Kodak Graphic Communications Canada Company
4225 Kincaid Street
Burnaby, B.C., Canada
V5G 4P5
Tel: +1.604.451.2700
Fax: +1.604.437.9891

Request support:
partnerplace.kodak.com
http://graphics.kodak.com

Kodak

Product bulletin

Release date: 31 January 2018

Kodak Remote Support System (RSS)

Background

The Kodak® Remote Support System (RSS) is an infrastructure for connecting to and supporting Kodak customers' equipment. RSS provides connectivity management, diagnostic tools, per-site equipment information, automated support tasks, and basic support management features. Kodak has used RSS to provide remote support since 2000. As technologies and Kodak products evolve, the RSS adapts to meet these changing needs.

For further information about Kodak RSS, contact a service representative from your regional Customer Engagement Center (CEC). CEC numbers are listed at the end of this bulletin.

Kodak RSS Connectivity

RSS VPN is a secure broadband connectivity method used by Kodak RSS for providing remote support. It is a centrally-managed VPN solution dedicated for Kodak RSS use. RSS VPN is capable of establishing direct peer-to-peer authenticated and encrypted tunnels by automatically bypassing network address translations (NAT) and stateful firewall devices on the route between trusted peers. The result is a low-latency virtual network requiring few or no configuration changes to an existing network infrastructure. Kodak RSS VPN utilizes a third-party mediation service that is powered by LogMeIn® Hamachi. The service is managed by Kodak RSS; only RSS Client peers that Kodak has registered are deemed to be trusted and may communicate via the RSS Connector.

RSS connectivity includes four main components: Kodak RSS Client Software, Kodak RSS Connector, Kodak RSS Server and Kodak RSS ServiceNet.

Product bulletin

Kodak

RSS Client Software is installed on customer servers and workstations. Its purpose is to communicate online status and availability to the RSS Connector, and to establish a secure tunnel with the RSS Server.

RSS Connector centralizes the RSS Client peers (server and workstations running RSS Client Software) by providing the mediation services required for establishing direct peer-to-peer VPN tunnels between the RSS Client Software and the RSS Server. In rare cases where a direct peer-to-peer tunnel cannot be established, the RSS Connector is used to relay tunnels between the RSS Server and RSS Client Software.

RSS Server is the application that service representatives around the world use to establish remote connections to supportable equipment. The RSS Server controls the management of VPN tunnels through a secure connection to the RSS Connector.

RSS ServiceNet is a messaging and data transfer mechanism between the RSS Client and RSS Server for non-reactive support.

Kodak

Remote Support System (RSS)
RSS VPN - Components
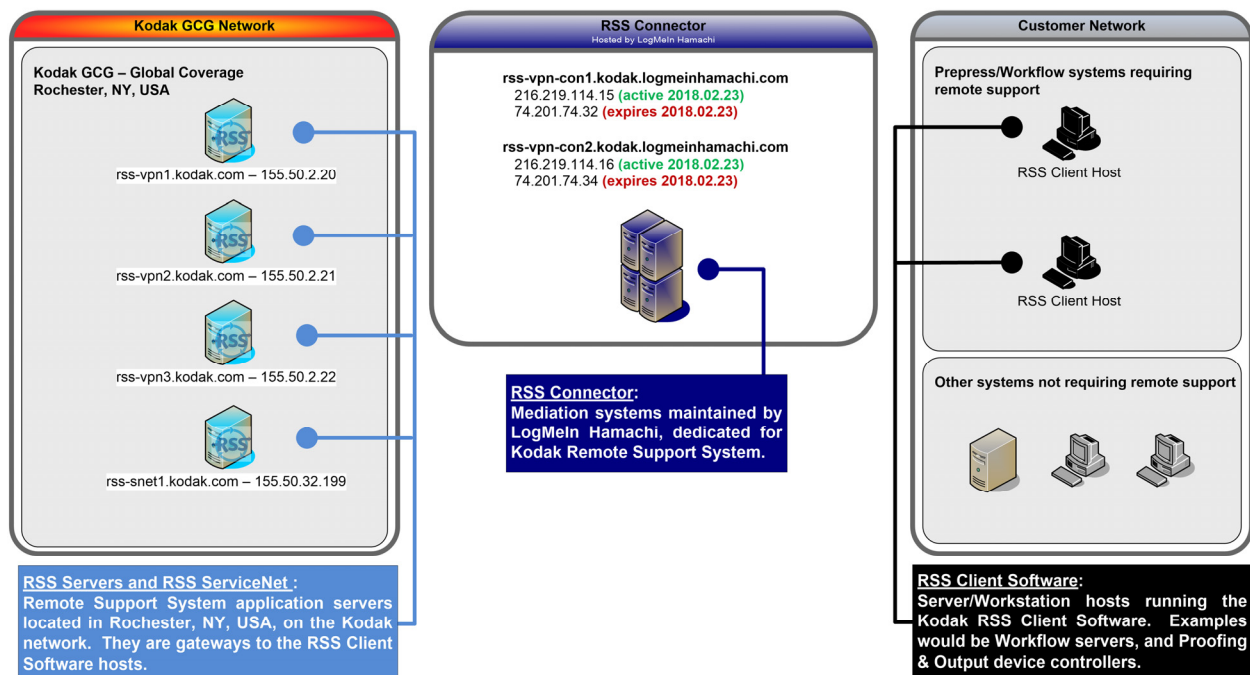
Component Destination Addresses		
RSS Connector 1	216.219.114.15 (active 2018.02.23)	rss-vpn-con1.kodak.logmeinhamachi.com
	74.201.74.32 (expires 2018.02.23)	
RSS Connector 2	216.219.114.16 (active 2018.02.23)	rss-vpn-con2.kodak.logmeinhamachi.com
	74.201.74.34 (expires 2018.02.23)	
RSS Servers	155.50.2.20	rss-vpn1.kodak.com
	155.50.2.21	rss-vpn2.kodak.com
	155.50.2.22	rss-vpn3.kodak.com
RSS ServiceNet	155.50.32.199	rss-snet1.kodak.com

