

# Netconf connection setup and handshake analysis

Slide deck with setup flow and some test results

Tracing netconf handshake with default simulator with netconf testtool

1. Restconf accepts the add-netconf-node rpc
2. netconf topology for node created
3. config is recognized as not a reconnection because of changed schema and passed to sal-netconf-connector
4. keepalive "facade" is created for the device
5. properties of the mount are acknowledged (e.g., schema directory, rpc limit)
6. a "reconnecting" ssh client is created
7. ssh connection is initiated
8. ssh connection response seen and noted by "unverified RSA key" and established
9. netconf session negotiation begins
10. <hello> is sent from controller to device with session state moved from IDLE to OPEN\_WAIT
11. <hello> response is received with list of <capabilities> (see below)
12. netconf session moves from OPEN\_WAIT to ESTABLISHED
  - a. if exi (efficient XML interchange) is listed in the capabilities a <start-exit> RPC message is sent from the controller to the device
13. device responds with RPC reply <ok>
14. neconf-sal-connector recognizes netconf session as established with advertised capabilities and netconf topology-config notes connector for the device started successfully
15. controller sends rpc <get> on ietf-netconf-monitoring schemas
16. response is each schema (ietf-yang-types, ietf-netconf-monitoring-extension, ietf-netconf-monitoring, ietf-inet-types)
17. TRACE log message prints that response matched request "Matched request"
18. DEBUG log indicating the schemas exposed by the <get> and it's response from lines 15,16
19. ?looks like a check to see if some capability was reported by the device that we can map to and build out automatically?
20. Schema context built internally to controller
21. connected device exposed to MD-SAL operational store
22. netconf session keepalives started
23. well known message "Netconf connector initialized successfully"

full karaf log used to make analysis above is below.

Additional notes after repeating the same tests using a more realistic device (VMX JUNOS 18.4R1.8 Kernel 64-bit JNPR-11.0-20181207.6c2f68b\_2\_bu)

There are 14 capabilities advertised in it's hello response:

```
<nc:hello xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
<nc:capabilities>
<nc:capability>urn:ietf:params:netconf:base:1.0</nc:capability>
<nc:capability>urn:ietf:params:netconf:capability:candidate:1.0</nc:capability>
<nc:capability>urn:ietf:params:netconf:capability:confirmed-commit:1.0</nc:capability>
<nc:capability>urn:ietf:params:netconf:capability:validate:1.0</nc:capability>
<nc:capability>urn:ietf:params:netconf:capability:url:1.0?protocol=http,ftp,file</nc:capability>
<nc:capability>urn:ietf:params:xml:ns:netconf:base:1.0?module=ietf-netconf&revision=2011-06-01</nc:capability>
<nc:capability>urn:ietf:params:xml:ns:netconf:capability:candidate:1.0</nc:capability>
<nc:capability>urn:ietf:params:xml:ns:netconf:capability:confirmed-commit:1.0</nc:capability>
<nc:capability>urn:ietf:params:xml:ns:netconf:capability:validate:1.0</nc:capability>
<nc:capability>urn:ietf:params:xml:ns:netconf:capability:url:1.0?protocol=http,ftp,file</nc:capability>
<nc:capability>urn:ietf:params:xml:ns.yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15</nc:capability>
<nc:capability>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring</nc:capability>
<nc:capability>http://xml.juniper.net/netconf/junos/1.0</nc:capability>
<nc:capability>http://xml.juniper.net/dmi/system/1.0</nc:capability>
</nc:capabilities>
<nc:session-id>38893</nc:session-id>
</nc:hello>
```

But, the response (bullet 15 above) for ietf-netconf-monitoring GET RPC on <schemas>, is a reply which reports 172 extra schemas, like:

```

<netconf-state xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">
<schemas>
<schema>
<identifier>junos-conf-system</identifier>
<version>2018-01-01</version>
<format>yang</format>
<namespace>http://yang.juniper.net/junos/conf/system</namespace>
<location>NETCONF</location>
</schema>
<schema>
<identifier>junos-conf-chassis</identifier>
<version>2018-01-01</version>
<format>yang</format>
<namespace>http://yang.juniper.net/junos/conf/chassis</namespace>
<location>NETCONF</location>
</schema>
.
.
.

```

### ? Unknown Attachment

full list of additional 172 schemas reported is in this attached xml file.

