

draft-haas-i2rs-ephemeral-state-reqs-00

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Intent of this document

- To attempt to provide concrete examples of desired I2RS protocol behavior.
- To drive discussion about potential implementations of that behavior and their representations in netconf/restconf and yang.

Flagging configuration state as ephemeral

- Proposal: Extend “config” yang keyword to include “ephemeral”.
- Initial discussion: Consider instead a separate keyword “ephemeral true”.
- (Martin Bjorkland also points out we’re potentially hitting much of what is in draft-bjorklund-netmod-operational-00.)

Hierarchy

- Ephemeral configuration may be a child of persistent configuration. The reverse is not permitted.
- Operational state whose parent is ephemeral **MUST** also be ephemeral.

Netconf Changes

- Announce an ephemeral-config capability.
- Add a new parameter, “filter-ephemeral” to `<get-config>` and `<get>`.
 - Consider alternative from draft-bjorklund-netmod-operational-00. Martin suggests we shouldn't overload `<get-config>`.

Secondary identity

- A property of I2RS ephemeral state that is stored for each ephemeral configuration state node.
- Made accessible to the user as a read-only piece of meta-data. Note that “read-only” meta-data would be a new construct.
- Carried as a parameter to <edit-config>

Priority

- Similar to secondary-identity, a property of each ephemeral configuration state node.
- User's priority is assigned as a new attribute of NACM.
- For new ephemeral nodes, it is assigned the user's priority for that node. (NACM may vary it by path.)
- For existing ephemeral nodes, the update is only permitted if the user's priority is \geq the existing node's priority. The node then has this priority.
- Transaction/Commit will fail if the user has insufficient priority.
- Presented to the user as read-only meta-data.