Product bulletin

Kodak

How these components work together to provide a secure broadband connection

When the Kodak RSS Client Software is enabled on a peer, it establishes a connection to the RSS Connector using the proprietary LogMeIn Hamachi Client Control protocol to authenticate and communicate its online status. Using RSS Server, a service representative must initiate a remote support connection to the RSS Client peer. At this point, the RSS Server communicates to the RSS Connector that the RSS Server and the RSS Client peer are to be joined in a secure trust relationship. Only then does the RSS Server and RSS Client build a secure encrypted (AES-256-CBC) and authenticated (HMAC-SHA-1-96) VPN tunnel.

RSS Connectivity Requirements

System requirements: Kodak RSS Client Software is supported on the following operating systems: Microsoft® Windows® 10, Server® 2012, Server® 2008 and Windows® 7 Professional. The system must have a default gateway configured under the TCP/IP networking properties and DNS resolution is recommended. *For legacy versions of Microsoft® Windows® operating systems (Server® 2003, XP Professional, Server® 2000 and Windows® Professional 2000) please contact the CEC to find out if there is still an available version of the RSS Client Software.*

Network requirements: The RSS Client peer must be on a network segment that has access to the public Internet. If the network uses a proxy server to access the Internet, RSS VPN traffic must be configured to bypass the proxy. This may require additional firewall rules and/or proxy configuration settings.

Firewall requirements: Many firewalls do not require configuration changes for RSS VPN to operate. However, firewall configurations that explicitly block outbound ports require the services (protocols) that are described next to be permitted through the firewall.

Customers with more stringent security environments, explicit firewall rules may be configured to *only* allow RSS Client peer VPN traffic *to and from* the worldwide RSS Servers and the RSS Connector (see the following table).

- **Client Control Protocol** is responsible for three things: client/server communication, login, and NAT discovery. The protocol consists of three static ports (1 TCP, 3 UDP) and a range of UDP ports (see the following table). The RSS Client peers must have access to the RSS Connector's ports using this protocol. *An exception to the above port requirement is a 'non low-latency' TCP relayed configuration which uses a single TCP port (see the following table). This configuration is strongly recommended against due to performance effects it causes on the network and the RSS Connector.*

- **Transport Protocol** is responsible for securely tunneling traffic between an RSS Client peer and the RSS Server. The transport protocol may be **Transport—Direct** (Client peer to RSS Server), or **Transport—Relay** (Client peer through RSS Connector to RSS Server). Direct tunnels use a static port at the RSS Server and Relay tunnels use a static port at RSS Connector. RSS Client peers must have access to the static UDP ports of the RSS Connector and all RSS Servers. *An exception to the above port description is the 'non low-latency' TCP relayed configuration which uses a single TCP port.*

- **ServiceNet Protocol** is responsible for messaging and data transport between an RSS Client peer and the RSS Server. The protocol is HTTPS/SSL and requires one of two TCP port options.

Product bulletin

Kodak

#	Source	Destination*	Port	Protocol	Protocol Name
1	RSS Client Host	RSS Connector 1 216.219.114.15 74.201.74.32	6504 16504 36504 46504 – 46604	TCP UDP UDP UDP	**Client Control Protocol**
2	RSS Client Host	RSS Connector 2 216.219.114.16 74.201.74.34	26504	UDP	**Client Control Protocol**
3	RSS Client Host	RSS Servers 155.50.2.20 155.50.2.21 155.50.2.22	6504	UDP	**Transport-Direct**
4	RSS Client Host	RSS Connector 1 216.219.114.15 74.201.74.32	6504	UDP	**Transport-Relay**
5	RSS Client Host	RSS ServiceNet 155.50.32.199	6504 (or 443)	TCP	**ServiceNet**
Optional 'Non Low-Latency' TCP Relayed Configuration below **				
	RSS Client Host	RSS Connector 1 216.219.114.15 74.201.74.32	6504 (or 443)	TCP	Client Control Protocol & Transport-Relay

* See previous table for IP addresses and domain names and their respective *active* and *expiry* dates. For more information about the change, see RSS IP Address Change.

