RFC 4741bis Status

draft-ietf-netconf-4741bis-01

IETF 75
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Summary of changes in -01

- Added YANG module to describe the operations layer

- Removed operations from the XSD - the XSD now describes the RPC layer only.

- Clarified that <validate> always validates a complete configuration.

- Added capability validate:1.1 with a new value for the test-option parameter: 'test-only'

- Specified the XPath context for 'error-path' and XPath filters.

Issue tracker

We will track issues at the NETCONF WG wiki:

http://trac.tools.ietf.org/wg/netconf/trac/wiki/Issues_4741bis

The numbers on the remaining slides refer to issues on that page.

003: error-path (open)

- error-path root node different depending on if the node is present in the PDU or not? Current text:

> This element will not be present if no appropriate payload element can be associated with a particular error condition

- It seems useful to report the path to the node with error if <validate> or <commit> fails (and at least two implementations does this)

You will get one of:

- /nc:rpc/...

- /foo:top/... (data model top node)

004: error-severity (open)

- The error-severity 'warning' is not used – there are no error-tags that may use the 'warning' error-severity.

- It is unclear how warnings are supposed to work. As a result of an operation, an rpc-error is returned with a warning. Did the operation succeed? Note that it cannot be returned together with <ok/> (according to the XSD).

- Proposal 1: deprecate or remove 'warning' (but for backwards compatibility keep <error-severity>)

- Proposal 2: add a new error-tag which can be used for warnings.

006: multiple namespaces (open)

- Can namespaces in subtree filters really be used to select format, i.e. text vs. XML? So namespaces are used to indicate both data models, and format. If so, what is returned when no filter is specified?

- Proposal: remove this text

014: capability changes (open)

- We need to describe what happens if the device changes its capabilities while there are active NETCONF sessions.

- Proposal: Add an error code 'capabilities-changed', and text:

  A server MUST reply with a 'capabilities-changed'
  error if the client sends a request which is affected by
  a modified capability.

- Can we add a new error-code, or do we have to use 'operation-failed' with a standard error-app-tag (it would be our first...)

013: confirmed-commit (new)

- If the session dies, a pending confirmed commit is reverted.

   Thus, If a config change is done so that the session dies, the config change will immediately be reverted.

- Proposal: add a confirmed-commit:1.1 capability which adds a parameter <persist> to the <commit>.

- It is unclear (existing implementations behave differently) if the confirming commit can be send from another session or not. Seems insecure to allow other session to do it.

   But in the persist example above, the confirming commit MUST be sent from another session (since the first died).

- Proposal: Allow other session to explicitly confirm.

015: UTF-8 and UTF-16 (open)

- Can we require that NETCONF servers support UTF-8 only?

010: namespace wildcarding (new)

- Can / should no namespace in subtree filter be interpreted as a wildcard, e.g.

```
<nc:filter>
  <interface/>
</nc:filtery>
```

could return:

```
<nc:data>
  <if:interface>

   …
  <if:interface/>
  <ospf:interface>

   …
  </ospf:interface>
</nc:data>
```

009: partial-operation error (new)

- This error is presumably returned when continue-on-error is used. Also stop-on-error? This should be clarified.

- This error contains a list of 'ok-element', 'err-element', and 'noop-element', as QNames (note; not as paths!)

- Proposal: deprecate this error, and clarify that if continue-on-error is used, a set of <rpc-error> are returned.

012: format of copy-config (new)

- There is no description of the format of copy-config to/from URL – but a top-level XML element is needed.

- Suggest that <nc:config> is used:

```
<nc:config>
  <if:interface>

    …
  <if:interface/>
  <foo:top>

    …
  </foo:top>
</nc:config>
```