

## **The Issues**

All 180/360 degree panorama cameras on market has a very low resolution. Most of them is not ONVIF compliance.

## **Our Magic Solution**

Use the ONVIF HD cameras instead. Juz purchase 4/8 ONVIF HD cameras. Place them in accordingly to form a panorama view and linked them up via local gigabits Ethernet network switch and our run Panorama ONVIF App!!!

The App will stitches up all the camera images and provide user a 180/360 degree wider field of view HD image to enhance surveillance coverage.

## **How it works**

Panorama ONVIF App is a Windows Desktop App to enhance ONVIF camera surveillance coverage by stitching the video to form panoramic image.

The app will link up all the ONVIF cameras and user needs just need to simply clicking the Start Panorama Button.

Upon clicking the Start Panorama Button the app will perform a snapshot of the current video of each ONVIF camera video every 2 seconds interval and save the image to the sub folder named "capture".

The images are named snapshotXXX.png where XXX is the camera number.

The images will be stitched up in real time and display out as a big 180/360 degree wider field of view HD image to enhance surveillance coverage.

All the stitched images will be also save to a sub folder named "panorama"

The stitched images are named FinallImageYYYYMMDDHHMMSS.png where YYYYMMDDHHMMSS is the system time.

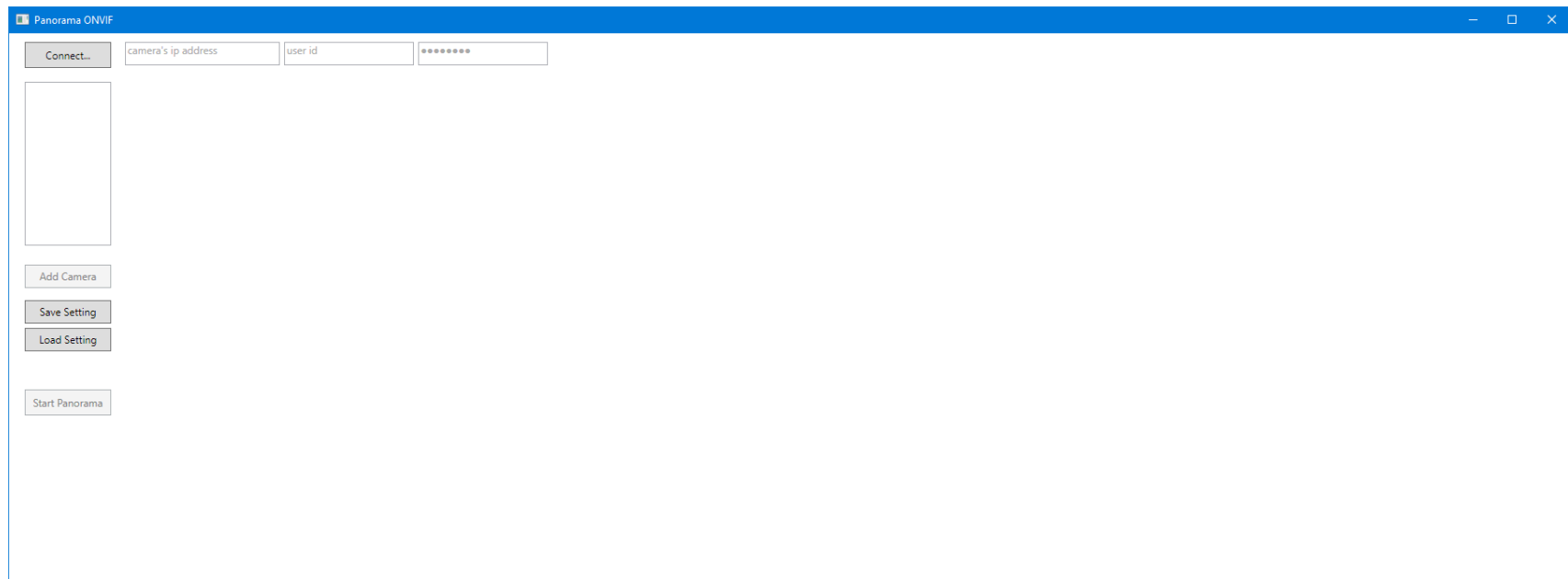
The app require the following library

VLC player

<https://www.videolan.org/vlc/download-windows.html>

## **Detailed Operation**

Launch the app panoramaONVIFVideo.exe, enter the ONVIF camera's ip, user id and password and click connect button.