for each of those additional schemas, an RPC <get-schema> is sent to retrieve the models.

```

1      2020-05-28T15:22:57,707 | TRACE | qtp1704654574-529 | BrokerFacade | 296 - org.opendaylight.netconf.
restconf-nb-bierman02 - 1.9.3 | Invoke RPC AbsoluteSchemaPath{path=[(urn:opendaylight:netconf-node-topology?
revision=2015-01-14)create-device]} with input: ImmutableContainerNode{nodeIdentifier=(urn:opendaylight:netconf-
node-topology?revision=2015-01-14)input, value=[ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-
topology?revision=2015-01-14)reconnect-on-changed-schema, value=false}, ImmutableLeafNode{nodeIdentifier=(urn:
opendaylight:netconf-node-topology?revision=2015-01-14)concurrent-rpc-limit, value=0}, ImmutableChoiceNode
{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)credentials, value=
[ImmutableContainerNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)login-
password, value=[ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)
password, value=jamo123}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?
revision=2015-01-14)username, value=jamo1}]}], ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-
topology?revision=2015-01-14)tcp-only, value=false}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-
node-topology?revision=2015-01-14)max-connection-attempts, value=0}, ImmutableLeafNode{nodeIdentifier=(urn:
opendaylight:netconf-node-topology?revision=2015-01-14)node-id, value=localsim}, ImmutableLeafNode
{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)keepalive-delay, value=300},
ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)schemaless,
value=false}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)
schema-cache-directory, value=127.0.0.1-1}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-
topology?revision=2015-01-14)sleep-factor, value=1}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-
node-topology?revision=2015-01-14)default-request-timeout-millis, value=20000}, ImmutableLeafNode
{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)port, value=17830},
ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-14)connection-timeout-
millis, value=20000}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?revision=2015-01-
14)host, value=127.0.0.1}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:netconf-node-topology?
revision=2015-01-14)actor-response-wait-time, value=900}, ImmutableLeafNode{nodeIdentifier=(urn:opendaylight:
netconf-node-topology?revision=2015-01-14)between-attempts-timeout-millis, value=2000]}}

2      2020-05-28T15:22:57,716 | INFO | CommitFutures-2 | NetconfTopologyRPCProvider | 299 - org.
opendaylight.netconf.sal-netconf-connector - 1.9.3 | add-netconf-node RPC: Added netconf node successfully.


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2020-05-28T15:22:57,716 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 | NetconfTopologyImpl |
126 - netconf-topology-config - 1.6.3 | Config for node Uri{value=localsim} created

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3      2020-05-28T15:22:57,718 | INFO | opendaylight-cluster-data-notification-dispatcher-122 |
AbstractNetconfTopology | 126 - netconf-topology-config - 1.6.3 | Connecting RemoteDevice{Uri{value=localsim}}
, with config Node{getNodeId=Uri{value=localsim}}, augmentations={interface org.opendaylight.yang.gen.v1.urn.
opendaylight.netconf.node.topology.rev150114.NetconfNode=NetconfNode{getActorResponseWaitTime=900,
getBetweenAttemptsTimeoutMillis=2000, getConcurrentRpcLimit=0, getConnectionTimeoutMillis=20000,
getCredentials=LoginPw{getLoginPassword=LoginPassword{getPassword=vjYUM9J2DFFMABCs/fQesA==, getUsername=jamo,

```

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augmentations={}, augmentations={}, getDefaultRequestTimeoutMillis=20000, getHost=Host{_ipAddress=IpAddress
{_ipv4Address=Ipv4Address{_value=127.0.0.1}}}, getKeepaliveDelay=300, getMaxConnectionAttempts=0,
getPort=PortNumber{_value=17830}, getSchemaCacheDirectory=127.0.0.1-1, getSleepFactor=1,
isReconnectOnChangedSchema=false, isSchemaless=false, isTcpOnly=false}}}

2020-05-28T15:22:57,718 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Transaction DOM-CHAIN-7-0 merging (urn:TBD:params:xml:ns:yang:network-topology?revision=2013-10-21)
network-topology container to ensure its presence

2020-05-28T15:22:57,719 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Transaction DOM-CHAIN-7-0 merging (urn:TBD:params:xml:ns:yang:network-topology?revision=2013-10-21)
topology container to ensure its presence

2020-05-28T15:22:57,720 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Init device state transaction DOM-CHAIN-7-0 putting if absent operational data started.

2020-05-28T15:22:57,721 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Init device state transaction DOM-CHAIN-7-0 putting operational data ended.

2020-05-28T15:22:57,721 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Init device state transaction DOM-CHAIN-7-0 putting if absent config data started.

2020-05-28T15:22:57,723 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Init device state transaction DOM-CHAIN-7-0 putting config data ended.

2020-05-28T15:22:57,723 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Committing Transaction init:DOM-CHAIN-7-0

4      2020-05-28T15:22:57,724 | WARN | opendaylight-cluster-data-notification-dispatcher-122 |
AbstractNetconfTopology | 126 - netconf-topology-config - 1.6.3 | Adding keepalive facade, for device Uri
{_value=localsim}

5      2020-05-28T15:22:57,724 | INFO | opendaylight-cluster-data-notification-dispatcher-122 |
AbstractNetconfTopology | 126 - netconf-topology-config - 1.6.3 | Netconf connector for device localsim will
use schema cache directory 127.0.0.1-1 instead of schema

2020-05-28T15:22:57,725 | INFO | opendaylight-cluster-data-notification-dispatcher-122 |
AbstractNetconfTopology | 126 - netconf-topology-config - 1.6.3 | Concurrent rpc limit is smaller than 1, no
limit will be enforced for device RemoteDevice{localsim}

6      2020-05-28T15:22:57,727 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfClientDispatcherImpl | 276 - org.opendaylight.netconf.client - 1.6.3 | Creating reconnecting SSH client
with configuration: NetconfReconnectingClientConfiguration{address=/127.0.0.1:17830,
connectionTimeoutMillis=20000, additionalHeader=null, sessionListener=org.opendaylight.netconf.sal.connect.
netconf.listener.NetconfDeviceCommunicator@47424ae2, reconnectStrategy=org.opendaylight.netconf.nettyutil.
TimedReconnectStrategy@170cc08, clientProtocol=SSH, authHandler=org.opendaylight.netconf.nettyutil.handler.ssh.
authentication.LoginPasswordHandler@1e69fb05, sslHandlerFactory=null, connectStrategyFactory=org.opendaylight.
netconf.nettyutil.TimedReconnectStrategyFactory@303bcaa5}

7      2020-05-28T15:22:57,728 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfSessionPromise | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Promise
NetconfSessionPromise@66c8a31a(incomplete) attempting connect for 2000ms

2020-05-28T15:22:57,729 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 |
AbstractNetconfDispatcher | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Client created.

