

How to Achieve Link Failover in iSite Router

The SilverNet iSite Switch supports different network interfaces, including Ethernet, Dual Cellular and WIFI, which can connect the router to the Internet in different ways. The router supports Link Failover among these interfaces. The rules are as follows:

1. You can set the priority of the interfaces.
2. The router has Ping detection to detect whether the network is available. If the first priority link is not available, the router will switch to next available priority link.
3. There is a Revert Interval setting 300s by default to let the router try to revert back to the first priority link every 300 seconds. 0s means not to switch.

REQUIREMENT

SIL iSite Switch firmware version 3x.2.0.6 or later

SIL iSite Lite firmware version 1.0.15 or later

CONFIGURATION

Go to Network -> Interface -> Link Failover to setup link priority. Take the default link priority table as below as example, SIM1 has the first priority by default. When SIM1 is inserted the router connects to the Internet through SIM, the link priority table is below.

The screenshot shows the 'Link Failover' configuration page. At the top, there are tabs for 'Link Failover', 'Cellular', 'Port', 'WAN', 'Bridge', 'WLAN', 'Switch', and 'Loopback'. The 'Link Failover' tab is selected. Below the tabs, there is a section titled 'Link Priority' containing a table with the following data:

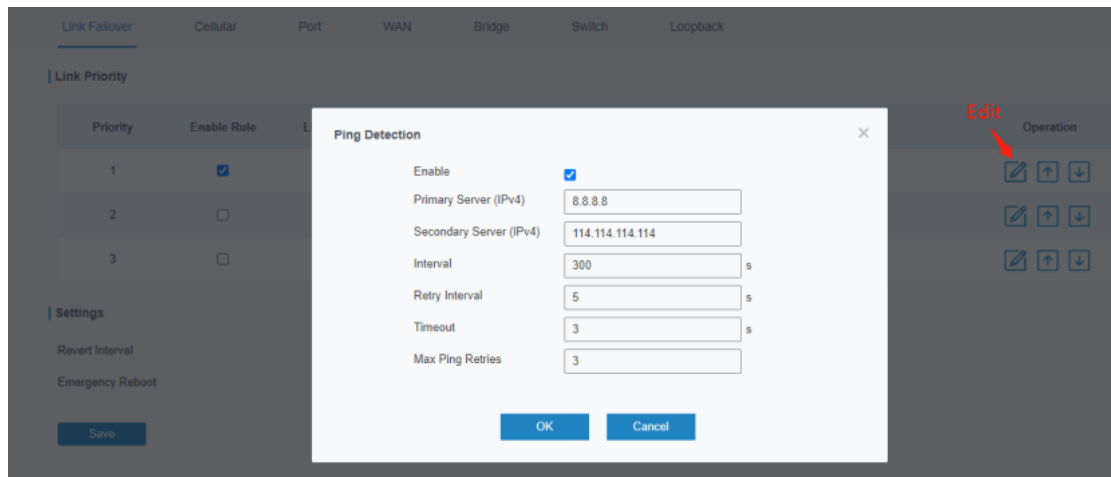
Priority	Enable Rule	Link in use	Interface	Connection Type	IP	Operation
1	☒	●	Cellular-SIM1	DHCP	10.2.25.71	Edit Up Down
2	☒	●	Cellular-SIM2	-	-	Edit Up Down
3	☒	●	WAN	Static IP	192.168.23.186	Edit Up Down

Below the table is a 'Settings' section with the following options:

- Revert Interval: s
- Emergency Reboot: ☐

A 'Save' button is located at the bottom of the settings section.

You can click the Edit button to adjust ping detection parameters such as ICMP server and interval according to real usage. This is used to detect whether the network is available.



Go to Status -> Overview you can also see the cellular is the link in use.

Overview	Cellular	Network	WLAN	VPN	Routing	Host List	GPS
System Information Model: SIL ISITE Serial Number: 6219B2640770 Firmware Version: 35.3.0.5 Hardware Version: V2.0				System Status Local Time: 2022-12-15 11:54:30 Thursday Uptime: 8days, 22:12:07 CPU Load: 9% RAM (Available/Capacity): 24MB/128MB(18.75%) Flash (Available/Capacity): 81MB/128MB(63.28%)			
Cellular ● Link in use Status: Ready, FDD LTE, Current SIM: SIM1 IPv4: 10.98.150.100/29 IPv6: fe80::a8f1:6fff:fe15:f34d/64 Connection Duration: 2 days, 07:24:27 Data Usage Monthly: 132.7 MIB				WAN Status: Offline IPv4: - IPv6: fe80::26e1:24ff:fe2:6cb2/64 MAC: 24:e1:24:f2:6c:b4 Connection Duration: 0 days, 00:00:00			
WLAN Status: Running Mode: AP SSID: iSite4G Connected Clients: 0				LAN IPv4: 192.168.168.16/24 IPv6: fe80::e466:8fff:fea6:84d9/64 Connected Devices: 1			

You can click the Up or Down button to adjust the priority or change the current link access to another. In the example below, the WAN link is adjusted to be the first priority and becomes the link in use. Revert Interval setting means the router tries switching back to the first priority link according to the interval. 0s refers to not to switch.

Link Priority

Priority	Enable Rule	Link in use	Interface	Connection Type	IP	Operation
1	☒	●	WAN	Static IP	192.168.23.186	[Edit] [Up] [Down]
2	☒	●	Cellular-SIM1	DHCP	10.2.25.71	[Edit] [Up] [Down]
3	☒	●	Cellular-SIM2	-	-	[Edit] [Up] [Down]

Settings

Revert Interval: s

Emergency Reboot: ☐

Save

The status page syncs the change.

System Information

Model: SIL ISITE

Serial Number: 6219B2640770

Firmware Version: 35.3.0.5

Hardware Version: V2.0

System Status

Local Time: 2022-04-21 07:53:30 Thursday

Uptime: 00:10:09

CPU Load: 11%

RAM (Available/Capacity): 25MB/128MB(19.53%)

Flash (Available/Capacity): 82MB/128MB(64.06%)

Cellular

Status: Ready, FDD LTE

Current SIM: SIM1

IPv4: 10.178.158.178/30

IPv6: fe80::2420:e0ff:feef:5019/64

Connection Duration: 0 days, 00:08:27

Data Usage Monthly: 132.8 MIB

WLAN

Status: Disabled

WAN ● Link in use

Status: Online

IPv4: 192.168.168.61

IPv6: fe80::26e1:24ff:feb2:6cb2/64

MAC: 24:e1:24:f2:6c:b4

Connection Duration: 0 days, 00:07:52

LAN

IPv4: 192.168.10.1/24

IPv6: fe80::4c84:80ff:fe22:6cae/64

Connected Devices: 1

Below is setting of Revert Interval to let the router try to revert back to the first priority link.

Settings

Revert Interval: s

Emergency Reboot: ☐

Save

You can also enable the Emergency Reboot to make the router reboot when all links are not available in emergency situation.

Note: Work mode of dual SIM cards is cold-standby, so if the link was switched from SIM1 to SIM2, it will not revert to SIM1 again until the link is switched to WAN or no other links are available.