



Vectorworks 2015 Site Protection Server User's Guide



English Version

Produced in partnership with A&A Co., Ltd.

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Vectorworks Site Protection Server User's Guide - License Server and Backup Server

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Nemetschek Vectorworks, Inc. produced in partnership with A&A Co., Ltd.

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Vectorworks Site Protection Server

1 Vectorworks Site Protection Server Overview

1.1 Introduction to the Vectorworks Site Protection Server

Thank you for purchasing the Vectorworks Site Protection Server. Vectorworks' Site Protection uses a Server/Client format to manage Vectorworks software licenses. While in the standalone version, it is necessary to have a Vectorworks license for each PC, when using the Vectorworks Site Protection Server, the license administration software on the server PC (hereafter referred to as the Vectorworks License Server) manages the number of licenses that can be used simultaneously. The Vectorworks Site Protection Server is installed on all client PCs, and when it is needed, a license is borrowed from the Vectorworks License Server, so that the Vectorworks program can be launched on that client.

The Vectorworks Site Protection Server is based on Vectorworks Fundamentals; the Design Series and Renderworks products are provided as "Modules." To include the functionality and tools in the Vectorworks software, all you have to do is select the necessary modules on the client PC at the time of program launch.

Compared to the previous network version of Vectorworks, the Vectorworks Site Protection Server improves the server solution by introducing generic server software that successfully increases stability.

It also includes the frequently-requested feature of license borrowing.

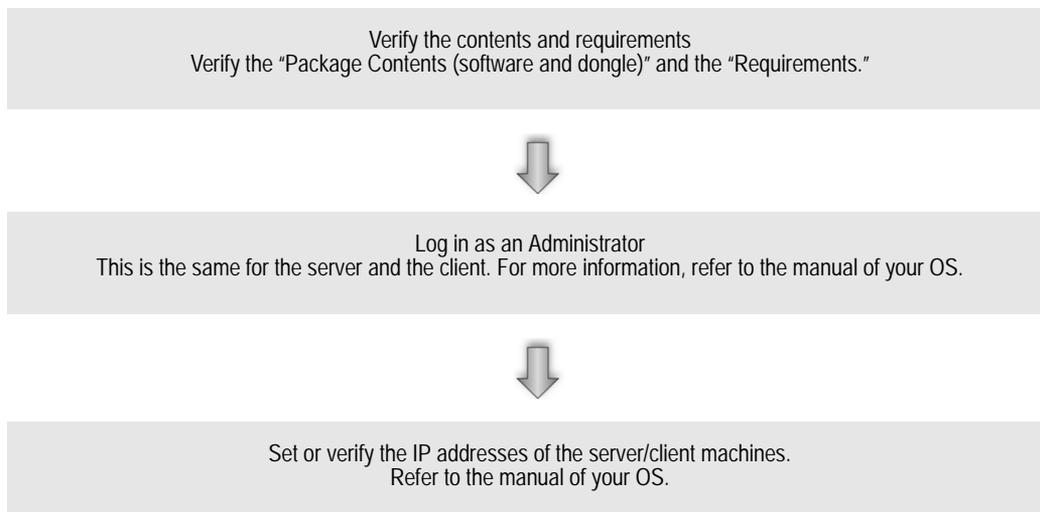
The core of the Vectorworks License Server is an American license management software called Reprise License Manager (RLM), made by Reprise Software, Inc. For more information on the structure and overview of the Vectorworks License Server, refer to "5.1 Overview of the Vectorworks License Server" on page 15.

1.2 The Vectorworks License Server

The Vectorworks License Server includes the following functionality to manage the startup and usage conditions of each instance of Vectorworks software over an entire network.

- Approves launching on the client when it connects to the server software
- License pool functionality (manages all licenses)
- Displays the license usage conditions
- Logs license usage conditions and client connection conditions
- License borrowing functionality
- Manages user rights, the license borrowing module, maximum days to borrow, etc.

1.3 The Process, from Setup to Launch



Server PC

Install the Dongle (Protection Key) driver
Refer to "2.2 Installing the Dongle Driver and Connecting the Dongle" on page 4.



Insert the Dongle
Refer to "2.2.2 Connecting the Dongle" on page 6.



Copy the Vectorworks License Server folder to the server PC.
Refer to "2.3 Installing the Vectorworks License Server" on page 6.



Set up the license file
Refer to "2.1 Requirements" on page 3.

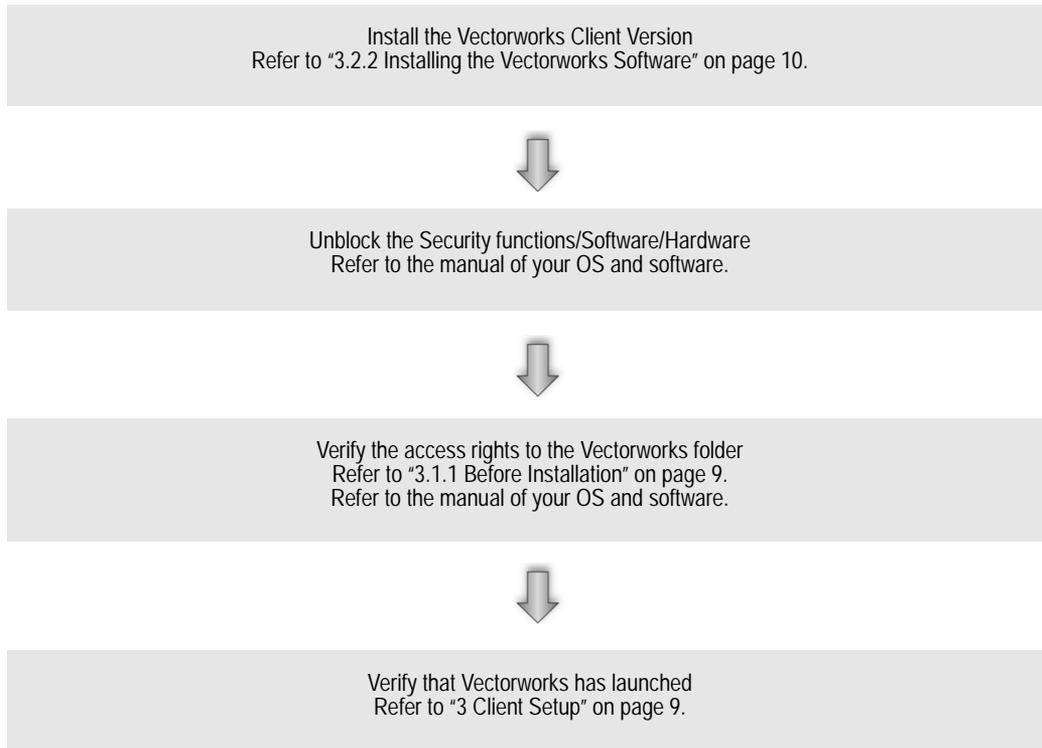


Unblock the Security functions/Software/Hardware
Refer to the manual of your OS and software.



Verify that the Vectorworks License Server has launched

Client PC



2 Vectorworks License Server Setup

2.1 Requirements

Using the license management software requires a server/client type network environment. The environment must meet the following requirements:

- One or more server PCs and one or more client PCs are required.
The Vectorworks License Server does not work on a virtual machine.
- A user account with Administrator rights is necessary for installation and operation.

2.1.1 Operating Environment of the Vectorworks License Server

The Vectorworks License Server manages Vectorworks software licenses. First, the Vectorworks License Server must be launched. Only then can the Vectorworks software be launched.

Platform

Windows:

A computer with at least an Intel Pentium processor, and a USB port

Mac:

A computer with at least an Intel Core processor, and a USB port

OS

Windows:

Windows Server 2003 R2 (32bit/64bit) / Windows Server 2008 (32bit/64bit) / Windows Server 2008 R2 (64bit) / Windows Server 2012 (64bit) / Windows Server 2012 R2 (64bit) / Windows XP (32bit/64bit) / Windows Vista (32bit/64bit) / Windows 7 (32bit/64bit) / Windows 8 (32bit/64bit)

Mac:

Mac OS X Snow Leopard, Lion, Mountain Lion, Mavericks, Snow Leopard Server, Lion Server, Mac OS X Server (10.8, 10.9)

2.1.1.1 Supported Vectorworks versions

Vectorworks Site Protection Server

The operation of the provided dongle driver has been confirmed in the previously mentioned environment. For more information on the operating environment, refer to the dongle manufacturer's website, SafeNet Inc. at <http://www.safenet-inc.com>

2.1.2 Operating Environment of the Vectorworks Software (Client)

Platform

The software client must be installed on a computer conforming to the Vectorworks product requirements, with Ethernet capability.

OS

The Vectorworks product requirements apply.

Memory

The Vectorworks product requirements apply.

Hard drive space

The Vectorworks product requirements apply.

Network protocol

TCP/IP

The Vectorworks License Server and Vectorworks software require different operating environments. Use caution when using a PC both as a server and a client.

While it is technically possible to use a computer as both the server PC and the client PC, due to the nature of license management, the use of a separate, dedicated server PC is recommended.

In general, use fixed IP addresses for the server PCs. However, if they are located in the same subnet, the IP addresses of the server PCs do not have to be fixed; connections are possible using automatically assigned IP addresses as well.

2.2 Installing the Dongle Driver and Connecting the Dongle

Keep in mind the following precautions when performing the installation.

Procedure

Install the dongle according to these steps:

Install driver > Turn PC off > Insert dongle > Turn PC on.

In some environments, a Wizard opens at this point.

1. After inserting the dongle, the first time the PC starts up, the "Found new hardware" window opens.
2. To install the driver, select the option to install the software automatically.

The installation disc contains the following files:

- VWNL Server Installer.app (Mac) and Setup.exe (Windows):
Installs the Vectorworks License Server.
- Readme.pdf: Contains important installation information.

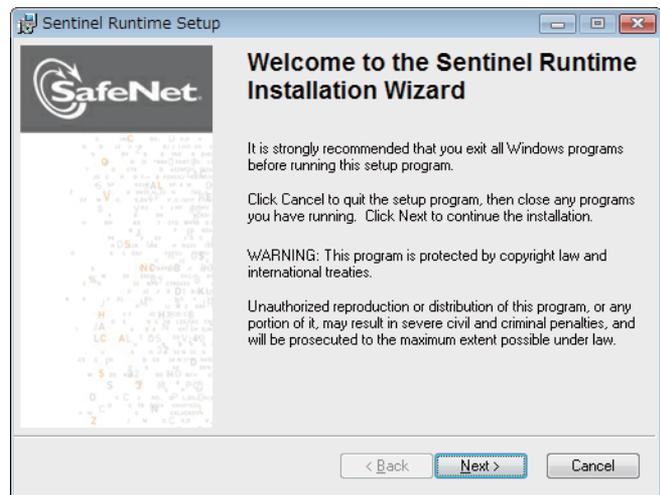
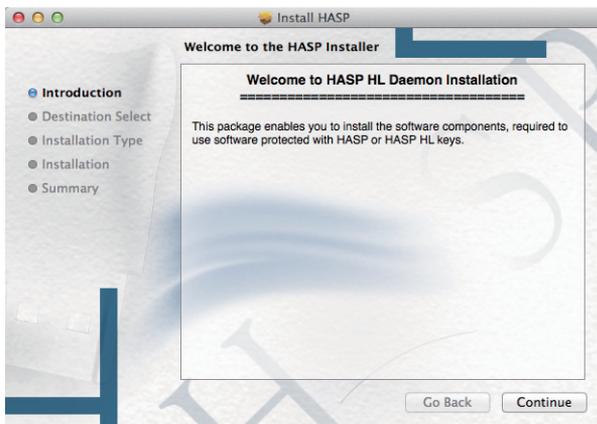
- UsersGuide_Site_SG.pdf: This manual.
- Dongle Support folder: Contains driver software for the dongle.

2.2.1 Installing the Driver

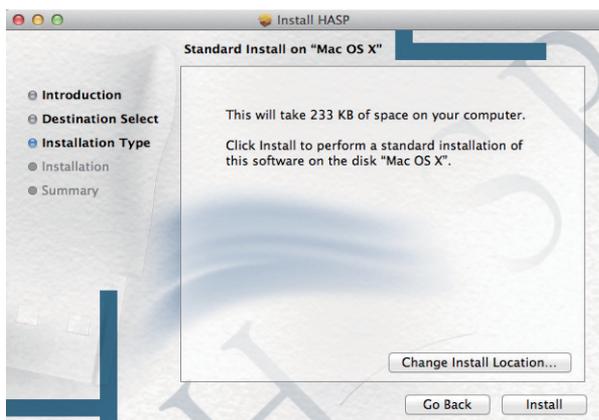
It is necessary to install the driver so that the OS can recognize the dongle. Make sure you perform the driver installation first.

You must log in as an Administrator.

