

# Linux Bonding Network

## RedHat 7/8 with nmtui

nmtui > Edit a connection > Add > New Connection > Select Bond > Create

- Profile Name: bond0
- Device: bond0

> Slaves > Add

- Profile Name: eno1-slave NOTE: ??????? -slave??????????????
- Device: eno1
- Profile Name: ens3f0-slave
- Device: ens3f3

> IPv4 Configuration

- Address: 10.4.1.71/24
- Gateway: 10.4.1.254
- DNS Servers: 10.3.3.3

> IPv6 Configuration > Disabled

“ Profile Name ???????????? ifcfg-XXX ???????????????? ifcfg-bond0 , ifcfg-eno1-slave

?? Profile Name ???????????????? Bond ??? ifcfg-XXX ???

?? Bonding ??

???????? Load Balancing (Round-Robin)???????? Active-Backup

nmtui > Edit a connection > Bond: bond0 > Edit >

- Mode: Active Backup
- Primary: eno1 ? : ??????????????????

NOTE: ???????? Round-Robin ???????? Switch ??????  
EtherChannel??? Switch ?????? vlan XX is flapping between port YYY and  
port ZZZ?

??????

```
# [ ]:[ ] iSCSI Disks,[ ]
systemctl restart network.service
or
nmcli networking off; modprobe -r bonding ; nmcli networking on
```

## RedHat 8 with nmcli

????: ???????? bonding

- ens3
- ens4
- ens5

```
# [ ]
nmcli device status

# [ ] team [ ]
# [ ]: team0
nmcli connection add type team con-name team0 ifname team0 ipv4.addresses 192.168.10.20/24 ipv4.gateway
192.168.10.1 ipv4.dns 192.168.10.1 ipv4.method manual connectio.autoconnect yes config '{"runner" :
{"name" : "activebackup"}}'

# [ ] team 0 [ ]
nmcli device status

# [ ] team-slave [ ]([ ])
# [ ]: team0-eth0
# master [ ] team0
nmcli connection add type team-slave con-name team0-eth0 ifname ens3 master team0

# [ ] team-slave [ ]([ ])
# [ ]: team0-eth1
# master [ ] team0
```

```
nmcli connection add type team-slave con-name team0-eth1 ifname ens4 master team0
```

```
# team-slave team0(team0)
```

```
# team0: team0-eth2
```

```
# master team0 team0
```

```
nmcli connection add type team-slave con-name team0-eth2 ifname ens5 master team0
```

```
# team 0
```

```
nmcli device status
```

?????

```
# team0
```

```
teamdctl team0 state
```

```
teamnl team0 options
```

```
#
```

```
nmcli connection down team0-eth2
```

```
#
```

```
nmcli device status
```

```
teamdctl team0 state
```

```
#
```

```
nmcli connection up team0-eth2
```

## LACP Mode

### RedHat 7/8

nmtui > Edit a connection > Bond: bond0 > Edit >

- Mode: 802.3ad

Verify the state of the network

- Make sure the **Aggregator ID** are the same on the ports with the same Port Channel configured.
- Bonding Mode is 802.3ad.

- Aggregator ID ??????????????

“ If you run into the issue with *Multiple LACP bonds have the same Aggregator ID*, check the link, <https://access.redhat.com/solutions/2916431> .

```
[root@tpeitpsm01 ~]# cat /proc/net/bonding/bond0
Ethernet Channel Bonding Driver: v3.7.1 (April 27, 2011)

Bonding Mode: IEEE 802.3ad Dynamic link aggregation
Transmit Hash Policy: layer2 (0)
MII Status: up
MII Polling Interval (ms): 100
Up Delay (ms): 0
Down Delay (ms): 0
Peer Notification Delay (ms): 0

802.3ad info
LACP rate: slow
Min links: 0
Aggregator selection policy (ad_select): stable
System priority: 65535
System MAC address: b4:7a:f1:4c:8b:1c
Active Aggregator Info:
    Aggregator ID: 1          <=====  port  port ID portchannel.
    Number of ports: 4        <=====  portchannel  port
    Actor Key: 9
    Partner Key: 3
    Partner Mac Address: 70:18:a7:dc:ac:80

Slave Interface: eno1
MII Status: up
Speed: 1000 Mbps
Duplex: full
Link Failure Count: 0
Permanent HW addr: b4:7a:f1:4c:8b:1c
Slave queue ID: 0
Aggregator ID: 1
Actor Churn State: none
```

Partner Churn State: none <===

Actor Churned Count: 0

Partner Churned Count: 0 <===

details actor lacp pdu:

system priority: 65535

system mac address: b4:7a:f1:4c:8b:1c

port key: 9

port priority: 255

port number: 1

port state: 61

details partner lacp pdu:

system priority: 32768

system mac address: 70:18:a7:dc:ac:80 <===

oper key: 3

port priority: 32768

port number: 263

port state: 61

Slave Interface: eno2

MII Status: up

Speed: 1000 Mbps

Duplex: full

Link Failure Count: 0

Permanent HW addr: b4:7a:f1:4c:8b:1d

Slave queue ID: 0

Aggregator ID: 1

Actor Churn State: none

Partner Churn State: none

Actor Churned Count: 0

Partner Churned Count: 0

details actor lacp pdu:

system priority: 65535

system mac address: b4:7a:f1:4c:8b:1c

port key: 9

port priority: 255

port number: 2

port state: 61

details partner lacp pdu:

system priority: 32768

system mac address: 70:18:a7:dc:ac:80

oper key: 3  
port priority: 32768  
port number: 264  
port state: 61

## Configure Switch

[rhel\\_network\\_bonding\\_switch\\_config.png](#)

## Ubuntu with netplan

- [A Beginner's Guide to Creating Network Bonding and Bridging in Ubuntu](#)

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