2020-05-28T15:22:57,730 | TRACE | CommitFutures-2 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.
netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Transaction(init) DOM-CHAIN-7-0 SUCCESSFUL

2020-05-28T15:22:57,732 | DEBUG | nioEventLoopGroupCloseable-3-22 | FramingMechanismHandlerFactory | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | EOM framing mechanism was selected.

2020-05-28T15:22:57,736 | DEBUG | nioEventLoopGroupCloseable-3-22 | AsyncSshHandler | 292 - org.opendaylight.
netconf.netty-util - 1.6.3 | SSH session connecting on channel [id: 0xfafa7a61]. promise: null

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2020-05-28T15:22:57,736 | DEBUG |nioEventLoopGroupCloseable-3-22 | AsyncSshHandler | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Starting SSH to /127.0.0.1:17830 on channel: [id: 0xfafa7a61]

2020-05-28T15:22:57,743 | TRACE | sshd-SshClient[4846c888]-nio2-thread-7 | AsyncSshHandler | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | SSH session created on channel: [id: 0xfafa7a61]

8      2020-05-28T15:22:57,884 | WARN | sshd-SshClient[4846c888]-nio2-thread-8 | AcceptAllServerKeyVerifier | 150 - org.apache.sshd.osgi - 2.3.0 | Server at /127.0.0.1:17830 presented unverified RSA key: SHA256:Xc3E/UGcIYVzBRbTdrfAivfbEfGshDSH57ryGk1VGdk

2020-05-28T15:22:57,896 | DEBUG | sshd-SshClient[4846c888]-nio2-thread-3 | AsyncSshHandler | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | SSH session authenticated on channel: [id: 0xfafa7a61], server version: SSH-2.0-APACHE-SSHD-2.3.0

2020-05-28T15:22:57,901 | TRACE | sshd-SshClient[4846c888]-nio2-thread-4 | AsyncSshHandler | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | SSH subsystem channel opened successfully on channel: [id: 0xfafa7a61]

9      2020-05-28T15:22:57,902 | DEBUG |nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Starting session negotiation on channel [id: 0xfafa7a61]

10     2020-05-28T15:22:57,905 | DEBUG |nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Session negotiation started with hello message <hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<capabilities>

<capability>urn:ietf:params:netconf:capability:exi:1.0</capability>

<capability>urn:ietf:params:netconf:base:1.1</capability>

<capability>urn:ietf:params:netconf:base:1.0</capability>

</capabilities>

</hello>

on channel [id: 0xfafa7a61]

2020-05-28T15:22:57,909 | TRACE |nioEventLoopGroupCloseable-3-22 | NetconfMessageToXMLEncoder | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Sent to encode : <hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<capabilities>

<capability>urn:ietf:params:netconf:capability:exi:1.0</capability>

<capability>urn:ietf:params:netconf:base:1.1</capability>

<capability>urn:ietf:params:netconf:base:1.0</capability>

</capabilities>

</hello>

2020-05-28T15:22:57,914 | TRACE |nioEventLoopGroupCloseable-3-22 | AsyncSshHandlerWriter | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Writing request on channel: [id: 0xfafa7a61], message: <?xml version="1.0" encoding="UTF-8" standalone="no"?>

<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<capabilities>

<capability>urn:ietf:params:netconf:capability:exi:1.0</capability>

<capability>urn:ietf:params:netconf:base:1.1</capability>

<capability>urn:ietf:params:netconf:base:1.0</capability>

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</capabilities>
</hello>
]]>]]>

2020-05-28T15:22:57,917 | DEBUG |nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Changing state from : IDLE to : OPEN_WAIT for channel: [id: 0xfafa7a61]

2020-05-28T15:22:57,917 | TRACE | sshd-SshClient[4846c888]-nio2-thread-5 | AsyncSshHandlerWriter | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Ssh write request finished on channel: [id: 0xfafa7a61] with result: true: and ex:null, message:

2020-05-28T15:22:57,919 | TRACE |nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Message <hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<capabilities>
<capability>urn:ietf:params:netconf:capability:exi:1.0</capability>
<capability>urn:ietf:params:netconf:base:1.1</capability>
<capability>urn:ietf:params:netconf:base:1.0</capability>
</capabilities>
</hello>
sent to socket

11          2020-05-28T15:22:57,926 | TRACE | sshd-SshClient[4846c888]-nio2-thread-6 | AsyncSshHandlerReader | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Reading message on channel: ChannelSubsystem[id=0, recipient=0]-ClientSessionImpl[jamo@/127.0.0.1:17830][netconf], message: <?xml version="1.0" encoding="UTF-8" standalone="no"?>

<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<capabilities>
<capability>urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&revision=2013-07-15</capability>
<capability>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&revision=2010-10-04</capability>
<capability>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension?module=ietf-netconf-monitoring-extension&revision=2013-12-10</capability>
<capability>urn:ietf:params:netconf:capability:exi:1.0</capability>
<capability>urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15</capability>
<capability>urn:ietf:params:netconf:capability:candidate:1.0</capability>
<capability>urn:ietf:params:netconf:base:1.1</capability>
<capability>urn:ietf:params:netconf:base:1.0</capability>
</capabilities>
<session-id>3</session-id>
</hello>
]]>]]>

2020-05-28T15:22:57,929 | TRACE |nioEventLoopGroupCloseable-3-22 | NetconfXMLToHelloMessageDecoder | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Received to decode:
3c3f786d6c2076657273696f6e3d22312e302220656e636f64696e673d225554462d3822207374616e64616c6f6e653d226e6f223f3e0a3c68656c6c6f20786d6c6e733d2275726e3a696574663a706172616d733a786d6c3a6e733a6e6574636f6e663a626173653a312e30223e0a3c6361706162696c69746965733e0a3c6361706162696c6974793e75726e3a696574663a706172616d733a786d6c3a6e733a79616e673a6965

