



Enabling Partner Video Sharing

ITSGA 2021



First Responders
Support

Enable Video in
Web Application

Increase Network
Security

Video Enabling Solution

- Supports Emergency Management and ESRI Applications, ex. Next Gen 911
- Supports Thick Client applications, VMS or Incident Management Solutions
- Supports Mobile Applications
- Supports Web App and Client Video Wall Apps
- Supports Trusted Partner Sharing
- Supports Media Sharing
- Reduces load on internal networks
- Improves Security Posture
- Provides video to Navigator and 511
- Centralized IDP Management
- Designed to expand

Maturity of your Video Interoperability

Reactive

- Single Purpose Camera Systems
- Video Access Violates Security Policies
- Managed Via Spreadsheets
- Super Hero Support
- Camera Status Unknown



Supporting Business Needs

- Centralized Video Sharing Architecture Based on COTS solutions
- Restful API Services
- Share with Multiple Zones and Applications
- Provide Video to any Business Use Case

Starting Foundation

- All Cameras Accessible to Internal Solutions
- Video Access Single Threaded and Restrictive
- Improved Security Limits Video Sharing
- Manual Camera Status Checks
- Standardized Camera Solutions

DOT Security Zones Approach



INTERNAL ZONE

Applications used by DOT Staff usually located within the DOT network. Some applications are provided to partners for shared use.

PARTNER ZONE

Applications used by trusted partners on the internet or within their networks that benefit from the DOT video stream information. Usually requires a password and source partner permission.

PUBLIC ZONE

Applications designed to provide real time traffic information to the traveling public. Goal is to empower the public to make travel decisions.

MEDIA ZONE

Applications and Distribution to allow news broadcasts to inform the Public about traffic conditions on TV and Radio.

COTS Product Approach

NETWORK

CAMERA



AGENCY

DEVICE



CLSP – Claris Live Streaming protocol, Flash replacement, Low Latency HTML5 compliant



Claris Portal enables view only video access to trusted partners.



Stream Pre-Roll allows on demand cameras to be used on mobile devices with HLS protocol.



