



SANGFOR

# SANGFOR\_NGAF\_ Sangfor VPN Tunnel Route Configuration Guide

SANGFOR Technologies Inc.

8 May 2018

*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +86 755 2654 2000 (7511) | E.: [tech.support@sangfor.com](mailto:tech.support@sangfor.com) | W.: [www.sangfor.com](http://www.sangfor.com)



## Declaration

Copyright © SANGFOR Technologies Inc. All rights reserved.

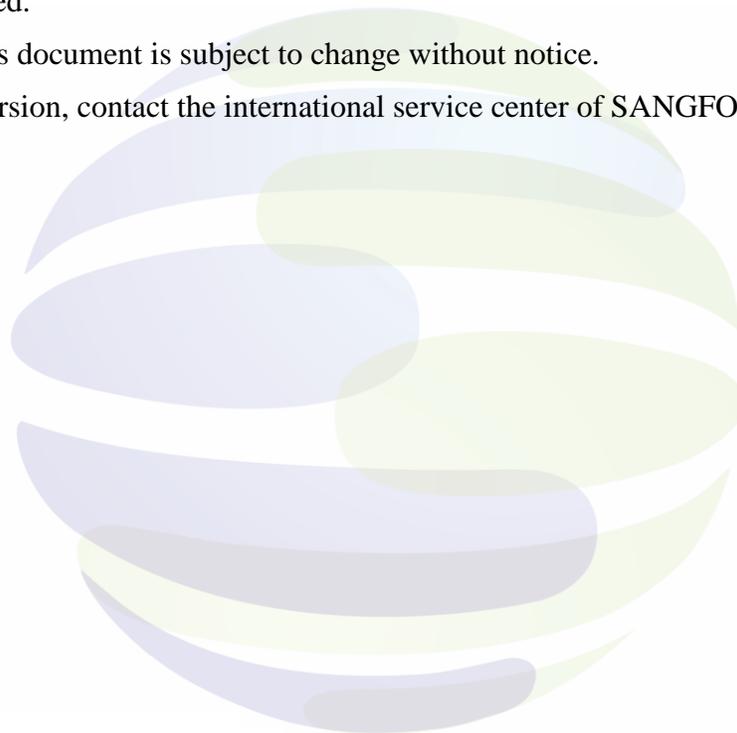
No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of SANGFOR Technologies Inc.

SANGFOR, SINFOR and  logo are the trademarks of SANGFOR Technologies Inc. All other trademarks and trade names mentioned in this document are the property of their respective holders.

Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

The information in this document is subject to change without notice.

To obtain the latest version, contact the international service center of SANGFOR Technologies Inc.



*Your Future-Proof IT Enabler*

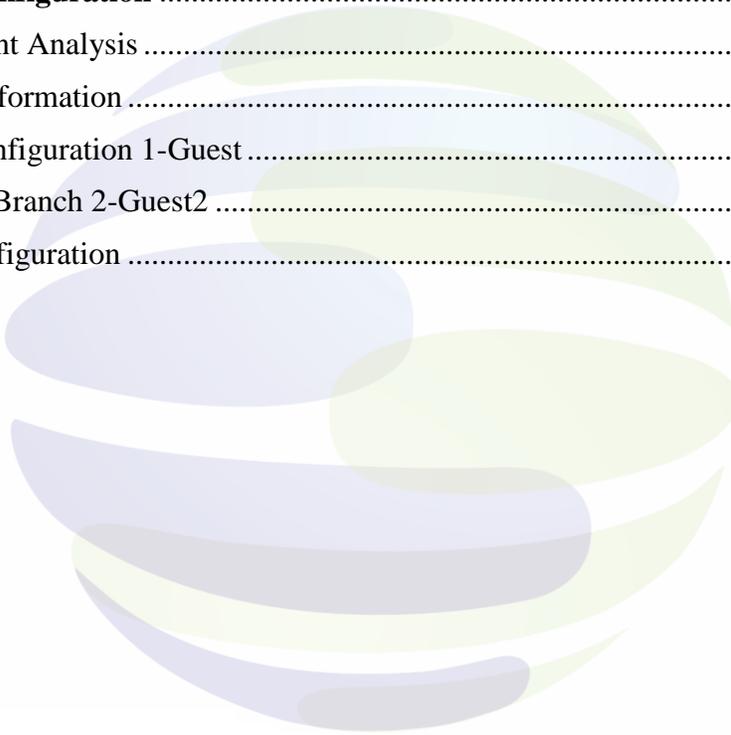
### Sangfor Technologies

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: [tech.support@sangfor.com](mailto:tech.support@sangfor.com) | W.: [www.sangfor.com](http://www.sangfor.com)

