

Business as Usual when Business isn't Usual: Remote Working Solutions for Production Customers

KK Yoon, April, 2020

Introduction

The increased demands for performing production tasks in the field presents a challenge to media organizations. The impact of COVID-19 in 2020, forcing many companies to relocate their workforces from home, has also meant production workflows have to be accessible from outside the traditional facility, often in environments never designed for production workflows!

The flexibility and efficiency of Grass Valley's suite of Production tools is an enabler to a variety of remote working workflows. This document serves to outline a few possible remote working options which will support such workflows.

Considerations

Factors to consider when selecting the optimum configuration to deploy include:

- The production functionality to be supported
- Capability of the client devices utilized by the remote operators
- Feasibility of installing software modules into the remote devices
- Capacity and type of remote network connectivity

These factors will be analyzed for each of the remote working options proposed in this document.

	Remote Working Options	Features	Device Type	Device Installation	Network
GV STRATUS	Web Client via VPN	Basic	Chrome Browser	None	VPN
	Windows App via VPN	Full	i3/4 GB i5/8 GB	GV STRATUS App EDIUS XS App	VPN
	Workstation Remoting	Full	i5/4 GB	Remoting Client	Public Internet/VPN
	Clients on Amazon WorkSpaces	Full	i5/4 GB	Amazon WorkSpaces Client	Public Internet
	Wide Area News	Full	i7/8 GB	EDIUS Workgroup	VPN
sQ Server	Workstation Remoting	Full	i5/4 GB	Remoting Client	Public Internet/VPN
	Go! Web Editor	Rich	i3/4 GB	None	VPN
EDIUS	EDIUS Workgroup Cloud Editing	Rich	i5/4 GB	Amazon WorkSpaces Client	Public Internet