Vero Portal Integration with ATMS Platforms

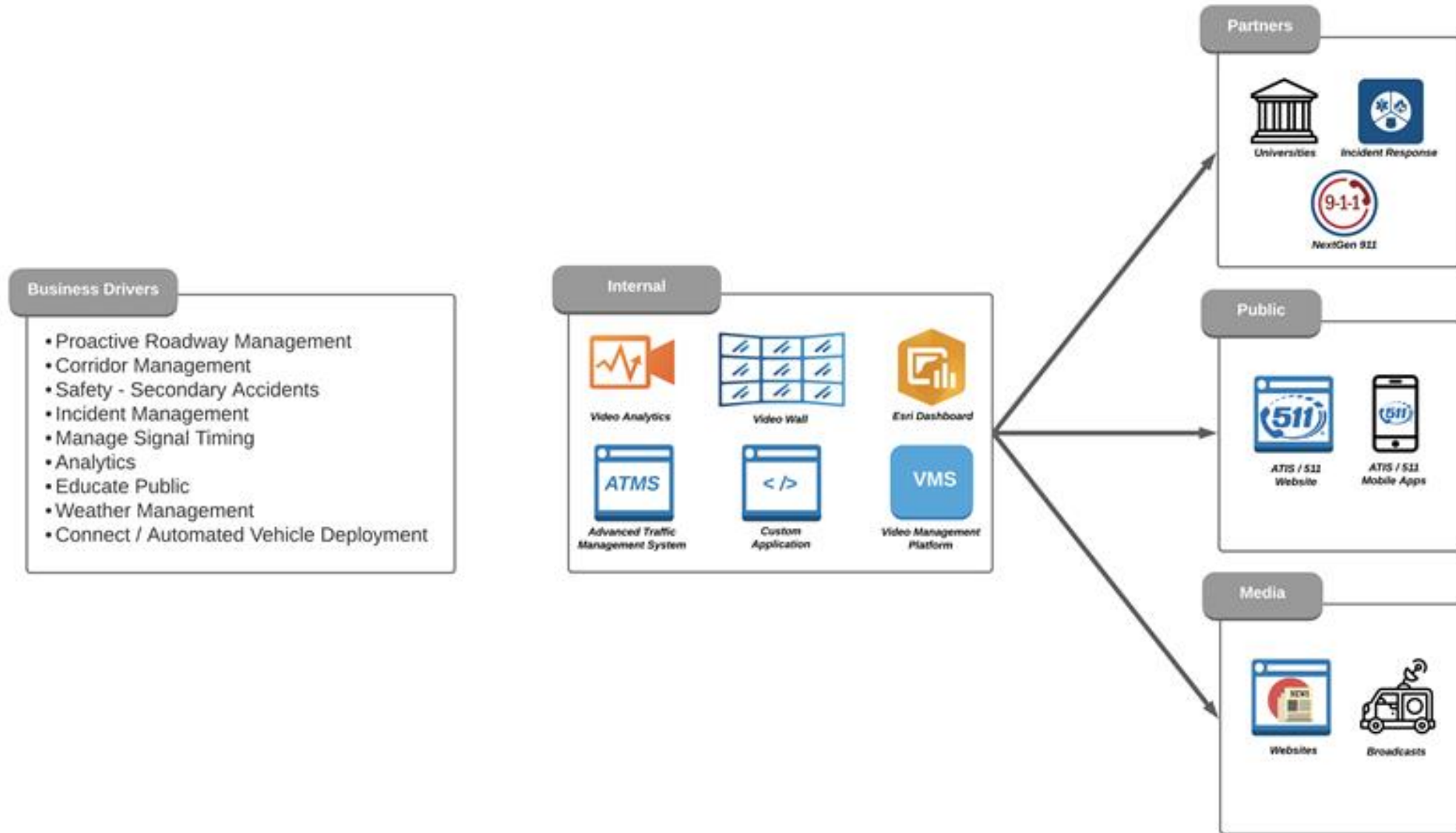


Stream Manager Portal manages the appliance and distribution zones.