## Table of contents

|   |   |
|---|---|
| <b>Declaration</b> .....                  | 2 |
| Table of contents .....                   | 3 |
| <b>1 Introduction</b> .....               | 4 |
| 1.1 Abbreviations and conventions .....   | 4 |
| 1.2 Feedback .....                        | 4 |
| <b>2 Tunnel Route Configuration</b> ..... | 4 |
| 2.1 Requirement Analysis .....            | 4 |
| 2.2 Confirm Information .....             | 5 |
| 2.3 Branch Configuration 1-Guest .....    | 5 |
| 2.4 Configure Branch 2-Guest2 .....       | 7 |
| 2.5 Finish Configuration .....            | 8 |



*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: tech.support@sangfor.com | W.: www.sangfor.com

# 1 Introduction

## 1.1 Abbreviations and conventions

NGAF in this article refers to the SANGFOR NGAF device.

WANO in this article refers to the SANGFOR WANO device.

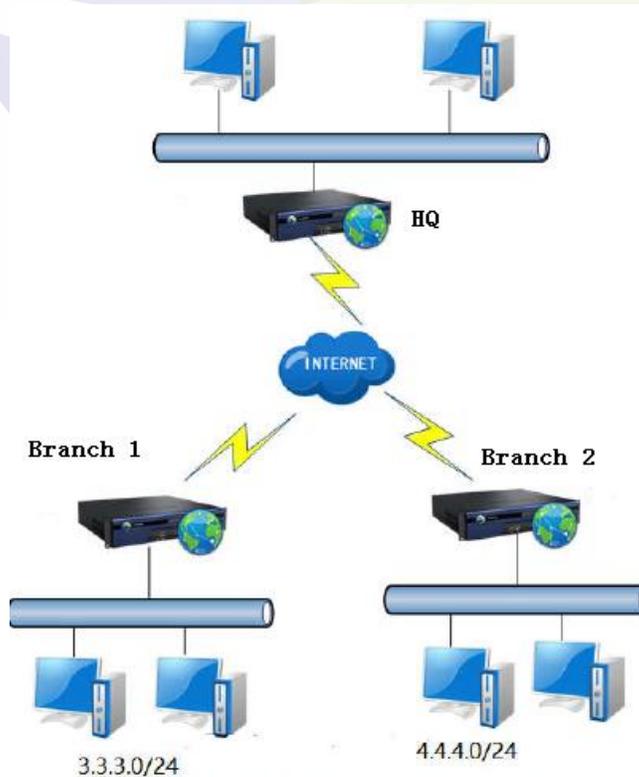
## 1.2 Feedback

If you find any questions of this document, please feel free to give us feedback, email: [tech.support@sangfor.com](mailto:tech.support@sangfor.com).

# 2 Tunnel Route Configuration

## 2.1 Requirement Analysis

As figure below, HQ WANO have connection with another 2 branch NGAF VPN connection, branch 1 and branch 2 can access to HQ internal network, now customer request that branch 1 and branch 2 are able to access to each other, branch 1 have internal IP 3.3.3.0/24 and branch 2 have internal IP 4.4.4.0/24 need to able access to each other.



*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: [tech.support@sangfor.com](mailto:tech.support@sangfor.com) | W.: [www.sangfor.com](http://www.sangfor.com)

As shown in figure above:

Branch 1 have 1 Guest1: Internal IP 3.3.3.0/24

Branch 2 have 2 Guest2: Internal IP 4.4.4.0/24

HQ: WANO device connection with 2 Unit of NGAF device as branch.

### Question Analysis:

2 branches have connection with HQ separately by using VPN tunnel, but branch 1 and branch 2 doesn't have and connection and also no VPN tunnel.

### Solution:

Create a VPN route base on both branch AF device to make it possible.

