External Client (EC) 1.6.0 Troubleshooting Guide

Overview

This document is created to assist a user in resolving the External Client issues when the user is not the administrator. This document also indicates what is needed in the case of network or firewall restrictions.

System Requirements

The machine recommended specifications:

- Operating system: Windows10 (x86 or x64)
- Ram: 4GB

Other requirements:

- The External Client also relies on .Net Framework 4.6 (Included in the EC setup)

Proxy

A websocket is being used as a communication channel between the browser and the External Client. The External Client uses the alias localhost.euphoria.co.za as an identifier for the websocket connection on the local machine.
If you are running a proxy server, External Client will require localhost.euphoria.co.za to be added to the exceptions in Windows proxy settings. Example below:

Use a proxy server for Ethernet or Wi-Fi connections. These settings don't apply to VPN connections.

Use a proxy server

🔵 On

Address	Port
xx.xxx.xxx.xxx	xxxx ✕

Use the proxy server except for addresses that start with the following entries. Use semicolons (;) to separate entries.

localhost.euphoria.co.za

☑ Don't use the proxy server for local (intranet) addresses

Save

General

Connection

- The External Client requires ICMP access upon startup in order to detect if the user has access to certain URLs. It will do this by running a ping test to Amazon S3 and Google.

Ports

The external client requires certain ports to be accessible in order to function, these summarily are:

- TCP 65501 which facilitates communication between the browser and the external client.
- EC uses UDP port 5060 to listen to SIP traffic.
- EC will pick dynamic outbound UDP ports from the range between 10,000 - 20,000 to be used for RTP (Real-time Transport Protocol) and RTCP (Real-time Transport Control Protocol) which is used for audio streaming.
- PortSIP uses random loopback ports which do not require to be opened in the system firewall, these are for internal application use.

Site Access

The External Client will need to be able to access certain sites to be able to function correctly, these are:

- PBX server name (including the domain name), in order to handle the real-time communication, firewall rules permitting traffic to the server may be required.
- Amazon AWS, used to download the certificate needed to secure the local port connection communication between EC and the user's browser.

Local Certificate Store

The External Client needs to have read and write access to the Windows Current User Certificate Store. This will enable it to download the certificate(mentioned above) to the store folder and read it from there when needed.

The User certificate store path can be found in the following location:

- {system drive}:\Users\{Username}\AppData\Roaming\Microsoft\Crypto

Updates

Auto Update

The External Client requires administrator rights in order to auto-update, if it does not have these, it will need to be done manually through the administrator by running the **External Client Updater** from the system start menu or the application folder.

Issues

Audio Issues

Since the External Client will use the system communication audio devices, any troubleshooting necessary should be done through the system troubleshooter or on the actual device itself.

The External Client should be allowed to access the device microphone and that can be done through the system privacy settings.
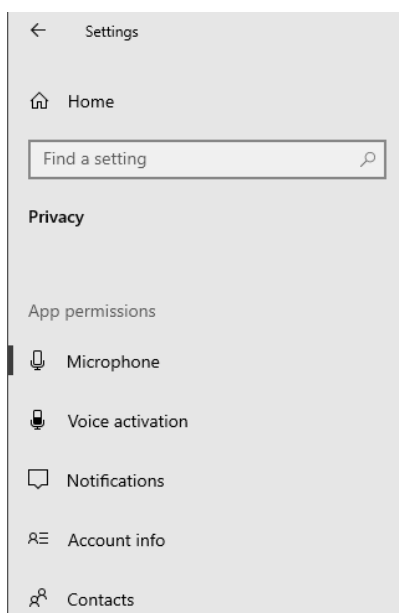
We also recommend that you install the audio device drivers from the device manufacturer's website and to configure it use the following sample rate and bit depth:

- Speaker device: 16 bit, 48000Hz (DVD Quality)
- Microphone device: 2 channel, 16 bit, 48000Hz (DVD Quality)

User Conflict Issues

The External Client currently supports a single user at a time and it can only interact with a single browser page that supports it. Having more than a single page interacting with External Client will interrupt the main connection between the browser and External Client.

This can be resolved by keeping a single browser page open with the phone (The page may need to be refreshed) and then resetting the External Client (right-click the tray icon in the taskbar and reset).

Local Port Connection Interruption

Due to the External Client creating a local port connection with the browser, the connection can be interrupted by external factors like the system going to "sleep" mode or by the browser itself.
This can be resolved by resetting the External Client (right-click the tray icon in the taskbar and reset).

Other Issues

To detect any other issue, run the Euphoria External Client Console from the user system start menu and you should be able to see the logs and errors in detail. Please note that this can not be run at the same time as the normal client as it will conflict.