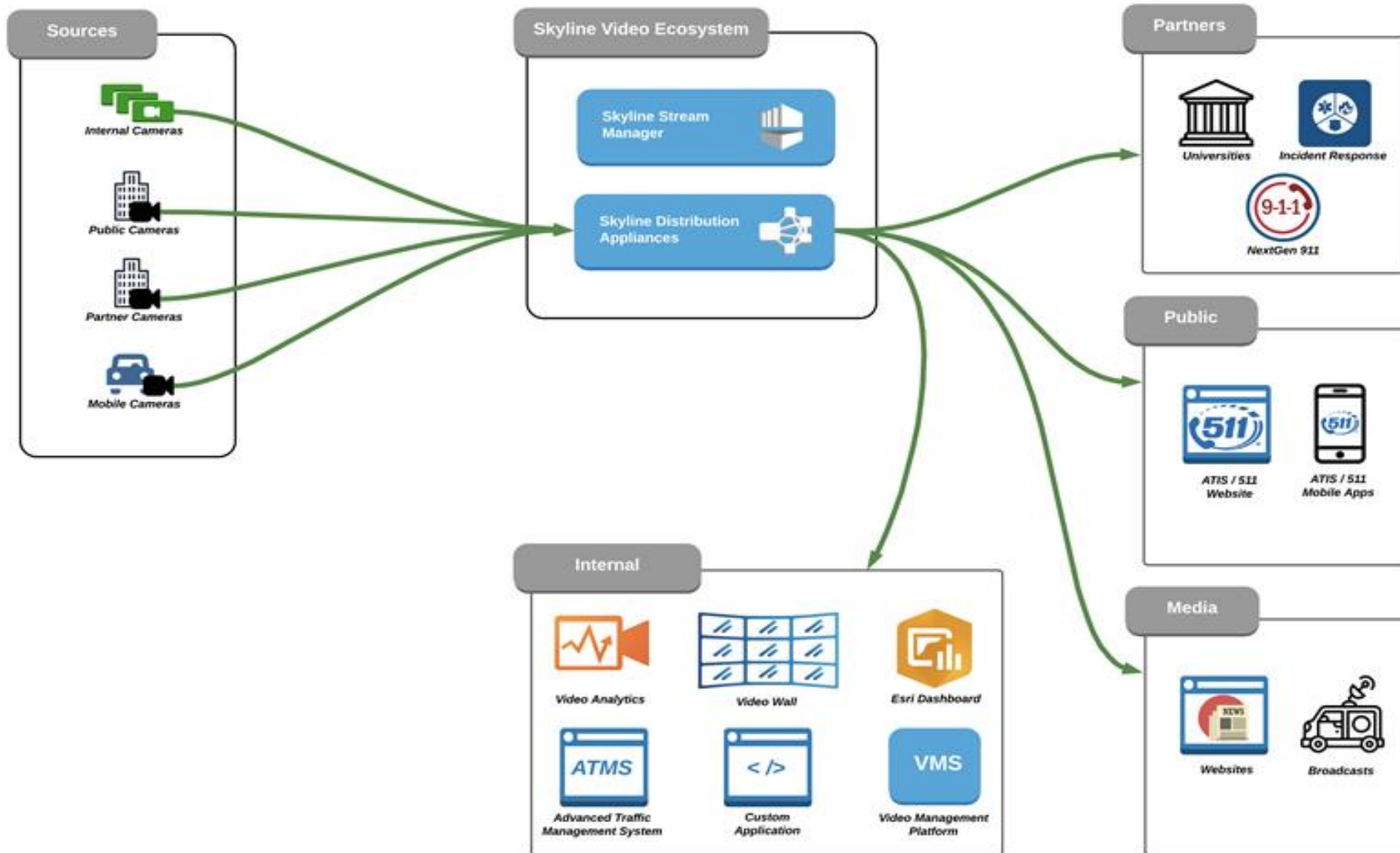


Designed Scale and Integrate with Partners

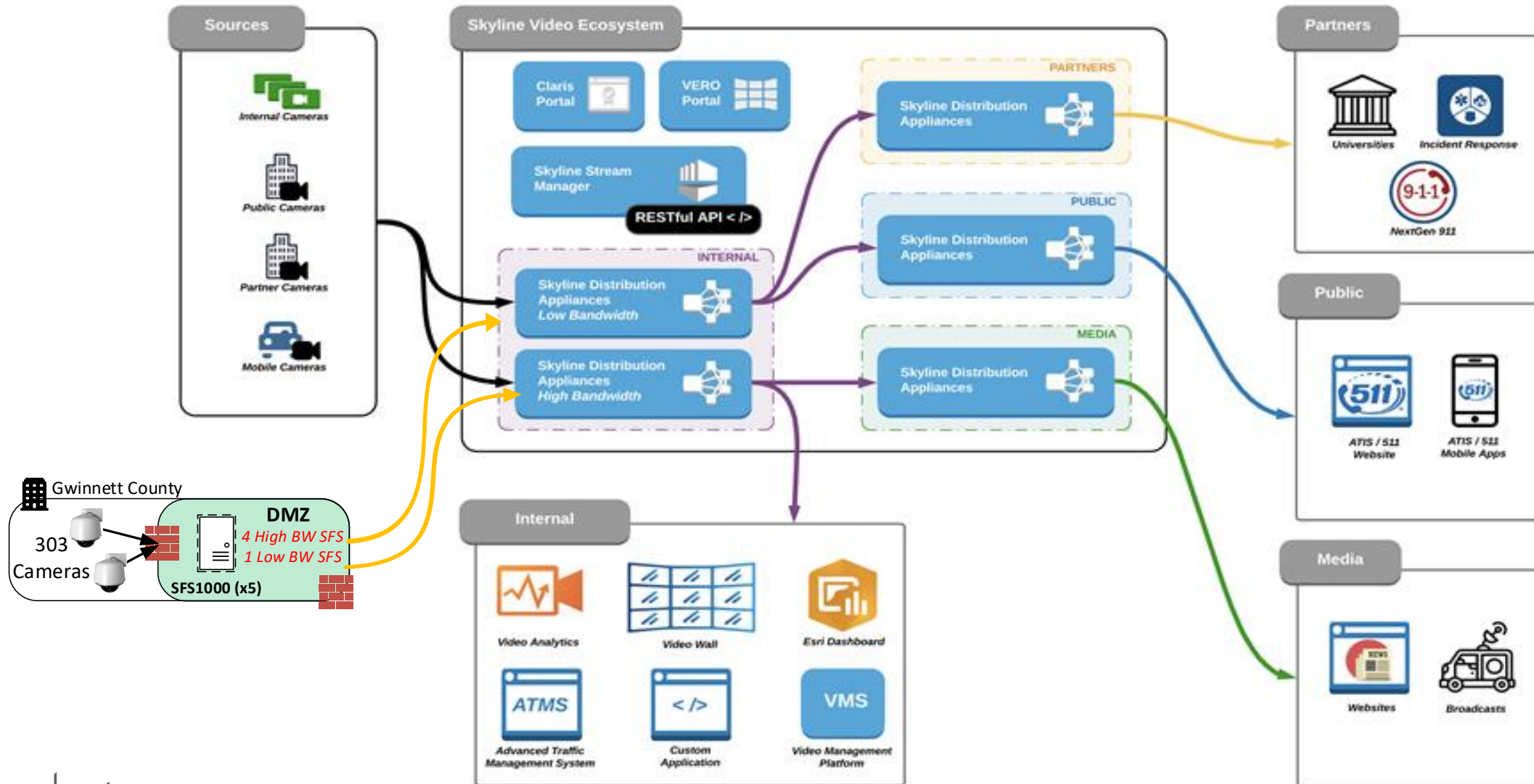
Start with the End in Mind



Skyline Ecosystem



Skyline Ecosystem – GDOT



Stream Manager Portal



Not Client, Web Application

HTML5 compliant web application requiring not clients or special software, HTML5 Compliant Video streams



Offline Control

Stream Manager allows operators to Offline cameras to specific user groups while allowing other to see the video.



Restful API Service

Video is provided to approved applications using an industry standard Restful API Service.



Manage Camera Metadata

Updates on camera names, locations and status are updated and shared with all down stream applications.



The screenshot shows the Stream Manager interface. On the left is a navigation menu with options like Dashboard, Streams, Appliances, Contacts, Api Keys, Users, Zones, Reports, Current Status, Stream Metadata, and Stream Network Config. The main area is divided into 'All Streams' and 'Streams' sections. The 'Streams' section shows details for 'richmondstream010', including description, jurisdiction, route name, mile marker, traffic direction, latitude, and longitude. Below this is a table of appliances.