## 2.2 Confirm Information

Confirm that VPN tunnel status is connected

2.2.1 Confirm HQ VPN connection status as shown below:

| Disconnect | Connection | Username | Description | Type   | Realtime Traffic (In/Out) | Internet IP | LAN IP |
|------------|------------|----------|-------------|--------|---------------------------|-------------|--------|
|            |            | Guest    | Guest       | Branch | 84/84                     |             |        |
|            |            | Guest2   | Guest       | Branch | 84/84                     |             |        |

2.2.2 Confirm branch 1-AF1 VPN connection status as shown below:

| Disconnect | Connection | Username | Description | Type | Realtime Traffic (In/Out) | Internet IP | LAN IP |
|------------|------------|----------|-------------|------|---------------------------|-------------|--------|
|            | ToHQVPN    | Guest    |             | HQ   | 84/84                     |             |        |

AF1 use Guest as Username

2.2.3 Confirm ranch 2-AF2 VPN connection status as shown below:

| Disconnect | Connection | Username | Description | Type | Realtime Traffic (In/Out) | Internet IP | LAN IP |
|------------|------------|----------|-------------|------|---------------------------|-------------|--------|
|            | ToHQVPN    | Guest2   |             | HQ 2 | 84/84                     |             |        |

AF2 as username Guest 2

## 2.3 Branch Configuration 1-Guest

On Branch 1 [VPN] - [IPSEC VPN] - [Tunnel Route Setting] add new branch 2 internal IP segment 4.4.4.0/24 tunnel route.

### 2.3.1 Enable Routing

Firstly, tick on enable route as shown on figure below:

| Status                              | Source IP | Subnet Mask | Destination IP | Subnet Mask | Destination Route User | Move | Operation |
|-------------------------------------|-----------|-------------|----------------|-------------|------------------------|------|-----------|
| <input checked="" type="checkbox"/> |           |             |                |             |                        |      |           |

Add Save

### 2.3.2 Add

*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: tech.support@sangfor.com | W.: www.sangfor.com

**Source IP** (Branch 1 internal IP): 3.3.3.0/24

**Subnet Mask** (Internal Subnet): 255.255.255.0

**Destination IP** (Branch 1 that want to reach network): 4.4.4.0/24

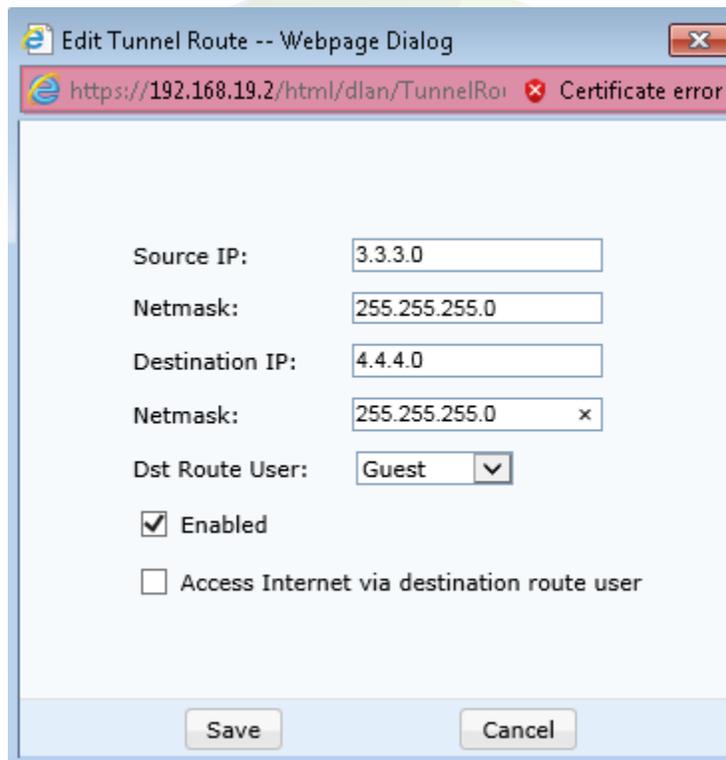
**Subnet Mask of Destination IP:** 255.255.255.0

**Destination Route User:** Guest (Same user that connect to HQ VPN)

**Enable:** Tick

**Access internet via destination route user:** Untick (Only tick if branch need to access internet through HQ)

Configuration as shown below:



Source IP: 3.3.3.0

Netmask: 255.255.255.0

Destination IP: 4.4.4.0

Netmask: 255.255.255.0

Dst Route User: Guest

Enabled

Access Internet via destination route user

Save Cancel

After finished configuration then press Save.