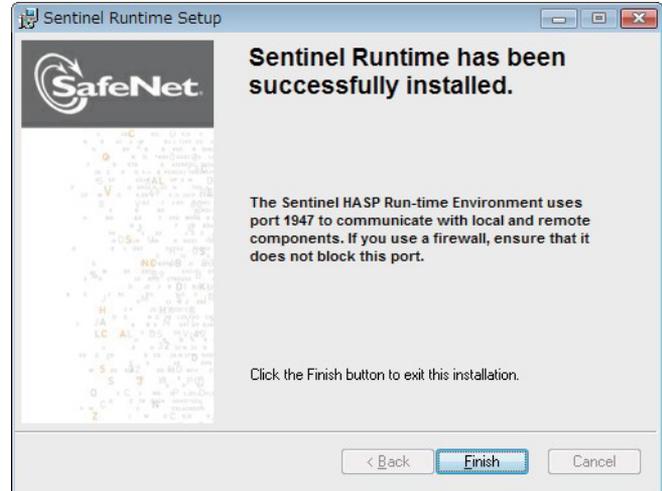
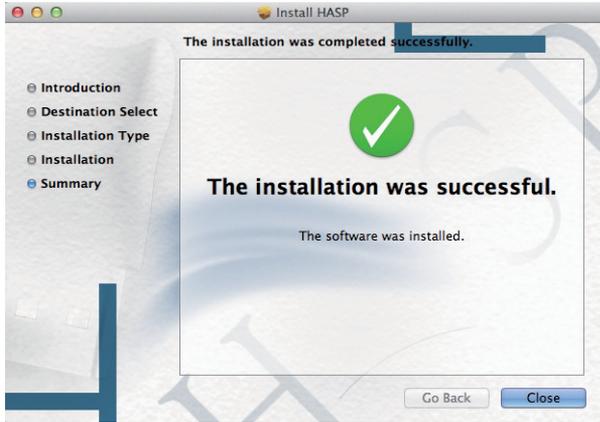
1. Open the Dongle Support folder on the installation disc.
2. Double-click the name of the dongle installer file (“DongleDriverInstaller10.4.pkg” on the Mac, and “HASPUUserSetup.exe” on Windows).
3. The Install HASP device driver installation dialog box opens on Mac; on Windows, the Sentinel Runtime Setup dialog box opens.



4. Click **Continue** or **Next**.
5. On the Mac, the standard installation location is displayed. Verify the installation location, and unless you want to change it, click **Next**. On Windows, read the License Agreement, consent to it, and then click **Next**.



6. Click **Install** (Mac) or **Next** (Windows).
7. When the installation has finished, click **Close** (Mac) or **Finish** (Windows).



2.2.2 Connecting the Dongle

Match the shape of the dongle slot carefully when inserting the dongle, and handle it with care while following the steps below. While the product was made with the utmost care, rough handling may damage the dongle or the connected computer. For more information on inserting the dongle, refer to “6.4 Precautions for Handling the Dongle (Hardware Protection Key)” on page 50.

1. Turn off the power to the server PC.
2. Connect the dongle to the server PC. Firmly insert the dongle into the USB port of the PC. If the dongle is loose, the application won't work properly.
3. Turn on the power to the server PC.
4. If connected properly, the light on the dongle will turn on. If the light is flashing or off, the dongle has to be properly re-inserted.
5. In Windows environments, if the dongle is properly connected, then sometimes a USB device installer dialog box opens. (This dialog box is displayed by the OS, and it will say “New hardware found” or something similar.) Follow the instructions on the screen.

2.3 Installing the Vectorworks License Server

Install the required license management software on the server PC. The following section provides detailed explanations about launching and setting up the software.

Customers who purchased the Vectorworks Site Protection Server version of products (modules) such as Renderworks, Architect, Landmark, Spotlight, or Designer, first must uninstall the previously installed Vectorworks software, and then reinstall it based on the new licenses.

2.3.1 Mac

1. Locate the Vectorworks Network License folder within the Macintosh folder on your installation disc.
2. Copy the entire folder to your computer.

When you purchased your copy of the Vectorworks License server, you received a license file (.lic file). Copy the license file into the Vectorworks Network License folder that you just copied to your computer. The following section provides a more detailed explanation about the license files.

After installation, the rlm file will be immediately necessary for launching and using the Vectorworks License Server. Several files are necessary for proper operation, so do not delete any of them.

List of the Vectorworks License Server files (Mac)	
README	Description of the files
rlm	RLM license manager program
rlmanon	RLM log file modification program (not used)
rlmtests	RLM functionality test program (not used)
rlmutil	RLM utility program (not used)
VERSION	RLM version information
demo.set	ISV (software vendor) definition file
vektorwrx	ISV server software

It is not sufficient to simply copy the Vectorworks Network License folder. For proper operation, various settings are required for the Vectorworks License Server. Refer to the next section, and perform the settings described.

2.3.2 Windows

1. Locate the Vectorworks Network License folder within the Windows folder on your installation disc.
2. Copy the entire folder to your computer.

When you purchased your copy of the Vectorworks License server, you received a license file (.lic file). Copy the license file into the Vectorworks Network License folder that you just copied to your computer. The following section provides a more detailed explanation about the license files.

After installation, the rlm.exe file will be immediately necessary for launching and using the Vectorworks License Server. Several files are necessary for proper operation, so do not delete any of them.

List of the Vectorworks License Server files (Windows)	
README	Description of the files
rlm.exe	RLM license manager program
rlmanon.exe	RLM log file modification program (not used)
rlmtests.exe	RLM functionality test program (not used)
rlmutil.exe	RLM utility program (not used)
VERSION	RLM version information
demo.set	ISV (software vendor) definition file
vektorwrx.exe	ISV server software

It is not sufficient to simply copy the Vectorworks Network License folder. For proper operation, various settings are required for the Vectorworks License Server. Refer to the next section, and perform the settings described.

2.4 Launching the Vectorworks License Server

Launch the Vectorworks License Server. Operate it with Administrator rights.

2.4.1 Verifying Dongle Insertion

Even though you may have already done this in “2.2.2 Connecting the Dongle” on page 6, verify once again that the dongle is properly inserted. If connected properly, the light on the dongle is turned on.

2.4.2 Launching the Vectorworks License Server

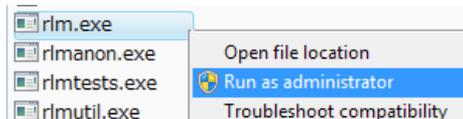
1. Take the license files from the License Files disc that was provided in the product package and copy them into the Vectorworks Network License folder.

The filename is the last six digits of the dongle ID and (.lic) filename extension.

2. Launch rlm.

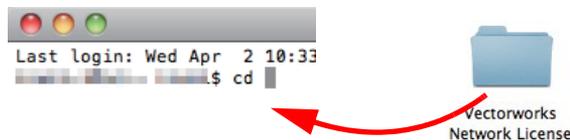
2.4.2.1 Launching on Windows

1. Right-click rlm.exe in the Vectorworks Network License folder.
2. Select **Run as administrator**. The Vectorworks License Server starts.



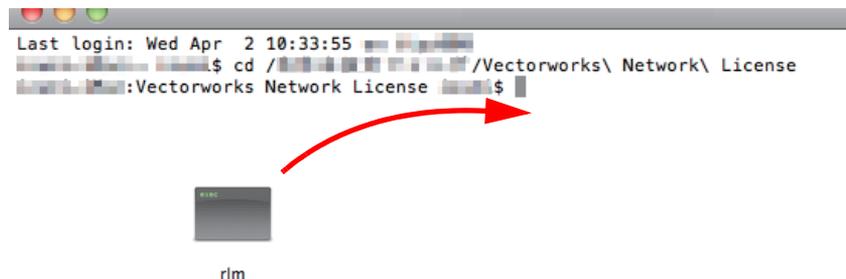
2.4.2.2 Launching on Mac

1. Go to the Applications > Utilities folder, and double-click the Terminal.app.
2. The Terminal window opens. Type cd, then press the space bar to enter a space.
3. Drag and drop the Vectorworks Network License folder into the Terminal window, and press the Return key.



4. The current directory switches to the Vectorworks Network License directory.

Drag and drop the rlm file from the “Vectorworks Network License” folder to the Terminal window.



5. The Vectorworks License Server starts.

In the Vectorworks License Server window, the current status of the client licenses is displayed along with the last six digits of the Vectorworks dongle and other license information.

The Vectorworks License Server should always be running in the background on the server PC. Leave the license software window open (you can minimize it). This keeps the Vectorworks License Server active and the Vectorworks Site Protection Server licensing will work properly over the network.

```

10/04 10:38 (rlm) ... vektorwrx on port 49743
10/04 10:38 (vektorwrx) RLM License Server Version 9.4BL2 for ISV "vektorwrx"
10/04 10:38 (vektorwrx) Server architecture: x86_m1

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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.

10/04 10:38 (vektorwrx)
10/04 10:38 (vektorwrx) Server started on pc101124.nts.net (hostid: hasp4=00F140) for:
10/04 10:38 (vektorwrx) fundamentals architect landmark spotlight
10/04 10:38 (vektorwrx) renderworks rlm_roam
10/04 10:38 (vektorwrx) License files:
10/04 10:38 (vektorwrx) /Users/vektorwrx/Network Licensing Software/Seri
Macintosh/Vectorworks Network License/0001_00F140_Designer_1_Base.Lic
10/04 10:38 (vektorwrx)
10/04 10:40 (vektorwrx) OUT: fundamentals v2014 by user1@pc101124.nts.net
10/04 10:40 (vektorwrx) OUT: renderworks v2014 by user1@pc101124.nts.net
10/04 10:40 (vektorwrx) OUT: architect v2014 by user1@pc101124.nts.net
10/04 10:40 (vektorwrx) OUT: landmark v2014 by user1@pc101124.nts.net
10/04 10:40 (vektorwrx) OUT: spotlight v2014 by user1@pc101124.nts.net
10/04 10:54 (vektorwrx) OUT: architect v2014 by user2@pc101572-w8
10/04 10:54 (vektorwrx) OUT: landmark v2014 by user2@pc101572-w8
10/04 10:54 (vektorwrx) OUT: spotlight v2014 by user2@pc101572-w8
10/04 10:54 (vektorwrx) OUT: fundamentals v2014 by user2@pc101572-w8

```

Sometimes a firewall alert dialog box shows up during startup. If that occurs, unblock the firewall to ensure proper communication. To avoid having to disable the firewall block each time you start up the server, you can change a setting to disable the block. For more information, refer to “6.5 Unblocking the Firewall for the Vectorworks License Server (Windows)” on page 50.

2.5 Shutting Down the Vectorworks License Server

To shut down the license management software, go to the execution window (DOS Prompt or Terminal), and press Ctrl+C to stop the process.

3 Client Setup

3.1 Installation

Install the Vectorworks Site Protection Server (client software).

3.1.1 Before Installation

Verify the following items before starting the Vectorworks software installation.

- If any virus protection or security software is running, stop them before starting the installation.
- If you are reinstalling the library files after adding on Vectorworks Site Protection Server modules such as Renderworks, Architect, Landmark, Spotlight, or Designer, then first you must uninstall the previously installed programs. For more information, refer to “6.2 Uninstalling the Vectorworks Site Protection Server” on page 48.

3.1.2 Limitations of the Client Installer

The actual modules that can be used depend on the licenses purchased.

Example: Customers who purchased only Fundamentals, cannot use the functions contained in the Designer with Renderworks module (menus, tools, libraries, and so on).

The workspaces are supported by the following modules:

- Fundamentals: VW2015 Fundamentals

- Architect:VW2015 Architect
- Landmark:VW2015 Landmark
- Spotlight:VW2015 Spotlight
- Designer:VW2015 Designer
- The workspaces are all created assuming that Renderworks is included.

Limitations of the Mac Client

- It is necessary to have full access (read and write privileges) to the installation directory (Application folder). Otherwise, you have to log in with a user account that has the full access rights. For more information about access rights, refer to the setup-related precautions.
- Please remember that the following drive format options are not supported:
UNIX upper case and lower case differentiation MS-DOS

3.2 Installation Steps

3.2.1 Serial Number

The Vectorworks serial number has 24 digits.

Example: G9XJAZ (or G9XJAC) -XXXXXX-XXXXXX-XXXXXX

- The serial number is available from the product purchase sheet inside the product package.
- The serial number is written with Latin characters in capital letters. Don't use lower case letters when entering the serial number.
- There is no letter O (o) or letter I (i) in the Vectorworks software serial number. "0" always means zero.

3.2.2 Installing the Vectorworks Software

There is an installation disc in the Vectorworks product package. Launch the Vectorworks installer from the disc, and install the software on the hard drive.

1. Insert the Vectorworks disc (Vectorworks Installer DVD) into the DVD drive. The number of files included on the disc will be displayed.
2. Double-click the VW2015_Net_SG_Installer.app (or .exe). The Installer dialog box opens. Click **Next**.
3. Enter the registration information (name, organization name, serial number), and then click **Next**.
4. The Product Selection dialog box opens. Verify or modify the selection, and then click **Next**.
If you select a product for which you don't have a license, the file will be installed, but you won't be able to use it. Select the appropriate products for installation.
5. Carefully read the Vectorworks User License Agreement, and click **Yes**.
6. Choose whether to register your copy of Vectorworks and/or download and install content libraries after installation.
7. Click **Install** to begin the installation.
8. When the installation completes, click **Finish**.
9. If you selected to register software, complete the registration form that opens in your browser.
10. If you selected to download and install content libraries, the Vectorworks Package Manager opens for you to select the desired libraries.

If you select a library file of a product for which you don't have a license, the library file will be installed, but you won't be able to use it. Select the appropriate products' library files for installation.

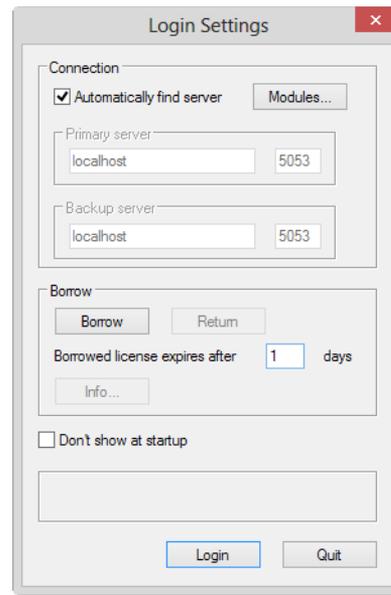
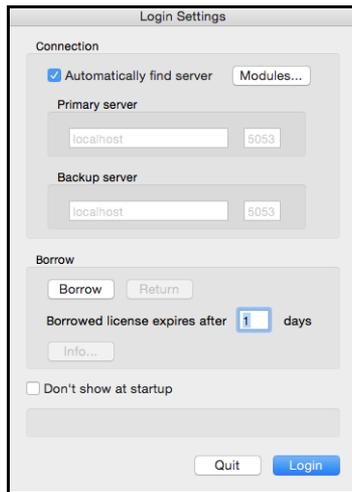
3.3 Launching the Client

When you launch the Vectorworks Site Protection Server client software, it communicates with the server software. Therefore, it is necessary to have a network connection to the server PC.