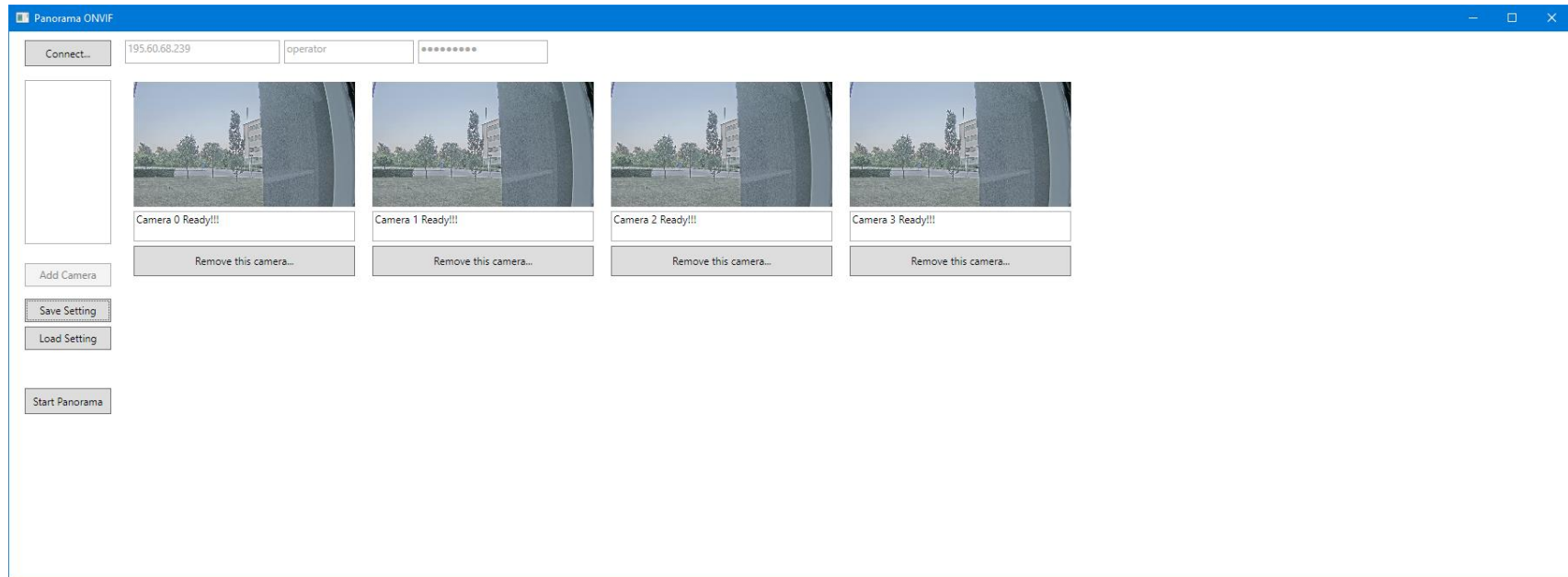


The screenshot shows the 'Panorama ONVIF' application window. The interface includes a 'Connect...' button, three input fields for 'camera's ip address', 'user id', and a password field (masked with dots), a large empty rectangular area for a video feed, and a vertical stack of buttons: 'Add Camera', 'Save Setting', 'Load Setting', and 'Start Panorama'.

Select the desire profile and click Add camera button.

