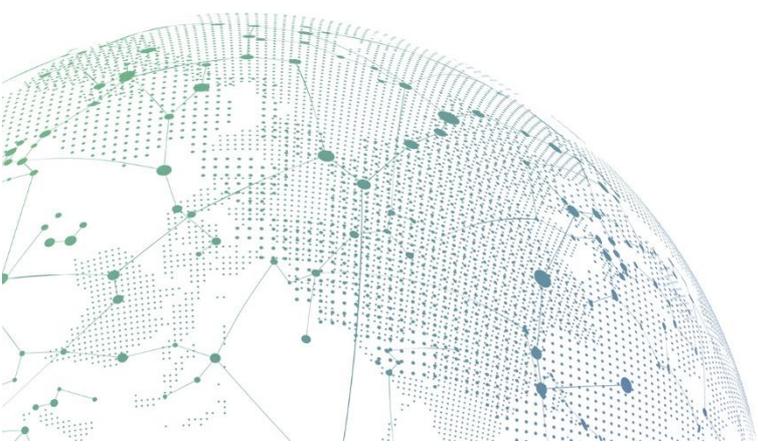




WANO

Hands-Free mode Configuration Guide

Version 9.5.6



Change Log

Date	Change Description
August 29, 2019	Version 9.5.6 document release.

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Chapter 1 Content requirements

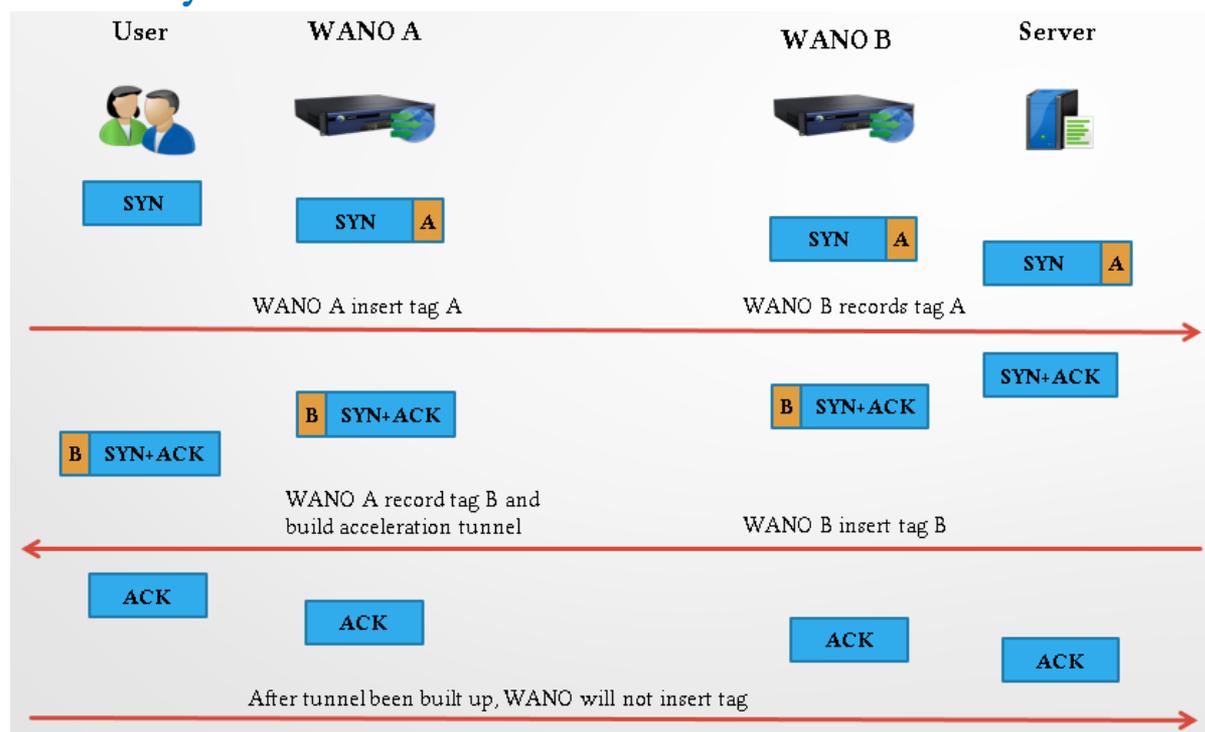


Note: If the whole document only has 1 chapter, this title can be omitted.

1 Document title

SANGFOR_WANO_V9.5.6_Hands-Free_Mode_Configuration_Guide_EN_20190829

2 Theory of Hands-free mode



1. Both WANO A and WANO B are deployed in Bridge Hands-free mode
2. The Acceleration Tunnel is not build-up
3. When the first User wants to access to the Server, User send out SYN packet
4. When WANO A received the SYN packet for the first time, it will tag the SYN packet with tag A
5. When WANO B received the SYN packet forwarded from WANO A with the tag A, WANO B will record the tag A and forward the packet to the Server
6. Then, Server reply with SYN+ACK to the User
7. WANO B received the SYN+ACK packet from Server, it will tag the packet with tag B and forward to WANO A
8. When WANO A received the SYN+ACK packet forwarded from WANO B with the tag B, WANO A will then record the tag B.
9. Since the tag A and tag B is complete recorded in both WANO, therefore both WANO negotiate to build up Acceleration Tunnel
10. Finally, the tag is removed and the Acceleration Tunnel built-up

Note: Only traffic with proper **Three-way Handshake** able to trigger the establishment of Acceleration Tunnel, ICMP packet will NOT work.