If you are “borrowing” the software license, then during its loan period you don't need the network connection.

Launching the Vectorworks Program

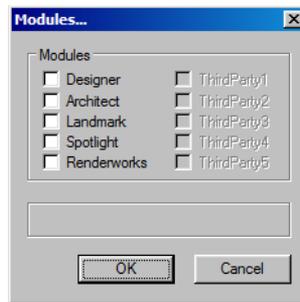
1. Launch the Vectorworks software. The Login Settings dialog box opens.



Parameter	Description
Connection	
Automatically find server	When selected, the connection to the Vectorworks License Server and the module verification is performed automatically. The server PC port number field is not available. Depending on the environment, automatic client verification may not be possible, so normally, deselecting this option is recommended.
Modules	This button opens the Modules dialog box, where you can select the modules that you want to use (and for which you have a license).
Primary server	If the Automatically find server option is not selected, this field is enabled. Please enter the IP address and the port number manually. Set the port number to the same number as the RLM server's number. The default setting is 5053.
Backup server	See “ Vectorworks Site Protection Backup Server” on page 59 for more information.
Borrow	Allows the license for the selected module (or software) to be borrowed for the specified number of days. The maximum borrowing time is 30 days.
Return	Connects to the Vectorworks License Server to return a borrowed module (or software) license, even if the borrowing time has not yet elapsed. When a borrowing time period has elapsed, the client license is automatically released and the client will no longer launch.

Parameter	Description
Borrowed license expires after: __ days	Enter the number of days to borrow the software license. This cannot be set to more than 30 days. At midnight on the last day of the borrowing time period, the license is be automatically released, and the client no longer launches.
Info	When software licenses have been borrowed, the modules and their remaining borrowing time (number of days) are displayed.
Don't show at startup	Logs directly in to the software with the current settings, bypassing the Login Settings dialog box. The display can be re-enabled from the Session tab of the Vectorworks preferences.

- Click **Modules** to specify the module you want to use. The Modules dialog box opens. Depending on the license, certain modules may not be available.



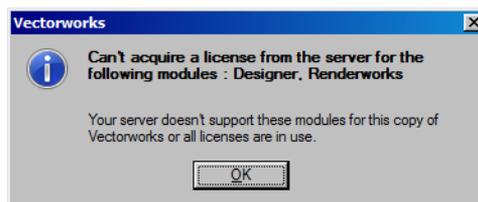
Select the desired module. (Third-party options are regionally available and may not display.) If you click **OK** without selecting any modules, only Fundamentals will launch. Multiple modules cannot be selected, except when one is Renderworks.

Workspaces available on the client depend on the module selected.

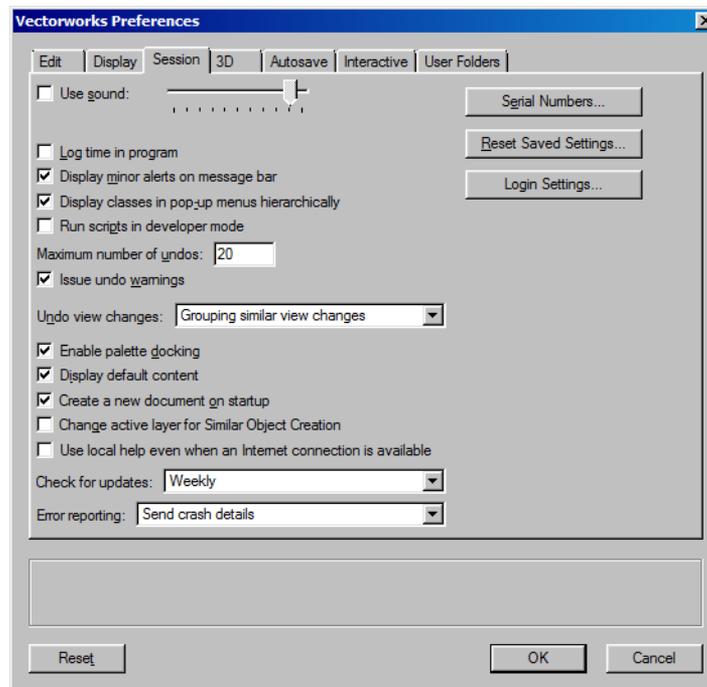
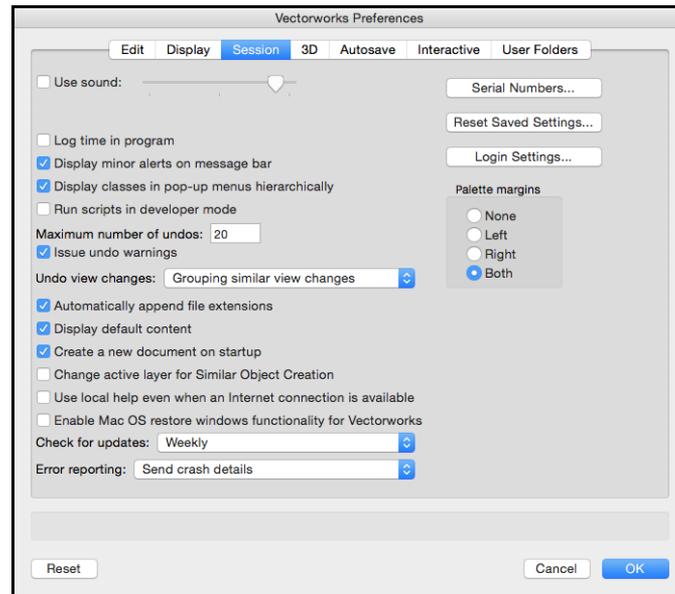
Module	Available workspace
Fundamentals	Fundamentals
Architect	Fundamentals, Architect
Landmark	Fundamentals, Landmark
Spotlight	Fundamentals, Spotlight
Designer	All

- Click **OK** to return to the Login Setting dialog box.
- Click **Login**. When the Vectorworks software successfully connects to the server PC, and the Vectorworks License Server approves it, the Vectorworks software launches.

If the module license cannot be obtained, the following alert opens, showing the name of the module(s):



When the Vectorworks software is running, click **Login Settings** on the Session tab of the Vectorworks Preferences dialog box to access the Login Settings dialog box. If the **Don't show at startup** option was set and you want to change it, you can re-enable the display at startup.



When the Vectorworks software is running (but not borrowing a license), it periodically communicates with the Vectorworks License Server. The connection is verified at a fixed interval of ten minutes. If the connection to the Vectorworks License Server is lost, a warning dialog box opens.



If connection to the Vectorworks License Server was lost due to a temporary network problem, click **Retry**, and try connecting again. If connection to the Vectorworks License Server is successful at this time, then you can continue working. If reconnection is unsuccessful, click **Save and Quit**. All unsaved work files will be saved, and the Vectorworks software closes.

If the connection to the Vectorworks License Server was unexpectedly lost, you need to determine the cause of the problem. Section “7 Troubleshooting” on page 52 provides hints to resolve problems. Verify the operating status of the Vectorworks License Server, and identify the source of the problem.

4 Advanced Topics: Vectorworks Software (Client)

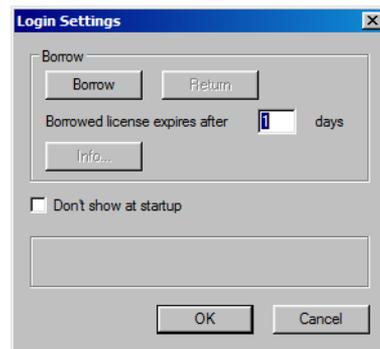
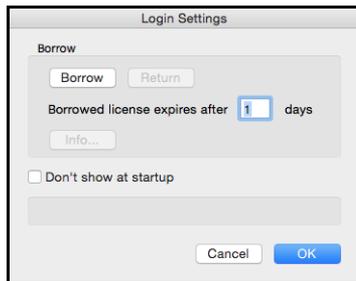
4.1 Borrowing a License

When borrowing a license, the client software can be used without having to connect to the network during the borrowing time period. This means you can use Vectorworks software on business trips or in other situations when it is not possible to connect to the Vectorworks License Server.

1. If the Login Settings dialog box is set to open when launching the Vectorworks program, then you can borrow a license from the Login Settings dialog box.

If the Login Settings dialog box does not open when starting Vectorworks, enable the dialog box at startup from the Session tab of Vectorworks preferences.

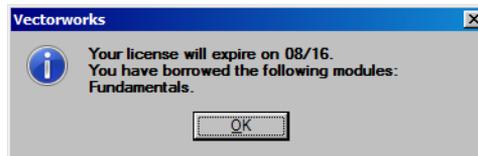
2. The Login Settings dialog box opens.



3. Enter the number of days you want to borrow the license into the Borrowed license expires after: __ days field, and click **Borrow**. The **Borrow** button appears dimmed, and the **Return** button becomes enabled. The Vectorworks License Server keeps track of the number of borrowed licenses.

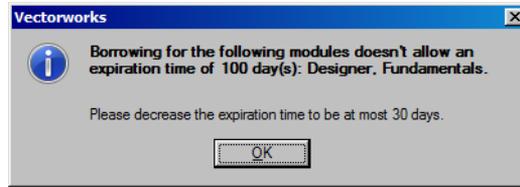
The maximum borrowing time period is 30 days.

4. Click **Info** to see the expiration date of the license, and the name of the borrowed module.

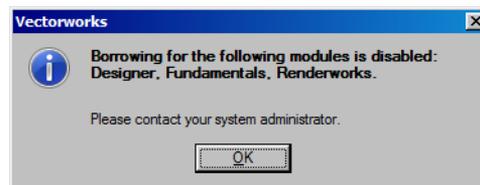


5. Click **OK**.

If the desired borrowing time period is longer than the maximum permissible number days set by the Vectorworks License Server, an alert opens.



If you try to borrow a module that is restricted by an ISV server option, an alert opens, showing the name of the restricted module.



Click **OK** to return to the Login Settings dialog box.

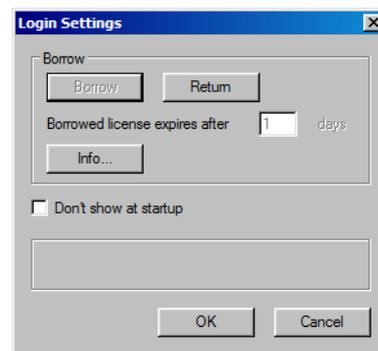
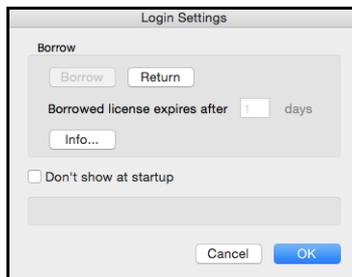
4.2 Returning a License

To return a license before its borrowing time period has elapsed, connect the Vectorworks software to the Vectorworks License Server, and perform the following steps.

1. If the Login Settings dialog box is set to open when launching the Vectorworks program, then you can return the license from the Login Settings dialog box.

If the Login Settings dialog box does not open when starting Vectorworks, enable the dialog box at startup from the Session tab of Vectorworks preferences.

2. The Login Settings dialog box opens.



3. Click **Return**.
4. The license is returned. The **Return** button appears dimmed, and the **Borrow** button becomes enabled. The Vectorworks License Server increases the number of available licenses by the number of returned licenses.

Even if you don't return the licenses manually as described above, they are automatically returned when their borrowing time period has elapsed.

5 Advanced Topics: Vectorworks License Server

5.1 Overview of the Vectorworks License Server

The Vectorworks License Server consists of two parts: the RLM server and the ISV server, and they work together while communicating via TCP/IP.

Since these two programs normally work together in a seamless fashion as one unit, it is not necessary to be aware of them ordinarily. However, to change the various settings of the Vectorworks License Server, it is necessary to understand their individual roles within the system.

