

# NETCONF

# Transaction ID

2022-03-21

IETF 113

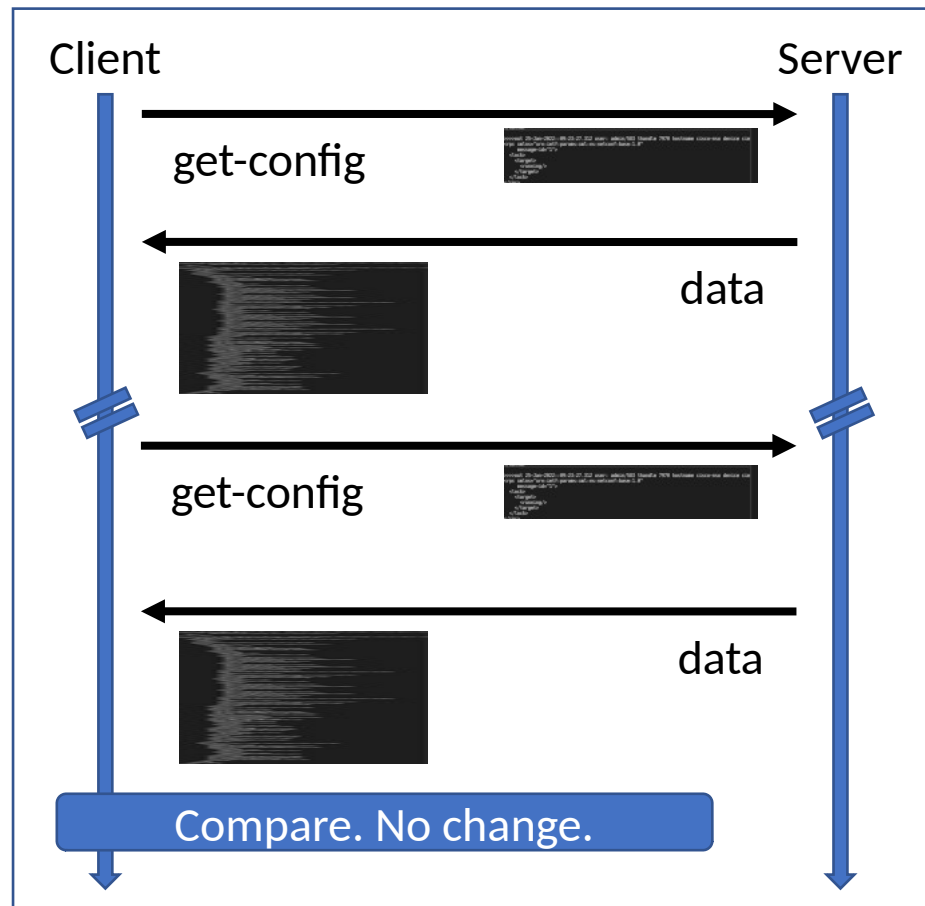
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# draft-lindblad-netconf-transaction-id-01