3 Configuration Guide

3.1 Hands-Free mode without Working IP

1. Navigate to **System > Network > Deployment**

The screenshot shows the 'Deployment' configuration page. At the top, there are tabs for 'Local Subnet', 'Windows Domain', 'VLAN', and 'NIC'. The main content is organized into three sections:

- Service Mode:** 'Acceleration Only' is selected with a radio button. 'VPN and Acceleration' is unselected. 'Deployment Mode' is set to 'Bridge' and 'Hands-free mode'. There is a checkbox for 'Use working IP to implement acceleration' which is unchecked. A 'Help Document' link is present.
- Manage Interface:** 'Manage Interface' is set to 'DMZ(eth1)'. 'IP Address' is '10.254.253.254' and 'Subnet Mask' is '255.255.255.0'.
- DNS Servers:** 'Preferred DNS' is '8.8.8.8' and 'Alternate DNS' is '8.8.4.4'.

A 'Save and Apply' button is located at the bottom left of the configuration area.

2. Select **Acceleration Only** for Service Mode
3. Select **Bridge** and **Hands-free mode** for Deployment mode
4. Change the **Manage Interface** IP Address if necessary
5. Ensure both WANO is using the same mode
6. Access any Server from the Client side to the Server side
7. Check if the Acceleration Connection is built-up

The screenshot shows the 'Acceleration Status' page in the WANO interface. The 'WAN Optimization Status' is 'Enabled'. There are buttons for 'Disable', 'Refresh', and 'Clear Cache'. Below this, there are filters for 'Connection Type' (All) and 'Client Type' (Any). A table displays the acceleration connections:

	[Direction]User	Peer WOC Version	Peer Device	Peer IP	Reverse User	Client Type	Speed	Sessions/Tun...	before/after ...	Reduction	Status	Protocol
1	[in]Auto	9.5.6	WOC-143DE294	192.168.3.25	Auto	WOC	0.00Bps	Q/30	0.00B/0.00B	0%	Connected	High-speed TCP

3.2 Hands-Free mode with Working IP

1. Navigate to **System > Network > Deployment**

The screenshot shows the 'Deployment' configuration page with the following settings:

- Service Mode:** Acceleration Only (selected), VPN and Acceleration
- Deployment Mode:** Bridge (selected), Hands-free mode (selected), Help Document
- Use working IP to implement acceleration
- Bridge Interface:** LAN(eth0)->WAN1(eth2)
- Logic Interface:**
 - Working IP: 192.168.3.254
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 192.168.3.1 (Note: Enter IP address of the router or gateway for external network)
 - MTU (Bytes): 1500
- Manage Interface:**
 - Manage Interface: DMZ(eth1)
 - IP Address: 10.254.253.254
 - Subnet Mask: 255.255.255.0
- DNS Servers:**
 - Preferred DNS: 8.8.8.8
 - Alternate DNS: 8.8.4.4

A 'Save and Apply' button is located at the bottom left of the configuration area.

2. Select **Acceleration Only** for Service Mode
3. Select **Bridge** and **Hands-free mode** for Deployment mode
4. Enable “**Use working IP to implement acceleration**”
5. Configure the IP address for Logic Interface with an unused LAN IP
6. Ensure both WANO is using the same mode
7. Access any Server from the Client side to the Server side
8. Check if the Acceleration Connection is built-up

The screenshot shows the 'WANO Acceleration Status' page. The WAN Optimization Status is 'Enabled'. Below the status, there are filters for Connection Type (All) and Client Type (Any). A table displays the active connections:

	[Direction]User	Peer WOC Version	Peer Device	Peer IP	Reverse User	Client Type	Speed	Sessions/Tun...	before/after O...	Reduction	Status	Protocol
1	[out]Auto	9.5.6	WOC-143DE294	192.168.4.254	Auto	WOC	0.00Bps	0/30	0.00B/0.00B	0%	Connected	High-speed TCP

4 Precautions

1. There are some configurations still need to configure manually.
 - i. Local Subnet
 - ii. Bandwidth Management
 - iii. Import SSL Certificate
 - iv. WANO join domain
 - v. Delegate user
2. Working IP can be used to access WANO Web UI
3. "Peer IP" showed in the Acceleration Connection for Hands-free mode without working IP is the Client/Server IP that CANNOT be used to access WANO Web UI
4. Acceleration Tunnel protocol do not support to change currently. Only support High-speed TCP
5. Do not support Pre-connection
6. Do not support Video Optimization
7. Network Transparency is enabled by default
8. Hands-free mode without working IP only able to access Web UI with Manage IP
9. Hands-free mode without working IP that manage with Manage IP from different IP segment are required to configure Static Route manually
10. Only a complete flow of Three-way Handshake can trigger the establishment of Acceleration Connections



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