RLM Server

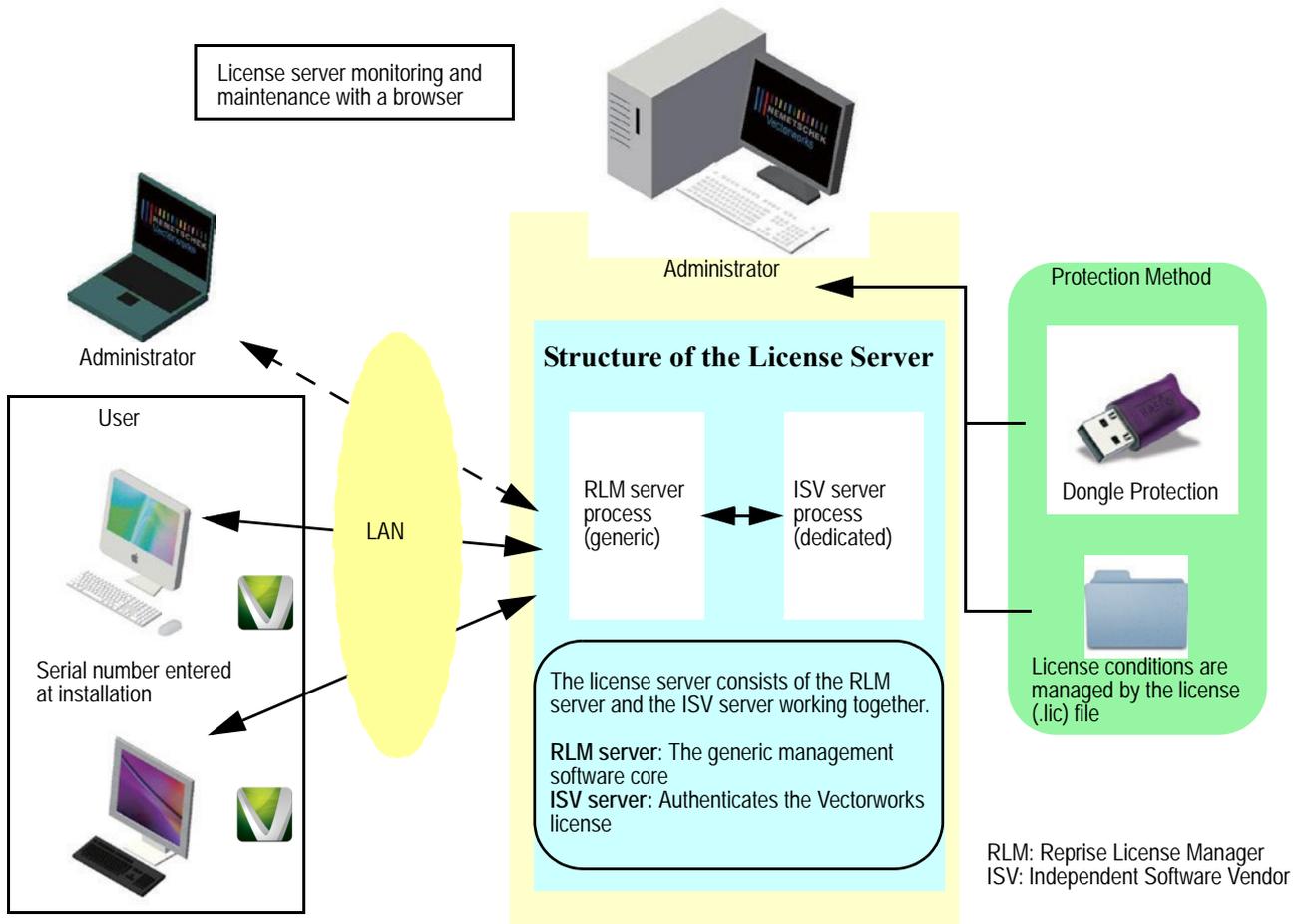
The license management system uses an American license management software called Reprise License Manager (RLM), made by Reprise Software, Inc. As the core of the license management software, it fulfills the following network management tasks:

- Communicates with the ISV server through the UDP port (5053) to coordinate the operation.
- Communicates with the Vectorworks client through the TCP/IP port (5053) to verify startup.
- Communicates with the browser via the TCP/IP port (5054) to manage the Vectorworks License Server and to display information.

The RLM server has additional optional features that are not used with the Vectorworks Site Protection Server.

ISV Server

The ISV server manages the Vectorworks client licenses. It performs various functions, such as license usage verification, login management, and other optional functions.



5.2 The Reprise License Server Administration Screen

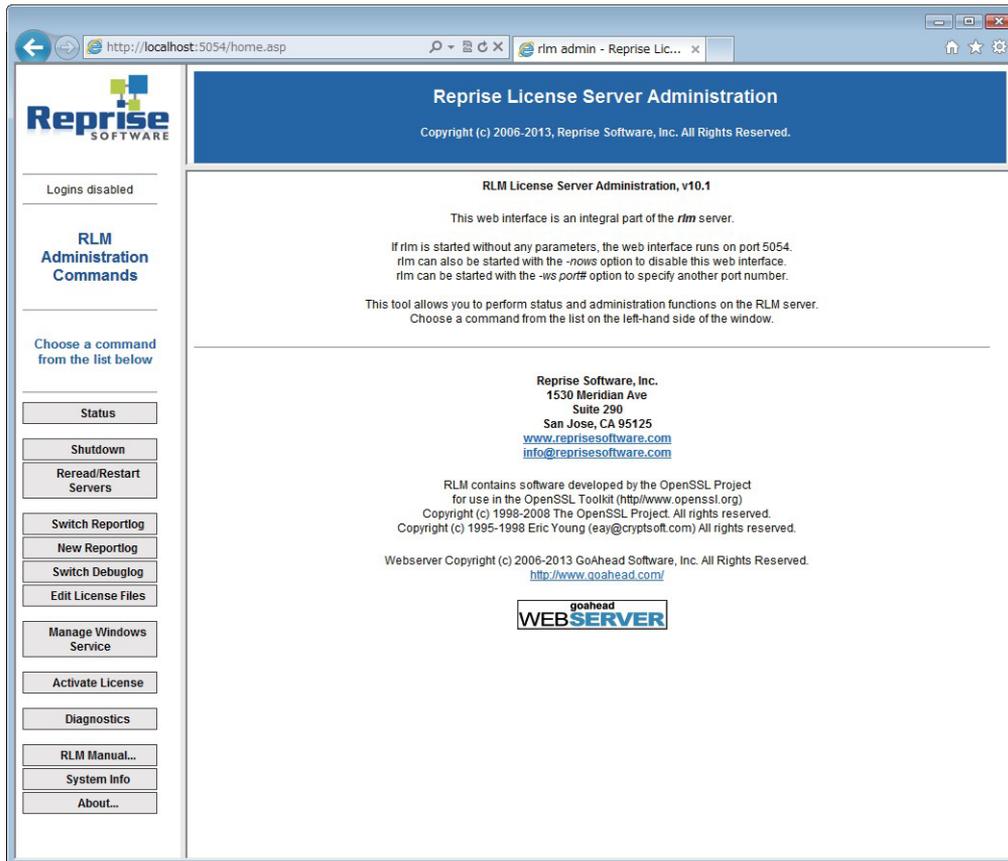
Use a Web browser to access the Administration screen, to perform the various license management functions. The following section explains how to access the Administration screen. This is the first step to perform the settings that are described later in this guide.

To open the Reprise License Server Administration window (Administration screen):

1. Launch a browser on the PC that runs the Vectorworks License Server. Enter `http://localhost:5054` into the URL field.

To open the Administration screen remotely with an IP address, type this address into the browser:
`http://192.168.1.1:5054`.

2. The Administration screen opens.



The buttons on the left side of the Administration screen are used to perform various operations of the Vectorworks License Server.

Button	Operation
Status	Open the Status screen of the RLM server. The Status screen provides access to the ISV server operations. For more information, refer to “5.6 ISV Server Screens” on page 23.
Shutdown	<p>The Shutdown License Server screen opens, where the desired ISV server can be shut down.</p> <p>This operation can also be performed from the ISV Servers section of the Status screen.</p> <p>If a Windows service is installed with the <code>rlmdown</code> command disabled, as described in “5.8 Windows Service Settings” on page 31, then this button does not display.</p>

Button	Operation
Reread/Restart Servers	Opens the Reread/Restart Servers screen, and reloads the license file of the selected ISV server. Restarting the ISV server is part of this process. This function is used for replacing a license file. This operation can also be performed from the ISV Servers section of the Status screen.
Switch Reportlog	Closes the specified ISV server's Reportlog file, and switches the logging location to a new log file with the specified name. For more information, refer to “5.9.3.3 Switching the Report Log” on page 39.
New Reportlog	Creates a new Report log file with the specified name for the specified ISV server. For more information, refer to “5.9.3.4 Creating a New Report Log” on page 39.
Switch Debuglog	Opens the Debug log file. For more information, refer to “5.9.3.6 Creating a Temporary Debug Log” on page 41.
Edit License Files	Edits the license files. For more information, refer to “5.7 Modifying the Port Number of the Vectorworks License Server” on page 29.
Manage Windows Service (Windows only)	Registers or releases RLM as a Windows Service. For more information, refer to “5.8 Windows Service Settings” on page 31.
Activate License	This button does not apply to this software.
Diagnostics	Outputs the server's Host ID, dongle, MAC address, license file, and so on as text.
RLM Manual	Displays the RLM Online Manual. Some content in the manual does not apply to this software.
System Info	Displays the system information of the RLM.
About	Displays information about the RLM server

5.3 Shutting Down the Vectorworks License Server

As explained in “5.1 Overview of the Vectorworks License Server” on page 15, the Vectorworks License Server consists of two parts. Each part has a separate shutdown method.

For regular maintenance, only the license management software (the ISV server) of the Vectorworks Site Protection Server needs to be shut down and restarted. If a complete shutdown is necessary due to a problem, first shut down the ISV server, and then follow the steps described in section “5.3.2 Shutting Down the License Management Software (RLM server)” on page 19 to shut down the RLM server.

The Vectorworks client automatically connects to the server and verifies the connection at fixed intervals (every ten minutes). If the server is not running, a message displays, stating the client was unable to connect to the server. All open files are saved and then the Vectorworks software is shut down automatically. Modules or licenses that are currently borrowed are not affected, even if the license management software (ISV server) shuts down. However, if the license management software is not running, the license cannot be returned before the end of the borrowing time period.

5.3.1 Shutting Down the License Management Software (ISV server)

Follow these steps to shut down the ISV server:

1. Click **Shutdown** from the left side of the Administration screen.
2. The Shutdown License Server screen opens.



3. Click SHUT DOWN SERVER.
4. The ISV server stops.

The Administration screen and the Execution window do not close automatically. If you leave the Administration screen open, you will be able to perform various Vectorworks License Server tasks.

5.3.2 Shutting Down the License Management Software (RLM server)

Normally, there is no need to shut down the RLM server. If, for some reason, the system becomes unstable, only then should you shut down the RLM server.

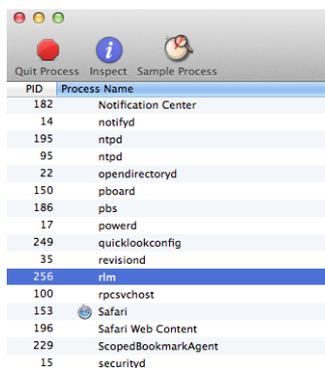
First shut down the ISV server, and then shut down the RLM server.

5.3.2.1 Mac

If the Terminal window is active, access the Terminal and press Ctrl+C to shut down the process. Alternatively, you can use the Activity Monitor for the shutdown.

To shut down the RLM server using the Activity Monitor:

1. Follow the steps described in section 5.3.1. to shut down the ISV server.
2. Go to Application > Utilities, and launch the Activity Monitor.



3. Select **rim** from the list of processes.
4. Click **End Process**. A dialog box confirming the process shutdown displays.



5. Click **Quit**.

5.3.2.2 Windows

If using the license server as a registered Windows service, follow the steps described in “5.8.4 Stopping the Windows Service” on page 34 to shut down the Windows service.

If the license server is not registered as a Windows service, then go to the DOS prompt, and press Ctrl+C to shut down the process and close the prompt window.

If you started the server from the DOS prompt when you created a Debug log or other log, go to the Task Manager and shut down the process, or use the Command Line and run the following to shut down the process:

```
./rlmutil rlmshutdown RLM
```

5.4 Restarting the Vectorworks License Server

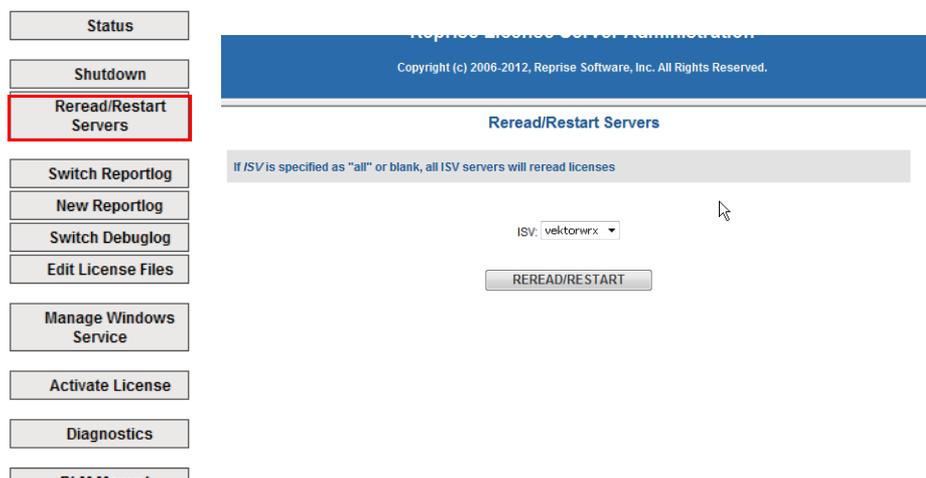
5.4.1 Restarting the License Management Software (ISV server)

If the license file changes or options have been added or removed, you can reload the license file and refresh the usable options. The ISV server can also be restarted and reloaded.

The ISV server reloads all license files daily at midnight.

To reload the current license information and restart the ISV server:

1. Click **Reread/Restart Servers** from the left side of the Administration screen.
2. The Reread/Restart Servers screen opens.
3. Select vektorwrx from the ISV drop-down list, and click REREAD/RESTART.



4. If the ISV server is running, the license information is reloaded.

If the ISV server is not running, it will be restarted.

The license file is reloaded at the time of the restart.

Select “-all” from the ISV drop-down list to restart all non-Vectorworks server software as well.