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74662d79616e672d74797065733f6d6f64756c653d696574662d79616e672d747970657326616d703b7265766973696f6e3d323031332d30  
372d31353c2f6361706162696c6974793e0a3c6361706162696c6974793e75726e3a696574663a706172616d733a786d6c3a6e733a79616e  
673a696574662d6e6574636f6e662d6d6f6e69746f72696e673f6d6f64756c653d696574662d6e6574636f6e662d6d6f6e69746f72696e67  
26616d703b7265766973696f6e3d323031302d31302d30343c2f6361706162696c6974793e0a3c6361706162696c6974793e75726e3a6965  
74663a706172616d733a786d6c3a6e733a79616e673a696574662d6e6574636f6e662d6d6f6e69746f72696e672d657874656e73696f6e3f  
6d6f64756c653d696574662d6e6574636f6e662d6d6f6e69746f72696e672d657874656e73696f6e26616d703b7265766973696f6e3d3230  
31332d31322d31303c2f6361706162696c6974793e0a3c6361706162696c6974793e75726e3a696574663a706172616d733a6e6574636f6e  
663a6361706162696c6974793a6578693a312e303c2f6361706162696c6974793e0a3c6361706162696c6974793e75726e3a696574663a70  
6172616d733a786d6c3a6e733a79616e673a696574662d696e65742d74797065733f6d6f64756c653d696574662d696e65742d7479706573  
26616d703b7265766973696f6e3d323031332d30372d31353c2f6361706162696c6974793a63616e6469646174653a312e303c2f6361706162696c6974793e0a  
74663a706172616d733a6e6574636f6e663a6361706162696c6974793a63616e6469646174653a312e303c2f6361706162696c6974793e0a  
3c6361706162696c6974793e75726e3a696574663a706172616d733a6e6574636f6e663a626173653a312e313c2f6361706162696c697479  
3e0a3c6361706162696c6974793e75726e3a696574663a706172616d733a6e6574636f6e663a626173653a312e303c2f6361706162696c69  
74793e0a3c2f6361706162696c69746965733e0a3c73657373696f6e2d69643e333c2f73657373696f6e2d69643e0a3c2f68656c6c6f3e0a
```

```
2020-05-28T15:22:57,932 | DEBUG | nioEventLoopGroupCloseable-3-22 | NetconfXMLToHelloMessageDecoder | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Parsing message
```

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>  
  
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">  
  
<capabilities>  
  
<capability>urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&revision=2013-07-15</capability>  
  
<capability>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&revision=2010-10-04</capability>  
  
<capability>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension?module=ietf-netconf-monitoring-extension&revision=2013-12-10</capability>  
  
<capability>urn:ietf:params:netconf:capability:exi:1.0</capability>  
  
<capability>urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15</capability>  
  
<capability>urn:ietf:params:netconf:capability:candidate:1.0</capability>  
  
<capability>urn:ietf:params:netconf:base:1.1</capability>  
  
<capability>urn:ietf:params:netconf:base:1.0</capability>  
  
</capabilities>  
  
<session-id>3</session-id>  
  
</hello>
```

```
2020-05-28T15:22:57,934 | DEBUG | nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Negotiation read invoked on channel [id: 0xfafa7a61]
```

```
2020-05-28T15:22:57,935 | DEBUG | nioEventLoopGroupCloseable-3-22 | FramingMechanismHandlerFactory | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | CHUNK framing mechanism was selected.
```

```
12 2020-05-28T15:22:57,935 | DEBUG | nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Changing state from : OPEN_WAIT to : ESTABLISHED for channel: [id: 0xfafa7a61]
```

```
2020-05-28T15:22:57,937 | DEBUG | nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Session 3 created
```

```
2020-05-28T15:22:57,938 | DEBUG | nioEventLoopGroupCloseable-3-22 | NetconfClientSession | 276 - org.opendaylight.netconf.client - 1.6.3 | Client Session NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]} created
```

```
12.1 2020-05-28T15:22:57,938 | DEBUG | nioEventLoopGroupCloseable-3-22 | NetconfClientSessionNegotiator | 276 - org.opendaylight.netconf.client - 1.6.3 | Netconf session NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]} should use exi.
```

```
2020-05-28T15:22:57,939 | TRACE | nioEventLoopGroupCloseable-3-22 | NetconfMessageToXMLEncoder | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Sent to encode : <rpc xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:message-id="default-start-exi" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
```

```
<start-exi xmlns="urn:ietf:params:xml:ns:netconf:exi:1.0">

<alignment>byte-aligned</alignment>

<fidelity>

<dtd/>

<lexical-values/>

<prefixes/>

</fidelity>

</start-exi>

</rpc>
```

```
2020-05-28T15:22:57,941 | TRACE | nioEventLoopGroupCloseable-3-22 | AsyncSshHandlerWriter | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Writing request on channel: [id: 0xfafa7a61], message:
```

```
#371
```

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>

<rpc xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:message-id="default-start-exi" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<start-exi xmlns="urn:ietf:params:xml:ns:netconf:exi:1.0">

<alignment>byte-aligned</alignment>

<fidelity>

<dtd/>

<lexical-values/>

<prefixes/>

</fidelity>

</start-exi>

</rpc>
```

```
##
```

```
2020-05-28T15:22:57,943 | TRACE | sshd-SshClient[4846c888]-nio2-thread-7 | AsyncSshHandlerWriter | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Ssh write request finished on channel: [id: 0xfafa7a61] with result: true: and ex:null, message:
```

