Comparison of NMDA datastores

draft-clemm-netmod-nmda-diff-00

Alexander Clemm, Yingzhen Qu, Jeff Tantsura, Andy Bierman
Updates from IETF 101

• 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

• Succeeds and replaces draft-clemm-netconf-nmda-diff-03
  • Moved to Netmod from Netconf (this specifies a YANG data model)

• Changes from the earlier revision
  • Prefiltering step to exclude data whose schema node is not within scope of both datastores as default
  • Origin metadata included in comparison
  • Examples
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}?
  +---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>

Flag to indicate all differences vs only same schema nodes as an option

Difference reported per yang-patch
Next steps

• Request for WG adoption

Thank you!