



Exercise 11.1: Create a VLAN-trunked interface

NOTE: if you have a problem with this exercise, you may need to reboot and choose a different kernel. Create a new tagged VLAN interface with the id 7 and these settings:

- The physical interface should be the main interface (eth0).
- The IP address should be 192.168.X.100, where X is a number unique to your classroom/lab.
- The Netmask should be 255.255.255.0.

Solution 11.1

1. Enable VLANs:

- On **CentOS**: edit the file `/etc/sysconfig/network` and add the following content:

```
VLAN=yes
VLAN_NAME_TYPE="DEV_PLUS_VID"
```

2. Create a VLAN interface configuration file:

- On **CentOS**, edit or create the file
`/etc/sysconfig/network-scripts/ifcfg-<INTERFACE>.7`

with the following content:

```
DEVICE=<INTERFACE>.7
BOOTPROTO=static
TYPE=vlan
ONBOOT=yes
IPADDR=192.168.X.100
NETMASK=255.255.255.0
PHYSDEV="<INTERFACE>"
```

- On **OpenSUSE**, edit or create the file
`/etc/sysconfig/network/ifcfg-<INTERFACE>.7`

with the following content:

```
NAME='<INTERFACE> vlan'
STARTMODE='auto'
VLAN_ID='7'
IPADDR='192.168.X.100/24'
ETHERDEVICE=<INTERFACE>
```

- On **Ubuntu**, edit the file:

```
/etc/network/interfaces
```

and add the following stanza:

```
auto <INTERFACE>.7
iface <INTERFACE>.7 inet static
    address 192.168.X.100
    netmask 255.255.255.0
    vlan-raw-device <INTERFACE>
```

The package `vlan` may need to be installed and the kernel-module `8021q` loaded.

3. Start the newly defined interface:

```
# ifup <INTERFACE>.7
```