- Problem + Solution Recap
- Simulated Results
- In the Works

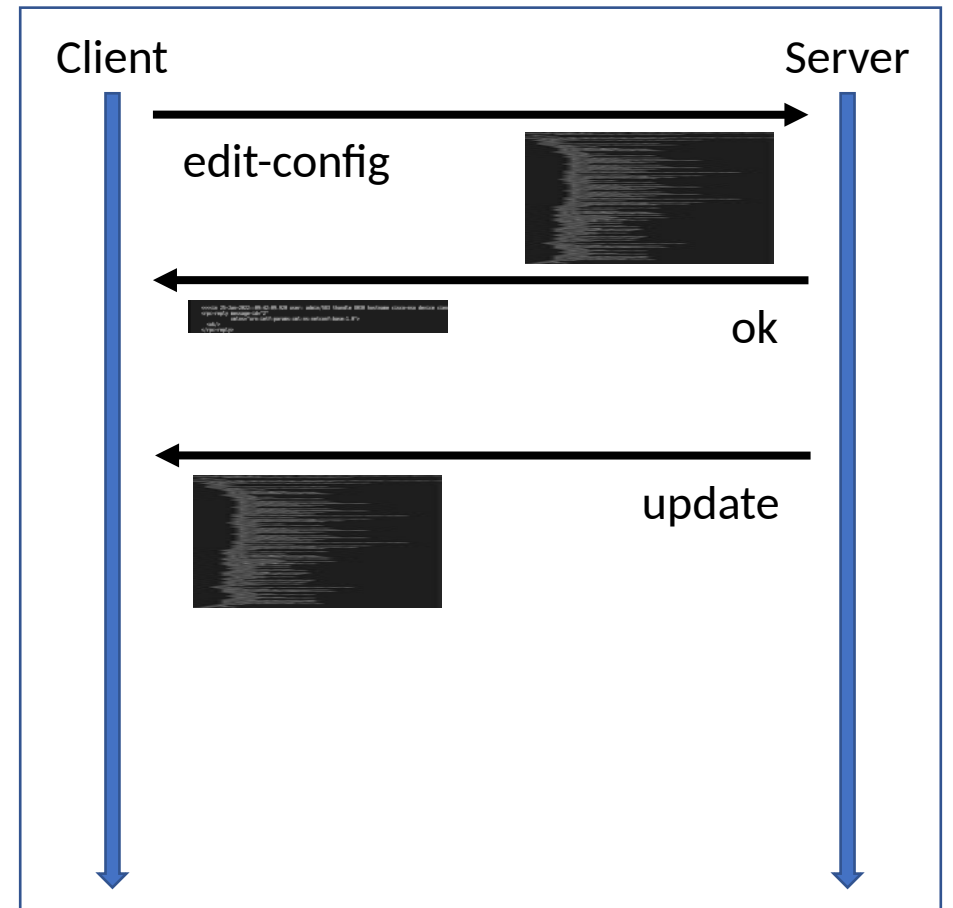
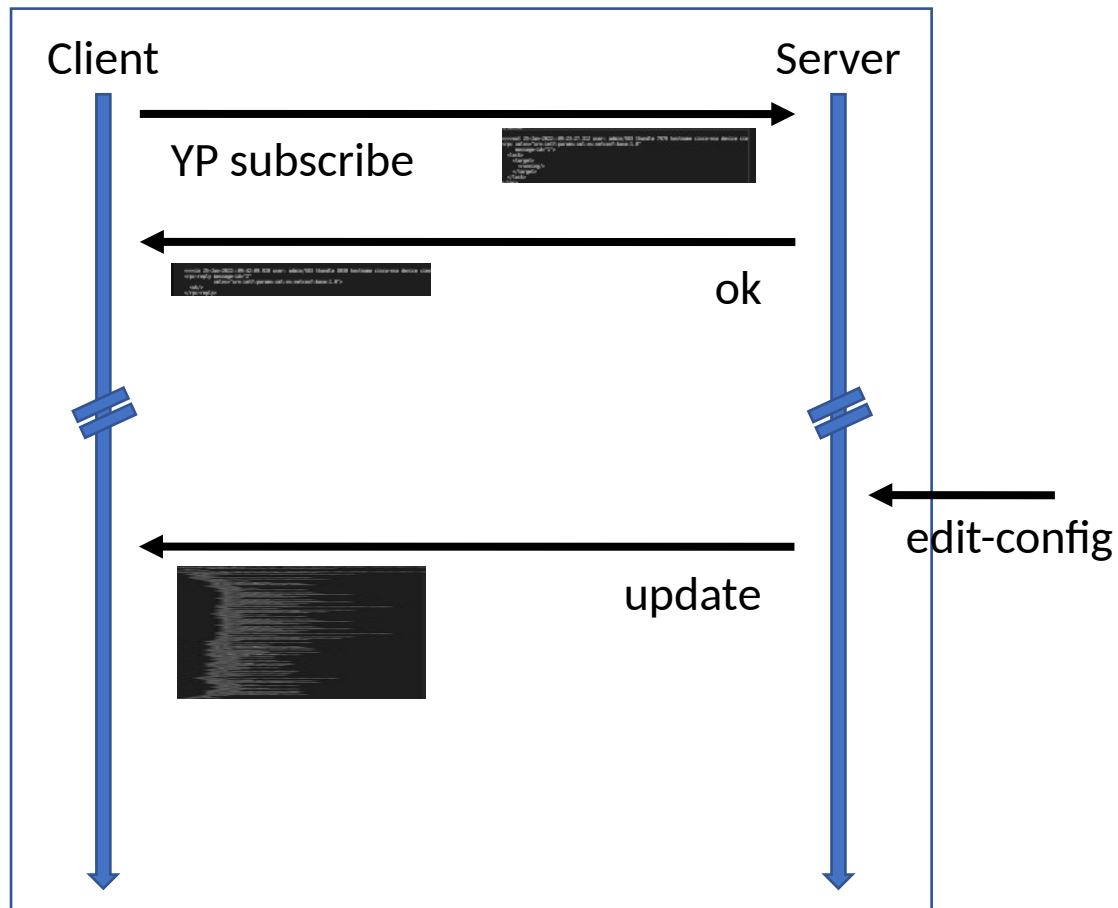
# Problem #1

