Kodak Graphic Communications Canada Company
3700 Gilmore Way
Burnaby, B.C., Canada
V5G 4M1
Tel: +1.604.451.2700
Fax: +1.604.437.9891

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

Kodak

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Product bulletin

Kodak Remote Support System v2.0—RSS VPN

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 at your regional Response/Support Center at the number listed at the end of this bulletin.

Introducing Kodak RSS VPN Connectivity

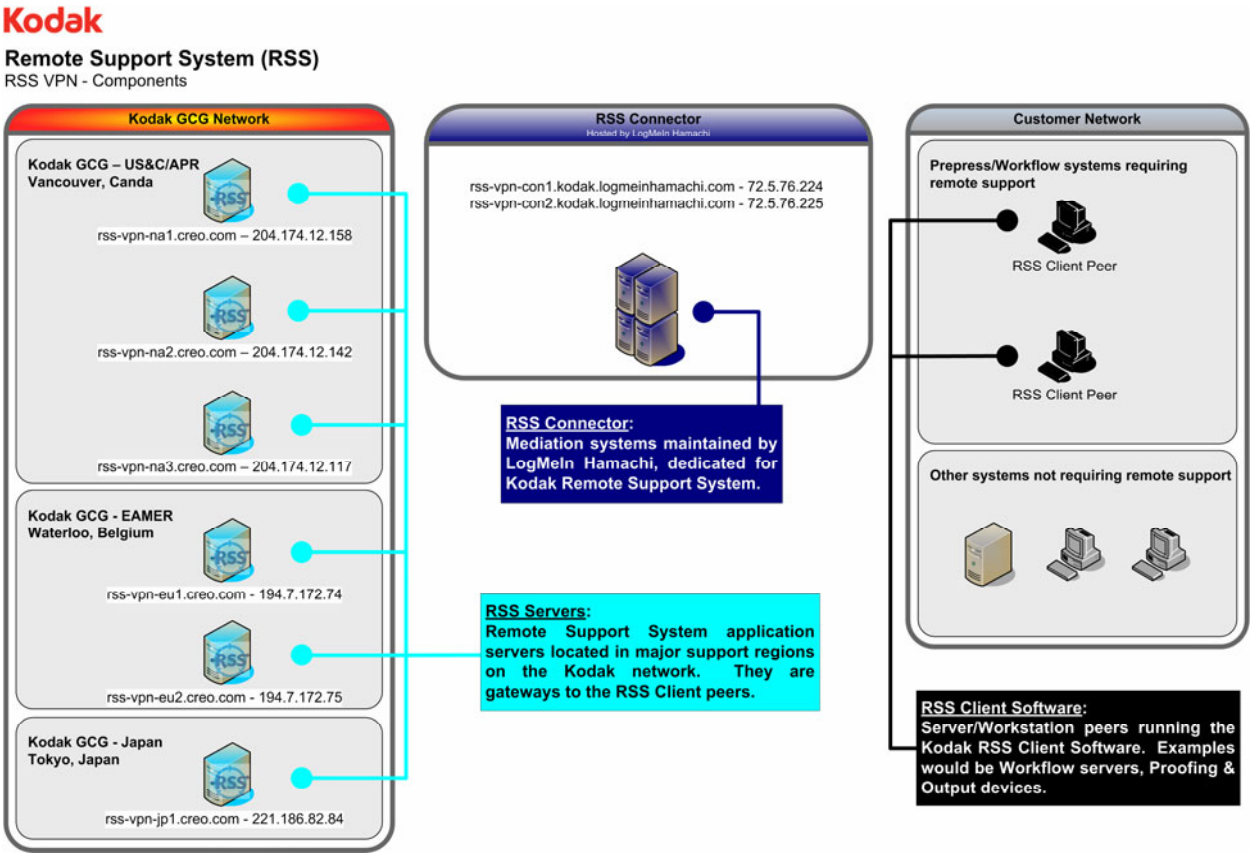
RSS VPN is the latest secure broadband connectivity method to be added to Kodak RSS. It is the primary technology used for making remote connections and is used unless one of the other connection methods outlined in the product installation guide is specifically requested. The new RSS VPN connectivity 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.

The RSS VPN connectivity solution includes three main components: Kodak RSS Client Software, Kodak RSS Connector, and Kodak RSS Server.

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 tracks the RSS Client peers' locations (server and workstations running RSS Client Software) and provides 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 software 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.



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 bit) and authenticated VPN tunnel.

RSS VPN Requirements

System requirements: Kodak RSS Client Software is supported on the following operating systems: Microsoft® Windows® 2000 Professional, Windows 2000 Server, Windows XP Professional, and Windows Server® 2003—32 bit. The system must have a default gateway configured under the TCP/IP networking properties.

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

For 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.
- **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). Both direct and relay tunnels use a static port at the RSS Server and RSS Connector. RSS Client peers must have access to the static UDP ports of the RSS Connector and all worldwide RSS Servers.

