Comparison of NMDA datastores
draft-ietf-netmod-nmda-diff-02

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Updates from IETF 104

• This draft defines an RPC that allows to compare NMDA datastores
  • Report only differences without needing to upload entire datastores
  • Use to troubleshoot conditions due to unexpected failures or time lags of change propagation

• New revisions posted: -01 (21 May), -02 (9 July)

• Changes since -00
  • Augmented YANG-Patch format to report differences:
    Added “source value” to show values on both sides of the comparison
  • Added extended examples of difference comparison
  • Extended Security Considerations
Differences format

container differences {
    description
        "The list of differences, encoded per RFC8072 with an augmentation to include source values where applicable.";
    uses ypatch:yang-patch {
        augment "yang-patch/edit" {
            description
                "Provide the value of the source of the patch, respectively of the comparison, in addition to the target value, where applicable.";
            anydata source-value {
                when "./operation = 'delete'"
                + "or ./operation = 'merge'"
                + "or ./operation = 'move'"
                + "or ./operation = 'replace'"
                + "or ./operation = 'remove'"
            }
            description
                "The anydata 'value' is only used for 'delete', 'move', 'merge', 'replace', and 'remove' operations.";
        }
    }
}}
Discussion items

- Patch format for differences
  - Augmentation of patch format shows value on both sides of comparison (of both source and target)
  - Other proposals for canonical diff format?
- Should parameter be included to control whether or not to include “origin” metadata when <operational> is comparison target?
- Comparison filter is defined using subtree and Xpath as per NETCONF. Is there a requirement for definition of filters relating to target resources per RESTCONF?
- Add performance considerations section? (Tim Carey)