5.4.2 Restarting the License Management Software (RLM server)

Normally, there is no need to restart the RLM server. If, for some reason, the system becomes unstable, only then should you restart the RLM server. The simplest way is to restart the server PC, but if that is not convenient, try the following method:

Windows:

1. If used as a registered Windows service, follow the steps described in “5.8.4 Stopping the Windows Service” on page 34 to shut down the service, and then the steps in “5.8.5 Restarting the Windows Service” on page 35 to restart it.
2. If a Windows service is not used, then use the DOS prompt window described in “5.3.2.2 Windows” on page 20 for the shutdown.
3. Restart using the steps described in “2.4.2.1 Launching on Windows” on page 8.

Mac:

1. Follow the steps described in “5.3.2.1 Mac” on page 19 to shut down the rlm process.
2. Restart using the steps described in “2.4.2.2 Launching on Mac” on page 8.

5.5 The Vectorworks License Server Status Screen

Click **Status** from the left side of the Administration screen to access this screen. It shows the complete status of all license management. This screen provides access to the various functions of the ISV server that manages the Vectorworks Site Protection Server licenses.

The screenshot shows the Administration screen with the 'Status' button highlighted. The main content area contains several sections:

- RLM Information Table (Circled 1):**

RLM software version	v10.1 (build:2)
RLM comm version	v1.2
debug log file	_stdout_
license files	vectorworks (64-bit).lic vectorworks (32-bit).lic
- RLM Statistics Table (Circled 2):**

rlm Statistics	Since Start	Since Midnight	Recent
Start time	03/26 10:48:38	03/26 10:48:38	03/26 10:48:38
Messages	0 (0/sec)	0 (0/sec)	0 (0/sec)
Connections	0 (0/sec)	0 (0/sec)	0 (0/sec)
- ISV Servers Table (Circled 3):**

Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49921	Yes	0	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

RLM version information (①):

This table shows information related to the RLM software and the license file.

Parameter	Description
RLM software version	The version of the RLM software.
RLM comm version	The version of the client-server communication.
debug log file	The name of the Debug log file.
license files	The names of the license files.

RLM Server Statistics (②):

This table shows the starting time of the server software and communication information. The server software reloads all license files daily at midnight.

Parameter	Description
Since Start / Since Midnight / Recent	The columns show items since start, since midnight, or during the last 30 minutes. It serves as a load estimation for the various time periods for servers that have been running for a long time.
Start time	The start time is shown in each column for the corresponding time period.
Messages	This shows the number of TCP messages sent to the RLM server.
Connections	This shows the number of connections to the RLM server.

EDIT rlm Options:

Normally, this is not used. Editing the RLM options may cause the operation of this software to become unstable.

Click this button to edit the RLM options. These options are created as a subset of the options that manage and control the ISV server.

SHOW rlm Debug Log:

Click this button to show the latest activity of the Vectorworks License Server. The information shown here is an excerpt of the information in the Vectorworks License Server command window, mostly concerning the RLM server (system information).

ISV Servers (③):

This table shows the license usage data, and contains buttons to operate the ISV server. The simple status of the ISV server is displayed here. It is also used for the actual license management of the Vectorworks Site Protection Server.

Parameter	Description
Name	vektorwrx stands for Vectorworks. Nemetschek Vectorworks is regarded as an Independent Software Vendor (ISV).
port	Shows the TCP port that is used by the ISV server software.
Running	Shows whether the server software is currently running (Yes/No).
Restarts	Shows how many times the server software has been restarted.
Server Status	Click to show the server software statistics and the status of the licenses. For more information, refer to “5.6.1 ISV Server Status” on page 23.
License Usage	Click to show the current license usage status. For more information, refer to “5.6.2 License Usage Status” on page 25.
Debug Log	Shows a log file of the latest activity of the Vectorworks License Server. The information shown here is an excerpt of the information in the Vectorworks License Server command window, mostly concerning the ISV server (records of the Vectorworks software clients using or returning licenses). For more information, refer to “5.6.3 Displaying the Debug Log” on page 26.
REREAD	Click to restart the ISV server and reload the license files and the option files (see “5.6.4 Rereading/Restarting the License Files” on page 27).

Parameter	Description
OPTIONS	Click to open the Edit ISV Options screen. For more information, refer to “5.10.1 ISV Server Option Settings” on page 42.
TRANSFER	This button does not apply to this software.
SHUTDOWN	Shuts down the ISV server. If a Windows service is installed with the rlmshutdown command disabled, as described in “5.8 Windows Service Settings” on page 31, then this button does not display.

5.6 ISV Server Screens

5.6.1 ISV Server Status

This button shows the status of the ISV server. It is used to verify the usage status of the Vectorworks Site Protection Server licenses.

ISV Servers				Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
Name	port	Running	Restarts							
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

①

vektorwrx software version	v10.0 (build:3)
vektorwrx comm version	v1.2
debug log file	_stdout_
report log file	reportlog

②

vektorwrx Statistics	Since Start	Since Midnight	Recent
Start Time	11/22 16:42:37	11/22 16:42:39	11/22 17:13:08
Messages	39 (0/sec)	39 (0/sec)	4 (0/sec)
Connections	17 (0/sec)	17 (0/sec)	2 (0/sec)
Checkouts	0 (0/sec)	0 (0/sec)	0 (0/sec)
Denials	0 (0/sec)	0 (0/sec)	0 (0/sec)
License Removals	0 (0/sec)	0 (0/sec)	0 (0/sec)
Current Connections	0		

License pool status

③

Product	Pool	Ver	Expires	count	soft lim	inuse	res	hostid	timeout	share	transactions	Show License Usage
rim_roam	1	1.0	permanent	Uncounted	0	0	0	ANY	0	None	0	usage...

Enter license password to select license results. Only licenses with matching passwords (or with no passwords) will be displayed above.

License Password:

ISV version information (①):

Shows information related to the ISV server, including version numbers.

Parameter	Description
vektorwrx software version	The version of the ISV server.
vektorwrx comm version	The version of the client-server communication.

Parameter	Description
debug log file	The name of the Debug log file.
reportlogfile	The names of report log files.

vektorwrx Statistics (②):

This table shows the starting time of the server software and the communication information. The server software reloads all license files daily at midnight. For more information, refer to “5.9.1 Operating Status of the Vectorworks License Server” on page 35.

Parameter	Description																																
Since Start / Since Midnight / Recent	The columns show the items since start, since midnight, or during the last 30 minutes. It serves as a load estimation for the various time periods for servers that have been running for a long time.																																
	<table border="1"> <thead> <tr> <th>vektorwrx Statistics</th> <th>Since Start</th> <th>Since Midnight</th> <th>Recent</th> </tr> </thead> <tbody> <tr> <td>Start Time</td> <td>11/22 16:42:37</td> <td>11/22 16:42:39</td> <td>11/22 17:13:08</td> </tr> <tr> <td>Messages</td> <td>39 (0/sec)</td> <td>39 (0/sec)</td> <td>4 (0/sec)</td> </tr> <tr> <td>Connections</td> <td>17 (0/sec)</td> <td>17 (0/sec)</td> <td>2 (0/sec)</td> </tr> <tr> <td>Checkouts</td> <td>0 (0/sec)</td> <td>0 (0/sec)</td> <td>0 (0/sec)</td> </tr> <tr> <td>Denials</td> <td>0 (0/sec)</td> <td>0 (0/sec)</td> <td>0 (0/sec)</td> </tr> <tr> <td>License Removals</td> <td>0 (0/sec)</td> <td>0 (0/sec)</td> <td>0 (0/sec)</td> </tr> <tr> <td>Current Connections</td> <td>0</td> <td></td> <td></td> </tr> </tbody> </table>	vektorwrx Statistics	Since Start	Since Midnight	Recent	Start Time	11/22 16:42:37	11/22 16:42:39	11/22 17:13:08	Messages	39 (0/sec)	39 (0/sec)	4 (0/sec)	Connections	17 (0/sec)	17 (0/sec)	2 (0/sec)	Checkouts	0 (0/sec)	0 (0/sec)	0 (0/sec)	Denials	0 (0/sec)	0 (0/sec)	0 (0/sec)	License Removals	0 (0/sec)	0 (0/sec)	0 (0/sec)	Current Connections	0		
vektorwrx Statistics	Since Start	Since Midnight	Recent																														
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Messages	39 (0/sec)	39 (0/sec)	4 (0/sec)																														
Connections	17 (0/sec)	17 (0/sec)	2 (0/sec)																														
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Denials	0 (0/sec)	0 (0/sec)	0 (0/sec)																														
License Removals	0 (0/sec)	0 (0/sec)	0 (0/sec)																														
Current Connections	0																																
Start time	The start time is shown in each column for the corresponding time period.																																
Messages	This shows the number of TCP messages sent to the ISV server.																																
Connections	This shows the number of connections to the ISV server.																																
Checkouts	Shows the number of times the license was used.																																
Denials	Show the number of times the license usage was denied. There is an ISV option setting to deny the use of a license.																																
License Removals	Shows the number of times a license that was in use was removed and returned to the server software.																																
Current Connections	Shows the number of licenses currently connected.																																

License Pool Status (③):

This table shows the licenses managed by the Vectorworks License Server.

Parameter	Description
Product	This is the name of the product (or module). (The rlm_roam file is the license borrowing settings file made by Reprise Software. It is for internal use.)
Pool	The license pool number.
Ver	Shows the version of the product.

Parameter	Description
Expires	Shows the expiration date of the license. “Permanent” indicates a license that never expires.
count	Shows the number of licenses that are available for use on the Vectorworks License Server.
soft lim	For this software, this shows the same number as the number of licenses.
inuse	Shows the number of licenses currently used.
res	Shows the number of licenses reserved.
roam	Shows the number of licenses currently borrowed. If no clients are currently borrowing a license, this item is not shown.
hostid	This shows whether the license is protected by hardware, such as a dongle. Since for this software, the server software itself is protected by a dongle, this item displays ANY.
timeout	When a Vectorworks client is not borrowing the license, this field shows the timeout period in seconds before connecting to the Vectorworks License Server. If the connection cannot be established within this period, the license used by the client is returned to the Vectorworks License Server.
share	This field shows whether the license is shared by using identical user names or machine names. For this software, license sharing is disabled, so this field always shows None.
transactions	Shows the number of times the license was checked in/checked out.
Show License Usage	Click to show user information. For more information, refer to “5.9.2 License Status” on page 35.
License Password	This field does not apply to this software.
Refresh	Reloads the page.
BACK	Returns to the previous screen.

5.6.2 License Usage Status

Use this screen to look up license usage status. Licenses can be filtered by currently used product licenses, current users, or host names. Items meeting the filter criteria are shown in a table.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

Get License Usage

If the Product/User/Host fields are all blank, then all licenses in use will be displayed.
Data entered in any of these fields will filter the list of licenses returned.
Only licenses with matching passwords (or with no passwords) will be displayed.

ISV:

Product:

User:

Host:

License Password:

GET License Usage

BACK

Parameter	Description
ISV	Select vektorwrx to see the usage status of the licenses available for the Vectorworks Site Protection Server.
Product	Enter Fundamentals, Architect, or one of the other product names to filter for those licenses.
User	Enter user1, user2, or any other user name to filter for licenses used by that user.
Host	Enter the IP address, localhost, or any other host name to filter for those licenses.
License Password	This button does not apply to this software.
GET License Usage	Click this button to show the license usage conditions based on the filter criteria selected in the fields above. For more information, refer to “5.9.2 License Status” on page 35.
BACK	Returns to the previous screen.

5.6.3 Displaying the Debug Log

This function displays the last 20 lines of information related to the ISV server from the Vectorworks License Server command window. The information consists mainly of the records of the Vectorworks software clients using or returning licenses. The Refresh button reloads the Log information. The BACK button returns to the previous screen.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

Recent Debug Log Entries

ISV vektorwrx Debug Log, last 20 lines

```

11/26 11:07 (vektorwrx) License files:
11/26 11:07 (vektorwrx) C:\Users\paul\OneDrive\Desktop\RMLM 10\Vectorworks-Ver2014.lic
11/26 11:07 (vektorwrx) C:\Users\paul\OneDrive\Desktop\RMLM 10\Vectorworks-2014.lic
11/26 11:07 (vektorwrx)
11/26 11:22 (vektorwrx) OUT: fundamentals v2014 by [user]@[ip]@[mac]-local
11/26 11:22 (vektorwrx) OUT: landmark v2014 by [user]@[ip]@[mac]-local
11/26 11:22 (vektorwrx) OUT: spotlight v2014 by [user]@[ip]@[mac]-local
11/26 11:23 (vektorwrx) OUT: designer v2014 by [user]@[ip]@[mac]-local
11/26 11:23 (vektorwrx) OUT: fundamentals v2014 by [user]@[ip]@[mac]-local
11/26 12:05 (vektorwrx) IN: (client exit) fundamentals v2014 by [user]@[ip]@[mac]-local
11/26 12:05 (vektorwrx) IN: (client exit) landmark v2014 by [user]@[ip]@[mac]-local
11/26 12:05 (vektorwrx) IN: (client exit) spotlight v2014 by [user]@[ip]@[mac]-local
11/26 12:37 (vektorwrx) OUT: fundamentals v2014 by [user]@[ip]@[mac]-local
11/26 12:37 (vektorwrx) OUT: landmark v2014 by [user]@[ip]@[mac]-local
11/26 12:37 (vektorwrx) OUT: spotlight v2014 by [user]@[ip]@[mac]-local
11/26 14:27 (vektorwrx) IN: fundamentals v2014 by [user]@[ip]@[mac]-local
11/26 14:27 (vektorwrx) IN: landmark v2014 by [user]@[ip]@[mac]-local
11/26 14:27 (vektorwrx) IN: spotlight v2014 by [user]@[ip]@[mac]-local

```

Refresh

BACK

The contents of the example Debug Log are explained as follows.

