

## Redundancy with InfiMUX



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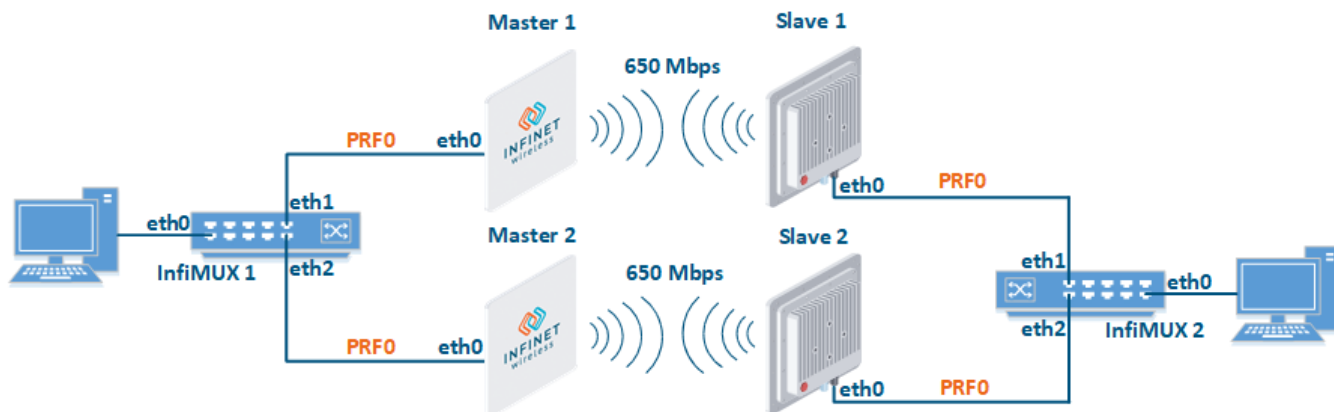


### CAUTION

Configurations from the scenarios below are examples that demonstrate the potential capabilities of the Infinet Wireless devices. The configurations may vary depending on the model and firmware version. We do not recommend copying this solutions to the hardware without checking.

### Description

Link aggregation of radio channels allows increasing the maximum radio throughput. InfiMUX switches can aggregate radio links into a single MINT domain where a capacity of each link will be estimated in real time.



### Configuration Example

A management is VLAN 100 in switch group #100. A transport of user data is in switch group #1.

- Configure Master 1 and Slave 1 as the main link.

## Master 1

```
rf rf5.0 band 40
rf rf5.0 mimo
rf rf5.0 freq 5000 bitr 300000 sid 10101010 burst
rf rf5.0 txpwr 25 pwrctl distance auto
dfs rf5.0 dfsoff
mint rf5.0 -roaming leader
mint rf5.0 -type master
mint rf5.0 -name "Master 1"
mint rf5.0 -key "123456789"
mint rf5.0 poll start
ifc svi100 up
ifc vlan100 vlan 100 vlandev eth0 up
sw group 100 add vlan100 rf5.0
svi 100 group 100
ifc svi100 192.168.1.1/24
sw group 100 start
```

## Slave 1

```
rf rf5.0 band 40
rf rf5.0 mimo
rf rf5.0 burst
dfs rf5.0 dfsoff
mint rf5.0 prof 1 -band 40 -freq 5000 -bitr 300000 -sid 10101010 -nodeid 00020 -type slave -netid 0 -
minbitr 30000 -autobitr -mimo -key "123456789"
mint rf5.0 -name "Slave 1"
ifc svi100 up
ifc vlan100 vlan 100 vlandev eth0 up
sw group 100 add vlan100 rf5.0
svi 100 group 100
ifc svi100 192.168.1.2/24
sw group 100 start
```

- Configure Master 2 and Slave 2 as a backup link.

## Master 2

```
rf rf5.0 band 40
rf rf5.0 mimo
rf rf5.0 freq 5100 bitr 300000 sid 10101010 burst
rf rf5.0 txpwr 25 pwrctl distance auto
dfs rf5.0 dfsoff
mint rf5.0 -roaming leader
mint rf5.0 -type master
mint rf5.0 -name "Master 2"
mint rf5.0 -key "123456789"
mint rf5.0 poll start
ifc svi100 up
ifc vlan100 vlan 100 vlandev eth0 up
sw group 100 add vlan100 rf5.0
svi 100 group 100
ifc svi100 192.168.1.3/24
sw group 100 start
```

## Slave 2

```
rf rf5.0 band 40
rf rf5.0 mimo
rf rf5.0 burst
dfs rf5.0 dfsoff
mint rf5.0 prof 1 -band 40 -freq 5100 -bitr 300000 -sid 10101010 -nodeid 00040 -type slave -netid 0 -
minbitr 30000 -autobitr -mimo -key "123456789"
mint rf5.0 -name "Slave 2"
ifc svi100 up
ifc vlan100 vlan 100 vlandev eth0 up
sw group 100 add vlan100 rf5.0
svi 100 group 100
ifc svi100 192.168.1.4/24
sw group 100 start
```

- Configure InfiMUX switches.

