#### YANG Patch Issues

#### draft-bierman-netconf-yang-patch-00 NETCONF WG IETF #89 London, UK

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## Agenda

• Discuss and resolve open issues

#### YANG Patch Issues

- P1. Is PATCH well-supported?
- P2: Identification of YANG Patch capabilities
- P3: Protocol Independence
  - location leaf
  - RESTCONF Coupling
- P4: Optional Operations
- P5: global-errors needed?
- P6: Bulk Editing Support

#### P1. Is PATCH well-supported?

- Do enough open-source tools support PATCH?
- CoAP does not support PATCH
  - This could be an issue for a HTTP to CoAP Proxy implementation of RESTCONF

# P2: Identification of YANG Patch capabilities

- How does a client know that the YANG Patch media type is supported by the server?
- Is there any functionality that could be considered optional that would need to be identified by the server capabilities?

#### P3: Protocol Independence

- yang-patch/target and point leafs (type target-resource-offset)
  - Is this syntax for a relative resource identifier acceptable for all protocols? Acceptable for just NETCONF and RESTCONF?
- yang-patch-status/location leaf (type inet:uri)
  - Can this be ignored in a protocol such as NETCONF?

#### P3a: location leaf

 Should the 'location' leaf be changed to match the 'error-node' choice in RESTCONF:

```
choice resource-identifier {
    leaf location-path {
        type instance-identifier;
    }
    leaf location-urlpath {
        type rc:data-resource-identifier;
    }
}
```

## P3b: RESTCONF Coupling

- RESTCONF is a normative reference for YANG Patch
  - Imported in YANG module for rc:errors grouping
- Is this a problem for protocol independence?

## P4: Optional Operations

- The 'operation' leaf has 7 operations.
  - Is there any need to allow a protocol server implementation to support a pre-defined subset?
    - create
    - delete
    - insert
    - merge
    - move
    - replace
    - remove

### P5: global-errors needed?

- 2 <errors> sections in yang-patch-status
  - global-errors/errors
  - edit-status/edit/errors
- If a special 'edit-id' value was reserved, such as an empty string, it could be used in the 'edit' list to identify global errors

## P6: Bulk Editing Support

- There is 1 'location' leaf ni yang-patch-status for each edit.
  - What if the protocol is using a bulk edit (such as NETCONF-EX <edit2>) and the edit list is applied to multiple nodes?
    - Should 'leaf location' be changed to 'leaf-list location'?