get-config slow + costly for change detection



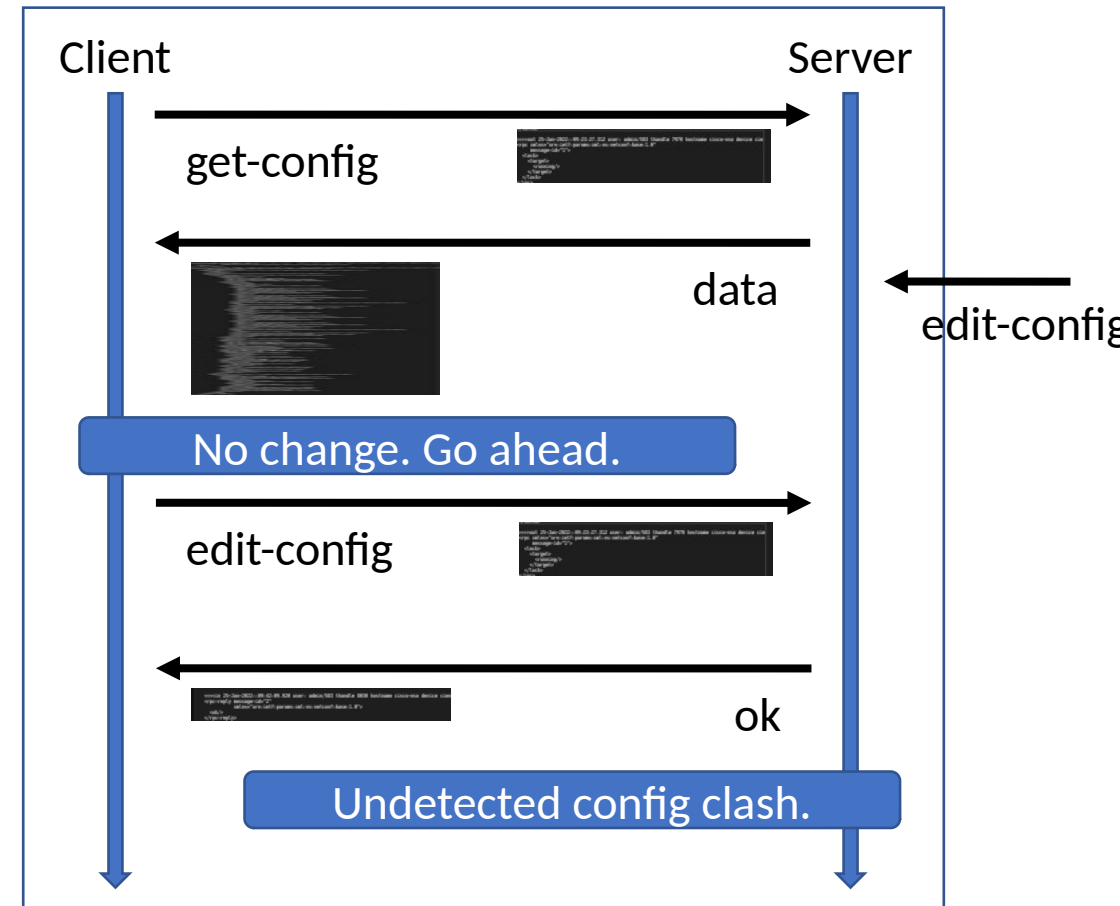
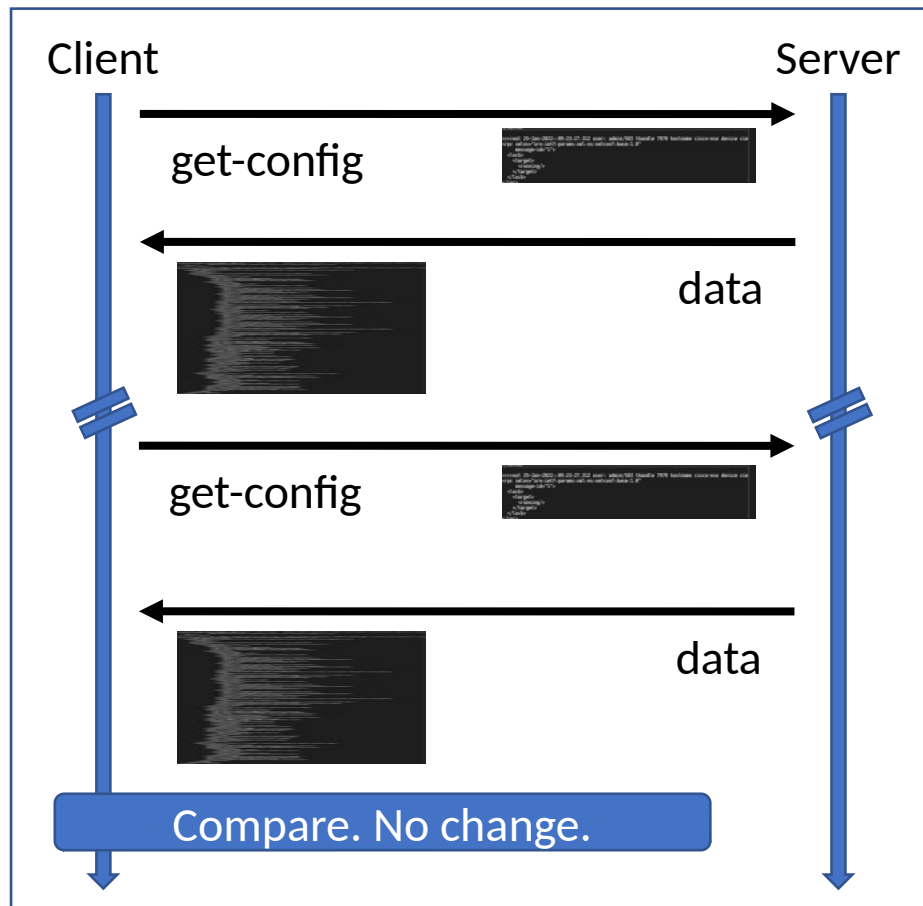
# Problem #2