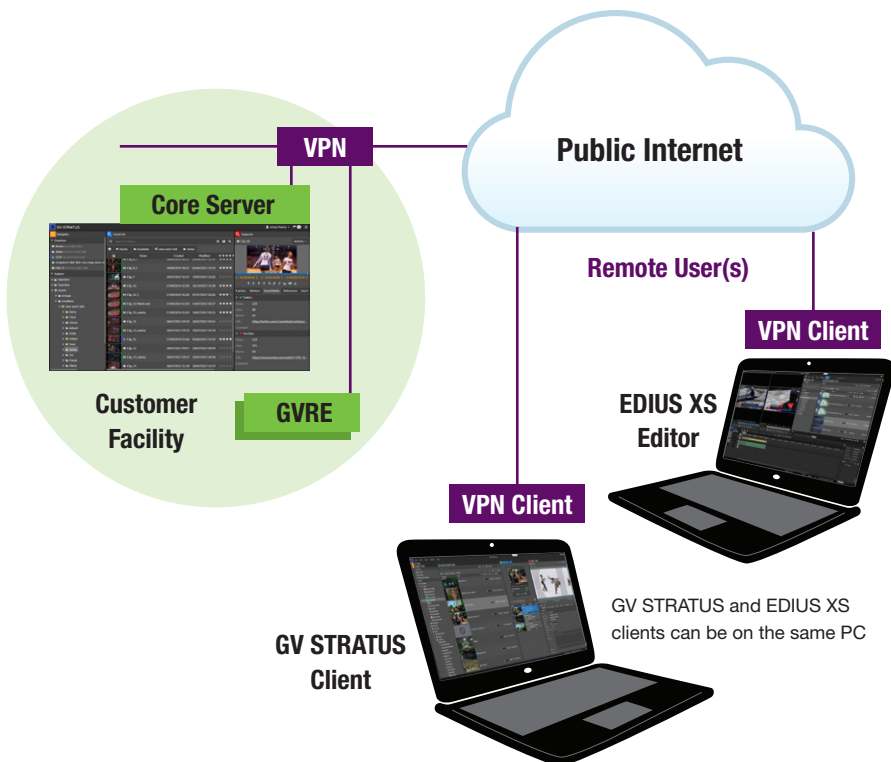
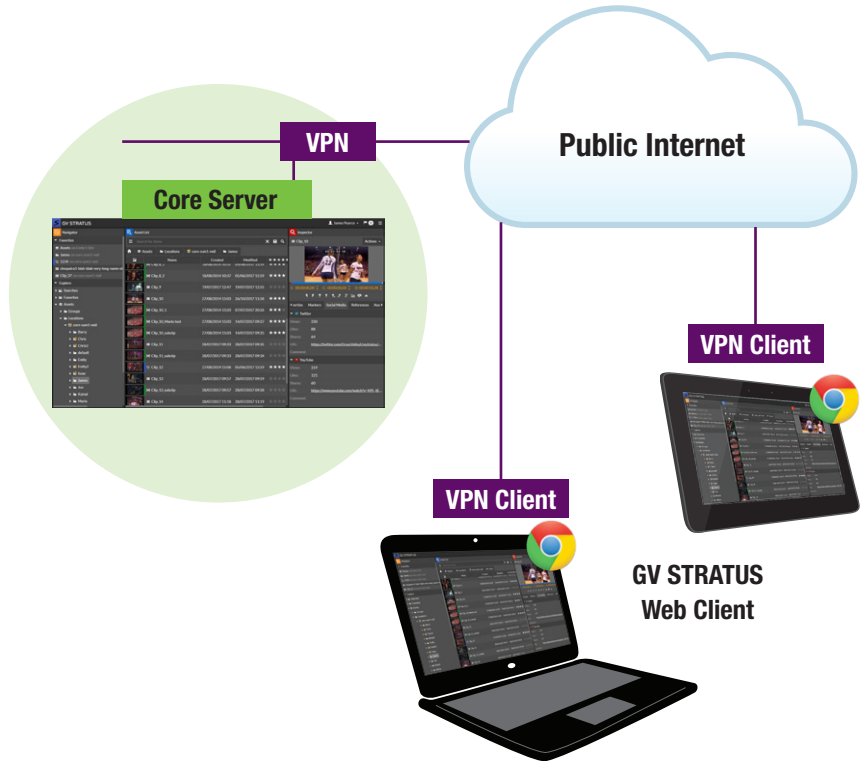
Remote Working Options

GV STRATUS — Web Clients via VPN

The GV STRATUS Web Client provides a rich set of features in a HTML5 user interface:

- GV STRATUS 6.0 — Transfer, Archive, Advanced Search, Send, Job Monitoring
- GV STRATUS 6.5 — Simple Editor
- GV STRATUS 6.9 — Segmentation, Assignment List

The Web Client can be run on any device that supports the Google Chrome web browser. No software modules need to be installed. The Simple Editor within the Web Client provides frame-accurate cuts-only editing by utilizing the GV STRATUS Proxy Streaming Server. The GV STRATUS Proxy Streaming Server is also required to support workflows which utilize proxy created by K2 Summit. This configuration requires access to the on premise network via VPN.



