



Cloudi-Fi and Zscaler Troubleshooting guide

V1.0





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Document summary

This document describes the main steps to troubleshoot Cloudi-Fi captive portal solution integrated into a Zscaler environment

More information here <u>Cloudi-Fi Help Website</u> <u>Cloudi-Fi Monitoring and Troubleshooting Guides</u> <u>Cloudi-Fi and Zscaler integration</u>

Contacts support@cloudi-fi.net https://admin.cloudi-fi.net/





1 Revoke authorization of a device

You may need to revoke the authorization of a device in order to display the portal again.

- Note the private IP address of the device then disconnect it from the SSID
- Go to Zscaler interface > Analytics > Web Insights > Logs > Filter on Client IP
- Note the User assigned to this IP address
- Go to Zscaler interface > Administration > User Management
- Search the User ID, edit it and delete it
- Activate your modification in Zscaler
- On the device, clear the cookies of the default web-browser
- Reconnect to the SSID, you should be redirected on the captive portal

2 Unable to associate to the SSID or have limited connectivity

- Ask the user to verify his private IP
- No private IP or an IP in 168.254.X.X means an issue with the DHCP server.
- Verify your DHCP Server and the Layer2 connectivity in your LAN.

3 Captive portal doesn't show up

- Disable cellular connectivity on your phone in order to enforce WiFi connectivity
- Make sure you can load <u>http://ip.zscaler.com/</u> .
 - This page MUST tell you, "you are protected by Zscaler".
 - If not, verify your local routing and VPN tunnel.
- Ask the user to access to <u>http://3wi.fi</u> or <u>http://neverssl.com</u>, this will enforce portal redirection.
- If you see 2 different websites, and not the portal, you are probably already authenticated on the service.
 - Follow "Revoke authorization of a device" to fix this.
 - If you are unable to revoke your authorization
 - o get your private IP

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- $\circ~$ check the Zscaler logs (Zscaler UI > Analytics > Web Insight > Logs > Filter by « Client IP »)
- From Zscaler admin console, verify if the private IP is already assigned to User token. If yes, that means an IP already allowed has been reassigned to another user.
- Ensure that the DHCP scope has enough IP for all your guests and if the lease time is equal of higher than the Cloudi-Fi session lifetime (Portals > session life time depending the portal).





4 Unable to browse Internet

This issue can have multiple origins from a local network problem to an Internet peering or DNS resolution issue for instance.

- Disable cellular connectivity on your phone in order to enforce WiFi connectivity
- Try to access <u>http://status.cloudi-fi.net</u> and <u>http://ip.zscaler.com/</u>
- If none of these pages display, it means that you probably have a problem with your DHCP or your DNS server.
 - If you need further assistance, please follow steps described in section 8 (information to provide to Cloudi-Fi support).
- If you don't have any problem with your DHCP or DNS server
 - please follow section 8 and get in touch with Cloudi-Fi support at <u>https://admin.cloudi-fi.net/</u> or <u>support@cloudi-fi.com</u>
- If these pages display properly, you most likely have an authentication / authorization issue. In such case, go to <u>http://3wi.fi</u> or <u>http://neverssl.com</u>
- If you are not yet authenticated, you will be immediately redirected to the captive portal. Once authenticated on the portal you will have access to Internet.

5 Error during authentication process

Web developers tools are used to display every web requests done in the browser.

To activate developers tools in common browsers (Firefox, Chrome, IE, Edge):

• click on F12 and go to the Network tab and tick « Persist logs » and « Disable cache ».

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To perform the capture :

- Connect your PC to the SSID.
- The portal normally shows up automatically
 - o If not, go to User is not redirected on captive portal
- Do not authenticate on the portal. Open a new tab in your browser, activate the developer tools (F12) as explained above.
- When developer tool is activated, go to : <u>http://3wi.fi</u>
- You will normally be redirected on the captive portal and you can now login as usual on the captive portal.
- Once finished or when you faced an error, please go to the developer tool and export the logs :





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• Provide these logs to Cloudi-Fi support for analysis.

In some cases, we need more advanced debug logs.

In such case, we will ask to have a Wireshark capture in order to retrieve all network packets (not only web requests).

6 The portal displayed is not the correct portal

If we are not able to recognize from which location the user is coming, we display the default portal of the company account.

Here are different ways to verify which location is detected.

6.1 Cloudi-Fi Visit menu

If the user has been authenticated on the portal :

- Go to Cloudi-Fl interface > Visits
- Search for the user name (depending the portal, it can be the name, phone number, email address...)
- You can see the location. « Default » means that the location has not been recognized

6.2 Default location

If a user is assigned to the location « Default », he will see the default portal of the company account.

This default portal is configured in Cloudi-Fi interface > Settings > Global Settings

You can have this behavior if you have excluded Cloudi-Fi's public IP from your VPN, and the public IP seen by Cloudi-Fi is not declared in any location.

- Go to Cloudi-Fi interface > Visits > Search the user and note the « Source IP »
- Verify in Cloudi-Fi interface > Location if this IP is assigned to a location





Note that you can now route the Cloudi-Fi public IP in the Zscaler VPN. This ease the VPN configuration and avoir this kind of error.

Before doing this, please contact Cloudi-Fi support to be sure that your account is ready for this: support@cloudi-fi.com

7 Web surf is slow

If your LAN and Internet links are healthy, please perform these tests :

- Verify which Zscaler ZEN you use and if you use the nearest node
- Once the ZEN node is identified, ping it with large ping and verify if you experienced packet loss
- Perform a traceroute from your router to the ZEN
- Verify the VPN logs of your equipment
- If you can, submit a ticket directly to Zscaler support (<u>https://help.zscaler.com/submit-ticket</u>) and provide them with the output of the test performed above.
- Specify also the Zscaler Company ID.
 - You can find it in the Zscaler interface > Administration > Company Profile > Company ID
- You can also contact Cloudi-Fi support for any doubt support@cloudi-fi.com.

8 Information to provide to Cloudi-Fi Support

If the portal doesn't show up and you can't browse Internet:

• please capture a Wireshark trace before opening a ticket to Cloudi-Fi support.

You will need a computer in order to gather these troubleshooting information.

- Here are the steps to follow in order to take a packet capture :
- Download wireshare from https://www.wireshark.org/#download
- Install it on a Mac or Linux or Windows computer
- Start Wireshark and run a capture on your computer's WiFi interface
- Connect to the Guest SSID
- Try to access <u>http://3wi.fi/</u> and <u>http://neverssl.com/</u>
- Stop the capture, save it in PCAP format and send it to Cloudi-Fi support with the location name
- These information can be submitted through https://admin.cloudi-fi.net/ with the botnet or directly by email at support@cloudi-fi.com