LEGUANG A320 Wireless Bridge Configuration Guide

ActForNet Technologies Inc.

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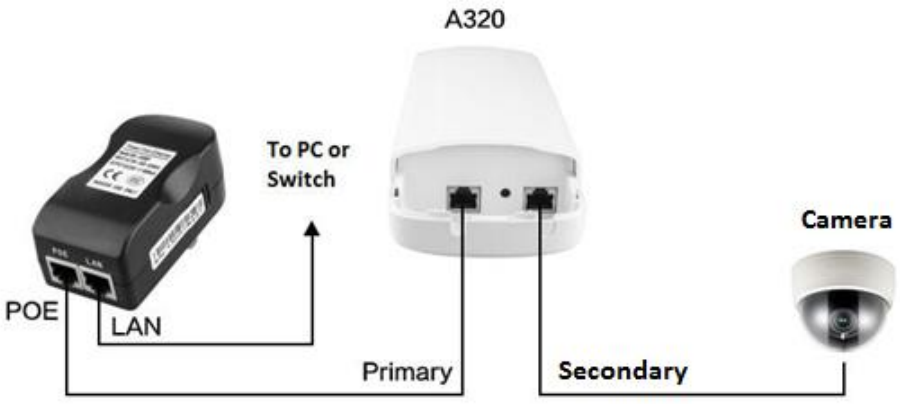
2.1 How to connect

The black adapter is PoE power supply. It comes with 2 ports. One is used to connect the switch or PC and the other is used to connect the Primary port of the wireless bridge. The secondary port of the bridge can be used to connect network camera. Please note that PoE port has to plug into the Primary port of the bridge, not the secondary port.



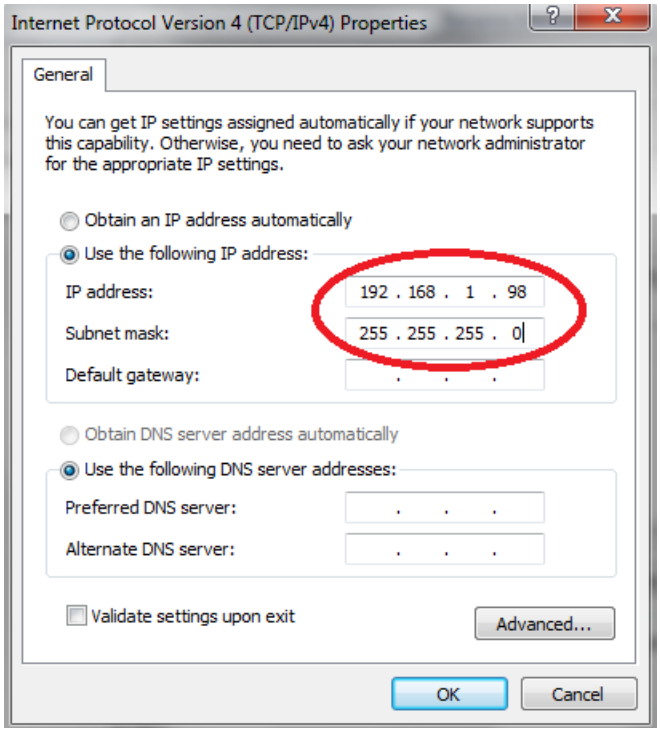
How A320 is connected

2.2 How to reset

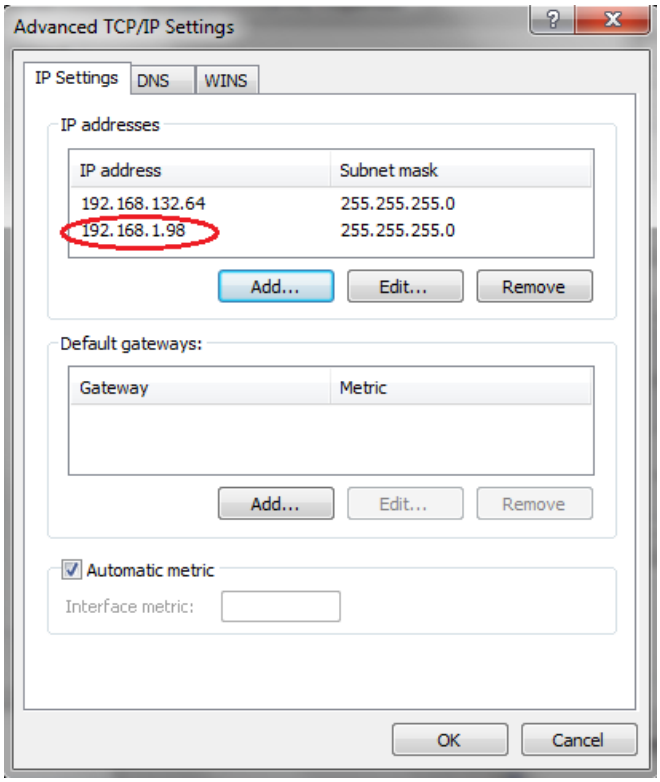
In some cases, you may need to reset the system. After the system has boot up which takes about 1 minute, press the RESET button which is located between the primary and secondary port for around 15 seconds before release it, the system will be reset after reboot.

2.3 How to configure your PC to set up the bridge

The default IP address of the wireless bridge is 192.168.1.1. You have to configure the IP address of your PC to be on the same subnet in order to access it for initial setup.