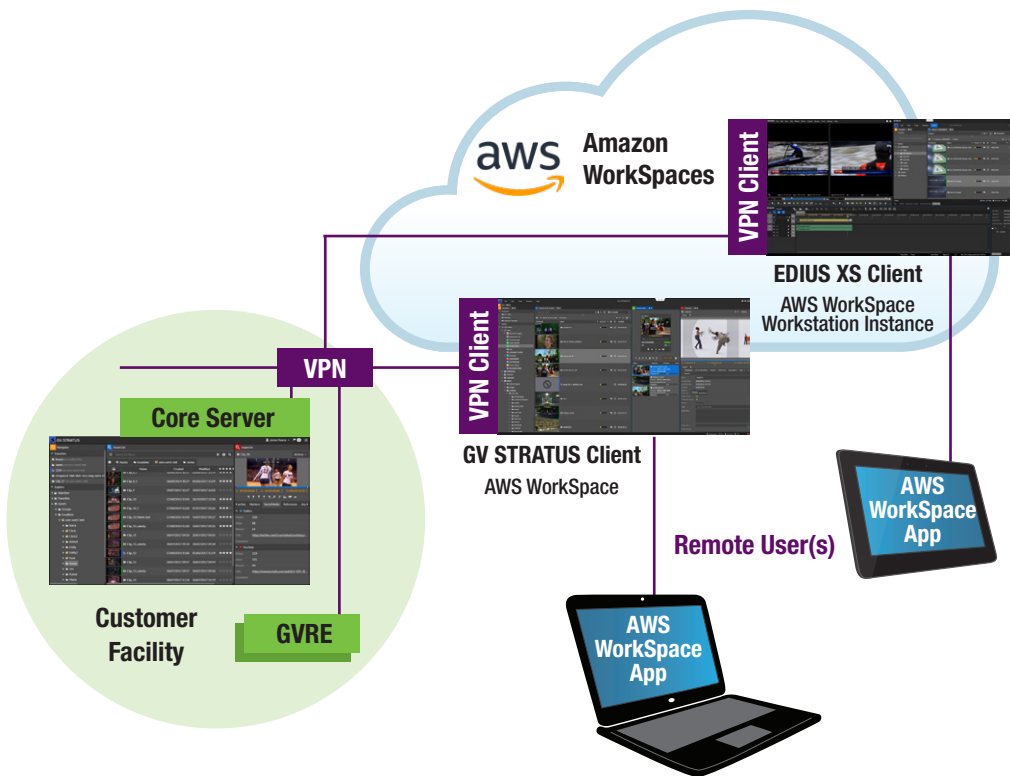
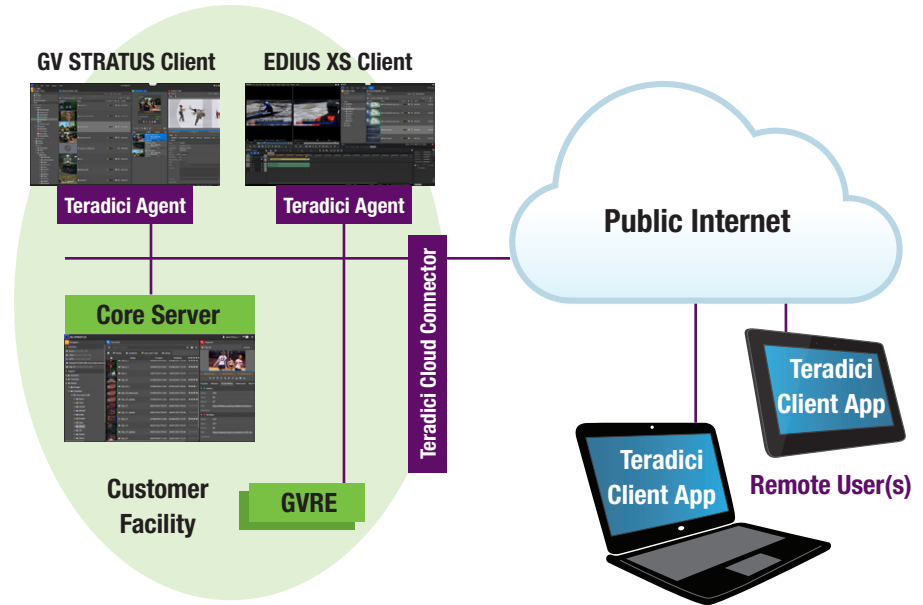
GV STRATUS — Windows Desktop App via VPN

With either the standard GV STRATUS or EDIUS XS desktop application installed in Windows PCs in the remote location, the full suite of GV STRATUS features are accessible. This configuration requires access to the on-premise network via VPN. The fully integrated proxy workflow of GV STRATUS allows user access to all features while conserving network bandwidth. The quality of the proxy can be set to suit the available VPN bandwidth.

