

# List Pagination for YANG-driven protocols

draft-ietf-netconf-list-pagination-04  
draft-ietf-netconf-list-pagination-nc-04  
draft-ietf-netconf-list-pagination-rc-04

## IETF 120 NETCONF WG 2025-07-25

On behalf of NETCONF List Pagination Authors

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# List Pagination Suite Overview

- List Pagination for YANG-driven Protocols (LP)
  - draft-ietf-netconf-list-pagination-04
  - 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-04
- RESTCONF Extensions to support List Pagination (LP-RC)
  - draft-ietf-netconf-list-pagination-04

# Current status

- Implementation status
- YANG Doctor review: Clarified text, applied corrections
- Define limit=0
- Updating text, examples etc
- Locale for ordered-by lists
- Validate examples
- Editorial changes

# Implementation status

- Olof Hagsand made an almost full implementation
  - Clixon open-source project
  - NETCONF and RESTCONF
  - Missing “cursor”, “locale”, and “sublist-limit”
- Other implementations are more spotty
  - Not both NETCONF and RESTCONF
  - Not all functionality

# YANG Doctor review

- XPath default context
  - Follows RFC 7950 Section 6.4.1
  - NETCONF uses prefixes
  - RESTCONF uses module names

# YANG Doctor review

- Seems to cater mostly for SQL databases?
  - Leverage underlying database system capabilities
  - Standardize broadly available functionality
  - Shortly discuss the variety of database systems

# limit=0

- Allow limit=0
- Should quickly return the empty result set
- Good for validating query validity
- Is it really necessary, since “limit” is evaluated last?

# Other changes

- Editorial changes, mostly typos etc
- Fix incorrect examples
- Add missing error identity examples
- Update “sort-by” string pattern
  - Correct “descendant-schema-nodeid” ABNF

# Locale for ordered-by lists

- MUST ordered-by user/system lists report locale used without “sort-by”?
- ordered-by user, probably not
  - User has defined an arbitrary order
- ordered-by system could!
  - If system lexically stored items according to system’s locale

# Validate yang-data+xml-list

- Added to RESTCONF XML encoding
  - Consistent access of list resource
- Example currently not validated
- Need modeling?

# Next steps

- Get some more reviews
- Decide on open questions
  - limit=0
  - Locale for ordered-by lists
  - How to validate yang-data+xml-list?
- Make the documents are ready for publication
  - Validate examples
  - Correct any ambiguity in text

Thank you!

Questions?