If you want to keep your orginal IP address, you can add an IP address to your NIC(network Interface Card) using Advanced options as following:



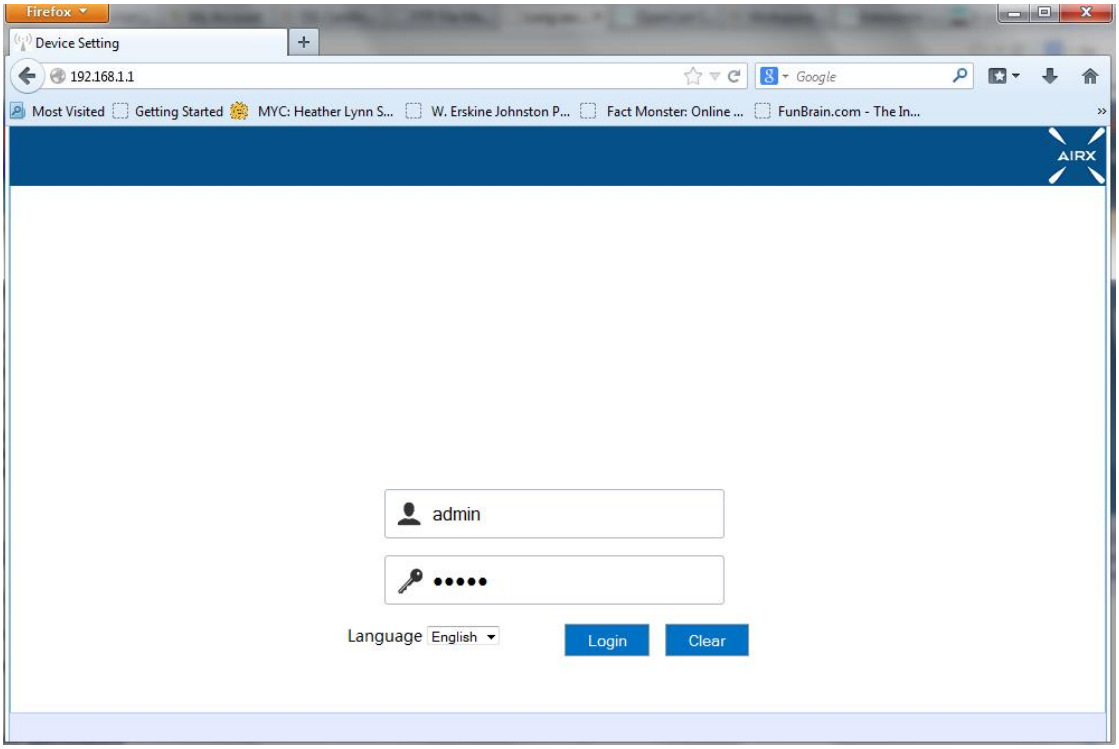
2.4 Login to the wireless bridge

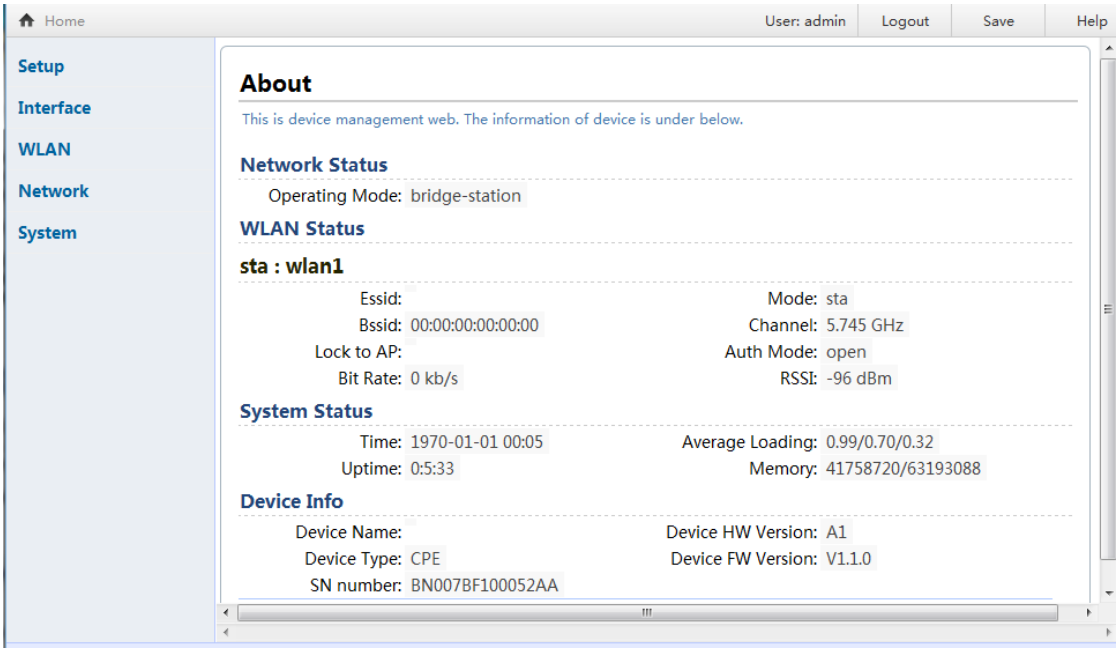
The factory default IP address: 192.168.1.1

Default username: admin

Default password: admin

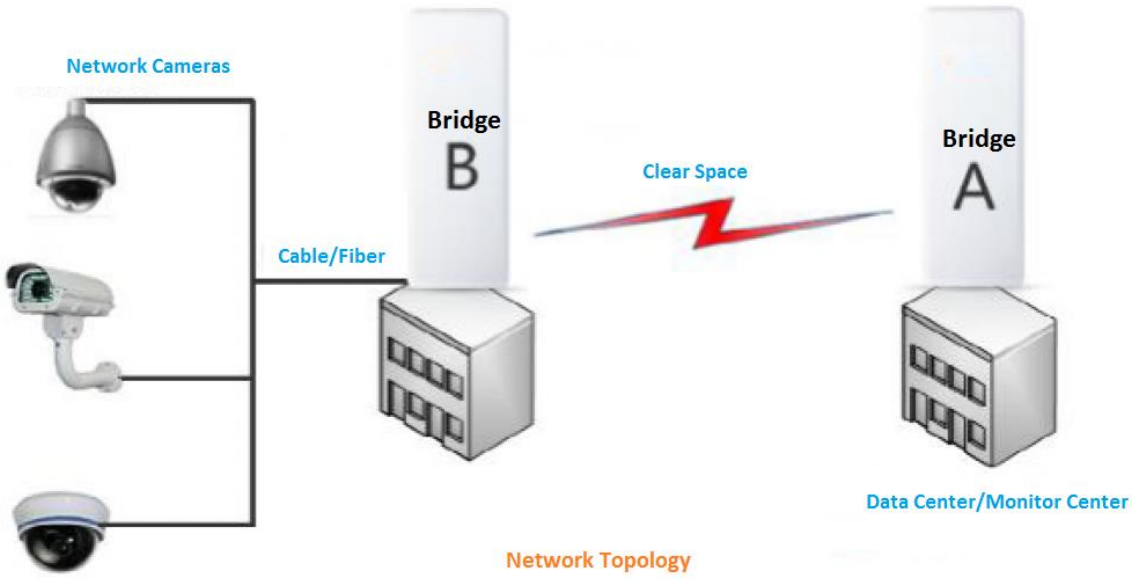
Open your browser and type the default IP into the address field, and enter the default user credential as prompted, you should be able access the admin GUI of the wireless bridge.