GV STRATUS/sQ Server — Remoting On-premise Workstations

In organizations using on-premise client machines but also needing the flexibility of personnel using those machines remotely, enabling remote access to them is a recommended solution. A lightweight remote access client module typically needs to be installed in the client device. To ensure the responsiveness of the editing user interfaces and smoothness of the video preview, careful attention needs to be paid to network throughput and latency, and to the remoting platform's efficiency.

Grass Valley is aware of solutions from Teradici and HP RGS that are suitable remote access solutions for this application. The Teradici solution requires an on-premise Cloud Connector device with specific ports open to a public IP address, whereas the HP RGS solution requires VPN connectivity. Please note, Grass Valley does not provide either Teradici or HP solutions as product, please contact the relevant companies to discuss their solutions.

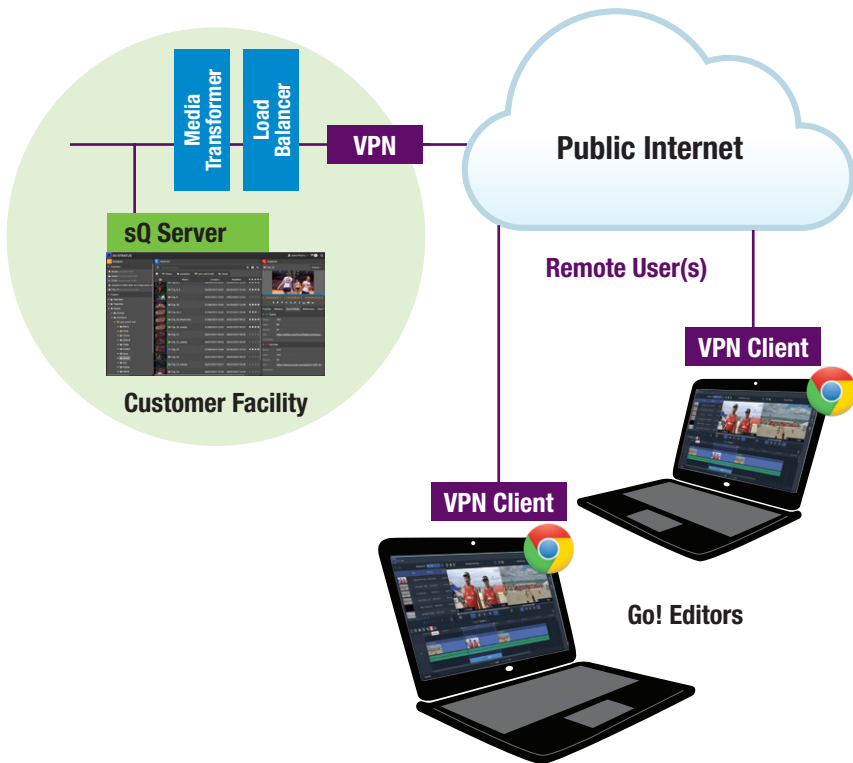
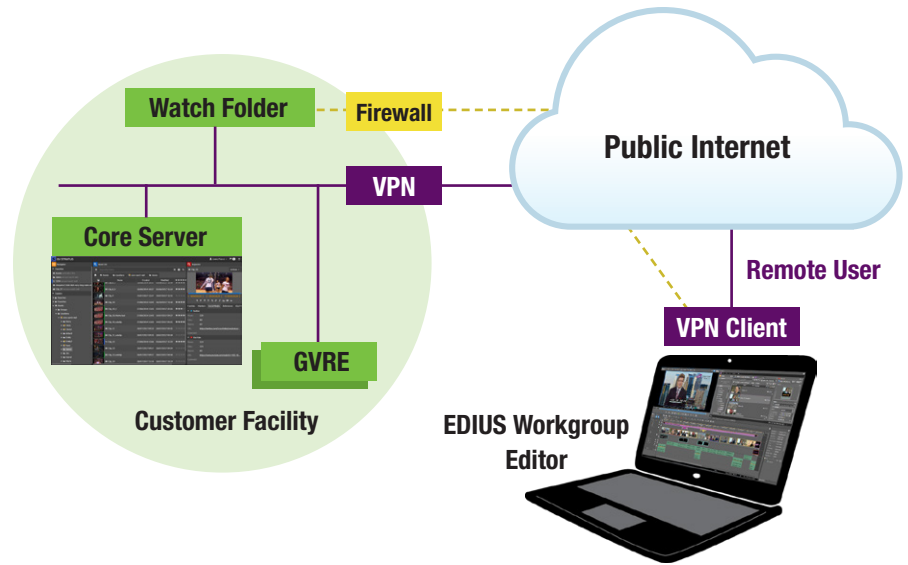