```
2020-05-28T15:22:57,945 | TRACE | nioEventLoopGroupCloseable-3-22 | NetconfClientSessionNegotiator | 276 - org.opendaylight.netconf.client - 1.6.3 | Start-exi message <rpc xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:message-id="default-start-exi" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<start-exi xmlns="urn:ietf:params:xml:ns:netconf:exi:1.0">

<alignment>byte-aligned</alignment>

<fidelity>
```

```

<dtd/>

<lexical-values/>

<prefixes/>

</fidelity>

</start-exi>

</rpc>

sent to socket on session org.opendaylight.netconf.client.NetconfClientSessionNegotiator$1@lbc0bb8a

13          2020-05-28T15:22:57,952 | TRACE | sshd-SshClient[4846c888]-nio2-thread-8 |
AsyncSshHandlerReader | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Reading message on channel:
ChannelSubsystem[id=0, recipient=0]-ClientSessionImpl[jamo@/127.0.0.1:17830][netconf], message:

#221

<?xml version="1.0" encoding="UTF-8" standalone="no"?>

<rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0"
ns0:message-id="default-start-exi">

<ok/>

</rpc-reply>

##

2020-05-28T15:22:57,954 | TRACE |.nioEventLoopGroupCloseable-3-22 | NetconfXMLToMessageDecoder | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Received to decode:
3c3f786d6c2076657273696f6e3d22312e302220656e636f64696e673d225554462d3822207374616e64616c6f6e653d226e6f223f3e0a3c
7270632d7265706c7920786d6c6e733d2275726e3a696574663a706172616d733a786d6c3a6e733a6e6574636f6e663a626173653a312e30
2220786d6c6e733a6e73303d2275726e3a696574663a706172616d733a786d6c3a6e733a6e6574636f6e663a626173653a312e3022206e73
303a6d6573736167652d69643d2264656661756c742d73746172742d657869223e0a3c6f6b2f3e0a3c2f7270632d7265706c793e0a

2020-05-28T15:22:57,955 | TRACE |.nioEventLoopGroupCloseable-3-22 | NetconfClientSessionNegotiator | 276 - org.
opendaylight.netconf.client - 1.6.3 | Positive response on start-exi call received on session
NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]}

2020-05-28T15:22:57,956 | DEBUG |.nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Session NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]}
EXI handlers added to pipeline

2020-05-28T15:22:57,957 | DEBUG |.nioEventLoopGroupCloseable-3-22 | AbstractNetconfSessionNegotiator | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Negotiation on channel [id: 0xfafa7a61] successful with session
NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]}

14          2020-05-28T15:22:57,957 | DEBUG |.nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Session NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]} up

2020-05-28T15:22:57,957 | DEBUG |.nioEventLoopGroupCloseable-3-22 | NetconfDeviceCommunicator | 299 - org.
opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Session established

2020-05-28T15:22:57,958 | TRACE |.nioEventLoopGroupCloseable-3-22 | NetconfDeviceCommunicator | 299 - org.
opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Session advertised capabilities:
NetconfSessionPreferences{capabilities={urn:ietf:params:netconf:capability:exi:1.0=DeviceAdvertised, urn:ietf:params:netconf:capability:candidate:1.0=DeviceAdvertised, urn:ietf:params:netconf:base:1.1=DeviceAdvertised, urn:ietf:params:netconf:base:1.0=DeviceAdvertised}, moduleBasedCapabilities={({urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension?revision=2013-12-10})ietf-netconf-monitoring-extension=DeviceAdvertised, ({urn:ietf:params:xml:ns:yang:ietf-inet-types?revision=2013-07-15})ietf-inet-types=DeviceAdvertised, ({urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?revision=2010-10-04})ietf-netconf-monitoring=DeviceAdvertised, ({urn:ietf:params:xml:ns:yang:ietf-yang-types?revision=2013-07-15})ietf-yang-types=DeviceAdvertised}, rollback=false,

```

```

monitoring=true, candidate=true, writableRunning=false}

2020-05-28T15:22:57,958 | DEBUG |nioEventLoopGroupCloseable-3-22 | NetconfDevice | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Session to remote device established with NetconfSessionPreferences{capabilities={urn:ietf:params:netconf:capability:exi:1.0=DeviceAdvertised, urn:ietf:params:netconf:capability:candidate:1.0=DeviceAdvertised, urn:ietf:params:netconf:base:1.1=DeviceAdvertised, urn:ietf:params:netconf:base:1.0=DeviceAdvertised}, moduleBasedCapabilities={(urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension?revision=2013-12-10)ietf-netconf-monitoring-extension=DeviceAdvertised, (urn:ietf:params:xml:ns:yang:ietf-inet-types?revision=2013-07-15)ietf-inet-types=DeviceAdvertised, (urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?revision=2010-10-04)ietf-netconf-monitoring=DeviceAdvertised, (urn:ietf:params:xml:ns:yang:ietf-yang-types?revision=2013-07-15)ietf-yang-types=DeviceAdvertised}, rollback=false, monitoring=true, candidate=true, writableRunning=false}

2020-05-28T15:22:57,959 | DEBUG |nioEventLoopGroupCloseable-3-22 | AbstractNetconfTopology | 126 - netconf-topology-config - 1.6.3 | Connector for localsim started successfully

2020-05-28T15:22:57,960 | DEBUG |nioEventLoopGroupCloseable-3-22 | NetconfSessionPromise | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Promise NetconfSessionPromise@66c8a31a(incomplete) completed