## YANG Push needs echo-cancellation

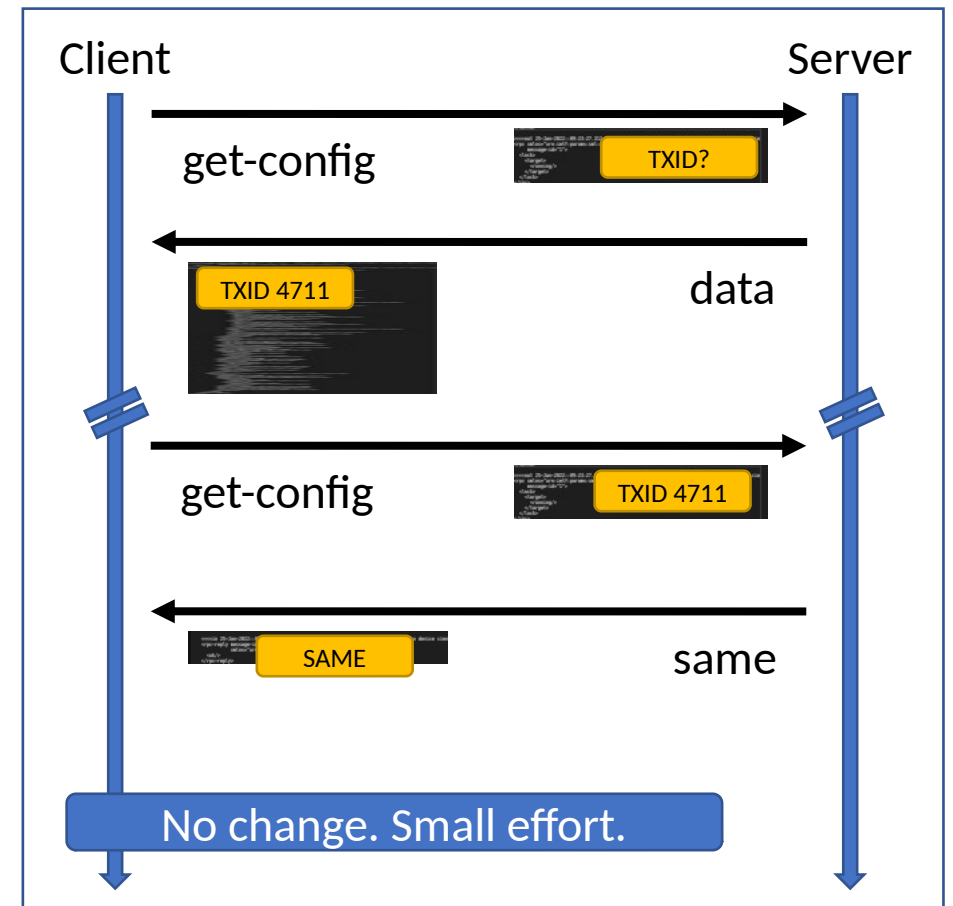
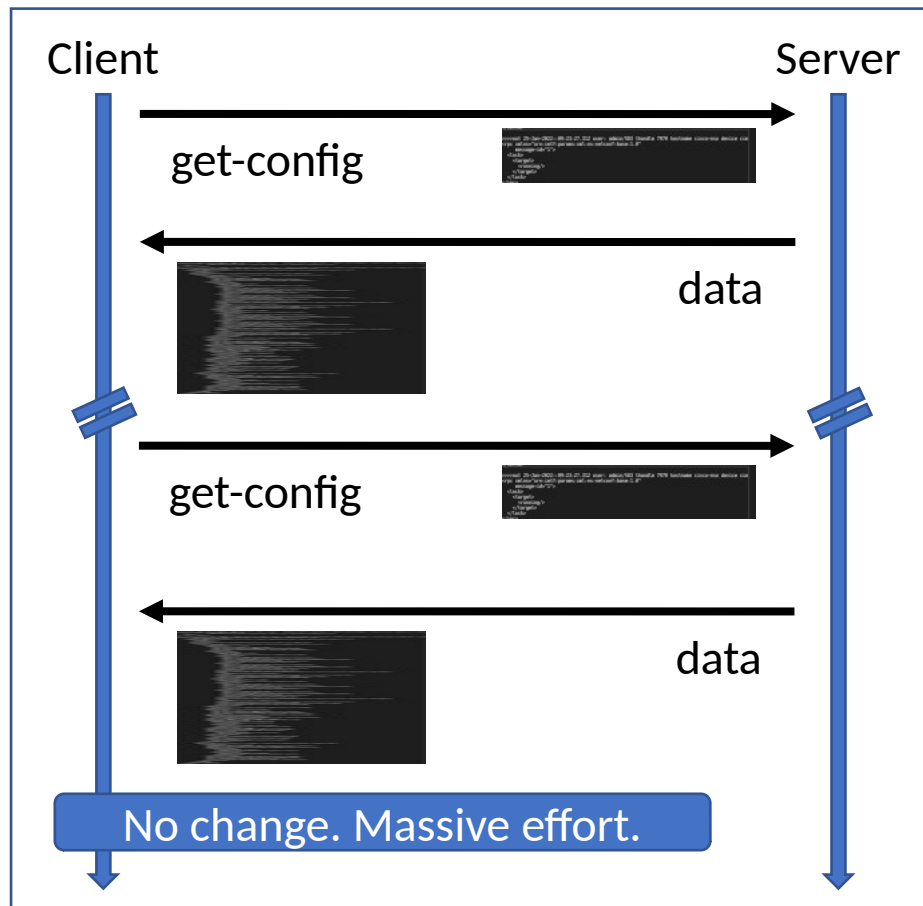