GV STRATUS — Amazon WorkSpaces Clients

The standard GV STRATUS or EDIUS XS desktop application can be installed in Amazon WorkSpaces, allowing the full suite of GV STRATUS features to be accessible without physically installing client workstations on premises. The Graphics Instance tier of Amazon WorkSpace is required. A lightweight Amazon WorkSpaces Client module needs to be installed in the client device.

GV STRATUS — Wide Area Newsgathering

The Grass Valley Wide Area News solution is suited for organizations that require crews to remotely produce ready-to-air packages using a mix of material captured on location and material stored on premise. Using EDIUS Workgroup installed on a laptop, complex edits with voiceover and graphics can be made with a combination of fresh footage and on-premise material previewed via proxy. Advanced editing features like tracking blurred regions and audio manipulation are available within the same user interface. When the edit is complete, the required high-res frames from the fresh footage are automatically sent back to the on-premise GV STRATUS system. This can be via any type of file transfer including FTP, Dropbox or Aspera.

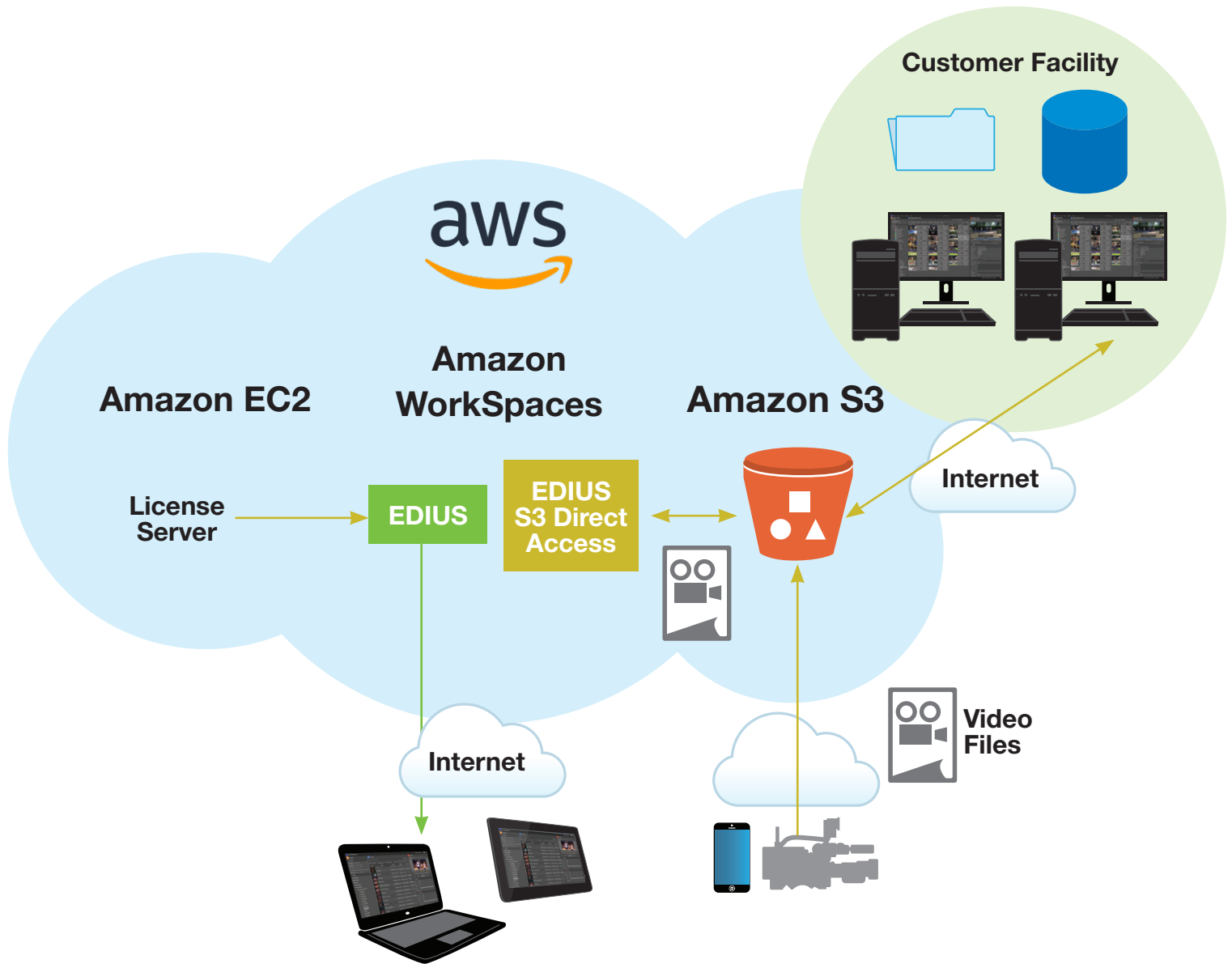


sQ Server/Go! — Go! Web Editor via VPN

For customer sites with existing Go! and Media Transformers, operating over a VPN is the recommended remote working option. The Go! editor provides a rich set of features such as split audio editing, transitions and voiceovers in a HTML5 user interface. The Web Client can be run on any device that supports the Google Chrome web browser. No software modules need to be installed. Go! allows frame-accurate editing by utilizing the Go! Media Transformer, which supports both HBR and LBR settings. This configuration requires access to the on-premise network via VPN.

