Failover

6310-DX, 6330-MX, and 6350-SR

Failover

Difficulty level: ***Beginner***

Goal

To use the 63xx-series router's cellular modem as a backup WAN connection for the primary WAN Ethernet port. The 63xx-series router will use the WAN Ethernet port as its main Internet connection, and will fail over to the cellular modem if the primary connection goes down.

Setup

This article assumes the LAN ports are operating under default settings, which provide DHCP connectivity to devices connected to the 63xx-series router's LAN ports. For more details on the default settings of the 63xx-series router, see the ***Default Settings*** section of the SR User's Manual.

For this setup, you will need the 63xx-series router with both a primary WAN Ethernet connection, and a cellular modem connection.

Sample

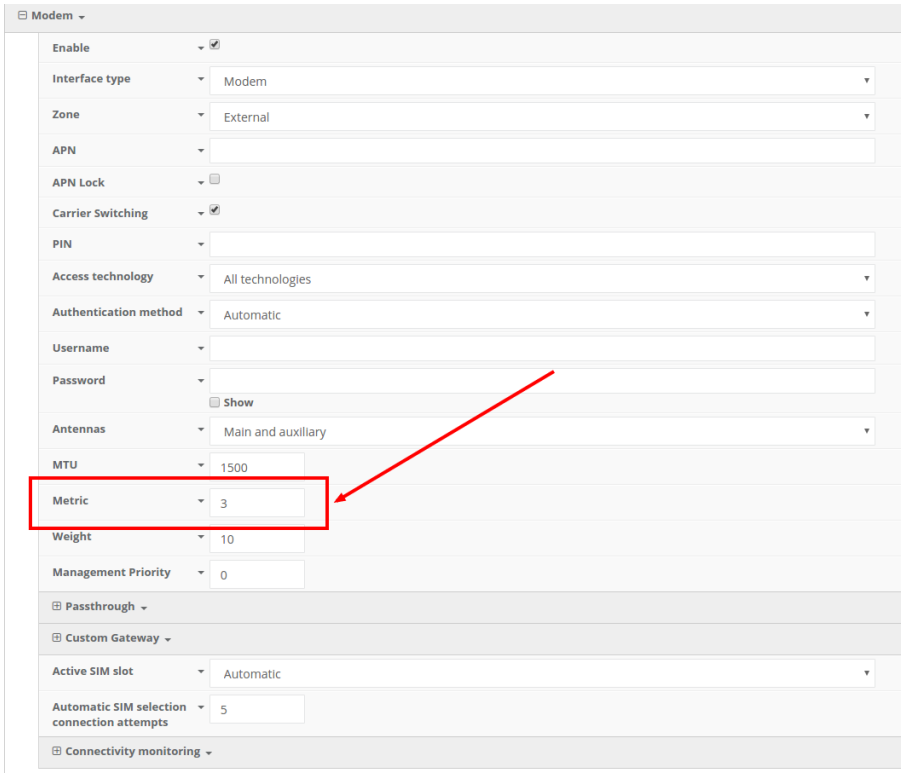
The sample configuration below shows a 63xx-series router with two internet connections. The WAN Ethernet interface will be used as the primary Internet connection. The 63xx-series router is setup to test the WAN Ethernet connection twice every minute. If three sequential tests fail, then the 63xx-series router will restart the WAN Ethernet connection, and failover to the cellular modem's Internet connection until the WAN Ethernet connection is re-established.

Summed up, if a 63xx-series router's primary WAN connection fails, with the below configuration the 63xx-series router will failover to the cellular modem in under 2 minutes.

Sample Configuration

Open the configuration profile for the 63xx-series router and make the following changes.

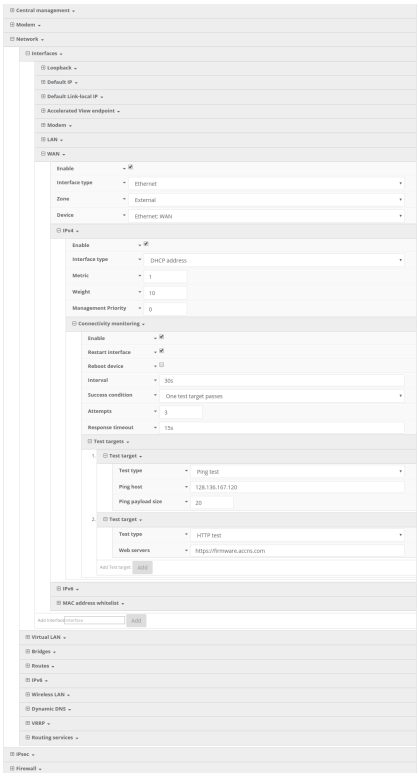
In the ***Modem -> Metric entry***, ensure the value is set to a number higher than the the value in ***Network -> Interfaces -> WAN -> IPv4 -> Metric***. The interface with the lower metric takes higher precedence. By default, the cellular modem metric should be 3 and the WAN Ethernet's metric should be 1, making WAN Ethernet the primary and the cellular modem the backup Internet connection.



Next, open the ***Network -> Interfaces -> WAN -> IPv4 -> Active Recovery*** section and make the following changes.

- **Enabled:** checked
- **Restart interface:** checked
- **Interval:** 30s
- **Attempts:** 3
- **Test targets:** a ping test to *128.136.167.120* and a HTTP test to *firmware.accns.com*
  Note: 2 different tests are recommended to prevent false positives

> ***NOTE:*** *Best practices dictate that redundant tests (with divergent failure conditions) will be the best way to ensure proper connectivity monitoring/active recovery. With only a single test type, false positives could be reported.*


Central management
Modem
Network
Interfaces
Loopback
Default IP
Default Link-local IP
Accelerated View endpoint
Modem
LAN
WAN
Enable
Interface type
Ethernet
Zone
External
Device
Ethernet WAN
IPv4
Enable
Interface type
DHCP address
Metric
1
Weight
10
Management Priority
0
Connectivity monitoring
Enable
Restart interface
Reboot device
Interval
30s
Success condition
One test target passes
Attempts
3
Response timeout
15s
Test targets
1.
Test target
Test type
Ping test
Ping host
128.136.167.120
Ping payload size
20
2.
Test target
Test type
HTTP test
Web servers
https://firmware.accns.com
Add Test target
Add
IPv6
MAC address whitelist
Add interface
Add
Virtual LAN
Bridges
Routes
IPv6
Wireless LAN
Dynamic DNS
VRRP
Routing services
IPsec
Firewall