VLAN router + L2 switch

Devices with built-in switch chip

Warning: Not all devices with a switch chip are capable of VLAN switching on a hardware level, check the supported features for each switch chip, the compatibility table can be found Here. If a device has VLAN table support, then it is capable of VLAN switching using the built-in switch chip. You can check the device's switch chip either in the provided link or by using /interface ethernet switch print

```
/interface bridge
add name=bridge1
/interface bridge port
add bridge=bridge1 interface=ether1 hw=yes
add bridge=bridge1 interface=ether2 hw=yes
add bridge=bridge1 interface=ether3 hw=yes
/interface ethernet switch vlan
add ports=ether1,ether2 switch=switch1 vlan-id=20
add ports=ether1,ether3 switch=switch1 vlan-id=30
add ports=ether1,switch1-cpu switch=switch1 vlan-id=99
/interface vlan
add interface=bridge1 vlan-id=99 name=MGMT
/ip address
add address=192.168.99.1/24 interface=MGMT
/interface ethernet switch port
set ether1 vlan-mode=secure vlan-header=add-if-missing
set ether2 vlan-mode=secure vlan-header=always-strip default-vlan-id=20
set ether3 vlan-mode=secure vlan-header=always-strip default-vlan-id=30
set switch1-cpu vlan-header=leave-as-is vlan-mode=secure
```

devices without a built-in switch chip

It is possible to do VLAN filtering using the CPU, there are multiple ways to do it, but it is highly recommended by using bridge VLAN filtering.

```
/interface bridge
add name=bridge1
/interface bridge port
add bridge=bridge1 interface=ether1 hw=no
add bridge=bridge1 interface=ether2 hw=no pvid=20
add bridge=bridge1 interface=ether3 hw=no pvid=30
/interface bridge vlan
add bridge=bridge1 tagged=ether1 untagged=ether2 vlan-ids=20
add bridge=bridge1 tagged=ether1 untagged=ether3 vlan-ids=30
add bridge=bridge1 tagged=ether1,bridge1 vlan-ids=99
/interface vlan
add interface=bridge1 vlan-id=99 name=MGMT
/ip address
add address=192.168.99.1/24 interface=MGMT
/interface bridge
set bridge1 vlan-filtering=yes
```