Title

Redundancy with InfiLINK 2x2 / InfiMAN 2x2 and InfiLINK Evolution / InfiMAN Evolution

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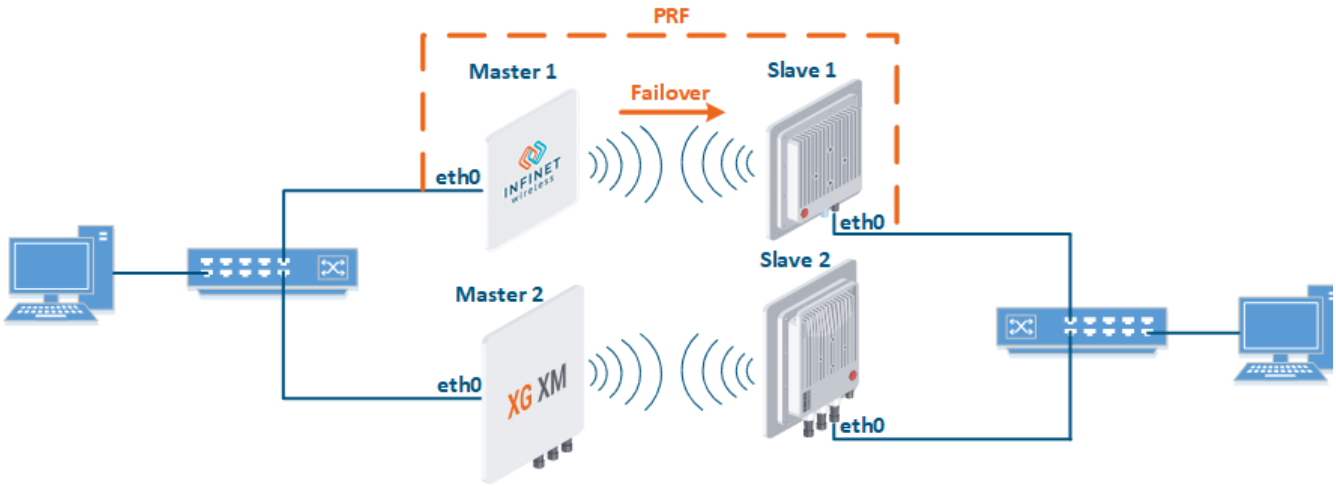
- Description
- Configuration Example

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

InfiLINK 2x2 / InfiMAN 2x2 and InfiLINK Evolution / InfiMAN Evolution families units have a channels redundancy functional. A hot reserve might be created by using the Failover option. The Failover option does not depend on the method of data transmission on the main channel. The only condition is connectivity at level 2 between Infinet Wireless devices through both links.
The principle of operation is extremely simple. The Infinet Wireless device, on which the Failover option is configured, checks the availability of a specific MAC address through the primary link. If this MAC address is available, then the operation of the backup channel is blocked. The radio module stops broadcasting on the backup master. The reserved slave device only listens to the radio while there is no signal from the master. Thus, the backup link can operate on the same frequency as the main one, but it does not have any influence on it. As soon as the monitored MAC address disappears in the main link, the backup link will be unlocked and traffic will begin to be transmitted over it. The process is completely automatic. However, the transition to a backup link is associated with a short-term idle time. Traffic will return automatically to the primary link as soon as reserve link is failure.
You can provide the redundancy for the link via InfiLINK XG/InfiLINK XG 1000 devices with using InfiLINK 2x2, InfiMAN 2x2, InfiLINK Evolution or InfiMAN Evolution.



Configuration Example

CAUTION

STP protocol may block correct working Failover option, so it should be disabled. Failover option causes short-time loops in one broadcast domain.

- Configure Master 1 and Slave 1 as a backup 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 stp off
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
switch group 100 order 1
sw group 100 stp off
sw group 100 start
```

- Configure Master 2 and Slave 2 as the main link.

Master 2

```
xg -type master
xg -tdd-sync-src freerun
xg -cell-id 1 xg -channel-width 40
xg -freq-dl 5000
xg -freq-ul 5000
xg -short-cp 1
xg -freq-auto 0
xg -max-distance 1
xg -sframelen 5
xg -tdd-profile-auto-switching 1
xg -txpwr 0 xg -ctrl-block-boost 1
xg -atpc-master-enable 1
xg -atpc-target-rssi -55
xg -atpc-rssi-threshold 1
```

Slave 2

```
xg -type slave
xg -tdd-sync-src freerun
xg -cell-id 1
xg -channel-width 40
xg -freq-dl 5000
xg -freq-ul 5000
xg -short-cp 1
xg -freq-auto 0
xg -max-distance 1
xg -sframelen 5
xg -tdd-profile-auto-switching 1
xg -txpwr 0
xg -ctrl-block-boost 1
xg -atpc-master-enable 1
xg -atpc-target-rssi -55
xg -atpc-rssi-threshold 1
```

- 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
```

- Configure switch groups.

Master 1

```
switch group 1 add eth0 prf0
switch group 1 start
```

Slave 1

```
switch group 1 add eth0 prf0
switch group 1 start
```

- Enable Failover option.

Master 1

```
mint rf5.0 failover "MAC Slave 1"
```