Firefox
Device Setting
192.168.1.1
Google
Most Visited
Getting Started
MYC: Heather Lynn S...
W. Erskine Johnston P...
Fact Monster: Online ...
FunBrain.com - The In...
AIRX
admin
Language
English
Login
Clear


Home
User: admin
Logout
Save
Help
Setup
Interface
WLAN
Network
System
About
This is device management web. The information of device is under below.
Network Status
Operating Mode: bridge-station
WLAN Status
sta : wlan1
Essid:
Mode: sta
Bssid: 00:00:00:00:00:00
Channel: 5.745 GHz
Lock to AP:
Auth Mode: open
Bit Rate: 0 kb/s
RSSI: -96 dBm
System Status
Time: 1970-01-01 00:05
Average Loading: 0.99/0.70/0.32
Uptime: 0:5:33
Memory: 41758720/63193088
Device Info
Device Name:
Device HW Version: A1
Device Type: CPE
Device FW Version: V1.1.0
SN number: BN007BF100052AA

3. Wireless Bridge Configuration

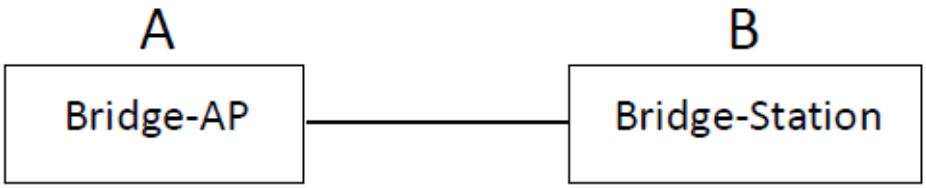
3.1 Network topology



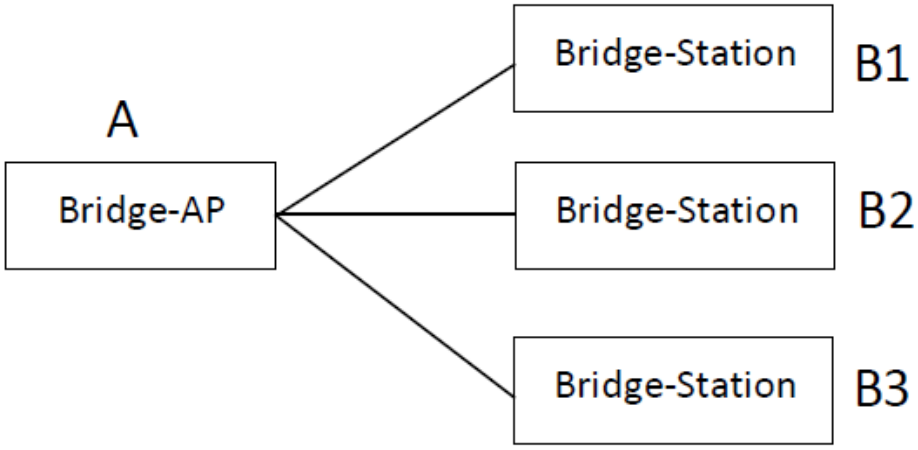
Assuming a customer has two separate buildings that are 1KM away and they need to connect a number of network cameras in the remote building to the monitor center in local building. Currently there is no network connectivity between the two buildings. It would be very expensive to connect the two building with optical fiber. That's where A320 wireless bridge can excel. We put a A320 wireless bridge on the top of each building, let's say A and B. All the network cameras on remote building are connected to a switch, then the wireless bridge B. The wireless bridge on local building (A) is connected to the monitor center. The two wireless bridges are connected together through WiFi, so are the remote network and the local monitor center.

3.2 Wireless Bridge Operating Modes

The modes of wireless bridge A and bridge B are configured in the following modes:



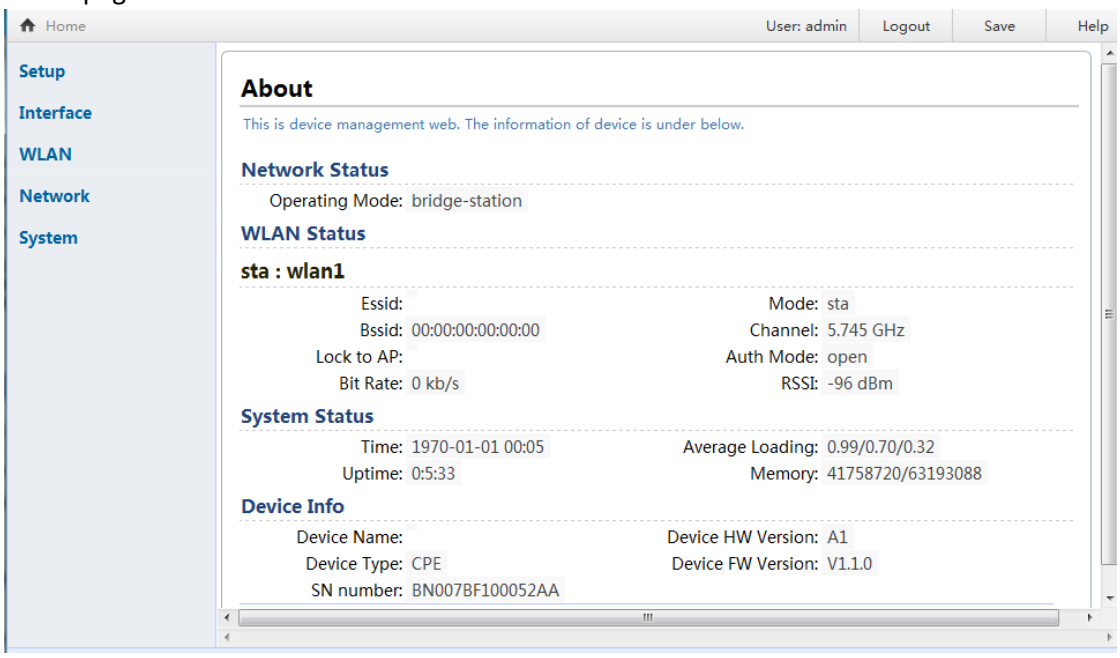
If we have three or more wireless bridges, the modes should be configure as following:



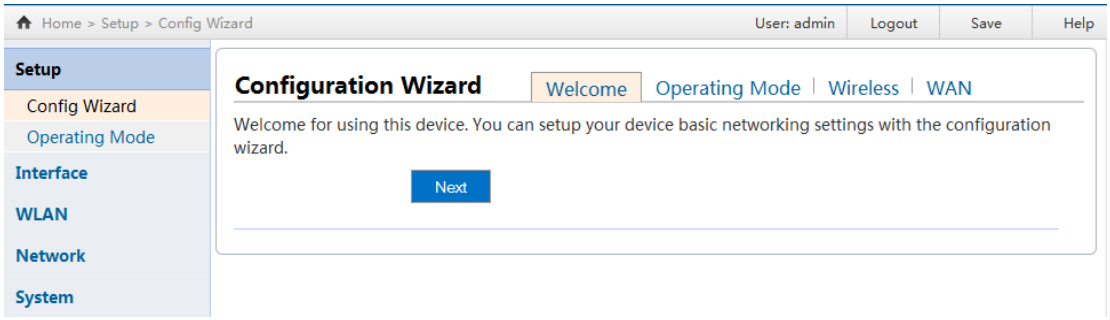
Usually Bridge-AP is connected to datacenter, monitor center or the Internet and Bridge-Station is located on the remote site.

3.3 Local bridge configuration

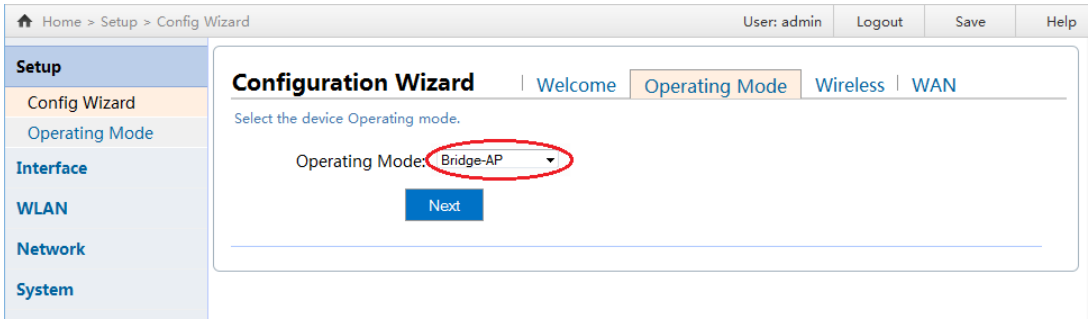
1. After you login to the web admin GUI of the wireless bridge, you will see the following status page:



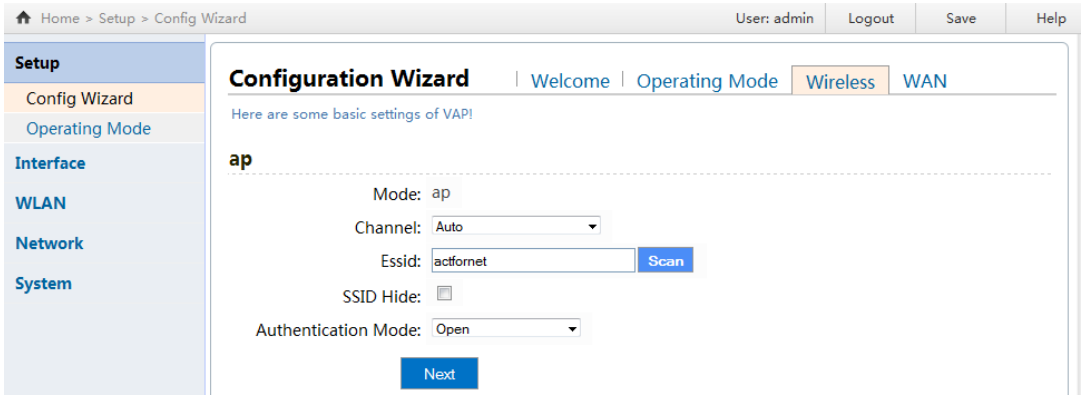
2. Click Setup->Config Wizard



3. Click Next, and select “Bridge-AP” for the mode:

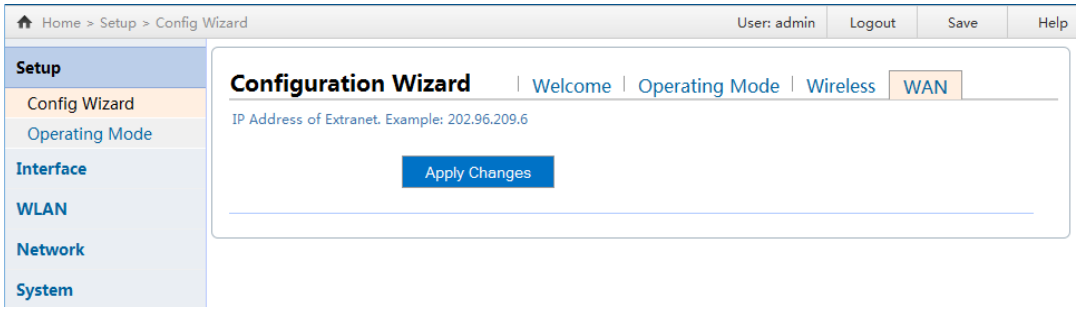


4. Click Next and configure the channel, ESSID and authentication:

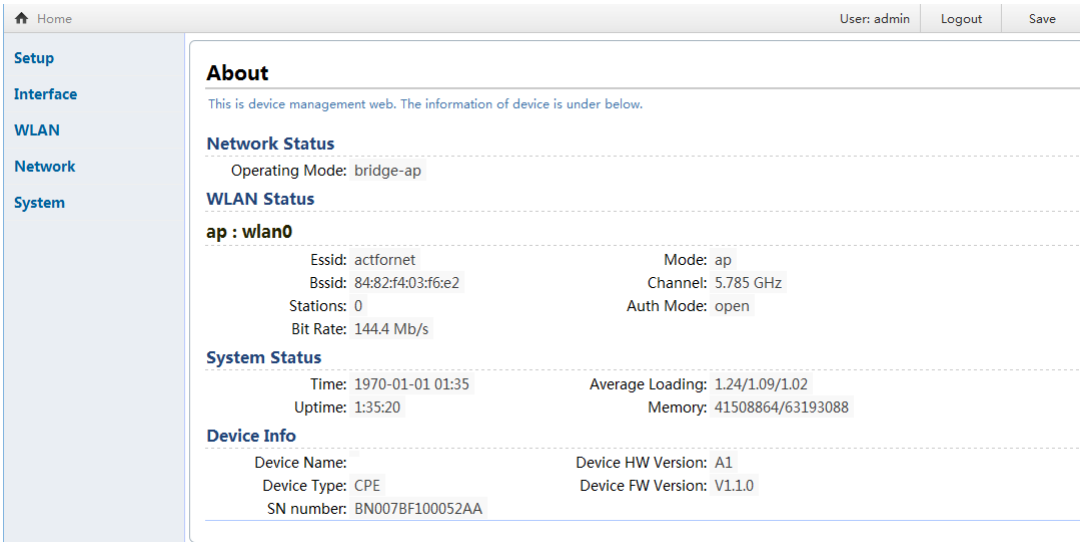


It is recommended to use “open” for authentication mode during the setup phase for simplicity. After setup is complete, user can set up the desired authentication as needed.

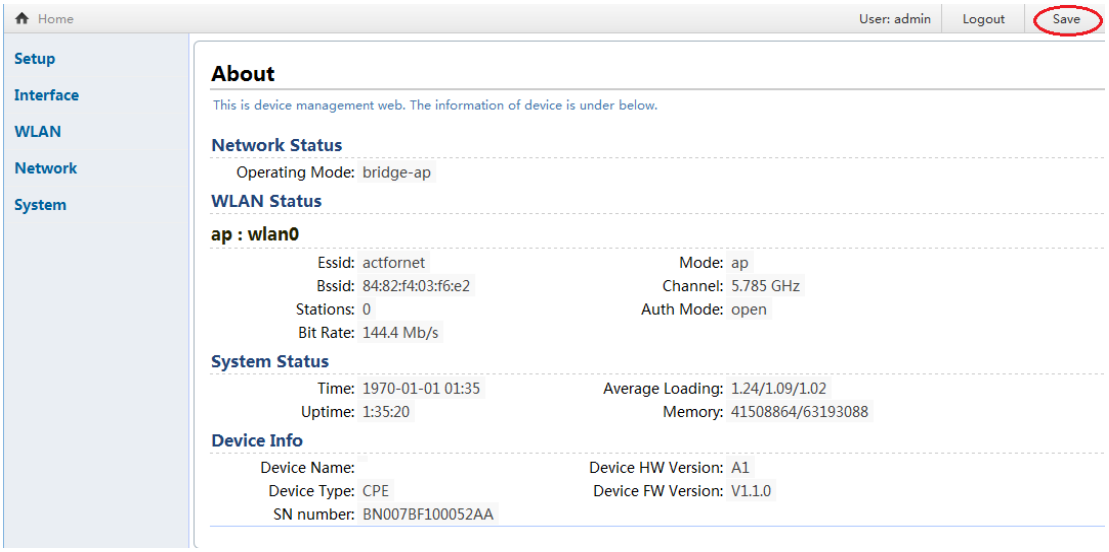
5. Click Next and confirm to apply the change:



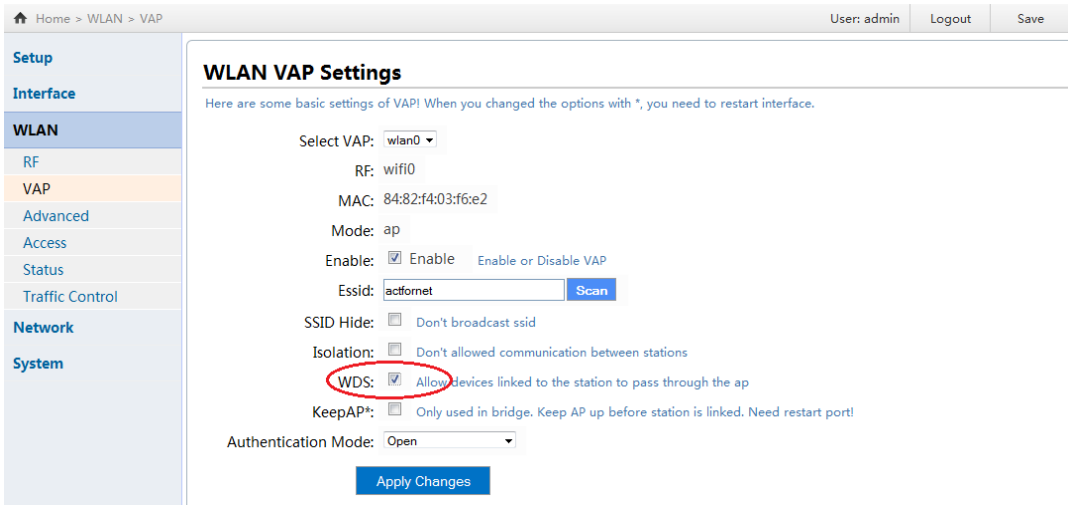
After applying the change, the bridge status will be displayed as following:



6. Click “Save” to save the change:



7. Under WLAN->VAP, Check the checkbox beside WDS to allow the wireless bridges to access each other.

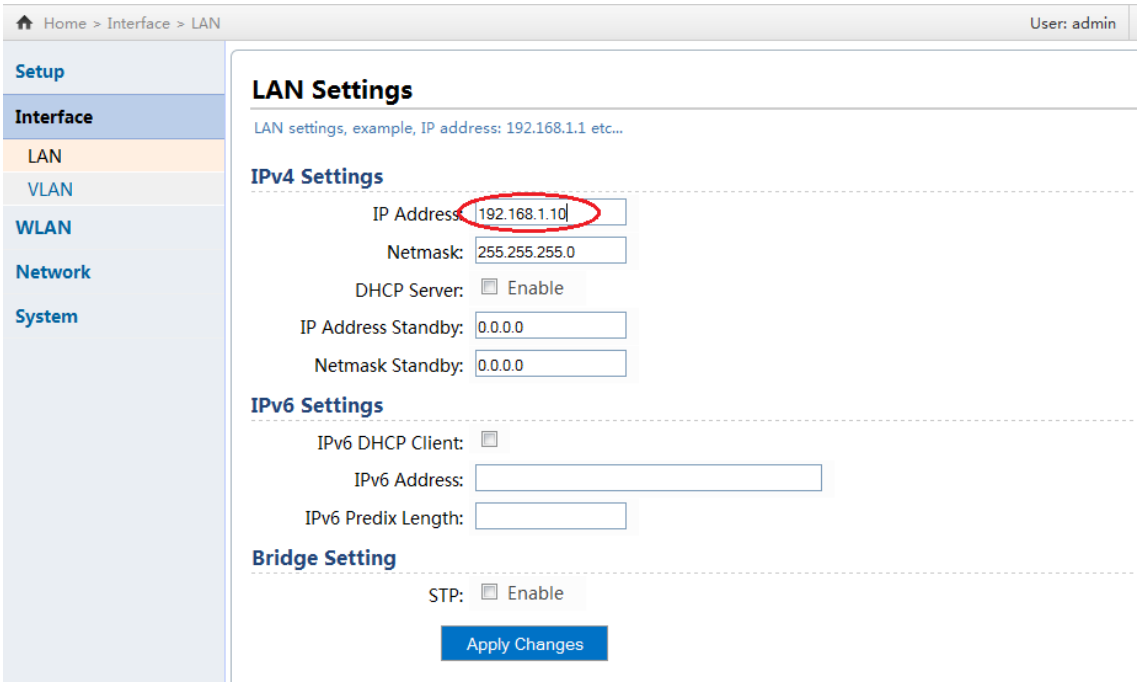


Now the basic configuration of the local wireless bridge is complete. You can proceed to next step to configure the remote wireless bridge.

3.4 Remote bridge configuration

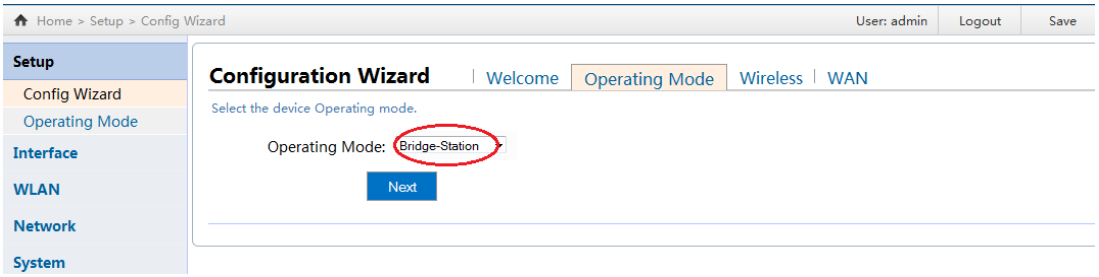
1. Change IP address

   Every bridge comes with default IP address 192.168.1.1. If we leave the local bridge with default IP address, we need to change the remote bridge IP address so that there won't be IP address conflict in the same subnet.

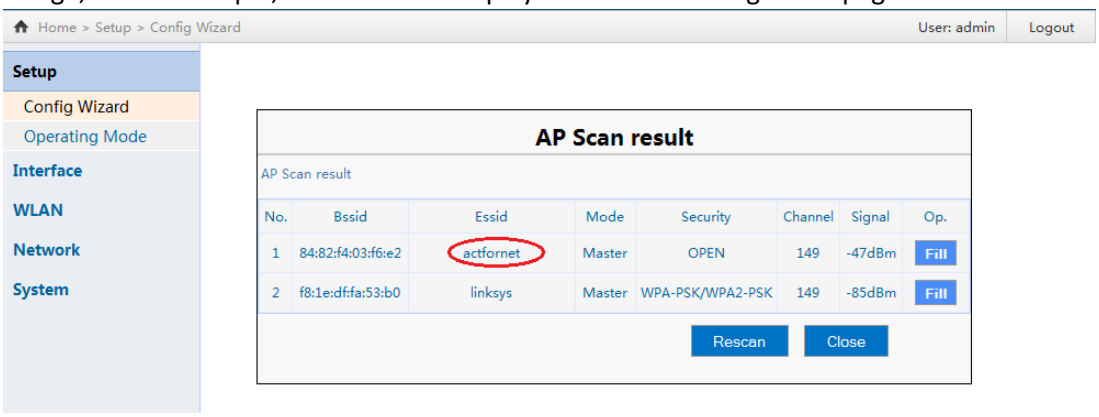


After you click "Apply Changes", the new IP address will be effective immediately. Please use the new IP to login to the GUI. Remember to click "Save" to make the change persistent after reboots.

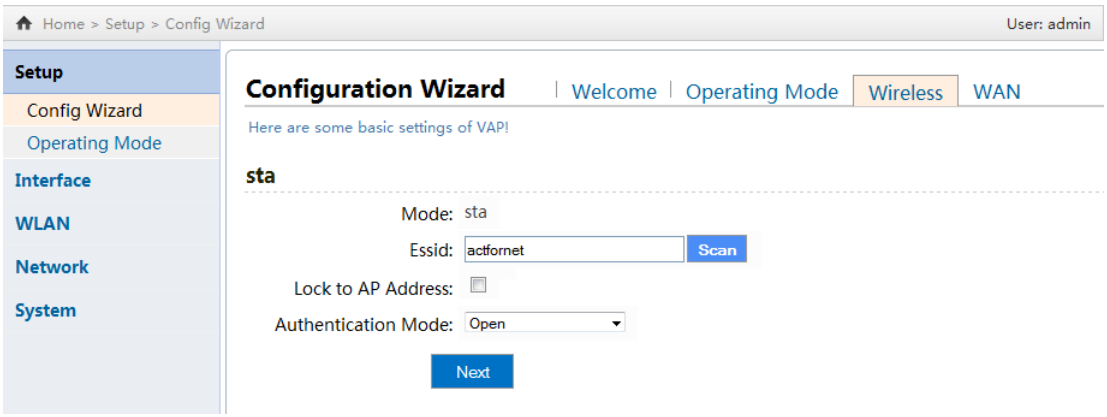
2. Open the setup-> config wizard to set the operating mode as “Bridge-Station”:



3. Click Next, and click “Scan” beside the ESSID box. The bridge can detect the signal of the local bridge, in our example, “actfornet” is displayed on the scanning result page:

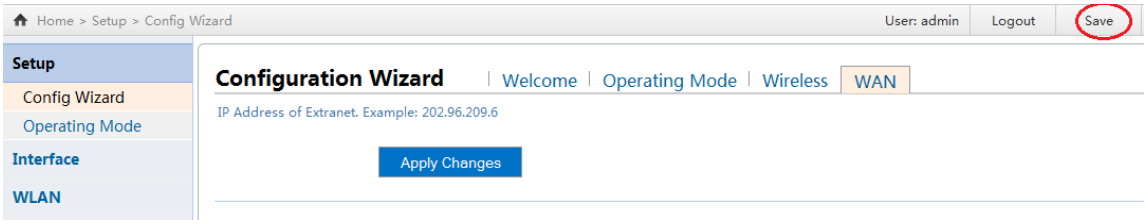


Click “Fill” to auto populate the Essid field.

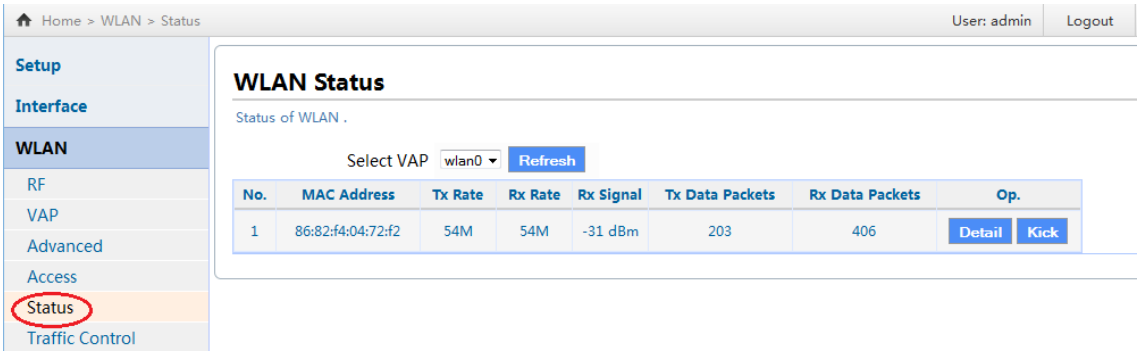


The authentication/encryption setting should matches whatever is configured on the local bridge.

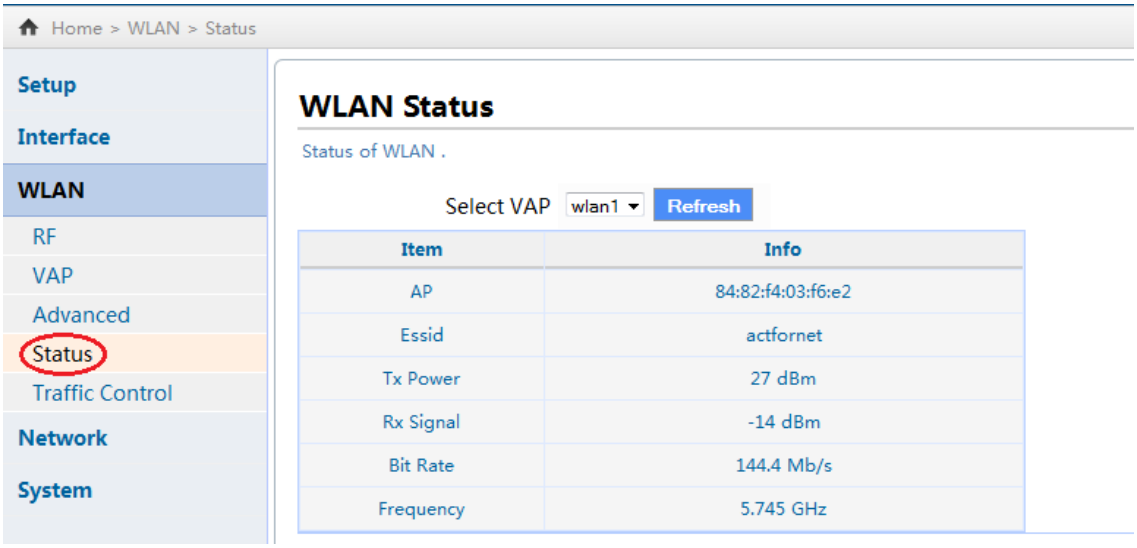
4. Click “Apply the change” to make the change take effect. Then click “Save” to save the changes.



5. Verify the WAN connection is working.
   On bridge A(local), check the WLAN status as following:



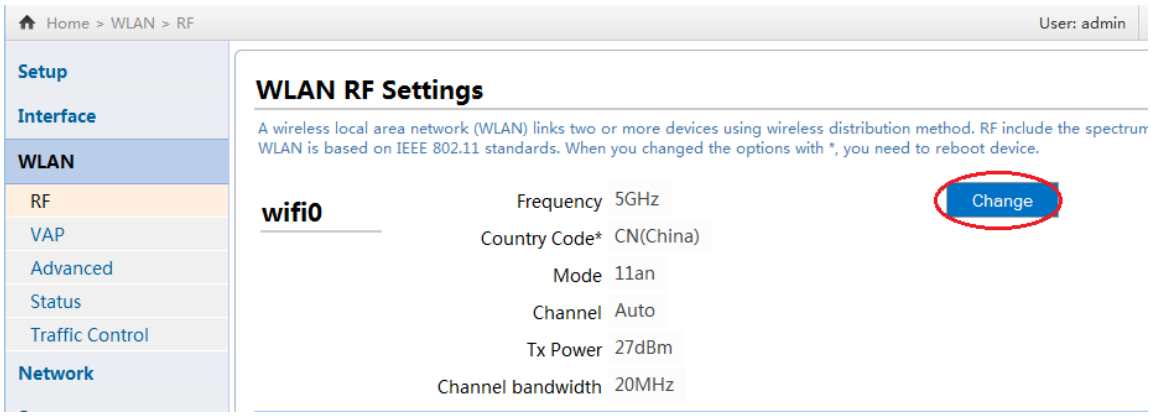
   On bridge B(remote), check the WLAN status as following:



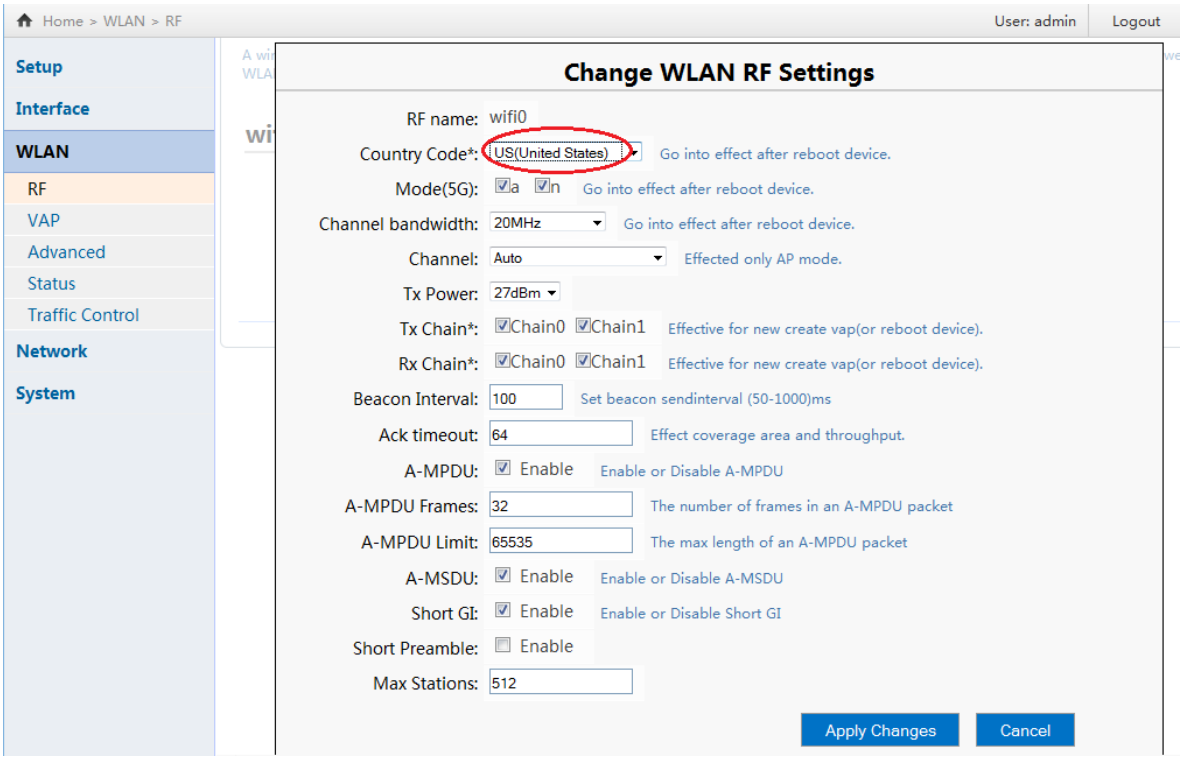
   Now we have connected the remote network to the local with two wireless bridge. You can ping the IP addresses on remote network from local to verify the network connectivity. If you have issue with WiFI, please change the direction/angle of the bridge as the antenna of wireless bridge is directional. A small angle change may make a big difference in signal strength.

3.5 Other Settings

1. RF settings
   Click WLAN->RF, and then “Change” to modify the wireless Radio Frequency related settings:

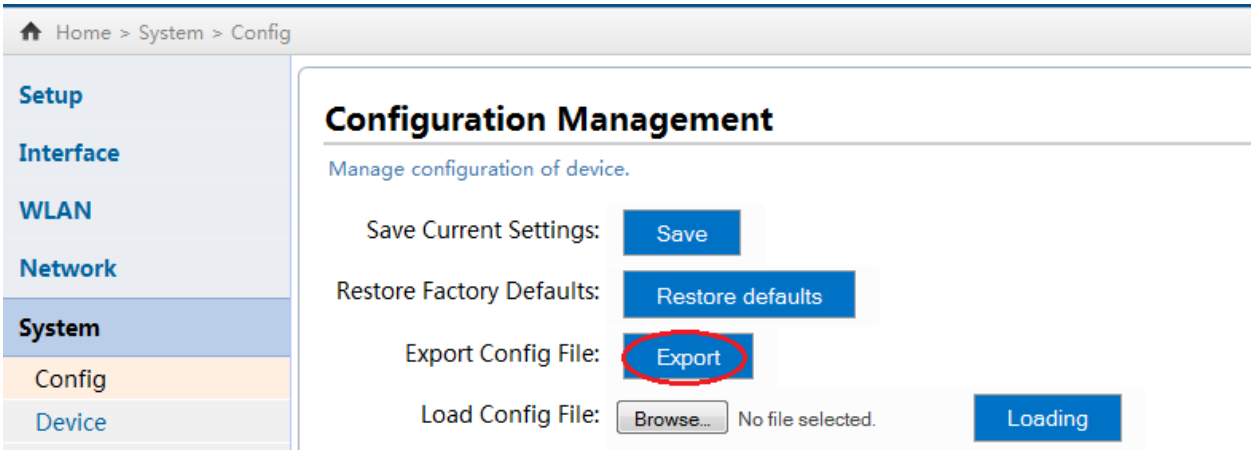


On this page, you can change the country code, channel bandwidth according to the regulation in your country. Please note that the RF settings you configured on both ends (remote and local site) should match each other. If you do not know what a specific setting is about, please leave them as default to avoid potential issues.



2. Backup and restore

   After you finished the setup and verify it is in work order, please back up the configuration files in case there is any problem you can restore the device to a known good state to reduce the service interruption time.


Home > System > Config
Setup
Interface
WLAN
Network
System
Config
Device
Configuration Management
Manage configuration of device.
Save Current Settings:
Save
Restore Factory Defaults:
Restore defaults
Export Config File:
Export
Load Config File:
Browse...
No file selected.
Loading