

Adaptive Subscription to YANG Notification

draft-ietf-netconf-adaptive-subscription-02

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Recap

- Motivation
 - A high-frequency data collection easy to identify operational data degeneration but at the cost of a great volume of data
 - A low-frequency data collection greatly reduces the data volume but hard to detect important events
- Goal
 - To balance between expensive data management cost and real-time streaming telemetry data for troubleshooting.
- Main idea
 - To perform adaptive subscription policy built on top of YANG-PUSH mechanism and allow servers to switch to different update intervals based on network condition changes.

Document Changes since 114

Thanks Adrian for the helpful comments.

- Editorial changes
- Update the adaptive subscription YANG module: add contact editor, fix IETF trust copyright statement, fix validation errors, etc.
- Clarify that the “period” must co-exist with an “xpath-external-eval” Xpath1.0 expression parameter
 - If the “xpath-external-eval” is evaluated as true, the publisher switches to the corresponding period with which push updates are reported

Document Changes since 114 (cont.)

- Clarify that existing RPC failures defined in 8639 and 8641 are still applicable to this document
 - For example, if any configured period is not supported by the publisher, a “period-unsupported” error response can be used.
- Clarify the “multi-xpath-criteria-conflict” RPC failure
 - Used when multiple Xpath evaluation expressions are evaluated as conflict (i.e., more than one condition expressions are evaluated to “true”).
 - Cause an ongoing adaptive subscription terminated -> push updates at the shortest streaming period

Multi-xpath-criteria-conflict is used to indicate that the multiple Xpath evaluation criteria represented by “xpath-external-eval” is evaluated as conflict, i.e., more than one condition expressions are evaluated to “true”. Such a conflict may also cause an ongoing adaptive-subscription terminated.



multi-xpath-criteria-conflict is used to indicate that the multiple Xpath evaluation criteria represented by “xpath-external-eval” are evaluated as conflicting, i.e., more than one condition expressions are evaluated to “true”. However, the publisher should still push updates at the shortest streaming period among multiple corresponding period intervals if multiple Xpath evaluations conflict with each other during the lifecycle of an adaptive subscription.

Comments, Questions, Concerns?