



Sangfor VPN

Troubleshooting guide for Sangfor VPN build up failure with Multiline



Change Log

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1. Document Description

The purpose of this document is to provide guidance for troubleshooting on the failure of building up Sangfor VPN with Multiline.

2. Applicable Version

This document is applicable for the failure of building up Sangfor VPN with Multiline on all Sangfor product.

The version included VPN/DLAN version 5.0 onwards.

3. Problem Scenario

The failure of building up Sangfor VPN with Multiline in this document is referring to the scenario that two Sangfor device is trying to build Sangfor VPN with Multiline option.

Example scenario as below:

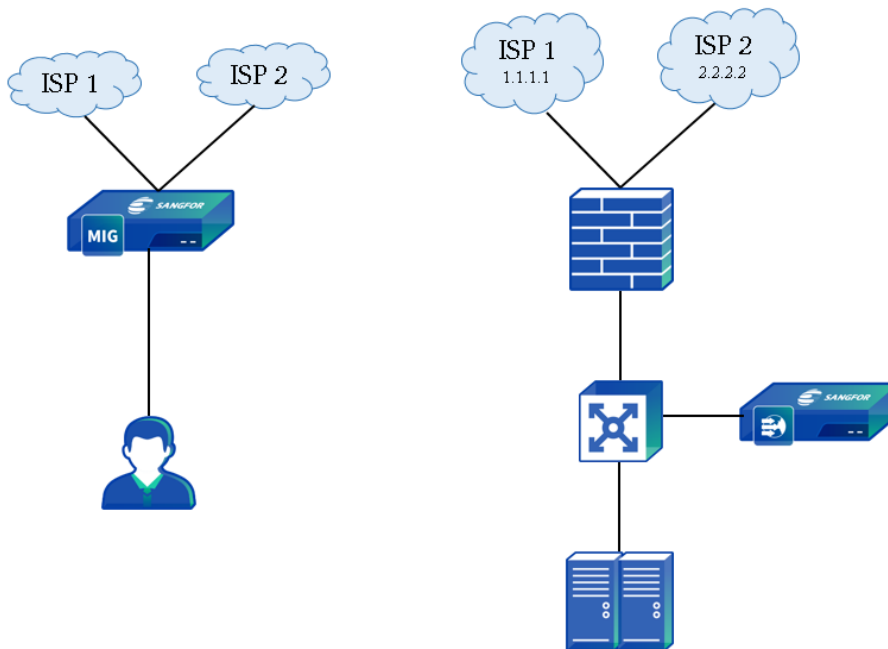


Figure 1

Branch has a Sangfor MIG with Gateway deployment, while HQ has a Sangfor WANO with Single-arm deployment.

For failure of building up Sangfor VPN with Multiline, mainly divided into the following scenarios:

- Line is not working properly
- Incorrect Multiline configuration

4. Troubleshooting Guide

4.1 General Scenario Troubleshooting Step

The following basic information need to be confirmed when the Sangfor VPN build up failure with Multiline:

1. Make sure both Sangfor side and Client side are able to ping to each other.
 - i. Navigate to [Maintenance] > [Web Console]
 - ii. Ping to peer side device IP
 - iii. Ensure it is able to Ping to each other
2. Make sure the Sangfor VPN Service port – 4009(default) is allowed in both sides.
3. Make sure the Sangfor VPN Service port – 4009(default) is NAT/Port Forward properly. (By referring to Figure 1 above)
4. Make sure Primary and Secondary Webagent is filled in correctly
5. Make sure WAN license is more than 1 in order to use Multiline Options

4.2 Ensure all lines are working

For Multiline scenario, by right it will shows the multiplication of the total numbers of line of both side. Take the above Figure 1 as example, both sides have 2 lines each, therefore at the Sangfor VPN shall show 4 connections in total.

Local Line	Peer Line	Result
Line 1	Line 1	Local [1] > Peer [1]
	Line 2	Local [1] > Peer [2]
Line 2	Line 1	Local [2] > Peer [1]
	Line 2	Local [2] > Peer [2]

If either line is not working properly, it will caused the connection unable to establish. Therefore, disabling/swapping both sides line 1 and 2 to ensure it is working.

