List Pagination for YANG-driven protocols

draft-ietf-netconf-list-pagination-03
draft-ietf-netconf-list-pagination-nc-03
draft-ietf-netconf-list-pagination-rc-03

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List Pagination Suite Overview

- List Pagination for YANG-driven Protocols (LP)
  - draft-ietf-netconf-list-pagination-03
  - Standard mechanism to control filtering, and retrieval of entries of list or leaf-list.

- NETCONF Extensions to support List Pagination (LP-NC)
  - draft-ietf-netconf-list-pagination-nc-03

- RESTCONF Extensions to support List Pagination (LP-RC)
  - draft-ietf-netconf-list-pagination-03
Current status

• Cursor pagination
  – Clarified support and polished text

• Locale-aware collation
  – Clarified support, added text, YANG, and examples

• Editorial changes

• Snapshot support for “config false” moved
  – draft-awwlh-netconf-list-pagination-snapshot-00
Cursor based pagination

- MUST be supported for “config true” lists
- SHOULD be supported for “config false” lists
  - Set “cursor-supported” leaf in “per-node-capabilities” node in “ietf-system-capabilities” model
- Offset a list resource by key
- No conformance for leaf-lists
  - There are no keys
  - Uniquely index duplicate elements would become similar to offset pagination:
    [1, 1, 2, 3, 5, 8]
Locale-aware collation

- Locales are assumed to be UTF-8
  - MAY be supplied and returned as both “sv_SE” and “sv_SE.UTF-8”
- Renamed “sort-locale-collate” query parameter to “locale”
- Locales not known by the server returns “locale-unavailable” instead of “locale-unknown”
Locale-aware collation

GET /restconf/data/example-social:member/member?locale=sv_SE

{"example-social:member":
    [{"member-id": "alice", ...},
     {"member-id": "bob", ...},
     ...],
    "@example-social:member":
    {
        "ietf-list-pagination:locale": "sv_SE"
    }
}
Locale-aware collation cont’d

GET /restconf/data/example-social:member/member?locale=sv_SE.UTF-8

{"example-social:member":
  [{"member-id": "alice", ...},
   {"member-id": "bob", ...},
   ...],
  "{example-social:member}"

  {
    "ietf-list-pagination:locale": "sv_SE.UTF-8"
  }
}
Editorial changes

- Added YANG Security considerations section
- Expanded example-social data set and “locale” query parameter examples
Next steps

- WGLC
Thank you!

Questions?