Appliances	Stream Map	Hostname	Model	Status	Zone	IP Address
1		sky-mclean-sfs10	SFS1000	Online	Public	172.28.95.14
2		sky-mclean-sfs5	SFS1000	Online	SSL VPN	172.28.95.9
3		sky-salem-3rdprty-sfs	SFS1000	Offline	Salem Internal	172.28.90.80
4		sky-richmond-ts1	TS1000	Playing	Public	10.60.253.40

The screenshot shows the Stream Manager interface with a 'Connections by Appliance' bar chart and an 'SFS Capacity' table. The bar chart shows the number of connections for various appliances, with 'sky-mclean-sfs13' having the highest number of connections. The table below shows the number of streams and current connections for each appliance.

SFS Capacity	Appliance Name	No. of Streams	Current Connections
	sky-fairfax-sfs1	1061	0
	sky-mclean-sfs2	414	71
	sky-mclean-dmz-sfs4	452	62
	sky-salem-3rdprty-sfs	525	54
	sky-mclean-sfs9	217	577
	richmond-sfs10	103	576

Claris – Trusted Partner Portal



No Client, Web Application

HTML5 compliant web application requiring not clients or special software, HTML5 Compliant Video streams



Share Live Video with your partners

Claris is a view only live video sharing portal meant to provide your trusted partners in a Map, Incident or Virtual video wall page.