** The optional non low-latency TCP relayed connection requires only TCP 6504 or TCP 443 to be opened. If selecting this option, rules #1-4 may be ignored, however, **this configuration is strongly recommended against due to performance effects it causes on the network and the RSS Connector. There will be an increase in latency resulting in loss of speed and performance.**

Protocol examples: The following diagram shows all protocols with an example of a direct and a relay tunnel.

Kodak

Remote Support System (RSS)
RSS VPN - Protocol Examples
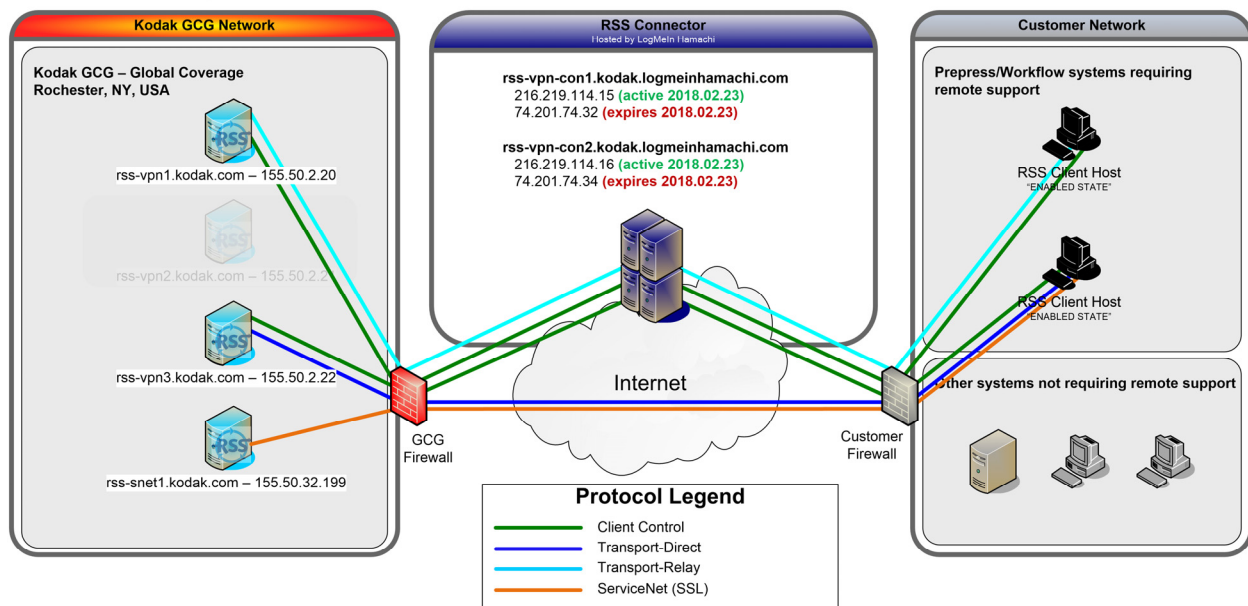
Please note that the above example is used only to show the difference between direct and relay tunnels. During a real support-call scenario, a site would connect with a single RSS Server only. The 'non low-latency' option is not shown in this example, however, if it were, the 'Transport-Relay' protocol would follow the 'Client Control' protocol over TCP/IP.

For more information about the technologies and security that are used in the above protocols from LogMeIn Hamachi, go to https://www.vpn.net/security.

Product bulletin

Kodak

Download, Install and Register RSS Client Software

You can download the RSS Client Software from https://ecentral.kodak.com/RSS and install it on Kodak supportable server and workstations systems that meet the requirements in this bulletin. After installing RSS Client Software, contact a service representative to complete the registration process and test RSS VPN.

Kodak Customer Engagement Center (CEC) phone numbers:

Australia: 1 800 222 555	Ireland: 1800.92 4501	Spain: 900 11 39 99
Belgium: 0800 95 999	Italy: 800 90 56 09	Sweden: 020 12 01 999
China: 800 820 0861	Japan: 0120 327 326	Switzerland: 0800 19 99 99
Denmark: 80 40 49 99	Luxemburg: 32.2.352 30 90	The Netherlands: 0800 02 00 999
Finland: 0800 30 399	New Zealand: 0800 273 6111	United Kingdom: 0800 09 63 199
France: 0800 00 11 99	North America: 800 472 2727	
Germany: 0800 101 99 99	Norway: 800 628 99	

About Kodak Graphic Communications Group (GCG)

The leading provider of graphic communications solutions worldwide, Kodak's Graphic Communications Group (GCG) offers image capture systems; professional color, copydot, and high-speed document scanning systems; inkjet printing and proofing systems; workflow and color management software; thermal imaging devices for film, plates, and proofs; high-quality proofing media, printing plates, and recording film; on-demand color and black-and-white printing systems; data storage products; and professional services. With corporate headquarters located in Rochester, N.Y., Kodak has the largest global sales force and is committed to a digitally oriented growth strategy. For more information, visit www.graphics.kodak.com.