

# Factory default Setting

**draft-wu-netmod-factory-default-02**

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# 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.

# 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

# 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
- v01 - v02
  - Close two minor open issues discussed in the last meeting
  - Add copy-config based on Rob's comment.
  - A few reference Update

# Way Forward

- › Adopted as workgroup document?
  - › Received sufficient support in last IETF meeting

# 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.