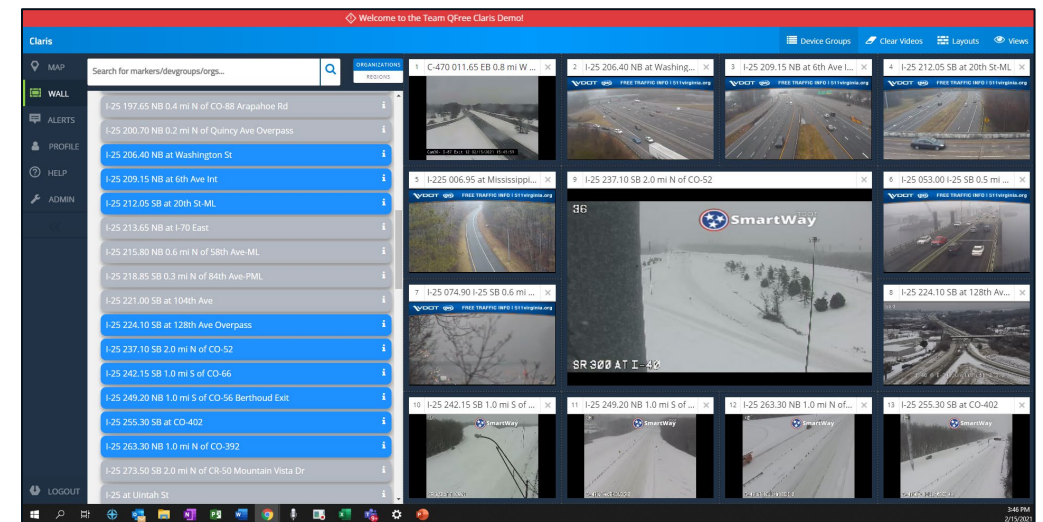
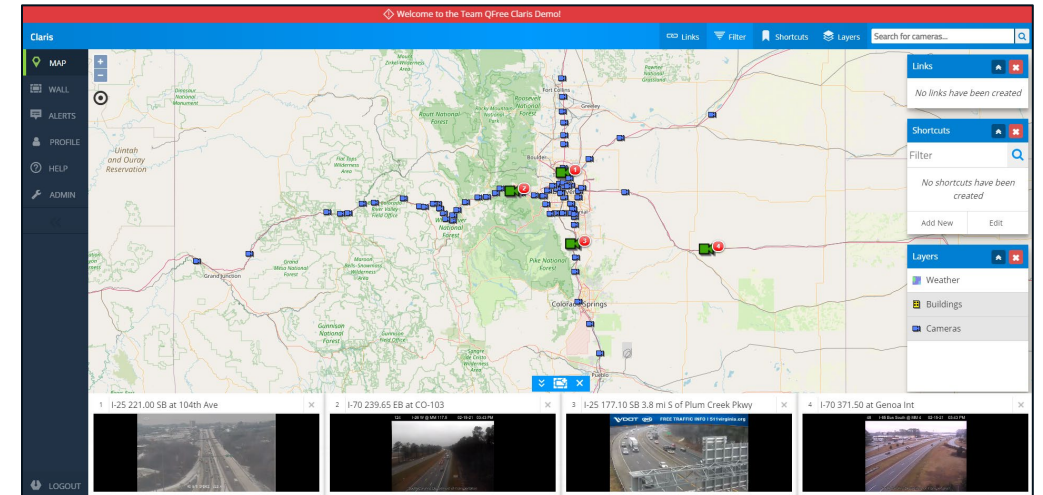
Create your own dashboard

Claris allows users to save their favorite map locations, create and save multiple video wall layouts and ingest data to enhance incident response.



Secure and Filter

Claris requires every user to sign on and allows the video source agencies to filter who gets to see their video. Making multi-agency video sharing a reality, allowing the video to be filtered and of course tracked.