### 2.3.3 Save

Press Save, as shown as in the picture, it needs to restart VPN service:

| Status  | Source IP | Subnet Mask   | Destination IP | Subnet Mask   | Destination Route User | Move    | Operation   |
|---------|-----------|---------------|----------------|---------------|------------------------|---------|-------------|
| Enabled | 3.3.3.0   | 255.255.255.0 | 4.4.4.0        | 255.255.255.0 | Guest                  | Up Down | Edit Delete |

Add Save

*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: tech.support@sangfor.com | W.: www.sangfor.com

## 2.4 Branch Configuration 2-Guest

2.4.1 Tick on Enable Tunnel Route

2.4.2 Add

**Source IP** (Branch 1 internal IP): 4.4.4.0/24

**Subnet Mask** (Internal Subnet): 255.255.255.0

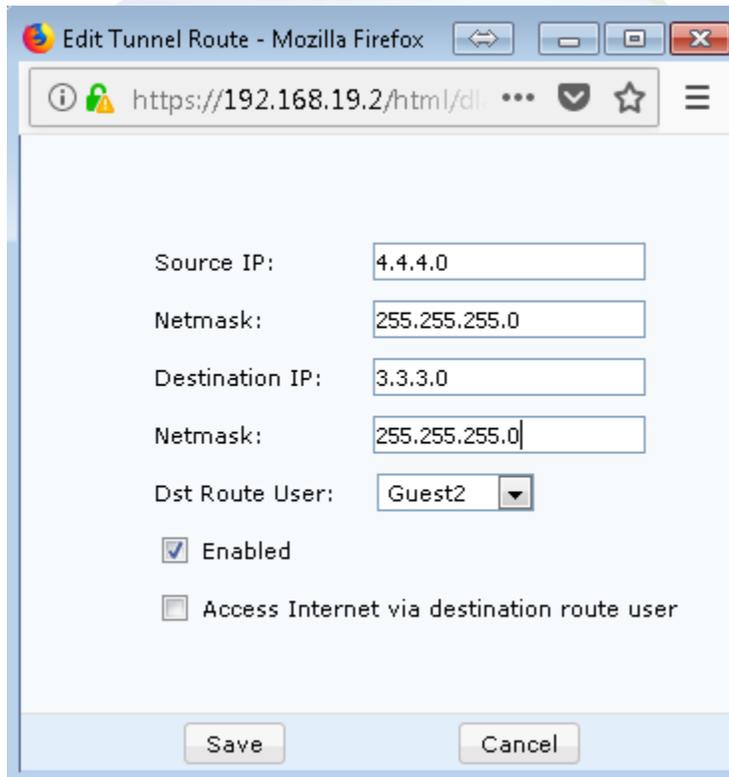
**Destination IP** (Branch 1 that want to reach network): 3.3.3.0/24

**Subnet Mask of Destination IP**: 255.255.255.0

**Destination Route User**: Guest2 (Same user that connect to HQ VPN)

**Enable**: Tick

**Access internet via destination route user**: Untick (Only tick if branch need to access internet through HQ)



Source IP: 4.4.4.0

Netmask: 255.255.255.0

Destination IP: 3.3.3.0

Netmask: 255.255.255.0

Dst Route User: Guest2

Enabled

Access Internet via destination route user

Save Cancel

After successful configuration, then press “Save”

2.4.3 Save

Press Save, as picture below:

*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: tech.support@sangfor.com | W.: www.sangfor.com

| Status  | Source IP | Subnet Mask   | Destination IP | Subnet Mask   | Destination Route User | Move    | Operation   |
|---------|-----------|---------------|----------------|---------------|------------------------|---------|-------------|
| Enabled | 4.4.4.0   | 255.255.255.0 | 3.3.3.0        | 255.255.255.0 | Guest2                 | Up Down | Edit Delete |

## 2.5 Finish Configuration

The whole process does not need to modify any configuration on HQ device, we only need to add a tunnel route on both branch site.



*Your Future-Proof IT Enabler*

**Sangfor Technologies**

Block A1, Nanshan iPark, No.1001 Xueyuan Road, Nanshan District, Shenzhen, China

T.: +60 12711 7129 (7511) | E.: tech.support@sangfor.com | W.: www.sangfor.com