# Problem #3

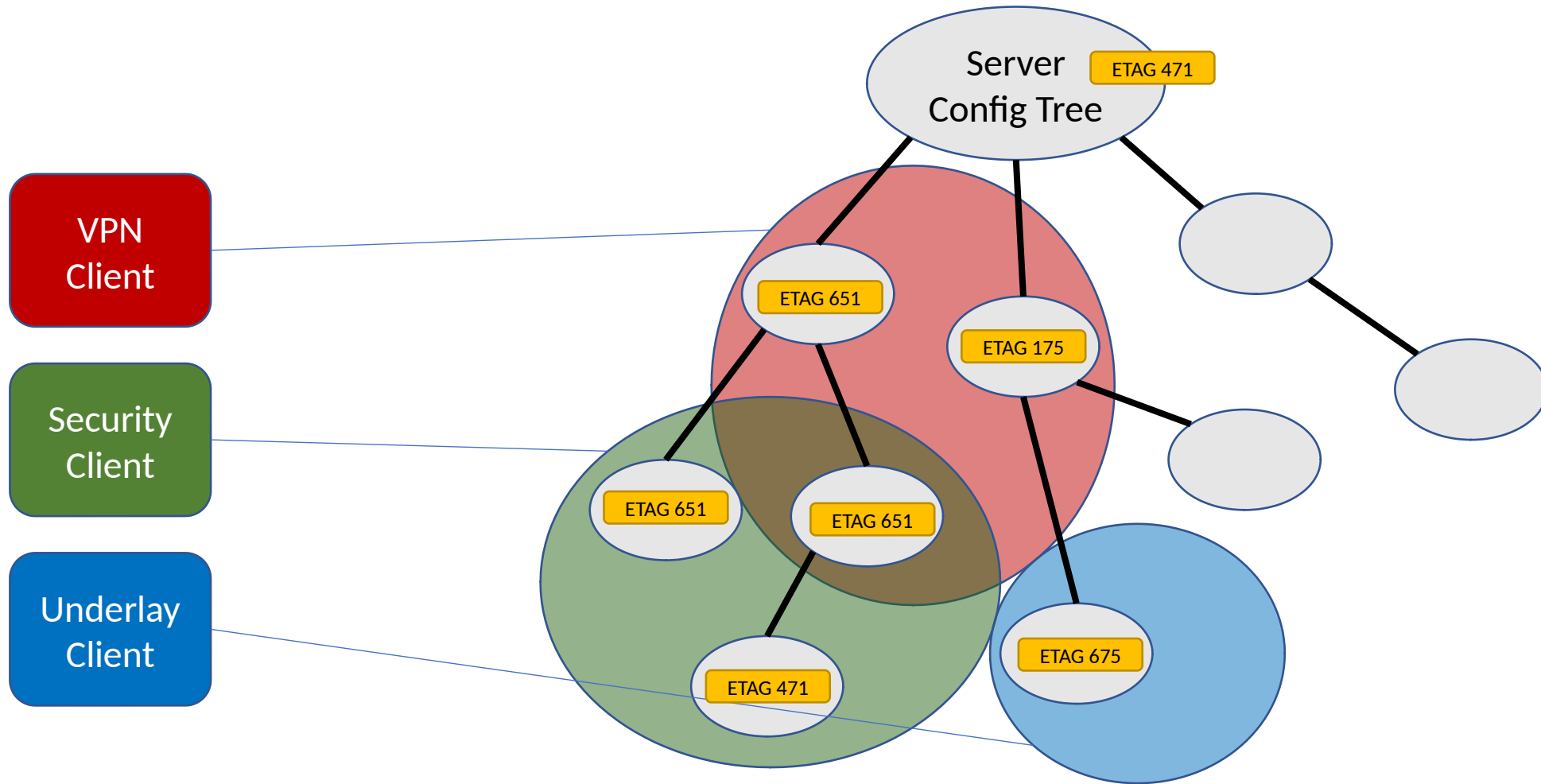
## Vulnerability to clashing changes



# Simplistic, Top-Level TXID Solution



# Draft Solution



# Simulated Results

- Real world management application running 1h in lab:
  - 569 => 378 roundtrips, down 34% (network load, delay)
  - 1002 kB => 547 kB, down 45% (network load, processing)
- No datastore locking outside <edit-config> until <commit>
- No window of vulnerability to clashing configurations



# In the Works

- Add text for ETAG integration with YANG Push
- Prototype implementation for verifying and broadening results