The screenshot shows a web browser window titled "Panorama ONVIF". The interface includes a "Connect..." button followed by three input fields: an IP address field containing "195.60.68.239", a username field containing "operator", and a password field with masked characters "\*\*\*\*\*". Below these fields is a list box containing three items: "profile\_1\_h264" (which is highlighted with a blue selection bar), "profile\_1\_jpeg", and "test". Under the list box are four buttons: "Add Camera", "Save Setting", "Load Setting", and "Start Panorama".

Repeat the above 2 steps for all the rest of the ONVIF cameras.

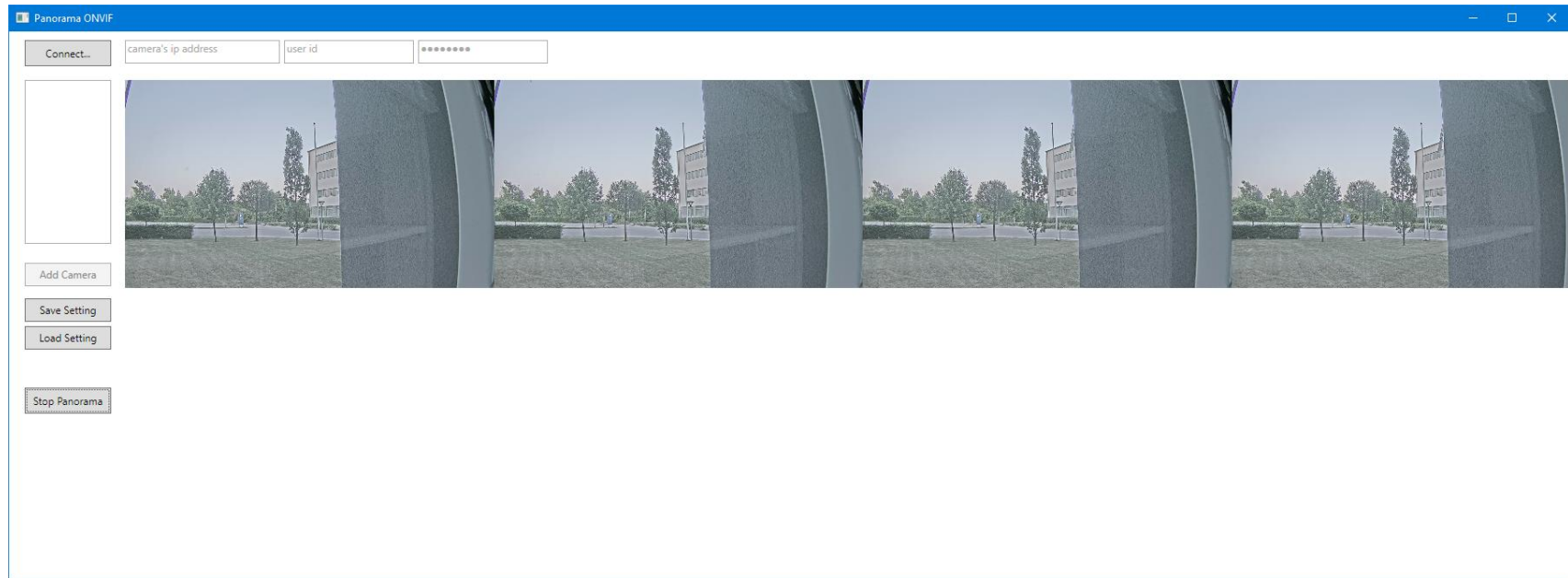


You can save the setting for future use via the Save Setting button.

Use 4 cameras for 180 degree field of view panorama image

Use 8 cameras for full 360 degree field of view panorama image

Click the Start Panorama and the image will be snapshot (every 2 sec) and stitch up and form a 180/360 degree panorama image (every 2 sec).



Its like a radar scanning image of the entire surrounding!!!

Ta Da!!! Enjoy Panorama viewing!!! 😊

## **Further Improvement**

Incorporate playback and advancement of the stitched panorama images.

Incorporate intelligent Stitching as currently it is using simply stitching algorithm.

**Thank you**