API & NETWORK SOFTWARE EXPERTISE

YOUR DATA, OUR EXPERTISE

Rimage is well known for creating industry leading automation systems, but the hardware is only as capable as the software that controls it. While it may not get the spotlight as much as the hardware, Rimage software is just as powerful. Whether submitting a one-off job or managing an entire fleet of networked Rimage automation systems, Rimage software has you covered.

The first key strength of Rimage software is networking. Networking is at the core of Rimage software, allowing users to monitor and control systems remotely, tie multiple systems into a single workflow or integrate with 3rd party applications.

What can Rimage networking do for me?

If you have a network, you can do a lot more with your Rimage automation system right from your own desk. The main component that enables this is the Rimage Messaging Server. You can get started benefiting from the network by installing Rimage Messaging Server on a server managed by your IT department, making sure it is always available rather than in your production environment. You could also take two, or more, Rimage systems and configure them to connect to this Messaging Server. This lets you install your client applications on your own computer, and submit to all of your Rimage systems without leaving your desk. Meanwhile, the data for jobs can also be kept on a secure server that is backed up and has lots of space. This lets you take advantage of Rimage service programs like Rapid Exchange to recover from an unfortunate hardware outage without missing a beat.

How does Rimage software use the network?

The important part to know about Rimage software is that it utilizes XML messages via TCP/IP to communicate. Whether you are submitting a job, checking the status of a job, receiving an out of discs alert or resetting the input bins, it is all XML messages. All of these messages are handled by the Rimage Messaging Server, which operates on port 4664 by default. Every other piece of Rimage software connects to Rimage Messaging Server to send and receive communication. So a client would send a job as XML to the Messaging Server, and then the Messaging Server would send it to an available Production Server. If there was an alert or job message, Production Server would send that back to Messaging Server to send to any clients listening for status.

While Messaging Server typically resides on a Rimage system itself, there is no requirement that it does. It can be installed on a remote server with redundancy and backup if so desired. Additionally, multiple clients and Rimage systems can all point to the same Messaging Server, allowing you to use one client to send a job to several different Rimage systems, or one Rimage System Manager application to monitor the production of all the Rimage systems on a network.

What about the job data itself?

While all Rimage communication is XML, the data to be recorded and label to be printed might also have to move across a network if not local to the Rimage system. Rimage software is designed to give you maximum flexibility in getting data to the Rimage system for recording, so there are a few possible ways to make this work. Rimage offers out of the box software clients for submitting jobs, such as QuickDisc™, which utilizes two different methods, while other client applications might utilize even more.

The default method QuickDisc uses for job data utilizes the Rimage Stream Server. Custom applications created using our Software Development Kit (SDK) may also use Stream Server. Stream Server is an application that runs on the client computer, and like QuickDisc, connects to Rimage Messaging Server to notify Rimage systems about its availability. Stream Server then listens on port 9613 of the client computer by default, using the user credentials. If there are multiple users, each will have their own Stream Server, utilizing incrementally higher port numbers to listen. When a job is submitted to a Rimage system, the Production Sever on that Rimage system connects back to the Stream Server on the client and requests the job data. Since the Stream Server is running with the user credentials, it should have permission to get access to all the same data for recording. Typically, no other permissions or networking is required to use this method, but some firewalls or security software on the client computer may block the Production Server from connecting to the client.

The other method QuickDisc uses is Windows File Sharing. In this case, QuickDisc will take the job data and copy it to the Rimage System Folder (RSF) on the Rimage system itself. When QuickDisc submits the job then, it uses the RSF folder as the path to the data in the job, so the Rimage system knows the data is already local. In this scenario, every user that wants to send jobs to the Rimage system would need to have write access to the RSF. The network also needs to allow standard Windows File Sharing.

The third method is the most common method for custom clients created using our SDK as well as sometimes being used by QuickDisc. This method utilizes UNC paths (Universal Naming Convention) in the job and requires Production Server to go out to the network to get the data directly. This can pose some networking challenges to configure, but generally works quite well once setup. The Production Server on the Rimage system needs to be configured to have user rights on the network. Any data that will be recorded needs to be shared out with Windows File Sharing, and then the user that Production Server is configured with needs to be granted access to those shares. When a job is submitted, the paths to the data in the XML file will be the UNC path to the data on the share. Production Server then connects to the share to download the file as it is recording the disc.

What other networking does Rimage software use?

Other than the Messaging Server, Stream Server and Windows File Sharing, Rimage software may also use standard HTTP on default port 80. If you use the Rimage WebRSM™, WebQD™ or integrated using the WebServices SDK, you will be utilizing HTTP, just like browsing the web. If you point a web browser to the Rimage system, (e.g. http://RimageSystem) it will most likely bring up WebRSM because browsers also default to port 80.

The second key strength for Rimage software is the Rimage SDK. The Rimage SDK provides sample code, documentation and files for the Rimage Application Programming Interface (API), which enables system integrators, partners and end users to interface directly with the Rimage system using custom software. This enables seamless integration into the workflows and software that operators are already using, making it even easier to create jobs.

Have an order fulfillment website that allows users to order discs?

The Rimage API lets you integrate it directly to the Rimage system so that the jobs are recorded and printed automatically when a customer places an order. Perhaps you have a document management system and need to distribute records from the system. Rather than exporting the files, opening QuickDisc™ or similar application and manually sending a job, the Rimage API lets you program your document management system to automatically send the job with a single button.

The Rimage SDK is available upon request at no charge, simply by contacting Rimage Support. The standard SDK includes both the Rapid APIs and Client APIs, while the WebServices API using SOAP (simple object access protocol) is available separately. Starting with release 9.0, Rimage Software Suite now includes the Network Publisher integration tool built-in with the software. Each of these APIs offers different advantages, from easy to use text-based integration to full-fledged integration using all of the capabilities of the native Rimage software.

If the power of the SDK itself is not enough, Rimage application engineers are available for consultation, typically at no cost to you. Rimage application engineers can provide advice on best practices, which API is right for your workflow, which method to use to accomplish a specific task, and much more. While Rimage application engineers will not write your application for you, they are able to assist you throughout the process to be successful. If you do wish to outsource the integration, they can recommend resources and coordinate work with them.