



Zao Cloud View

used by fire departments

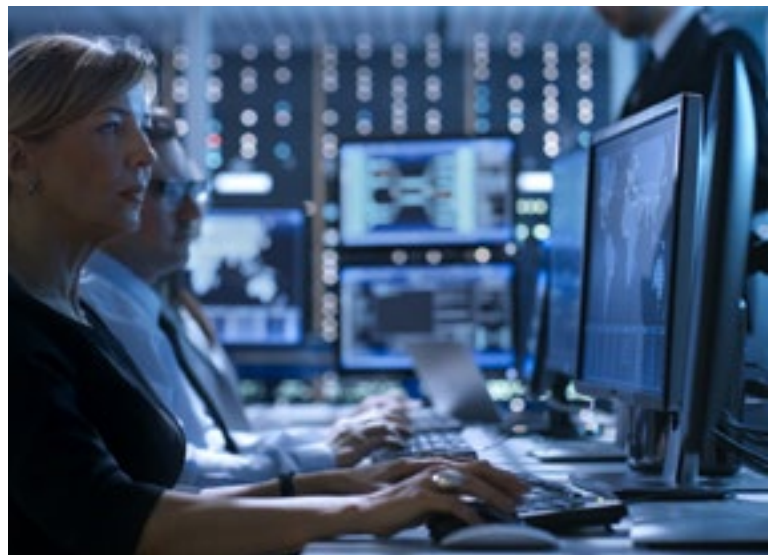
A Fire Department based in Osaka, Japan is using Cloud View for Receiving, Viewing and Recording Live Streams in the Cloud for Emergency Disaster Control

A Fire Department in Osaka, Japan has implemented Soliton's Cloud View, a cloud-based platform that is used to receive, decode, display and record live streams from Soliton's mobile surveillance products. The fire department is using rugged android tablets with the Zao Android App for encrypted live streaming from emergency situations back to a command centre. The same Android tablets can be used to view live streams from other emergency workers that are either carried on person or situated within the fire vehicles.



Informed Command Centres and Decision Making

The fire department is using Cloud View for gathering real time visual information in disaster sites and securely streaming events as they unfold from the tablets to their HQ. This ensures that the Command Centre, the local on-site commander to a total of six separated sites can view what is happening in real time. The value of seeing live footage allows the Command Centre to share content that can be evaluated and acted on as a team. Live streaming saves precious time in trying to explain the disaster situation, while giving a much less ambiguous real time view of the situation.



The real time video from the disaster sites is critical for timely decisions. Communication can be clear and concise, with live footage commands and resource allocation can be given by better-informed decision makers.

FIRES, EARTHQUAKES AND FLOODS

The fire department remit covers coastal areas, rivers and inlets. As such, in recent years the fire fighters have been deployed to face many different types of disasters, not just fires, but also earthquake and flooding rescue. By using Cloud View they are able to assess how big the threat is and ensure that they can deploy the right people to the right area.

Their vision of the area ensures they know which routes are blocked and which are still safe and accessible for their teams. With the use of GPS, Cloud View can be combined with a map to display real-time video and this is extremely advantageous when deploying teams and their resources.



CLOUD ACCESS ANYWHERE


The emergency services benefit from not needing a dedicated receiving platform that needs to be installed and managed, as the solution is installed by Soliton in a virtualised cloud environment. Cloud View can be securely accessed anywhere to by members of the emergency team through a standard browser interface. Any device using a browser can view live or recorded video either in the Headquarters, the Command Centre or remotely in the field. Soliton's mobile surveillance products include the Zao, Zao-S and Zao Android App and can live stream with full encryption in full broadcast HD quality.

SMART USE OF PROPRIETARY TABLETS, SMARTPHONES AND CAMERAS

The Zao Android app is widely used in field operations as it provides a cost saving by not needing dedicated hardware. Emergency responders can also choose to use Soliton encoders (Zao-S or Zao) as well as a smartphone or tablet with the Zao Android app.

The Zao Android app works with devices with Android 6 or later, which has power saving functions, zoom, thermal camera where available (Cat S61 Phone), light-on option, dual camera option and lock screen. These features ensure that the users get the best out of the device in these emergency situations. For example, Soliton can transmit thermal imagery to help evaluate fire hotspots or trapped civilians in fallen structures.

Soliton improves the video quality from the Osaka Fire department's smartphone cameras and other smart devices when compared to traditional video live streaming. Soliton's RASCOW streaming technology brings superior video quality and reliability through optimizing mobile cellular communication. RASCOW technology automatically balances the load between various network base stations during live broadcasting and optimises picture quality based on the available combined



bandwidth. This allows unprecedented stability in image transmission, even under network congestion or weak network signals. This is needed when the fire brigade responds to incidents in remote locations or during disaster crises, when the networks can become overloaded.