2020-05-28T15:22:57,961 | DEBUG |nioEventLoopGroupCloseable-3-22 | NetconfSessionPromise | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Promise NetconfSessionPromise@66c8a31a(success: NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]}) connection resolved

2020-05-28T15:22:57,962 | DEBUG |nioEventLoopGroupCloseable-3-22 | NetconfSessionPromise | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Promise NetconfSessionPromise@66c8a31a(success: NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]}) connection successful

15 2020-05-28T15:22:57,961 | TRACE |remote-connector-processing-executor-14 | NetconfDeviceCommunicator | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Sending message <rpc message-id="m-0" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<get>
<filter xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:type="subtree">
<netconf-state xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">
<schemas/>
</netconf-state>
</filter>
</get>
</rpc>

2020-05-28T15:22:57,963 | TRACE |nioEventLoopGroupCloseable-3-22 | NetconfMessageToEXIEncoder | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Sent to encode : <rpc message-id="m-0" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

<get>
<filter xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:type="subtree">
<netconf-state xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">
<schemas/>
</netconf-state>
</filter>
</get>
</rpc>

```

```

2020-05-28T15:22:57,965 | TRACE |nioEventLoopGroupCloseable-3-22 | AsyncSshHandlerWriter | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Writing request on channel: [id: 0xfafa7a61], message:
#349

$EXI@'urn:ietf:params:xml:ns:netconf:base:1.0rpc

message-idm-0http://www.w3.org/2000/xmlns/xmlns)urn:ietf:params:xml:ns:netconf:base:1.0getfilters0ns0type
subtree3urn:ietf:params:xml:yang:ietf-netconf-monitoringnetconf-state5urn:ietf:params:xml:ns:yang:ietf-
netconf-monitorinschemas

##

2020-05-28T15:22:57,967 | TRACE | sshd-SshClient[4846c888]-nio2-thread-1 | AsyncSshHandlerWriter | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Ssh write request finished on channel: [id: 0xfafa7a61] with result:
true: and ex:null, message:

2020-05-28T15:22:57,969 | TRACE |nioEventLoopGroupCloseable-3-22 | NetconfDeviceCommunicator | 299 - org.
opendaylight.netconf.sal-netconf-connector - 1.9.3 | Finished sending request <rpc message-id="m-0" xmlns="urn:
ietf:params:xml:ns:netconf:base:1.0">

<get>

<filter xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:type="subtree">

<netconf-state xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">

<schemas/>

</netconf-state>

</filter>

</get>

</rpc>

16 2020-05-28T15:22:57,976 | TRACE | sshd-SshClient[4846c888]-nio2-thread-2 | 
AsyncSshHandlerReader | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Reading message on channel:
ChannelSubsystem[id=0, recipient=0]-ClientSessionImpl[jamo@/127.0.0.1:17830][netconf], message:
#741

$EXI@'urn:ietf:params:xml:ns:netconf:base:1.0

rpc-replyhttp://www.w3.org/2000/xmlns/xmlns)urn:ietf:params:xml:ns:netconf:base:1.0

message-idm-0data3urn:ietf:params:xml:ns:yang:ietf-netconf-monitoringnetconf-state5urn:ietf:params:xml:ns:yang:
ietf-netconf-monitorinschemasformatyanversion

2013-07-15

identifierietf-yang-types

namespace-urn:ietf:params:xml:ns:yang:ietf-yang-types location NETCONF

2013-12-10#ietf-netconf-monitoring-extension?urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension

2010-10-04ietf-netconf-monitoringietf-inet-types-urn:ietf:params:xml:ns:yang:ietf-inet-types

##

2020-05-28T15:22:57,978 | TRACE |nioEventLoopGroupCloseable-3-22 | NetconfEXIToMessageDecoder | 292 - org.
opendaylight.netconf.netty-util - 1.6.3 | Received to decode:
24455849a0004002c000002775726e3a696574663a706172616d733a786d6c3a6e733a6e6574636f6e663a626173653a312e300a7270632d

```

```
7265706c790204000101001d687474703a2f2f777772e77332e6f72672f323030302f786d6c6e732f06786d6c6e732975726e3a696574663a706172616d733a786d6c3a6e733a6e6574636f6e663a626173653a312e300101010b6d6573736167652d6964056d2d30020304056461746103003375726e3a696574663a706172616d733a786d6c3a6e733a79616e673a696574662d6e6574636f6e662d6f6e69746f72696e670e6e6574636f6e662d7374617465020600010105003575726e3a696574663a706172616d733a786d6c3a6e733a79616e673a696574662d6e6574636f6e662d6f6e69746f72696e6701030608736368656d6173030607736368656d61030607666f726d6174040679616e67000100060876657273696f6e040c323031332d30372d3135000200060b6964656e7469666965720411696574662d79616e672d7479706573000300060a6e616d657370616365042d75726e3a696574663a706172616d733a786d6c3a6e733a79616e673a696574662d79616e672d747970657300040006096c6f636174696f6e04094e4554434f4e46000401000600020000000003000c323031332d31322d31300020023696574662d6e6574636f6e662d6d6f6e69746f72696e672d657874656e73696f6e0001003f75726e3a696574663a706172616d733a786d6c3a6e733a79616e673a696574662d6e6574636f6e662d6d6f6e69746f72696e672d657874656e73696f6e000000000004000000000003000c323031302d31302d303400020019696574662d6e6574636f6e662d6d6f6e69746f72696e67000100010200000000000400000000000300000000020011696574662d696e65742d74797065730001002d75726e3a696574663a706172616d733a786d6c3a6e733a79616e673a696574662d696e65742d74797065730000000000401000000
```