Service	Purpose	Ports	Destination (*)
Client Control Protocol	Client / Server	TCP : 6504	RSS Connector
	Login	UDP : 16504, 26504, 36504	
	NAT Discovery	UDP range : 46504 to 46604	
Transport Protocol (**)	Encrypted and authenticated Tunnel	UDP : 6504	RSS Servers and RSS Connector

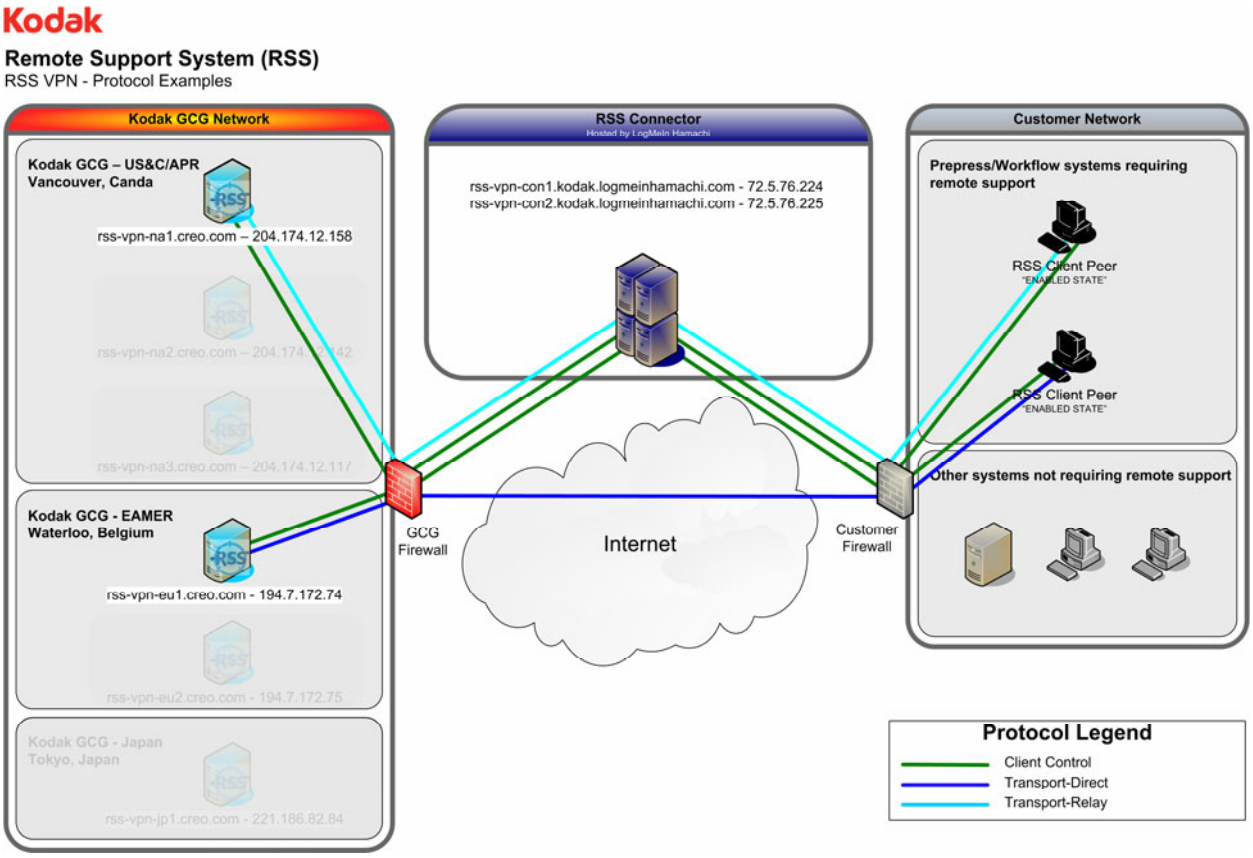
* See the following table for IP address and domain names.

**Future versions of RSS VPN will support the Transport Protocol over TCP : 443.

For more information about the technologies and security that are used in the above protocols from LogMeIn Hamachi, go to https://secure.logmein.com/products/hamachi/securityarchitecture.asp.

Destinations		
72.5.76.224	rss-vpn-con1.kodak.logmeinhamachi.com	RSS Connector
72.5.76.225	rss-vpn-con2.kodak.logmeinhamachi.com	
204.174.12.158	rss-vpn-na1.creo.com	RSS Server
204.174.12.142	rss-vpn-na2.creo.com	
204.174.12.117	rss-vpn-na3.creo.com	
194.7.172.74	rss-vpn-eu1.creo.com	
194.7.172.75	rss-vpn-eu2.creo.com	
221.186.82.84	rss-vpn-jp1.creo.com	

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



Please note that the previous example is used only to show the difference between direct and relay tunnels. During a real support-call scenario, a site would connect with an RSS Server in only one region; the connectivity would not span to two regions as the diagram shows.

Download, Install and Register RSS Client Software

You can download the RSS Client Software from https://ecentral.creo.com/eCentral/Self_support/downloads_resultsn.asp?ProductName=Remote+Support+System+(RSS)&countryid=global 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 Response/Support Center phone numbers:

Australia: 1 800 222 555
Belgium: 0800 95 999
China: 800 820 0861
Denmark: 80 40 49 99
Finland: 0800 30 399
France: 0800 00 11 99
Germany: 0800 101 99 99
Ireland: 1800.92 4501
Italy: 800 90 56 09
Japan: 0120 327 326
Luxemburg: 32.2.352 30 90
New Zealand: 0800 273 6111
North America: 800 472 2727
Norway: 800 628 99
Spain: 900 11 39 99
Sweden: 020 12 01 999
Switzerland: 0800 19 99 99
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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 (NYSE: EK) has the largest global sales force and is committed to a digitally oriented growth strategy. For more information, visit www.graphics.kodak.com.

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