

OF-Config Protocol: Visualization of the Management Plane in OpenFlow/SDN Networks

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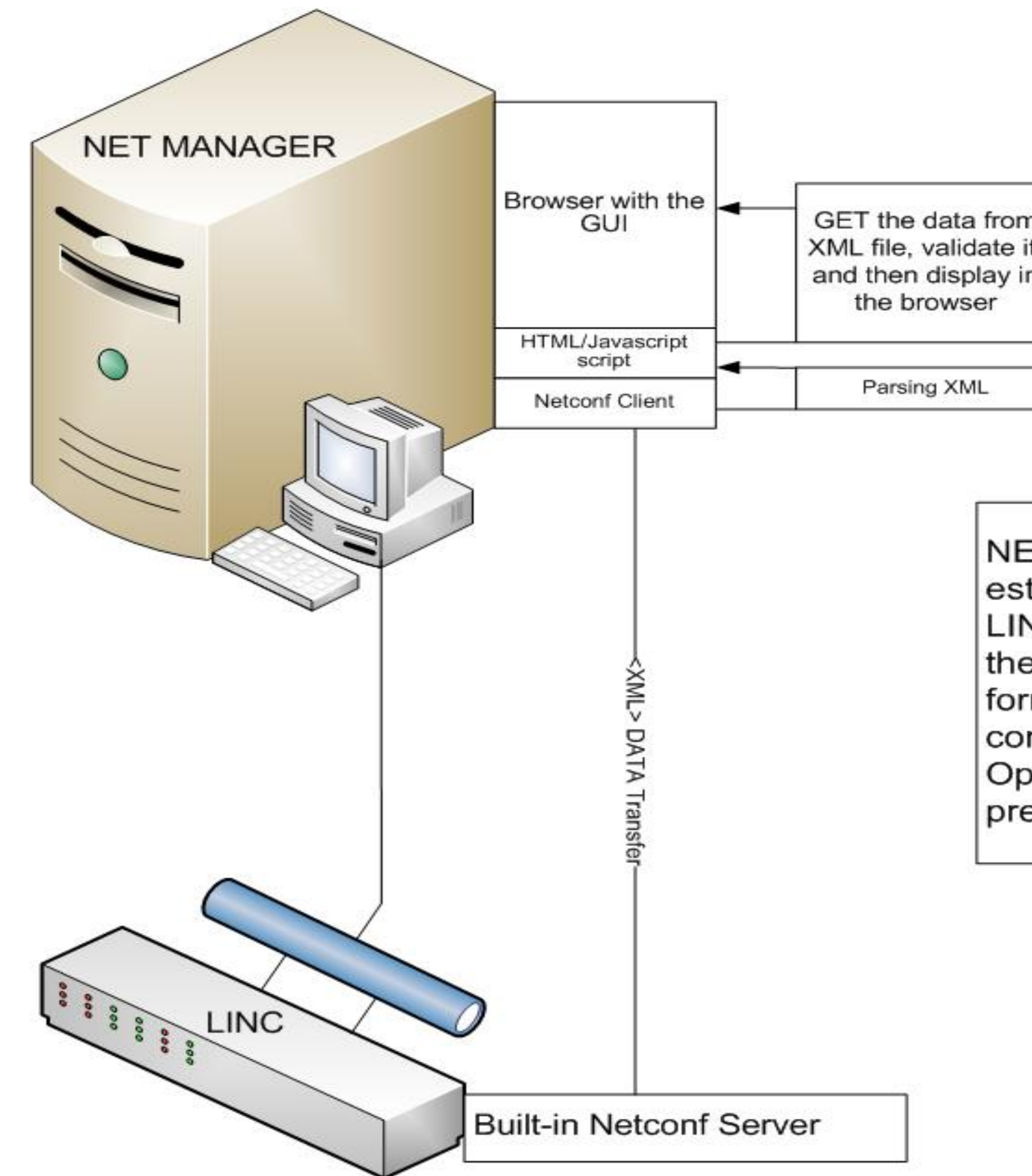
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The screenshots show the following configuration details:

- Logical Switch:** Logical Switch ID: logical-switch0, Data Path: 00:00:00:04:23:b7:19:03, Controller Certificate: undefined, Connection Behaviour: undefined.
- Configuration Point:** Configuration Point ID: ConfigurationPoint1, URI: uri0, Protocol: ssh.
- Logical Switch Controller:** Controller ID: controller1, Role: master, IP Address: 100.1.2.3, Port: 6633, Local IP Address: 192.168.2.129, Protocol: tcp, OF-Config Version: 1.2.

The screenshots show the following configuration details:

- OpenFlow Capable Switch:** (Empty configuration fields)
- OpenFlow Configuration Point:** (Empty configuration fields)
- OpenFlow Logical Switch:** (Empty configuration fields)
- OpenFlow Resource:** (Empty configuration fields)
- OpenFlow Queue:** (Empty configuration fields)
- OpenFlow Port:** (Empty configuration fields)



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LINC switch, more info at:

FLOWFORWARDING.ORG

- Implemented on ProtoGENI
- OF-Config: Network Management for OpenFlow networks
- DEMO: Displaying LINC Switch configurations through NETCONF using OF-Config specification
- OF-Config Specification uses NetConf as transport
- YangCli (YUMA) mechanism is used to get switch configurations
- GREE 2013 work in progress paper

The data model for OF-Configurations Protocol is structured into classes and attributes of classes. Each class is described in a separate sub-section by XML, UML, and YANG. The core of the model is an OF Capable Switch that is configured by OF Configuration Points. Instances of OF logical switches are contained within the OF Capable Switch. A set of OF Controllers is assigned to each OF logical switch. When issuing a NETCONF “get-request” all elements in the requested sub-class or sub-tree must be returned in the result and then manipulation can be done.