License Files:

Under this line, the paths of loaded license files are shown.

OUT: fundamentals v2015 by XXXXX

IN: (client exit) fundamentals v2015 by XXXXX

OUT shows when the client started using the license, and IN shows when the license was returned. The license name is shown first, then the word “by,” and then the user's IP address, machine name, user name, and so on.

5.6.4 Rereading/Restarting the License Files

In the same way as described in “5.4.1 Restarting the License Management Software (ISV server)” on page 20, reload the license files and perform a restart. Use this function to replace license files or load option files.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

Reread/Restart Servers

If /SV is specified as "all" or blank, all ISV servers will reread licenses

ISV: vektorwrx

REREAD/RESTART

CANCEL

5.6.5 Options

OPTIONS shows the ISV server options. This screen allows you to specify the Report Log output and the license settings.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

ISV "vektorwrx" has no options file, creating it now

ISV vektorwrx Options

Update Options

For more information, refer to "5.9.3.2 Report Log Output" on page 37 and "5.10.1 ISV Server Option Settings" on page 42.

5.6.6 License Transfer from Another Environment

TRANSFER allows a license to be transferred from a different environment. However, this functionality does not apply to this software.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

5.6.7 Shutdown

SHUTDOWN shuts down the ISV server. Normally, this is not used.

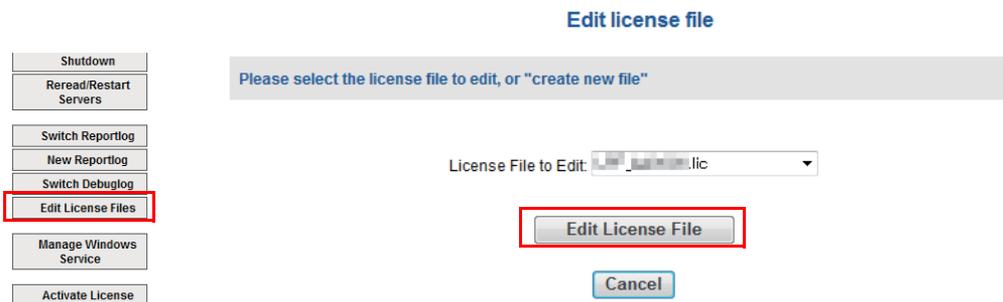
ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwx	49213	Yes	1	vektorwx	vektorwx	vektorwx	vektorwx	vektorwx	vektorwx	vektorwx

If a Windows service is installed with the `rlm` command disabled, as described in “5.8 Windows Service Settings” on page 31, then this button does not display.

5.7 Modifying the Port Number of the Vectorworks License Server

Sometimes, it becomes necessary to change the port number used by the Vectorworks License Server; for example, another application may already use the default port number. Change the port number by editing the port number in the server information contained in the license file (.lic).

1. Click **Edit License Files** from the left side of the Administration screen.
2. The Edit license file screen opens.



3. Select the license file you want to edit from the License File to Edit drop-down list.
4. Click **Edit License File**.
5. The Edit license file window opens.

Edit license file

This form edits the license files for the RLM server. When you are finished, select "Update License File" if you want to save your changes on the server. Select "Cancel" if you want to discard your changes.

NOTE: The license file is NOT LOCKED while you are doing this edit, so if more than one user updates the file, one set of changes will be lost.

If you want the server to operate with the new license file, you will need to execute a Reread command after editing the license file(s).

License File: C:\Program Files\Vectorworks Network License\Vectorworks-Ver2014.lic

```

HOST localhost hasp4=XXXXXX 5053
ISV vektorwrx
LICENSE vektorwrx fundamentals 2014 permanent 5 issued=2-oct-2013
options=model=float ing _ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"
LICENSE vektorwrx architect 2014 permanent 2 issued=2-oct-2013
options=model=float ing _ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"
LICENSE vektorwrx landmark 2014 permanent 2 issued=2-oct-2013
options=model=float ing _ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"
LICENSE vektorwrx spotlight 2014 permanent 2 issued=2-oct-2013
options=model=float ing _ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"
LICENSE vektorwrx renderworks 2014 permanent 3 issued=2-oct-2013
options=model=float ing _ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"
LICENSE vektorwrx rlm_roam 1.0 permanent uncounted hostid=ANY
_ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"

```

Update License File

Cancel

The contents of an example license file are explained below.

- ① HOST localhost hasp4=XXXXXX (dongle ID) 5053
- ② ISV vektorwrx
- LICENSE vektorwrx fundamentals 2014 permanent 6 issued=22-oct-2013
options=model=float ing _ck=XXXXXXXXXX sig="XXXXXXXXXXXXXXXXXXXX"

Edit only the values shown within red boxes.

① 5053: This is the port number of the RLM server. The default setting is 5053. This port is necessary to connect with the clients.

② ISV vektorwrx: This parameter specifies the port number of the ISV server, for internal use. By default, an open port is assigned automatically.

To change the port number to a specific number, type:

ISV vektorwrx port=nnnn

where nnnn is the desired port number.

Do not edit any other portions of the license file. The Vectorworks License Server may become inoperable.

When performing an upgrade, or adding a Fundamentals license or plug-in modules (Renderworks, Architect, Landmark, Spotlight, or Designer), first delete the old license files, then install the newly acquired license files, and edit them as needed before use.

Be aware of the following when replacing license files:

License conditions cannot be changed while a license is being borrowed. You must retrieve all licenses (have them returned) temporarily, before you can replace license files.

To change the port number that is used to display the Administration screen, a different method must be followed. For more information, refer to “5.12 Changing the Administration Screen's Port Number” on page 47.

- After modification, click **Update License File** to save the changes.
- Refer to “5.4.2 Restarting the License Management Software (RLM server)” on page 21, and restart the Vectorworks License Server.

5.8 Windows Service Settings

In a Windows environment, the Vectorworks License Server can be launched using the Windows service feature. This functionality allows the Vectorworks License Server to be launched automatically when the Windows server PC starts, and keeps the Vectorworks License Server running as long as the system is up and running. The following settings are necessary to launch the Vectorworks License Server as a Windows service.

To set up a Windows service, you must start the license server with Administrator rights (by selecting this from the right-click context menu).

5.8.1 Registering a Windows Service

- Launch the Vectorworks License Server (rlm.exe) with Administrator rights.
- Click **Manage Windows Service** from the left side of the Administration screen.
- The Service Definition screen opens. Enter the data required to register the service.

Manage Windows Service for RLM license server

This form installs or removes a Windows Service to automatically start the RLM license server. Select the action to perform, fill in the form, and press "Apply".

Service Definition

Service Action:

Service Name:

Service Description:

Server Debug Log:

Server License File Directory:

Webserver port #:

ISV server startup delay (seconds):

Admin webserver disabled:

rimdown command disabled:

rimremove command disabled:

Parameter	Description
Service Action	Select INSTALL service to install the service, or REMOVE service to delete it.
Service Name	Enter the name that will be shown in the Windows Services list. The default is rlm.
Service Description	Enter the description of the service. The default is RLM License Server.
Service Debug Log	Specify the location of the Debug log for the service. The default is the same path where rlm.exe is located. If a log file is not necessary, leave this field blank. The contents are the same as what is displayed when pressing the SHOW rlm Debug log button.
Server License File Directory	Specify the location of the license files. The default is the same path where rlm.exe is located.
Webserver port #	Specify the port number of the Administration screen. Use this setting to change the Administration screen's port number.
ISV server startup delay (seconds) (normally not used)	If you want to start the ISV server (the licensing portion of the Vectorworks License Server) after a delay, specify the number of seconds here. This setting prevents any problems arising from a slow startup of the Vectorworks License Server.
Admin webserver disabled* (normally not used)	Select to disable the Administration screen (all operations must be conducted via the command line interface).
rlmdown command disabled* (normally not used)	Select to disable the ability to shut down the ISV server. The SHUTDOWN button does not appear on the Administration screen.
rlm remove command disabled* (normally not used)	Select to disable the ability to remove a currently used license from a user and return it to the Vectorworks License Server. The REMOVE button does not appear on the Administration screen.

- Click **Apply** to install the service.
- When the settings are complete, restart the PC.

The startup type is set to Automatic at installation. Therefore, when the PC restarts, the Vectorworks License Server launches automatically in the background.

- If you want to temporarily disable the settings marked with an asterisk (*), stop the Windows service and then run rlm.exe.

When a Windows service is registered and launched, the vektorwrx.dlog file (containing the same information as described in “5.6.3 Displaying the Debug Log” on page 26) is created in the Vectorworks License Server folder.

5.8.2 Unregistering a Windows Service

To stop using the Windows service to launch the Vectorworks License Server automatically, in the Service Definition screen, select REMOVE service from the Service Action list, and click **Apply**.

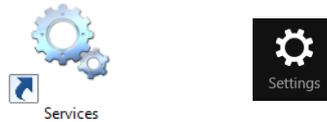
If the specified RLM is currently running as a service, the service cannot be deleted. If this is the case, first stop the service, and then remove it.

5.8.3 Launching from the Windows Service

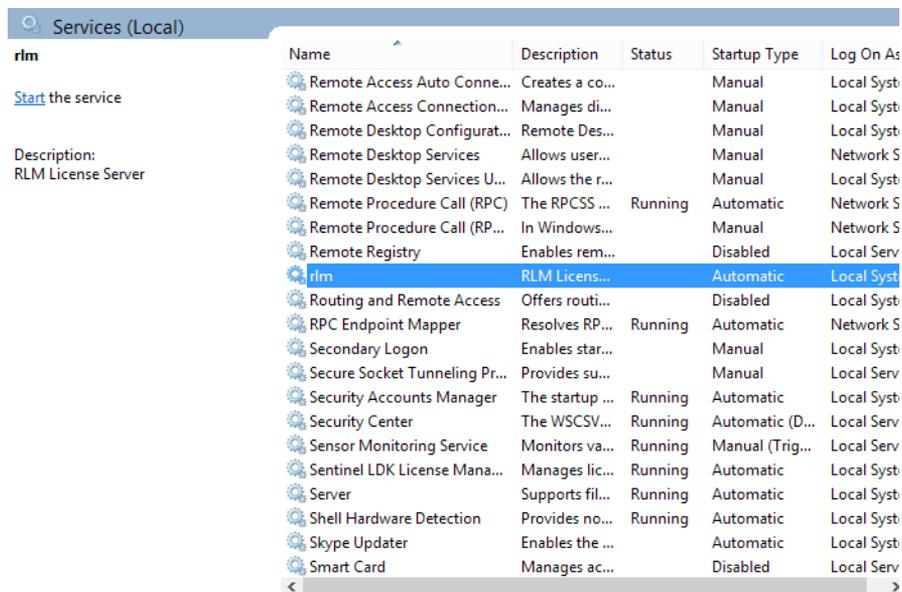
If the server PC cannot be restarted after registering the Windows service, use the following method to launch it.

The startup type is set to Automatic. Therefore, if the Windows server PC is restarted, this operation is unnecessary.

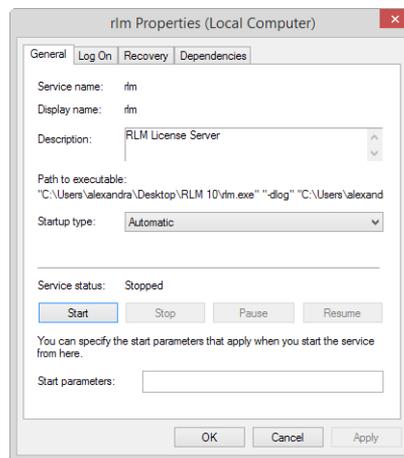
1. Shut down the Vectorworks License Server.
2. Go to Start > Control Panel > System and Security > Administrative Tools, and launch the Services from there. In Windows 8, move the mouse to the upper or lower right area of the Desktop, click on the gear icon, and select Control Panel.



3. In the Services dialog box, search for the name that you provided in the **Service Name** field when registering the service (by default, it is rlm). Double-click on it to open the Properties dialog box.



4. Click **Start** under Service Status to start the service.



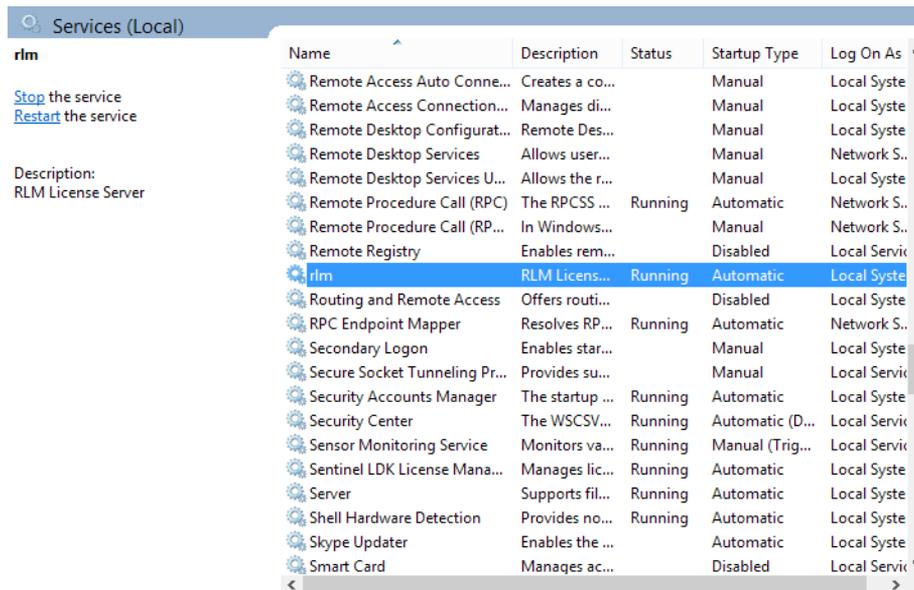
For more details on using Services, refer to the manual of your OS.