Example for incomplete VPN establishment with all lines:

Version: DLAN6.2.0
Timeout: 10 second(s)

Local Line	Peer Line	Protocol	Upload	Download	Latency(ms)	Packet loss rate
[2]180. [REDACTED]	[0]112 [REDACTED]	TCP	66.62Kbps	75.38Kbps	7	0.00%

Example for complete VPN establishment with all lines,

Version: DLAN6.2.0
Timeout: 10 second(s)

Local Line	Peer Line	Protocol	Upload	Download	Latency(ms)	Packet loss rate
[0]36. [REDACTED]	[0]112. [REDACTED]	TCP	91.00Kbps	98.50Kbps	10	0.00%
[0]36. [REDACTED]	[1]203. [REDACTED]	TCP	592.00bps	592.00bps	36	0.00%
[2]180. [REDACTED]	[0]112. [REDACTED]	TCP	592.00bps	26.95Kbps	8	0.00%
[2]180. [REDACTED]	[1]203. [REDACTED]	TCP	0.00bps	17.75Kbps	12	0.00%

4.3 Multiline Configuration

Ensure Multiline options is enabled. Also, the status must be “Activated”. Status “Activated” means working normal, while “Disabled” means the WAN interface might be disabled. Refer to below example screenshot,

>>Multiline Options		
<input checked="" type="checkbox"/> Enable Multiline		
Status	Outgoing Line	Line Alias
Disabled	Line 2	
Activated	Line 1	
Activated	Line 3	

According to Figure 1 above, WANO was NAT/Port Forward by a Third-party Firewall. In this scenario, the Multiline configuration must be configured correctly. Refer to below screenshot,

Line Attributes -- Webpage Dialog

https://[REDACTED]/html/system/mline_operate.html Certificate error

Line: Line 1 (LAN) v

Line Interface: v i

Line Type: v i

ISP: v i

☐ 4G/Satellite

Bandwidth Allocation

Outbound 0 Mbps v

Inbound 0 Mbps v

Testing Domain: www.sina.com

Note: Leaving Testing Domain blank under ethernet line stands for disable DNS detection.

Testing DNS1: v

Testing DNS2: v

Note: After filling Testing Domain under ethernet line, leaving these Testing DNS blank stands for using the interface DNS. If the line is ADSL, these Testing DNS could be blank.

☒ Use static Internet IP

IP Address: Public IP v

☐ Enable link state probe

IP Address: v

IP Address: Tips: Ping probe is performed by a route on the link. It is better to use IP address to probe link state in leased line environment. IP addresses are separated by comma.

OK Cancel

If the respective WAN line has static Internet IP, it is a must to configure it in the Multiline.

The concept of configuring the static Internet IP is because when Branch trying to establish a VPN connection with HQ by using the NAT ip from Firewall, it will be resolved into WANO LAN IP if it can be reached successfully.

For instance, Figure 1 HQ side ISP 1 with IP of 1.1.1.1 and ISP 2 with IP of 2.2.2.2. When Branch MIG request to establish VPN to HQ WANO, after HQ WANO received the traffic, the next packet will by using HQ WANO Arm IP instead of HQ ISP IP as the HQ WANO detects that in the Multiline configuration does not configure Static Internet IP.

5. Collect Information

If the problem still unable to be resolve through the troubleshooting steps above, you can collect the below information and escalate the problem to Sangfor Technical Support with the Community Open a Case feature. Technical Engineer will contact you to provide assistance on resolving the issue.

Information need to be collect:

- i. Server Model and both sides firmware version.
- ii. Screenshot of the System Logs for both sides.
- iii. What troubleshooting step you had gone through.

Open a support case access link:

<http://community.sangfor.com/plugin.php?id=service:case>

6. Request Articles

If you have new document requirement, you can feedback to us with the feedback link below. We will provide the troubleshooting guide document based on the feedback.

Feedback Link

CMS: <http://192.200.19.22/request-articles/>

Sangfor Community: <http://community.sangfor.com/plugin.php?id=service:feedback>



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