# **Table of Contents**

Overview	. 2
Install RLM server	. 2
Get host name and ID	. 3
Install Server License File	. 5
Control RLM Server	. 6

## **Overview**

The RLM license server from Reprise Software Inc. provides floating licenses for the PANTORA application. If PANTORA is shipped with a floating license the RLM server must be running in your network or PANTORA cannot be started.

To install and set up the RLM server the following steps are required:

- Install the RLM server on a machine in your network
- Get the name and ID of your host and send it to X-Rite
- Install the server license file you get from X-Rite

These steps are described in detail in the next sections.

### **Install RLM server**

#### System requirements

The RLM server can only be installed on a Windows machine. It cannot be installed on a virtual machine.

The RLM server must be installed on a dedicated machine in your network that can be reached from all machines where you want to install PANTORA. For additional help please contact your IT department.

### Installation

Please install the RLM license server with the provided installer "RLMServerSetup.exe". For a typical installation you simply can accept the suggested options.



After the installation the RLM server should automatically start. If it doesn't do so you can start it with the installed desktop icon.

The server command window may look like this:

C:\Program Files\X-Ri	te\RLM\rlm.exe	
06/08 09:09 (rlm) 06/08 09:09 (rlm) 06/08 09:09 (rlm) 06/08 09:09 (rlm) 06/08 09:09 (rlm) 06/08 09:09 (rlm)	WARNING: No license file for this host (REG-PL-0080) The hostname in the license file(s) may be incorrect License files:	•
06/08 09:09 (r1m) 06/08 09:09 (r1m)	RLM License Server Version 12.0BL2-p2	
Copyright	(C) 2006-2015, Reprise Software, Inc. All rights reserved.	
06/08 09:09 (rlm) 06/08 09:09 (rlm)	License server started on REG-PL-0080 Server architecture: x64_w3 License files: Web server starting on port 5054 Using TCP/IP port 5053 adding UDP/IP port 5053 (No ISU servers to start)	+

To stop the server you simply can close this window. Please note that the server is not configured yet to provide any floating licenses. This will be done in the next steps.

The RLM server could also be started as a Windows service. For more information, see the document "RLM\_License\_Administration.pdf" that has been installed to the RLM installation directory (typically "C:\Program Files\X-Rite\RLM\Doc").

### Troubleshooting

If PANTORA doesn't get a license from the RLM server, this could be caused by the firewall settings in your network or on your PC.

To solve this problem and for more information and FAQs on RLM Server, please visit <u>http://www.reprisesoftware.com/admin/software-licensing.php</u>.

## Get host name and ID

The server license file that X-Rite will give you will be locked to the machine where you installed the RLM server and cannot be used on any other machine. Therefore X-Rite needs the name and a unique ID of your host machine.

### Get host name

If you don't know the name of your host machine, you can get it e.g. from the line "License server started on ..." in the above server command window.

### **Get host ID**

As unique host ID the RLM server uses the serial number of your hard disk. To get this you can use the web interface of the RLM server. First make sure that the server is running and then enter the following URL in your browser:

#### http://<Hostname>:5054

The placeholder <Hostname> must be replaced by the name of your host (see above).

The web interface provides many useful functions to control the RLM server. To get the unique host ID please select the "System Info" option which will show the following screen:



On the line "Disk Serial Number" you see the serial numbers of the hard disks of your server. If there are several hard disks simply select the serial number of the first one.

If you cannot use the web interface, you could also get the hard disk serial numbers by using the RLM tool "rlmhostid.exe" that has been installed to the RLM installation directory (typically "C:\Program Files\X-Rite\RLM").

#### Send information to X-Rite

Send the obtained information to X-Rite, e.g.

Host Name:	REG-PL-0800				
Disk Serial Number:	S1DHNSAF613346Z				

## **Install Server License File**

X-Rite will send you a license file that specifies the types and numbers of licenses you have bought. The license file can be opened with any editor and could look like this:

```
HOST REG-PL-0080 disksn=S1DHNSAF613346Z 5053
ISV xrite
LICENSE xrite pantorabasic 1.1 31-dec-2016 10 _ck=xxx sig="..."
LICENSE xrite pantoratac7 1.1 31-dec-2016 1 _ck=xxx sig="..."
```

This sample specifies 10 PANTORA Basic licenses up to version 1.1 expiring on December 31 2016 and one PANTORA TAC7 license. Please note that the file content is cryptographically signed ("\_ch" and "sig" entries) and cannot be modified.

The provided license file has to be copied to the RLM installation directory (typically "C:\Program Files\X-Rite\RLM"). Note that you normally need administrator rights to do this.

After the license file has been installed you have to restart the RLM server. The command window then could look like this:

```
х
RLM License Server
06/09 08:15 (rlm) RLM License Server Version 12.0BL2-p2
                                                                                                                                                                                 .
                Copyright (C) 2006-2015, Reprise Software, Inc. All rights reserved.
                                   License server started on REG-PL-0080
Server architecture: x64_w3
License files:
Pantora_20160608_003.lic
            Ø8:15
                         (rlm)
                        (rlm)
(rlm)
            08:15
             08:15
08:15
                        (rlm)
(rlm)
                       (rIm)
(rIm) Web server starting on port 5054
(rIm) Using TCP/IP port 5053
(rIm) ... adding UDP/IP port 5053
(rIm) Starting ISU server xrite on port 55522
(rIm) New thread created to watch ISU xrite
(xrite) RLM License Server Version 12.0BL2-p2 for ISU "xrite"
(xrite) Settings from RLM Version 12.0BL2 for ISU "xrite"
(xrite) Server architecture: x64_w3
            08:15
08:15
08:15
            08:15
08:15
           08:15
        Copyright (C) 2006-2015, Reprise Software, Inc. All rights reserved.
       RLM contains software developed by the OpenSSL Project
for use in the OpenSSL Toolkit (http://www.openssl.org)
Copyright (c) 1998-2008 The OpenSSL Project. All rights reserved.
Copyright (c) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.
                       (xrite)
(xrite)
            08:15
                                        Server started on REG-PL-0080 (hostid: disksn=S1DHNSAF613346
            08:15
                                                  pantorabasic pantoratac7
            08:15
08:15
08:15
08:15
08:15
                       (xrite)
(xrite)
(xrite)
(xrite)
                                         License files:
Pantora_20160608_003.lic
                                                                         111
```

# **Control RLM Server**

Now you can start one or more PANTORA applications. In the command window you can see when an application request or releases a license.

You can also start the web interface (http://<Hostname>:5054) and use "Status", "Server Status" to watch the number of available and used licenses:

License pool status											
Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	checkouts	Show Usage
pantorabasic	1	1.1	31-dec-2016	10	10	0	0	0	None	0	usage
pantoratac7	2	1.1	31-dec-2016	1	1	1	0	0	None	1	usage