patch
 - If such format is defined, additional questions arise:
 - Which format should be the default (if any)
 - Is there a format that is mandatory to implement
 - Pro: facilitates interoperability
 - Con: raises cost of implementation, reduces flexibility
 - Should the format definition be part of this draft
- Suggestion 2: augment yang-patch "edit" list with an "old-value" anydata node and use that as the one format that is defined in this draft
 - This one appears to be the preferable solution

Thank you!