Claris – Media Portal



No Client, Web Application

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Share High Quality Live Video with the Media

Claris is a view only live video sharing portal meant to provide your trusted partners in a Map, Incident or Virtual video wall page.



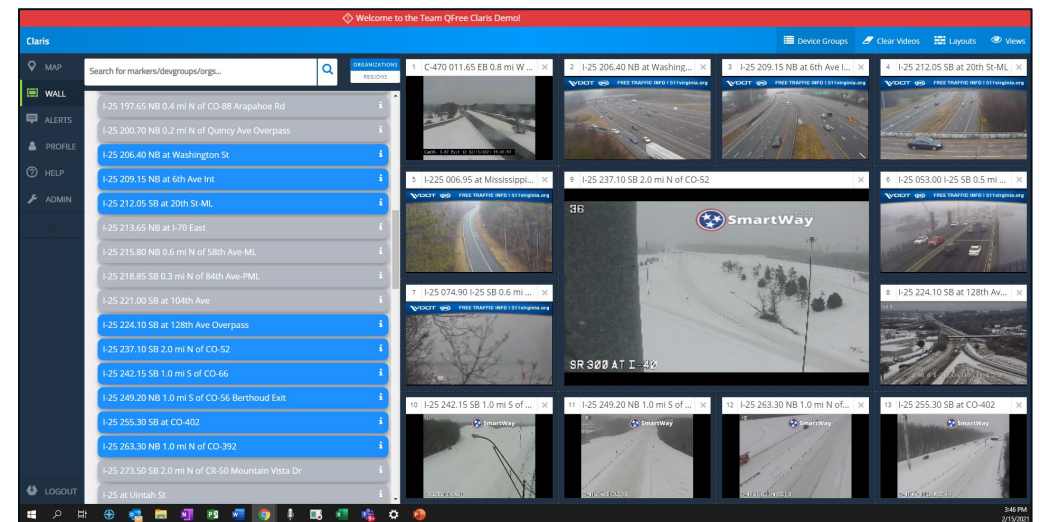
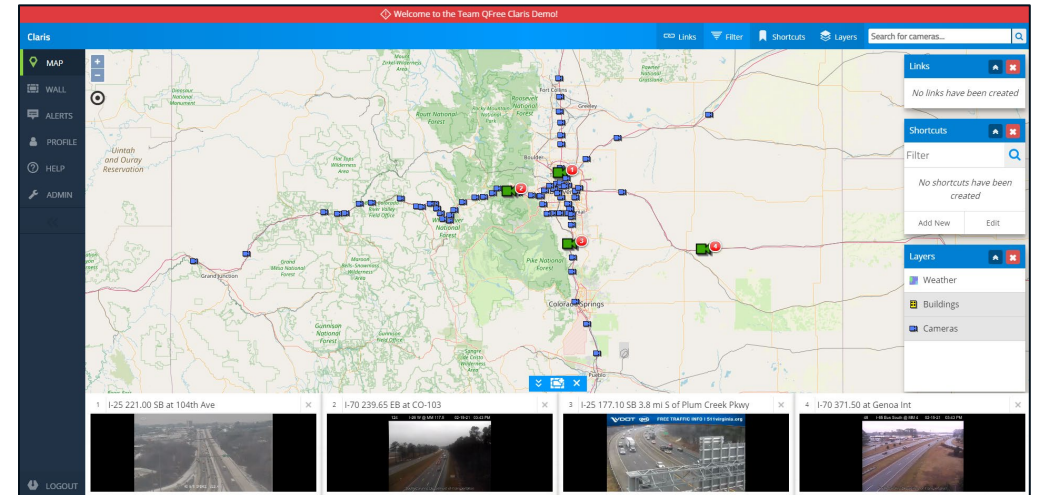
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Vero Virtual Video Wall



