VideojetConnect™ Remote Service

**IT infrastructure requirements and FAQs**

### Features and benefits

<table>
<thead>
<tr>
<th>First to Know (Remote Alerts)</th>
<th>First to Respond (Remote Access)</th>
<th>First to Recover (Connect to Printer)</th>
<th>First to Improve (Optimize Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notify plant personnel of printer status when away from the line</td>
<td>Remote printer access from anywhere in the world</td>
<td>Remote adjustment of printer settings and parameters</td>
<td>Analytics and reporting to identify improvement opportunities</td>
</tr>
<tr>
<td>Alerts sent to Videojet allow us to proactively start diagnostics</td>
<td>Printer configuration and performance data at-a-glance</td>
<td>Remote identification of potential failed parts for faster on-site fixes</td>
<td>Printer event history to measure progress</td>
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</tbody>
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### Hardware and software requirements

**Remote Edge Server (RES)**
- The Remote Edge Server (RES) is a microcomputer with a Linux operating system that is used to collect and send information from VideojetConnect™ Remote Service-enabled printers to the Videojet Cloud.
- Specifically, the RES collects information from printers and pushes those files through a secure tunnel to a specified endpoint in the Videojet Cloud.
- System Protocol (WAN and LAN): TCP-IP
- Ports for cloud communication: 443 and 53 (DNS)
- AWS Endpoint Used: kinesis.us-west-2.amazonaws.com

Please contact your local Videojet sales or service representative to order the Remote Edge Server.

**Wi-Fi Client Kit**
- The Wi-Fi Client Kit is a Wi-Fi air gateway which extends Wi-Fi capabilities to devices equipped natively with only wired Ethernet.
- This kit is used to connect printers that are not near an Ethernet connection, or for facilities without Ethernet capabilities.
- Security specifications: WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
- Operating environment requirements: Indoor only, Operating temperatures -10° to 60° C (14° to 140° F), Operating humidity 5% to 95% non-condensing
- Range of 100 meters

In North America, please contact your local Videojet sales or service representative to order the Wi-Fi Client Bridge.
In all other locales, please source a Wi-Fi bridge that meets the above specifications.

### LAN configuration requirements

**LAN Connectivity:**
- Remote Edge Server (RES) ➔ Printer Communication

The RES and Videojet printers communicate on the following ports and protocols as described below:
- TCP 3282 – Printer data transferred to RES approximately every 30 seconds, 2K bytes per printer. If faults or warnings occur, then approximately 8K bytes are transferred per occurrence.
- TCP 5900 – For Virtual Network Computing (VNC) connection to printers
- TCP 80 – For HTTP connection to printers

For remote access connections to printers, there is a data load of approximately 2-4K bytes per second when active. Ideally, the RES and printer(s) will be on the same subnet / VLAN. If not, network switches must be customer-managed to allow communication on these ports.

**WAN Connectivity:**
- Communications between the RES and the Videojet Cloud are always initiated by the RES. Printer data is transferred using HTTPS.
- Remote Edge Server (RES) ➔ Videojet Cloud Communication

Communication between the RES and the Videojet Cloud occurs on the following ports and protocols:
- TCP 443 (HTTPS 554), TCP / UDP 53 (DNS)
- Data uploaded from RES to the Videojet Cloud. RES will attempt to upload data to the cloud every 5 seconds as needed. The amount of data will depend on the number of printers and plant activity.
Videojet Cloud Connection (WAN)

Customer Network (LAN)

Remote Service Protocol

Remote Edge Server

Videojet Cloud

Dashboard via web browser

E-mail alerts to plant personnel and Videojet Expert

Videojet Technical Support Expert

Outbound only HTTPS transmissions

Q: What is VideojetConnect™ Remote Service (VRS)?
A: VRS is a dedicated, remote alert and diagnostics system that is customized for Videojet Ethernet-enabled Videojet printers. This remote system allows for real-time notification of printer status changes, warnings, and/or fault conditions via email and email to text. VRS also provides the ability for designated in-house maintenance staff and/or Videojet Technical Support to remotely access the printer for the purpose of running diagnostics, troubleshooting, providing settings adjustments and helping plant personnel address printer issues.

Q: Where does printer data reside and how does VideojetConnect™ Remote Service connect to our printers?
A: Data passes through a Remote Edge Server and is transferred to the Videojet Cloud, where it is permanently stored.

Q: What are the benefits of transferring data to the Videojet Cloud?
A: Allowing data transfer to the Videojet Cloud facilitates expedited response times. It will also allow Videojet Technical Support to help diagnose the problem, address the issue and/or repair the printer remotely, if possible. And if additional service is necessary, a customized action plan can be developed for the Service Engineer assigned to your service call. This insight and action plan enables your Videojet Service Engineer to arrive onsite with the right knowledge, skill set and parts to address the needs of your printer. This is designed to provide the shortest response and repair time possible, helping to keep your lines moving.

Q: How many printers can be connected to one Remote Edge Server?
A: One Remote Edge Server can serve up to 30 printers.

Q: What ports are required for VideojetConnect™ Remote Service?
A: For data only, Printer to Remote Edge Server: Port 3282. Remote Edge Server to Videojet Cloud: Port 443. All data sent to the cloud is encrypted via SSH and transmitted to Amazon Web Services. Remote connection to printers requires additional ports.

Q: Will I need to provide static IP addresses for VideojetConnect™ Remote Service connected printers?
A: While most of our printers are capable of Dynamic Host Configuration Protocol (DHCP), for ease of installation we suggest keeping all Videojet equipment on static IP addresses, if possible. The Remote Edge Server will always require a static IP address.

Q: How will Videojet printers connect to my Wi-Fi?
A: Our Wi-Fi Client Kit is an enterprise-level Wi-Fi access point capable of being configured in multiple modes to accommodate almost any Wi-Fi network setup. Typically we use client bridge mode to bridge the printer Ethernet to the Wi-Fi network.

* VideojetConnect™ Remote Service is available in select regions worldwide. Please contact your local Videojet representative for availability information for your location.

Data security (measures to protect your network)

- External access to your printer(s) by Videojet is allowed on-demand by your designated in-house staff via the printer(s)
- Data transmission is always outbound and only sent via HTTPS, unless Remote Recovery is required
- Access to data in the Videojet Cloud is limited to Videojet Technical Support and customer-defined users, and is controlled by the user support role and geographic location

IT-related support and additional info

- E-mail a Videojet Technical Support Expert at: vrshelpdesk@videojet.com
- Visit: www.videojet.com/remoteservice

Call 800-843-3610
Email info@videojet.com or visit www.videojet.com

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Part No. SL000628
ss-remote-service-it-requirements-us-0417
Printed in U.S.A.