Workgroup Editing Solution In The Cloud

Benefits of cloud-hosting a production can be realized with a cloud deployment of EDIUS Workgroup. In this system, EDIUS Workgroup is installed onto Amazon WorkSpaces instances. A lightweight WorkSpaces Client module needs to be installed in the client device. The WorkSpaces EDIUS instance can directly access S3 Object Storage to access raw material and to save completed edits and sequences. An S3 Storage Gateway can be deployed on premise to allow the EDIUS instance to access on-premise material, too. The clients need appropriate internet access to connect to AWS.



Technical Details to Support Remote Working Solutions

The following ports are required for general operation of GV STRATUS clients:

445

Protocol: TCP. Used by SDB and XMOS Server and NAS. Used by SiteConfig. File and printer sharing. Used by SMB. Used by GV STRATUS Proxy Storage System. GV STRATUS clients and K2 Summit systems need access to shared folder for import and export.

2000-2003

Protocol: TCP. Used by SDB Server incoming, and by GV STRATUS and GV STRATUS Rundown clients outgoing.

3000-3001

Protocol: TCP. Used by XMOS Server incoming, and by GV STRATUS and GV STRATUS Rundown clients outgoing.

8001-8003

Proxy Streaming

80 and 8080

HTTP traffic.

For more information on all ports, please see the GV STRATUS Topic Library at:

wwwapps.grassvalley.com/manuals/gv_stratus_v6.9.1/core/sub/topic/gg_gvports.html