5.8.4 Stopping the Windows Service

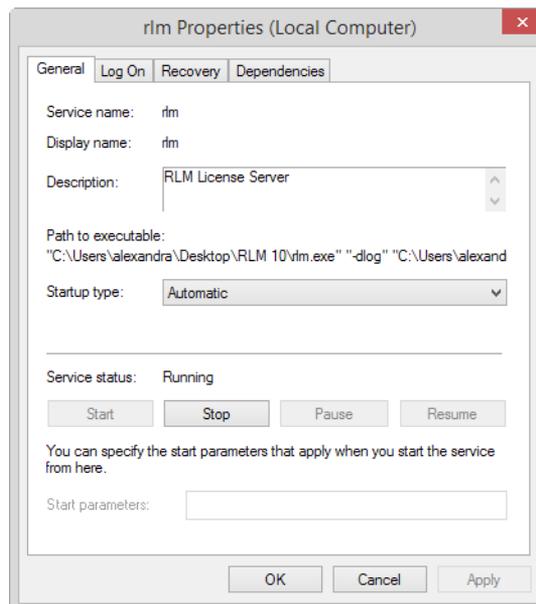
1. Follow the steps described in “5.3.1 Shutting Down the License Management Software (ISV server)” on page 18 to shut down the ISV server.
2. Go to Start > Control Panel > System and Security > Administrative Tools, and launch the Services from there. In Windows 8, move the mouse to the upper or lower right area of the Desktop, click on the gear icon, and select Control Panel.



3. Go to the Services dialog box, and search for rlm. Double-click on it to open the Properties dialog box.



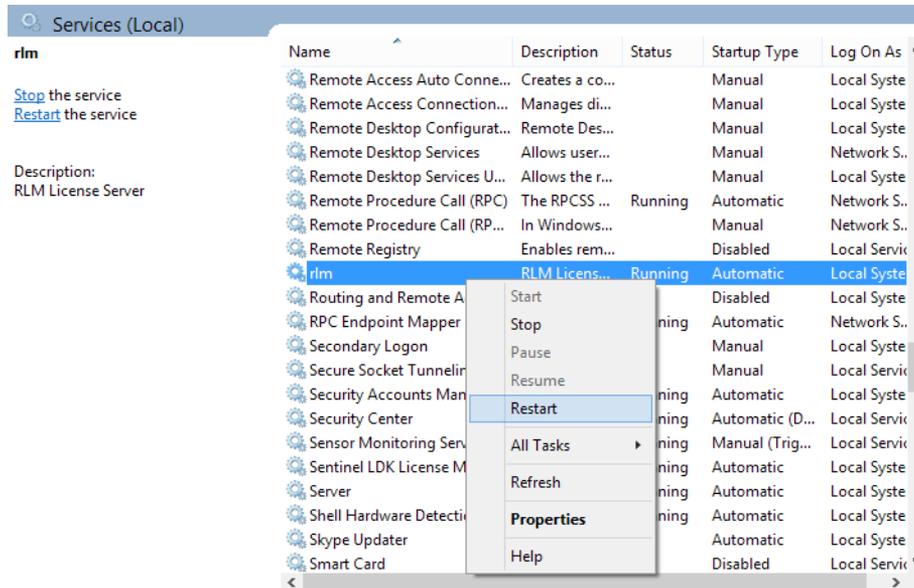
4. Click **Stop** under Service Status to stop the service.



To remove the rlm registration from the list of services, refer to “5.8 Windows Service Settings” on page 31.

5.8.5 Restarting the Windows Service

1. Right-click on rlm in the Services dialog box.
2. Click **Restart** from the context menu.



If you set up the service to unblock the firewall when launching the Vectorworks License Server, then you won't need to unblock the firewall manually. If, for some reason, you need to unblock it separately, refer to “6.5 Unblocking the Firewall for the Vectorworks License Server (Windows)” on page 50.

5.9 Displaying the Operating Status

5.9.1 Operating Status of the Vectorworks License Server

The operating status of the Vectorworks License Server can be viewed by two methods: using the RLM statistics (web server statistics), or using vektorwrx statistics (license management software statistics).

RLM Statistics

Click **Status** to open the RLM Server Statistics screen, which shows the overall operating time and communication status of the RLM server. For more information, refer to “5.5 The Vectorworks License Server Status Screen” on page 21.

vektorwrx statistics

The vektorwrx statistics that display under Server Status in the ISV server block of the Status button show the load information of the ISV server (the license management software of the Vectorworks Network Version). For more information, refer to “5.6.1 ISV Server Status” on page 23.

5.9.2 License Status

As previously explained in “5.6.2 License Usage Status” on page 25, currently used licenses are shown on the License status for ISV vektorwrx screen that opens when clicking License Usage > GET License Usage in the ISV server status area of the Status screen. Alternatively, you can click **Usage** in License Pool Status > Show License Usage to show the current usage status for each product. The contents displayed in both cases are essentially the same.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwx	49213	Yes	1	vektorwx	vektorwx	vektorwx	vektorwx	vektorwx	vektorwx	vektorwx

Get License Usage

If the Product/User/Host fields are all blank, then all licenses in use will be displayed.
 Data entered in any of these fields will filter the list of licenses returned.
 Only licenses with matching passwords (or with no passwords) will be displayed.

ISV:

Product:

User:

Host:

License Password:

GET License Usage

BACK

Reprise License Server Administration

License status for ISV vektorwx

Product	Pool	Ver	user	host	PID	req ver	# lic	# res	Out time	In (hold) time	Click to REMOVE
rim_roam	1	1.0	vektorwx	vektorwx	1893	1.0	1	0	01/23 16:39	None	Remove
rim_roam	1	1.0	vektorwx	vektorwx	1893	1.0	1	0	01/23 16:39	None	Remove
rim_roam	1	1.0	vektorwx	vektorwx	1893	1.0	1	0	01/23 16:39	None	Remove
rim_roam	1	1.0	vektorwx	vektorwx	1893	1.0	1	0	01/23 16:39	None	Remove
rim_roam	1	1.0	vektorwx	vektorwx	1893	1.0	1	0	01/23 16:39	None	Remove
fundamentals	2	2013	vektorwx	vektorwx	0	2013	1	0	01/22 13:30	01/24 00:00	Remove
fundamentals	2	2013	vektorwx	vektorwx	4888	2013	1	0	01/23 16:11	None	Remove
fundamentals	2	2013	vektorwx	vektorwx	1893	2013	1	0	01/23 16:39	None	Remove
spotlight	3	2013	vektorwx	vektorwx	0	2013	1	0	01/22 13:30	01/24 00:00	Remove
spotlight	3	2013	vektorwx	vektorwx	4888	2013	1	0	01/23 16:11	None	Remove
spotlight	3	2013	vektorwx	vektorwx	1893	2013	1	0	01/23 16:39	None	Remove
architect	4	2013	vektorwx	vektorwx	0	2013	1	0	01/22 13:30	01/24 00:00	Remove
architect	4	2013	vektorwx	vektorwx	4888	2013	1	0	01/23 16:11	None	Remove
architect	4	2013	vektorwx	vektorwx	1893	2013	1	0	01/23 16:39	None	Remove
landmark	5	2013	vektorwx	vektorwx	0	2013	1	0	01/22 13:30	01/24 00:00	Remove
landmark	5	2013	vektorwx	vektorwx	4888	2013	1	0	01/23 16:11	None	Remove
landmark	5	2013	vektorwx	vektorwx	1893	2013	1	0	01/23 16:39	None	Remove
renderworks	6	2013	vektorwx	vektorwx	0	2013	1	0	01/22 13:30	01/24 00:00	Remove
renderworks	6	2013	vektorwx	vektorwx	4888	2013	1	0	01/23 16:11	None	Remove
renderworks	6	2013	vektorwx	vektorwx	1893	2013	1	0	01/23 16:39	None	Remove

Parameter	Description
Product	The name of the product.
Pool	The pool number.
Ver	The version number.
User	Displays the user name.
host	Displays the name of the host using the license.
PID	Shows the product ID.
req ver	The version of Vectorworks that was requested from the Vectorworks License Server by the Vectorworks software client.
#lic	Shows the number of licenses used by each user.

Parameter	Description
#res	Shows the number of reserved licenses.
Out time	Shows the start time for using the license.
In (hold) time	Shows the scheduled day to return the license (for a borrowed license).
Click to REMOVE	<p>Click this to have the license currently in use returned to the Vectorworks License Server.</p> <p>This operation is only available for licenses connected to the network. It does not work for borrowed licenses.</p> <p>If a Windows service is installed with the rlm<code>down</code> command disabled, as described in “5.8 Windows Service Settings” on page 31, then this button does not display.</p>

5.9.3 Managing the Operating Status (Logs)

5.9.3.1 Report Log and Debug Log

The Debug log writes all data from the command window of the Vectorworks License Server into a file. The Debug log contains the RLM server log (system-related log data) and the ISV server log (license-related log data).

The Report log file is specific to license-related log data. It contains historic information such as usage status for each product in a more detailed fashion than what is in the Debug log. It is helpful for calculating usage statistics.

The type of the log file can be chosen based on what it is used for, but generally, the Report log contains statistical data related to the licenses available on the Vectorworks License Server, while the Debug log contains information related to any malfunctioning of the actual Vectorworks License Server.

The information in the Debug log related to the license status is shown from the server software’s point of view. In other words, when the client software is using a license, this is indicated by “OUT,” and when the client software shuts down (the license is returned to the server), this is indicated by “IN.”

5.9.3.2 Report Log Output

Use the following procedure to set up the Report log output.

To output statistics information using the log tools, you need to output the Report log.

1. Go to Status > ISV Servers > OPTIONS, and click the vektorwrx button.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

2. The Edit ISV Options window opens.

Edit ISV Options

This form edits the ISV options. When you are finished, select "Update Options" if you want to save your changes on the server. Select "Cancel" if you want to discard your changes. If you want the server to use these options immediately, select "REREAD/RESTART" for this ISV on the status page.
NOTE: The options file is NOT LOCKED while you are doing this edit, so if more than one user updates the file, one set of changes will be lost.

ISV "vektorwrx" has no options file, creating it now

ISV vektorwrx Options

- Enter the following command into the ISV Options field to specify the output.

The name and the path of the Report log file can be set to any valid value.

Format:

REPORTLOG (file path) (output mode)

The following example shows how to create the log file, placing it into a folder named LOG that was previously created within the Vectorworks Network License folder.

Example:

Windows: REPORTLOG LOG\Logfile.txt detailed

Mac: REPORTLOG LOG/Logfile.txt detailed

The LOG folder must be created before using this command.

The file path must also contain the actual filename.

The file path can be specified as either a full path or a relative path. When using a relative path, the current directory folder will be the RLM installation folder.

If no file path is specified, the log file is created in the RLM installation folder. If you want to create the log file in a folder that is not in the current directory, remember that you can only use existing folders.

The output mode can be set to detailed, std, or small. The difference between the detailed and std modes is mainly in the data format of the information describing the license-related connections from the clients. The small mode includes only minimal information, while the detailed mode includes the client's OS, the date, and other details. The std mode provides an amount of information somewhere in between detailed and small.

If the output mode is not specified, the default is std.

Log files created with the small output mode cannot be analyzed using the LogFileConverter that is described in "5.9.3.5 Creating a Debug Log" on page 40. If you want to use the LogFileConverter, use the detailed or the std output mode.

- Click **Update Options**.
- A message states that "vektorwrx options file written." Click **Back to Status** to return to the Status screen.
- Click **Reread/Restart Servers** to Restart the ISV server. The log file will be created at the specified path at the time the ISV server restarts.

When you restart the RLM server, the log file is overwritten by a new file. Creating a backup before restarting the RLM server is recommended.

The ROTATE command functions like a backup. Depending on the operating circumstances, the log files may become very large, so another reason to create a backup is to limit the size of the log files. For more information, refer to the ROTATE command in “5.10.1 ISV Server Option Settings” on page 42.

5.9.3.3 Switching the Report Log

You can close the currently used ISV server Report log file, and switch the logging location to a new log file with a specified name.

1. Click **Switch Reportlog** from the left side of the Administration screen.
2. The Switch Reportlog For License Server screen opens.

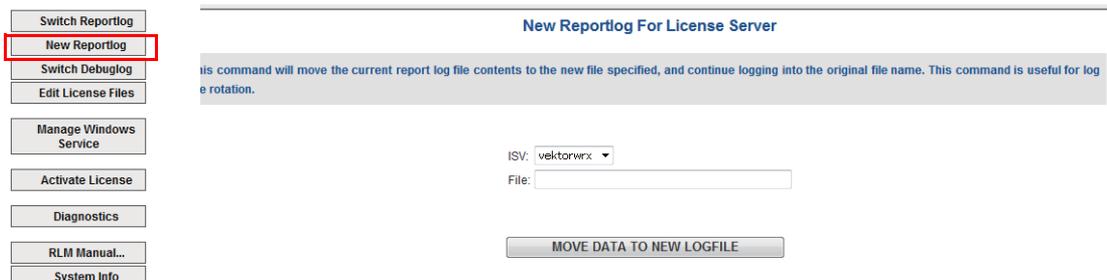


3. Select vektorwrx from the ISV dropdown list.
4. For File, enter the file path, including the filename.
5. Click the SWITCH REPORT LOG button.
6. The Report log switches to the new file.

5.9.3.4 Creating a New Report Log

You can save the current Report log file with a different name, and continue using the original file for logging. This function is convenient for creating backups.

