Factory default Setting

draft-wu-netmod-factory-default-01

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Goal

• Define a method to reset a YANG datastore to its factory-default content.
  – used e.g. during initial zero-touch configuration or when the existing configuration has major errors
  – When resetting a datastore, all previous configuration settings will be lost and replaced by the factory-default default content.

• Define a new reset-datastore RPC

• Define a new "factory-default" read-only datastore
Recap

• NETCONF defines `<delete-config>` and `<discard-changes>`
  – `<delete-config>` allows resetting the `<startup>` datastore,
  – `<discard-changes>` copies the content of the `<running>` datastore into the `<candidate>` datastore.
  – It is not possible to reset the running datastore
  – Not possible reset the candidate datastore without changing the running datastore
  – or to reset any dynamic datastore.

• A RESTCONF server MAY implement the above NETCONF operations,
  – But not allow it to reset the running configuration.
New reset-datastore RPC

• Used by the YANG server resets the content of the target datastore to its factory-default content.
• Uses a target datastore as a parameter.
• Several methods of documenting the factory-default content are specified
  – For the <running>, <candidate> and <startup> datastores as the content of the <factory-default> datastore, if it exists
  – YANG Instance Data [I-D.lengyel-netmod-yang-instance-data]
  – In some implementation specific manner
  – For dynamic datastores unless otherwise specified the factory-default content is empty.
"factory-default" read-only datastore

- The datastore is defined per guidelines in RFC 8342
  - YANG modules: all
  - YANG nodes: all "config true" data nodes
  - Origin: This document does not define a new origin identity as it does not interact with <operational> datastore
  - Protocols: All e.g. Restconf, Netconf
  - Management operation:
    - set by the YANG server in an implementation dependent manner and can not be changed by management operations via NETCONF, RESTCONF, the CLI
    - Use <reset-datastore> to copy the content of the factory datastore to another datastore.
    - not propagated automatically to any other datastores.
    - Usually static, but MAY change e.g. depending on external factors like HW available or during device upgrade.
- This datastore is optional, reset-datastore rpc can be used without it.
Current Status

• v02 to v03 in netconf
  • Add Balazs Lengyel as coauthor
  • Restructured
  • Made new datastore optional
  • Removed Netconf capability
  • Listed Open issues

• V0 3 - v00 - v01
  • Changed name from draft-wu-netconf-restconf
    -factory-restore to draft-wu-netmod-factory-default
  • Removed copy-config ; reset-datastore is enough
Two Minor Open issues:

• Proposal for restart:
  – Not needed, and ietf-system /sys:system-restart can be used anyway.
  – We could reconsider if someone comes up with a requirement beyond that,

• Proposal for reboot:
  – Not needed.
  – We could reconsider if someone can define, how is reboot different from restart, and come up with a requirement for it
Way Forward

› Request adoption as workgroup document

› Received support and comments on the mailing list