

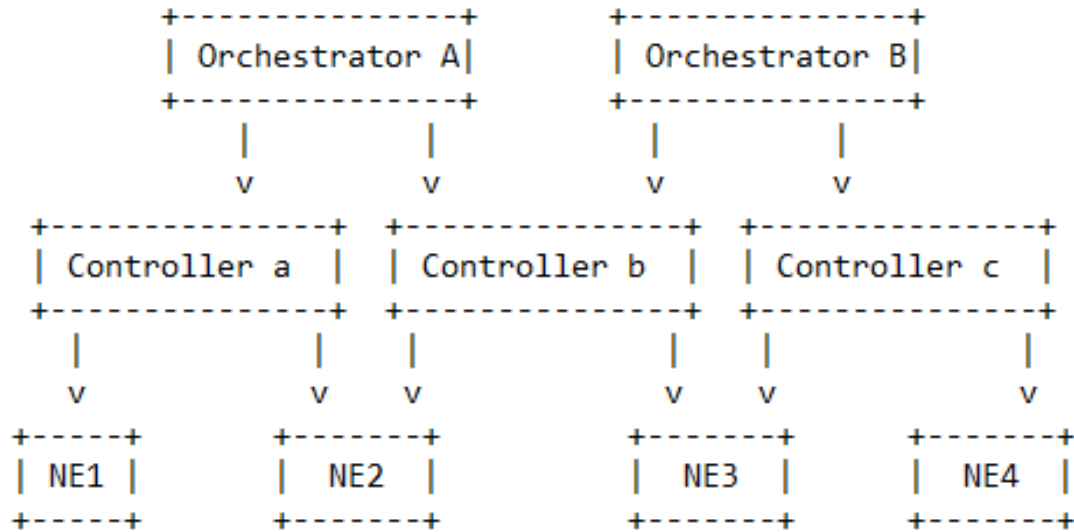
External Transaction ID for Configuration Tracing

[draft-ietf-netconf-configuration-tracing-01](#)

J. Quilbeuf (Huawei) , B. Claise (Huawei) , T. Graf
(Swisscom), D. Lopez (Telefonica) , S. Qiong (China
Telecom)

IETF 120, NETCONF

Motivation: Tracing Configuration



Something wrong with last change of configuration on NE2.

Where does the change comes from?

Use cases:

- **Configuration Mistake** *“Which service request, if any, caused the mistake?”*
- **Concurrent NMS modification** *“Both NMS assume that they are in charge of the NE and regularly overwrite each other configuration.”*
- **Conflicting Intents** *“Conflicting configuration changes are cause by two conflicting service requests.”*

Updates

- Pass client-id as an attribute of RPC (similar to trace-context)

```
<rpc xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="1"
  xmlns:w3ctc="urn:ietf:params:xml:ns:netconf:w3ctc:1.0"
  xmlns:ext-txid="urn:ietf:params:xml:ns:yang:ietf-external-transaction-id"
  w3ctc:traceparent="00-4bf92f3577b34da6a3ce929d0e0e4736-00f067aa0ba902b7-01"
  ext-txid:client-id="controller-01">
  <commit/>
</rpc>
```

Defined in YANG using annotation (yanglint likes that)

```
md:annotation client-id {
  type string;
  description
    "This annotation must be used in the NETCONF RPC nodes. It
    contains the client-id identifying the client which is calling
    the RPC. This value is used to populate the field client-id in
    the configuration-change container";
}
```

Next steps

- Align with other trace context and transaction-id drafts.
- Should we make a more general solution (i.e. follow <https://github.com/open-telemetry/opentelemetry-proto/blob/main/opentelemetry/proto/trace/v1/trace.proto>) and only specify what is missing (i.e. client-id, local-commit-id)?

Draft repo is at <https://github.com/netconf-wg/configuration-tracing>