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OWL: How to setup QoS (VLAN prio)

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OWL supports QoS on its Ethernet ports.

Please note: QoS usually is not accepted by ISPs.

Required:

- Knowledge about Linux and shell configuration
- Knowledge about how to setup VLANs
- Knowledge about prioritization according to IEEE 802.1Q.

  Note that prio 7 shall be reserved to network control and shall not be used by other applications

QoS as well as VLANs are implemented in Linux and available via e. g. the startup script.

On layer 2 the internal skb prios can be mapped to VLAN prios:
ip link add link <phys.IF> name <vlan-name> type vlan id <vid> egress-qos-map <skb-prio:vl-prio>

E.g.:

ip link add link eth0 name v1 type vlan 1 egress 0:1 1:2 4:4
In above command the internal skb prio 0 is mapped to VLAN prio 1,
skb prio 1 to VLAN prio 2 and 4 to 4.
For ingress use "ingress-qos-map".
Please note: if the agent shall send packets VLAN prio tagged then
the VLAN must get assigned an IP address and the physical interface's
IP address should be deleted, else the communication with the agent
might not reliably work via the VLAN.
Remember to activate the VLAN after all settings are done.

ip addr add <ip/mask> dev <vlan-name>

ip link set <vlan-name> up

- Check with

```
ip addr
```
whether the IP address is correctly assigned to the VLAN and
whether the VLAN is UP.

- Check with

```
cat /proc/net/vlan/<vlan-name>
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the prio mapping