```
2020-05-28T15:22:57,982 | DEBUG | nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Message was received: <rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="m-0">
```

```
<data>

<netconf-state xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">

<schemas>

<schema>

<format>yang</format>

<version>2013-07-15</version>

<identifier>ietf-yang-types</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-yang-types</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2013-12-10</version>

<identifier>ietf-netconf-monitoring-extension</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2010-10-04</version>

<identifier>ietf-netconf-monitoring</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2013-07-15</version>
```

```
<identifier>ietf-inet-types</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-inet-types</namespace>

<location>NETCONF</location>

</schema>

</schemas>

</netconf-state>

</data>

</rpc-reply>

2020-05-28T15:22:57,982 | DEBUG |nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | handling incoming message

2020-05-28T15:22:57,983 | DEBUG |nioEventLoopGroupCloseable-3-22 | NetconfDeviceCommunicator | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Message received <rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="m-0">

<data>

<netconf-state xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">

<schemas>

<schema>

<format>yang</format>

<version>2013-07-15</version>

<identifier>ietf-yang-types</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-yang-types</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2013-12-10</version>

<identifier>ietf-netconf-monitoring-extension</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2010-10-04</version>

<identifier>ietf-netconf-monitoring</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring</namespace>

<location>NETCONF</location>
```

```

</schema>

<schemas>
<format>yang</format>
<version>2013-07-15</version>
<identifier>ietf-inet-types</identifier>
<namespace>urn:ietf:params:xml:ns.yang:ietf-inet-types</namespace>
<location>NETCONF</location>
</schemas>
</schema>
</netconf-state>
</data>
</rpc-reply>

```

17 2020-05-28T15:22:57,985 | TRACE |.nioEventLoopGroupCloseable-3-22 |  
NetconfDeviceCommunicator | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice  
{localsim}: Matched request: <rpc message-id="m-0" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">

```

<get>
<filter xmlns:ns0="urn:ietf:params:xml:ns:netconf:base:1.0" ns0:type="subtree">
<netconf-state xmlns="urn:ietf:params:xml:ns.yang:ietf-netconf-monitoring">
<schemas/>
</netconf-state>
</filter>
</get>
</rpc>

```

to response: <rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="m-0">

```

<data>
<netconf-state xmlns="urn:ietf:params:xml:ns.yang:ietf-netconf-monitoring">
<schemas>
<schemas>
<format>yang</format>
<version>2013-07-15</version>
<identifier>ietf-yang-types</identifier>
<namespace>urn:ietf:params:xml:ns.yang:ietf-yang-types</namespace>
<location>NETCONF</location>
</schemas>
<schemas>

```

```

<format>yang</format>

<version>2013-12-10</version>

<identifier>ietf-netconf-monitoring-extension</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2010-10-04</version>

<identifier>ietf-netconf-monitoring</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring</namespace>

<location>NETCONF</location>

</schema>

<schema>

<format>yang</format>

<version>2013-07-15</version>

<identifier>ietf-inet-types</identifier>

<namespace>urn:ietf:params:xml:ns:yang:ietf-inet-types</namespace>

<location>NETCONF</location>

</schema>

</schemas>

</netconf-state>

</data>

</rpc-reply>

```

```

18          2020-05-28T15:22:57,988 | DEBUG | remote-connector-processing-executor-14 | NetconfDevice |
299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Schemas exposed by ietf-
netconf-monitoring: [(urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring-extension@revision=2013-12-10)ietf-
netconf-monitoring-extension, (urn:ietf:params:xml:ns:yang:ietf-inet-types@revision=2013-07-15)ietf-inet-types,
(urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring@revision=2010-10-04)ietf-netconf-monitoring, (urn:ietf:
params:xml:ns:yang:ietf-yang-types@revision=2013-07-15)ietf-yang-types]

```

```

19          2020-05-28T15:22:57,990 | DEBUG | remote-connector-processing-executor-14 | NetconfDevice |
299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Unable to map any source
identifiers to a capability reported by device : []

```

