

Comparison of NMDA datastores

draft-ietf-netmod-nmda-diff-02

Alexander Clemm, Yingzhen Qu, Jeff Tantsura, Andy Bierman

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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)