DRONES GIVE SAFE INSIGHT THE FIRE BRIGADE

When fire brigades have access to drones, they can use Cloud View through the use of the Zao-S attached to the ground base station of the drone. This way, the fire brigade can safely and quickly survey a wider area, giving a bird's eye view of the disaster. This is necessary with large fires, earthquakes and floods, where an aerial view gives a definitive view of the entire situation. These disasters often render it difficult for the fire and rescue teams to access certain areas e.g. above unsafe or collapsed infrastructure. An aerial view can provide vital information that can be used to aid a rescue with the least possible risk to rescue staff and civilians.

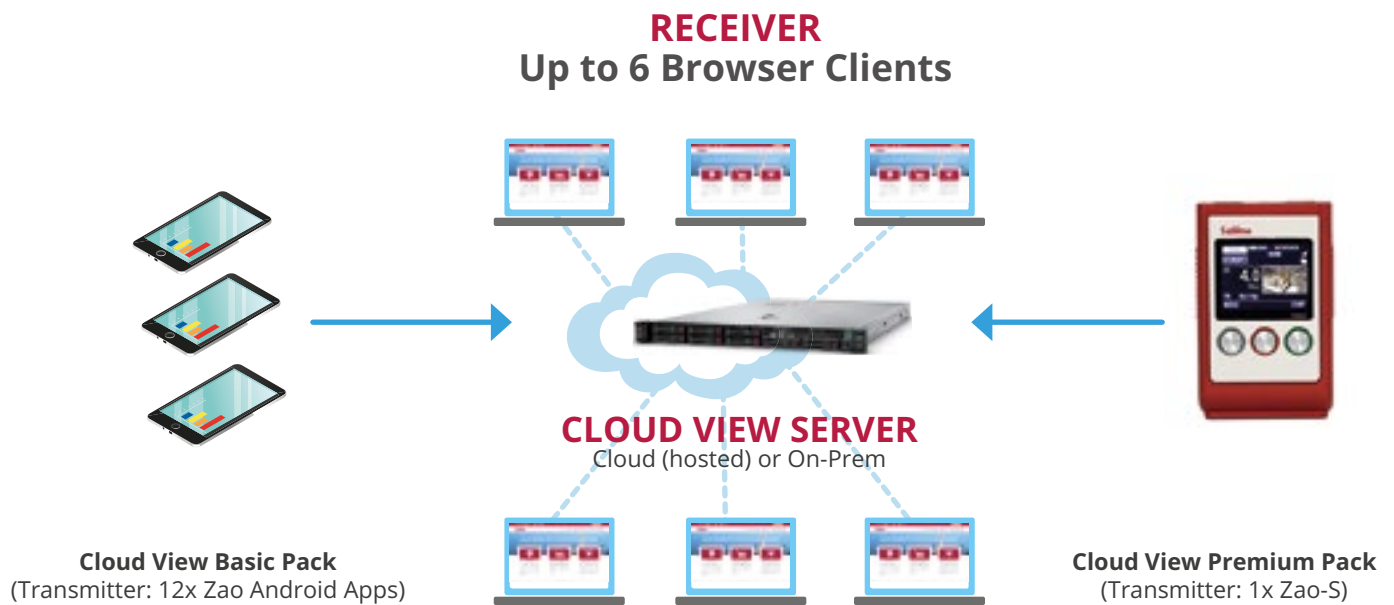


HOW CLOUD VIEW AND ENCRYPTION WORKS

Cloud View is normally provided as a cloud service and is securely and reliably hosted by Soliton. It can also be installed "On-Premise". The On-Premise solution is available for highly secure environments with enforced access control.

Naturally, all streaming is highly-secure through encrypted transmission. To guarantee secure communications Soliton supports authentication and encryption (AES 256bit). This is the highest level of public broadcasting encryption and Soliton is unique to use such a high level of secure transmission.

Fire fighters need to share their videos with the command centre and no one else. It's inconceivable for a fire fighter to use Facebook Live in order to live stream a scene to his management. The fire brigade needs private and secure communication tools, ensuring on-site footage is for their eyes only. Secure encryption of live feeds, ensures that the footage is safe, unadulterated and admissible in court.



KEY FEATURES OF ZAO CLOUD VIEW:

- ✓ Cloud View can be hosted by Soliton or installed “On-Premise”
- ✓ Two versions: Cloud View Basic (Android) or Cloud View Premium (Zao-S)
- ✓ Up to 12 live streams simultaneously
- ✓ Up to 6 receiving clients via a standard browser on multiple devices
- ✓ Fully encrypted
- ✓ Map Integration via GPS+
- ✓ Live streams can be recorded and archived for later retrieval
- ✓ Intuitive and easy to use