## InfiMUX 1

```
ifc svi100 up
ifc vlan100 vlan 100 vlandev eth0 up
sw group 100 add vlan100 prf0
svi 100 group 100
ifc svi100 192.168.1.5/24
switch group 100 order 1
sw group 100 start
ifc prf0 up
prf 0 parent eth1
mint prf0 -name "InfiMux 1 prf 1"
mint prf0 -nodeid 00090
mint prf0 -type master
mint prf0 -mode fixed
mint prf0 -key "123456789"
mint prf0 -authmode public
mint prf0 start
ifc prf1 up
prf 1 parent eth2
mint prf1 -name "InfiMux 1 prf 2"
mint prf1 -nodeid 00100
mint prf1 -type master
mint prf1 -mode fixed
mint prf1 -key "123456789"
mint prf1 -authmode public
mint prf1 start
mint join prf0 prf1
lag 0 mode fast port eth1 eth2
ifc lag0 up
```

**InfiMUX 2**

```

ifc svi100 up
ifc vlan100 vlan 100 vlandev eth0 up
sw group 100 add vlan100 prf0
svi 100 group 100
ifc svi100 192.168.1.6/24
switch group 100 order 1
sw group 100 start
ifc prf0 up
prf 0 parent eth1
mint prf0 -name "InfiMux 2 prf 1"
mint prf0 -nodeid 00110
mint prf0 -type master
mint prf0 -mode fixed
mint prf0 -key "123456789"
mint prf0 -authmode public
mint prf0 start
ifc prf1 up
prf 1 parent eth2
mint prf1 -name "InfiMux 2 prf 2"
mint prf1 -nodeid 00120
mint prf1 -type master
mint prf1 -mode fixed
mint prf1 -key "123456789"
mint prf1 -authmode public
mint prf1 start
mint join prf0 prf1
lag 0 mode fast port eth1 eth2
ifc lag0 up

```

- Create united MINT domain.

**Master 1**

```

ifc prf0 up
prf 0 parent eth0
mint prf0 -name "Master 1 prf"
mint prf0 -nodeid 00050
mint prf0 -type master
mint prf0 -mode fixed
mint prf0 -key "123456789"
mint prf0 -authmode public
mint prf0 start
mint join rf5.0 prf0

```

**Slave 1**

```

ifc prf0 up
prf 0 parent eth0
mint prf0 -name "Slave 1 prf"
mint prf0 -nodeid 00060
mint prf0 -type master
mint prf0 -mode fixed
mint prf0 -key "123456789"
mint prf0 -authmode public
mint prf0 start
mint join rf5.0 prf0

```

## Master 2

```
ifc prf0 up
prf 0 parent eth0
mint prf0 -name "Master 2 prf"
mint prf0 -nodeid 00070
mint prf0 -type master
mint prf0 -mode fixed
mint prf0 -key "123456789"
mint prf0 -authmode public
mint prf0 start
mint join rf5.0 prf0
```

## Slave 2

```
ifc prf0 up
prf 0 parent eth0
mint prf0 -name "Slave 2 prf"
mint prf0 -nodeid 00080
mint prf0 -type master
mint prf0 -mode fixed
mint prf0 -key "123456789"
mint prf0 -authmode public
mint prf0 start
mint join rf5.0 prf0
```

- Configure switch groups.



### CAUTION

The switching group number for the data transmission on Master 2 and Slave 2 must differ from the group number on Master1 and Slave 1, or it might cause the loop.

## Master 1

```
switch group 1 add eth0 prf0
sw group 1 repeater on
switch group 1 start
```

## Slave 1

```
switch group 1 add eth0 prf0
sw group 1 repeater on
switch group 1 start
```

## Master 2

```
switch group 2 add eth0 prf0
sw group 2 repeater on
switch group 2 start
```

## Slave 2

```
switch group 2 add eth0 prf0
sw group 2 repeater on
switch group 2 start
```

## InfiMUX 1

```
switch group 1 add eth0 lag0
switch group 1 start
```

## InfiMUX 2

```
switch group 1 add eth0 lag0
switch group 1 start
```