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 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 <u>draft-wu-netconf-restconf</u>
 <u>-factory-restore</u> to <u>draft-wu-netmod-factory-default</u>
 - 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