



## Übung zu NETCONF mit dem IOS XE

In dieser Übung wird über die Linux Shell eine NETCONF-Sitzung zu dem CSR1000v Router aufgebaut, um das Capability Advertisement zu analysieren.

- 1.) Öffnen Sie eine Linux Shell. Versuchen Sie eine NETCONF-Sitzung zum CSR1000v unter der Adresse 192.168.181.11 aufzubauen:

```
student@workplace-trainer:~$ ssh -l student -p 830 192.168.181.11 netconf
ssh: connect to host 192.168.181.11 port 830: Connection refused
```

Das scheitert aktuell daran, dass auf den Router NETCONF noch nicht konfiguriert wurde.

- 2.) Bauen Sie zu dem Router einen SSH Session auf:

```
student@workplace-trainer:~$ ssh student@192.168.181.11
Password:
CSR#
```

Nun können Sie NETCONF konfigurieren:

```
CSR#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
CSR(config)#netconf-yang
```

- 3.) Versuchen Sie erneut die NETCONF-Sitzung aufzubauen. Diesmal sollte es gelingen:

```
student@workplace-trainer:~$ ssh -l student -p 830 -s 192.168.181.11 netconf
student@192.168.181.11's password:
```

```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<capabilities>
<capability>urn:ietf:params:netconf:base:1.0</capability>
<capability>urn:ietf:params:netconf:base:1.1</capability>
<capability>urn:ietf:params:netconf:capability:writable-running:1.0</capability>
<capability>urn:ietf:params:netconf:capability:rollback-on-error:1.0</capability>
<capability>urn:ietf:params:netconf:capability:validate:1.0</capability>
<capability>urn:ietf:params:netconf:capability:validate:1.1</capability>
```

<capability>urn:ietf:params:netconf:capability:xpath:1.0</capability>  
<capability>urn:ietf:params:netconf:capability:notification:1.0</capability>  
<capability>urn:ietf:params:netconf:capability:interleave:1.0</capability>  
<capability>urn:ietf:params:netconf:capability:with-defaults:1.0?basic-mode=explicit&also-supported=report-all-tagged,report-all</capability>  
<capability>urn:ietf:params:netconf:capability:yang-library:1.0?revision=2016-06-21&module-set-id=dbb57984e8cfc75fbca07cb5a5a5ba70</capability>  
<capability>http://tail-f.com/ns/netconf/actions/1.0</capability>  
<capability>http://cisco.com/ns/cisco-xe-ietf-ip-deviation?module=cisco-xe-ietf-ip-deviation&revision=2016-08-10</capability>  
<capability>http://cisco.com/ns/cisco-xe-ietf-ipv4-unicast-routing-deviation?module=cisco-xe-ietf-ipv4-unicast-routing-deviation&revision=2015-09-11</capability>  
<capability>http://cisco.com/ns/cisco-xe-ietf-ipv6-unicast-routing-deviation?module=cisco-xe-ietf-ipv6-unicast-routing-deviation&revision=2015-09-11</capability>  
<capability>http://cisco.com/ns/cisco-xe-ietf-ospf-deviation?module=cisco-xe-ietf-ospf-deviation&revision=2018-02-09</capability>  
<capability>http://cisco.com/ns/cisco-xe-ietf-routing-deviation?module=cisco-xe-ietf-routing-deviation&revision=2016-07-09</capability>  
<capability>http://cisco.com/ns/cisco-xe-openconfig-acl-deviation?module=cisco-xe-openconfig-acl-deviation&revision=2017-08-25</capability>  
<capability>http://cisco.com/ns/cisco-xe-openconfig-aft-deviation?module=cisco-xe-openconfig-aft-deviation&revision=2018-12-05</capability>  
<capability>http://cisco.com/ns/cisco-xe-openconfig-isis-deviation?module=cisco-xe-openconfig-isis-deviation&revision=2018-12-05</capability>  
<capability>http://cisco.com/ns/cisco-xe-openconfig-ldp-deviation?module=cisco-xe-openconfig-ldp-deviation&revision=2018-07-25</capability>  
<capability>http://cisco.com/ns/cisco-xe-openconfig-mpls-deviation?module=cisco-xe-openconfig-mpls-deviation&revision=2019-06-27</capability>  
<capability><http://cisco.com/ns/cisco-xe-openconfig-segment-routing-deviation?module=cisco-xe-openconfig-segment-routing-deviation&revision=2018-12-05></capability>

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