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Command and Control PTZ

Control cameras from anywhere, create camera tours,



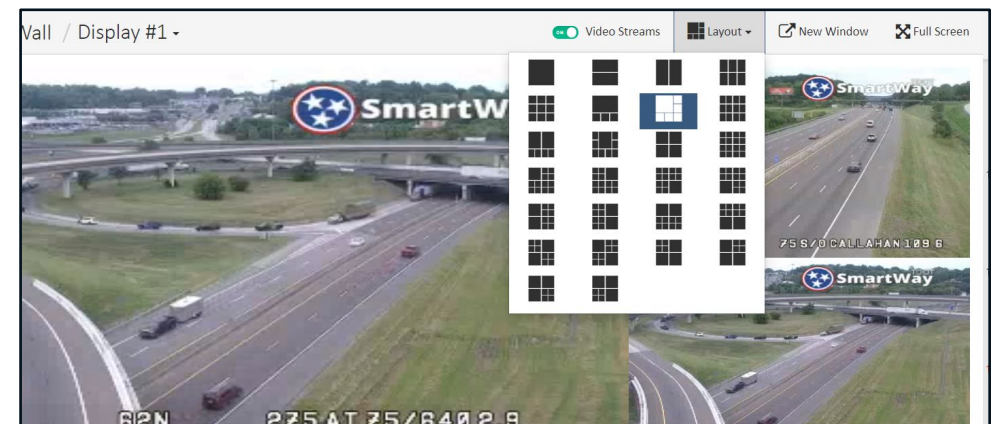
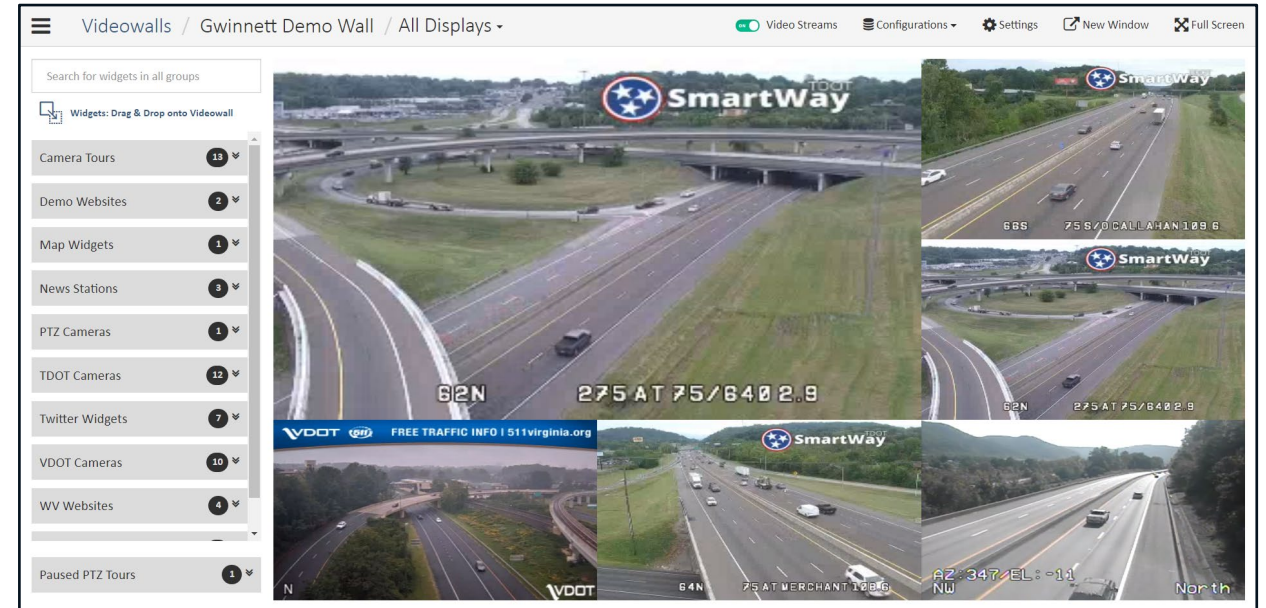
Personal and Shared Video walls

Each user has a personal video with multiple configurations for easy reference. Shared video walls can be displayed on any screen and even replace traditional video walls.



More than Just Video

Incorporate websites, applications, twitter feeds and maps to create walls that can provide more than just video.



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Review the Benefits

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