```

20          2020-05-28T15:22:57,991 | TRACE | remote-connector-processing-executor-14 | NetconfDevice |
299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Trying to build schema
context from [RevisionSourceIdentifier [name=ietf-netconf-monitoring-extension@2013-12-10],
RevisionSourceIdentifier [name=ietf-inet-types@2013-07-15], RevisionSourceIdentifier [name=ietf-netconf-
monitoring@2010-10-04], RevisionSourceIdentifier [name=ietf-yang-types@2013-07-15]]

```

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2020-05-28T15:22:57,991 | DEBUG | remote-connector-processing-executor-14 | NetconfDevice | 299 - org.
opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Schema context built successfully
from [RevisionSourceIdentifier [name=ietf-netconf-monitoring-extension@2013-12-10], RevisionSourceIdentifier
[name=ietf-inet-types@2013-07-15], RevisionSourceIdentifier [name=ietf-netconf-monitoring@2010-10-04],

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RevisionSourceIdentifier [name=ietf-yang-types@2013-07-15]]

21          2020-05-28T15:22:57,993 | DEBUG | remote-connector-processing-executor-14 |
NetconfDeviceSalProvider | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: TOPOLOGY Mountpoint exposed into MD-SAL {closed=0, instance=org.opendaylight.mdsal.dom.spi.
SimpleDOMMountPoint@56eba8d0}

2020-05-28T15:22:57,994 | TRACE | remote-connector-processing-executor-14 | NetconfDeviceTopologyAdapter | 299
- org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Update device state
transaction DOM-CHAIN-7-1 merging operational data started.

2020-05-28T15:22:57,995 | TRACE | remote-connector-processing-executor-14 | NetconfDeviceTopologyAdapter | 299
- org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Update device state
transaction DOM-CHAIN-7-1 merging operational data ended.

2020-05-28T15:22:57,995 | TRACE | remote-connector-processing-executor-14 | NetconfDeviceTopologyAdapter | 299
- org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Committing Transaction
update:DOM-CHAIN-7-1

22          2020-05-28T15:22:57,996 | DEBUG | remote-connector-processing-executor-14 |
KeepaliveSalFacade | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}:
Netconf session initiated, starting keepalives

2020-05-28T15:22:57,996 | TRACE | remote-connector-processing-executor-14 | KeepaliveSalFacade | 299 - org.
opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Scheduling keepalives every 300
SECONDS

23          2020-05-28T15:22:57,996 | INFO | remote-connector-processing-executor-14 | NetconfDevice |
299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Netconf connector
initialized successfully

BELOW THIS IS THE DELETE

2020-05-28T15:22:57,997 | TRACE | CommitFutures-2 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.
netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Transaction(update) DOM-CHAIN-7-1 SUCCESSFUL

2020-05-28T15:23:03,808 | TRACE | qtp1704654574-528 | BrokerFacade | 296 - org.opendaylight.restconf-nb-
bierman02 - 1.9.3 | Read OPERATIONAL via Restconf: /{urn:TBD:params:xml:ns:yang:network-topology?revision=2013-
10-21}network-topology/topology/topology[{(urn:TBD:params:xml:ns:yang:network-topology?revision=2013-10-21)
topology-id=topology-netconf}]/node/node[{(urn:TBD:params:xml:ns:yang:network-topology?revision=2013-10-21)node-
id=localsim}]

2020-05-28T15:23:09,950 | TRACE | qtp1704654574-529 | BrokerFacade | 296 - org.opendaylight.restconf-nb-
bierman02 - 1.9.3 | Delete CONFIGURATION via Restconf: /{urn:TBD:params:xml:ns:yang:network-topology?
revision=2013-10-21}network-topology/topology/topology[{(urn:TBD:params:xml:ns:yang:network-topology?
revision=2013-10-21)topology-id=topology-netconf}]/node/node[{(urn:TBD:params:xml:ns:yang:network-topology?
revision=2013-10-21)node-id=localsim}]

2020-05-28T15:23:09,955 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 | NetconfTopologyImpl |
126 - netconf-topology-config - 1.6.3 | Config for node Uri{_value=localsim} deleted

2020-05-28T15:23:09,956 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 |
AbstractNetconfTopology | 126 - netconf-topology-config - 1.6.3 | Disconnecting RemoteDevice{localsim}

2020-05-28T15:23:09,957 | WARN | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceCommunicator | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Session terminated Session closed

2020-05-28T15:23:09,957 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceCommunicator | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | Tearing down Session
closed

2020-05-28T15:23:09,962 | TRACE |.nioEventLoopGroupCloseable-3-22 | AsyncSshHandler | 292 - org.opendaylight.
netconf.netty-util - 1.6.3 | Closing SSH session on channel: [id: 0xfaafa7a61] with connect promise in state:
AbstractBootstrap$PendingRegistrationPromise@3ae3cb70(success)

2020-05-28T15:23:09,961 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 |
NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice
{localsim}: Update device state transaction DOM-CHAIN-7-2 merging operational data started.

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2020-05-28T15:23:09,963 | DEBUG | nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Channel [id: 0xfafa7a61] inactive.

2020-05-28T15:23:09,963 | DEBUG | nioEventLoopGroupCloseable-3-22 | AbstractNetconfSession | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | Session NetconfClientSession{sessionId=3, channel=[id: 0xfafa7a61]} end of input detected while session was in state initialized

2020-05-28T15:23:09,965 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: Update device state transaction DOM-CHAIN-7-2 merging operational data ended.

2020-05-28T15:23:09,966 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: Committing Transaction update:DOM-CHAIN-7-2

2020-05-28T15:23:09,967 | DEBUG | nioEventLoopGroupCloseable-3-22 | AsyncSshHandler | 292 - org.opendaylight.netconf.netty-util - 1.6.3 | SSH session closed on channel: [id: 0xfafa7a61]

2020-05-28T15:23:09,969 | DEBUG | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceSalProvider | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: TOPOLOGY Mountpoint removed from MD-SAL {closed=1, instance=org.opendaylight.mdsal.dom.spi.SimpleDOMMountPoint@56eba8d0}

2020-05-28T15:23:09,971 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceSalProvider | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: Not removing TOPOLOGY mountpoint from MD-SAL, mountpoint was not registered yet

2020-05-28T15:23:09,972 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: Close device state transaction DOM-CHAIN-7-3 removing all data started.

2020-05-28T15:23:09,972 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: Close device state transaction DOM-CHAIN-7-3 removing all data ended.

2020-05-28T15:23:09,978 | TRACE | CommitFutures-2 | NetconfDeviceTopologyAdapter | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice{localsim}: Transaction(update) DOM-CHAIN-7-2 SUCCESSFUL

2020-05-28T15:23:09,981 | TRACE | opendaylight-cluster-data-notification-dispatcher-122 | NetconfDeviceSalProvider | 299 - org.opendaylight.netconf.sal-netconf-connector - 1.9.3 | RemoteDevice {localsim}: TransactionChain(org.opendaylight.mdsal.binding.dom.adapter.BindingDOMTransactionChainAdapter@615f3347) SUCCESSFUL
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