1. Click **New Reportlog** from the left side of the Administration screen.
2. The New Reportlog For License Server screen opens.



3. Select vektorwrx from the ISV dropdown list.
4. For File, enter the file path, including the filename.
5. Click the MOVE DATA TO NEW LOGFILE button.

- The contents of the current Report log file are saved to the file specified in Step 4. Logging continues in the current Report log file.

5.9.3.5 Creating a Debug Log

You can create a Debug Log for the Vectorworks License Server. The Debug log contains settings and other information about the Vectorworks License Server and the environment used, and it can provide useful hints when troubleshooting. The Debug log can be created two ways: either by specifying it from the Command Prompt (on Windows) or from the Terminal (on Mac) as an option when launching the Vectorworks License Server, or by setting it up when registering the server as a Windows service. This section describes how to create the Debug log directly at startup.

Command to Use:

Please note that the commands are slightly different for Windows and Mac.

Format:

Windows: `rlm.exe -dlog (file path including filename)`

Mac: `/rlm -dlog (file path including filename)`

Setting Example:

Example: Creating a Debug log in the Vectorworks Network License > LOG folder.

- The folder for the Debug log should be created first. Create a folder named “LOG” inside the Vectorworks Network License folder.
- Open the Command Prompt (on Windows) or the Terminal (on Mac). Open the Command Prompt with Administrator rights.
- Specify the directory of the Vectorworks Network License folder. Enter the following command, and then press the Enter or Return key.

Windows: `cd C:\Program Files(x86)\Vectorworks Network License`

Mac: `cd/Applications/Vectorworks\ Network\ License`

- Enter the following startup option command, and then press the Enter or Return key.

Windows: `rlm.exe -dlog LOG\test.txt`

Mac: `/rlm -dlog LOG/test.txt`

```
WARNING: Unable to open debug log output file LOG\test.txt
03/17 15:30 (rlm) RLM License Server Version 10.1BL2

Copyright (C) 2006-2013, Reprise Software, Inc. All rights reserved.

03/17 15:30 (rlm) License server started on [REDACTED]
03/17 15:30 (rlm) Server architecture: x86_w1
03/17 15:30 (rlm) License files:
03/17 15:30 (rlm) 0806F2-2014PRO-30FALSRD.lic
03/17 15:30 (rlm) backupLicense-EAE43A.lic
03/17 15:30 (rlm)
03/17 15:30 (rlm) Using options file rlm.opt
03/17 15:30 (rlm) Web server starting on port 5054
03/17 15:30 (rlm) Using TCP/IP port 5053
03/17 15:30 (rlm) ... adding UDP/IP port 5053
03/17 15:30 (rlm) Starting ISV server vektorwrx on port 49427
03/17 15:30 (rlm) New thread created to watch ISV vektorwrx
03/17 15:30 (vektorwrx) RLM License Server Version 10.0BL3 for ISV "vektorwrx"
03/17 15:30 (vektorwrx) Server architecture: x86_w3

Copyright (C) 2006-2013, 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.

03/17 15:30 (vektorwrx) Using options file vektorwrx.opt
03/17 15:30 (vektorwrx) Report log started on reportlog
03/17 15:30 (vektorwrx) rlm_roam
03/17 15:30 (vektorwrx)
03/17 15:30 (vektorwrx) License files:
03/17 15:30 (vektorwrx) [REDACTED]-2014PRO-30FALSRD.lic
```

- The Vectorworks License Server launches.

Verify the successful launch by accessing the Administration screen of the Vectorworks License Server from your browser.

Also, if `rlm` and `vektorwrx` show up as running in the Task Manager or the Activity Monitor, that means the Vectorworks License Server is up and running.

- The `text.txt` file is created in the Vectorworks Network License >LOG folder. The `test.txt` file is the Debug log file.

The file path is the same as that of the Report Log. The file path can be specified as either a full path or a relative path. When using a relative path, the current directory folder will be the Vectorworks License Server installation folder.

If no file path is specified, the Debug log file is created in the Vectorworks License Server installation folder.

When you restart the RLM server, the log file is overwritten by a new file. Creating a backup before restarting the RLM server is recommended.

5.9.3.6 Creating a Temporary Debug Log

The Debug log that records events from the time of startup is created by a Command Line option or a setting made when registering as a Windows service (Windows only), but you can also create a separate log file from the Administration screen at any time after startup.

If you do not set up a Debug log at startup time, then until you perform this operation, no data is recorded in logs. For more information on how to set up a Debug log at the time of startup, refer to “5.9.3.5 Creating a Debug Log” on page 40.

- Click **Switch Debuglog** from the left side of the Administration screen.
- The Switch Debug Log For License Server screen opens.

The screenshot shows the 'Switch Debug Log For License Server' interface. On the left, a vertical menu contains several options: 'Restart Servers', 'Switch Reportlog', 'New Reportlog', 'Switch Debuglog' (highlighted with a red box), 'Edit License Files', 'Manage Windows Service', 'Activate License', and 'Diagnostics'. The main content area has a title bar 'Switch Debug Log For License Server' and a warning box: 'Both rlm and all the ISV servers begin logging debug information to standard output. This command will switch the debug log of one server to a new file. You should not attempt to send the output of multiple servers to the same file, as this will result in unpredictable behavior.' Below the warning, there is an 'ISV:' dropdown menu with 'vektorwrx' selected, a 'File:' text input field, and a 'SWITCH DEBUG LOG' button.

- Select `vektorwrx` from the ISV dropdown list.
- For File, enter the file path, including the filename
- Click the SWITCH DEBUG LOG button.
- The log information is recorded in the new Debug log file.

5.10 Vectorworks License Server Option Settings

Go to Status > ISV Servers > OPTIONS, and click on the `vektorwrx` button. The Edit ISV Options screen opens, where you can set the options.

5.10.1 ISV Server Option Settings

The ISV server options are useful for much more than to just create the Report Log file that was described in previous sections. The options provide a way of fine-tuning settings and controlling operations.

1. Click **Status** from the left side of the Administration screen. The ISV Server information opens. Click **OPTIONS** > **vektorwrx** to open the Edit ISV Options screen.

ISV Servers										
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN
vektorwrx	49213	Yes	1	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx	vektorwrx

2. Enter a command into the ISV vektorwrx Options field.

Edit ISV Options

This form edits the ISV options. When you are finished, select "Update Options" if you want to save your changes on the server. Select "Cancel" if you want to discard your changes. If you want the server to use these options immediately, select "REREAD/RESTART" for this ISV on the status page.
NOTE: The options file is NOT LOCKED while you are doing this edit, so if more than one user updates the file, one set of changes will be lost.

ISV "vektorwrx" has no options file, creating it now

ISV vektorwrx Options

The following section describes an example where the license usage is controlled based on the user name and explains how to enter this command option. Other command options are listed after the example.

Example: This setting prevents the specified user from borrowing a license.

Command to use:

EXCLUDEALL_ROAM (Parameter1) (Parameter2)

Parameter1: Select from [user / host / group / host_group / internet / internet_group] For more information about each parameter, refer to "Parameter Descriptions" on page 44.

Parameter2: Specifies the username or IP address.

Separate the command name and the parameters by a single space.

Example:

This command prevents the user with the given IP address or username from borrowing a license.

IP address: 192.168.255.35, username: AandA

1. Enter the command as shown below.

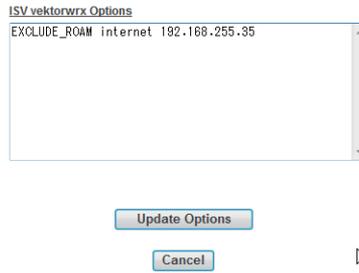
Setting by IP address:

Use internet for Parameter1.

Use the IP address of 192.168.255.35 for Parameter2.

EXCLUDEALL_ROAM internet 192.168.255.35

This setting prevents the user with IP address 192.168.255.35 from borrowing a license.



Setting by Username:

Use user for Parameter1.

Use the username of AandA for Parameter2.

EXCLUDEALL_ROAM user AandA

This setting prevents the user with username AandA from borrowing a license.



2. Click **Update Options**. The option file (vektorwrx.opt) is created in the Vectorworks Network License folder.
3. A message stating “vektorwrx options file written” displays. Click **Back to Status** to return to the Status screen.
4. Click **Reread/Restart Servers** to Restart the ISV server.

If a command was already entered in this field, enter the new command on the next line.

Parameter Formats

All commands have the following format:

- (Command_Name) (Parameter 1) (Parameter 2)
- The command line contains only Latin characters, and the command name and the parameters are separated by a single space. (Therefore, spaces cannot be used within the command name.)
- Tab and New Line symbols cannot be used. Each command must be entered on a separate line.
- Parameters cannot use the following characters: < > & "
- If you want to add a command to the option file, start the command line with a hash tag symbol (#).
- The maximum length of a line is 1024 characters.
- Upper case and lower case characters are not differentiated.
- The wildcard symbol (*) can be used in parameters.
- If group, host_group, internet_group are used in a command, then GROUP, HOST_GROUP, INTERNET_GROUP must be defined ahead of time, using their respective commands.

The main ISV option commands that are available in the Vectorworks Site Protection Server are described below.

Parameter Descriptions

Each format (function) can use the following parameters:

user

This parameter is used when some restriction is to be specified for a client-side username (account name).

Format: USER (username)

Example: USER tom

This example specifies tom as a username.

host

This parameter is used when some restriction is to be specified for a client-side computer name.

Format: HOST (hostname)

Example: HOST aa_windows

This example specifies aa_windows as a computer name.

internet

This parameter is used when some restriction is to be specified for a client-side IP address.

Format: INTERNET (IP address)

Example:

INTERNET 172.16.7.*

INTERNET 172.16.7.93

This example shows how to use wildcard characters in IP addresses. The first line specifies connections from IP addresses 172.16.7.(from 0 to 255), and the second line specifies a connection from IP address 172.16.7.93.

The parameters used for EXCLUDEALL, INCLUDEALL (user, host, internet) can be used in a group format if the same restriction is to be set for multiple clients.

If you want to use this feature, you must first define the groups before you can set the restriction options.

Group Setting Options

group

Use this command to define multiple client-side usernames (account names) as a group.

Format: GROUP (group name) (username list)

Example:

GROUP engineers tom sarah harry

GROUP engineers larry curly moe

GROUP architects firstname_lastname1 firstname_lastname2

In this example the first line defines a group called “engineers” with three usernames: tom, sarah, and harry. The second line specifies larry, curly, and moe to be in the engineers group.

This shows how additional usernames can be added to the same group.

Multiple groups can be created. In addition to the engineers group, the last line adds a new group called “architects,” and adds two usernames: firstname_lastname and firstname_lastname to this group.

host_group

Use this command to define multiple client-side computer names as a group.

Format: HOST_GROUP (host group name) (hostname list)

Example:

```
HOST_GROUP corporate node_a node_b node_c
HOST_GROUP corporate node_d node_e node_f
HOST_GROUP designers host_ID1 host_ID2
```

In this example, the first line specifies the group “corporate” with node_a, node_b, and node_c as three computer names that are members of this group.

The second line specifies the computers called node_d, node_e, and node_f to be members of the same corporate group.

This shows how additional computer names can be added to the same group.

Multiple groups can be created. In addition to the corporate group, the last line adds a new group called “designers,” and specifies host_ID1 and host_ID2 as two member computers of this group.

internet_group

Use this command to define multiple client-side IP addresses as a group.

Format: INTERNET_GROUP (internet group name) (IP address list)

Example:

```
INTERNET_GROUP AandA 1.2.3.4 2.*.*.7 172.16.7.*
INTERNET_GROUP BandB 1.1.1.1 2.2.2.2 3.3.3.3
INTERNET_GROUP BandB 4.4.4.4 5.5.5.5 6.6.6.6
```

In this example, the first line specifies a group called “AandA,” and includes several PCs in this group, all having the following IP addresses: 1.2.3.4, 2.(from 0 to 255).(from 0 to 255).7, and 172.16.7.(from 0 to 255).

Wildcard symbols can be used in the IP addresses specified in group commands.

Multiple groups can be created. In addition to the AandA group that was defined in the first line, the second line specifies a group called “BandB,” and includes three PCs in this group with IP addresses of 1.1.1.1, 2.2.2.2, and 3.3.3.3.

The third line adds 4.4.4.4, 5.5.5.5, and 6.6.6.6 to the same BandB group.

This shows how additional computers (defined by their IP addresses) can be added to the same group.

The following option settings use the parameters described above.

Options Related to Borrowing

EXCLUDEALL_ROAM

After making this setting, the specified client will not be able to borrow a license.

Format: EXCLUDEALL_ROAM [user|host|group|host_group|internet|internet_group]
(name or IP address)

Example: EXCLUDEALL_ROAM user aanda

In this example, the client with username (account name) aanda will not be able to borrow a license.

INCLUDEALL_ROAM

This setting enables the specified client to borrow a license. Clients not included in the INCLUDEALL_ROAM command will not be able to borrow a license.

Format: INCLUDEALL_ROAM [user|host|group|host_group|internet|internet_group]

(name or IP address)

Example: INCLUDEALL_ROAM internet 1.1.1.*

In this example, only clients with IP addresses of 1.1.1.0 to 1.1.1.255 will be able to borrow a license. IP addresses not included in this range will not be able to borrow a license.

MAX

This command limits the number of licenses of the specified product on the specified client.

Format: MAX (number of licenses) (product name) [user|host|group|host_group|internet|internet_group] (name or IP address)

Example: MAX 3 landmark group engineers

In this example, users registered in the engineers group can use a maximum of three Landmark module licenses total. To set all users as the target of the command, use the user parameter, and use the wildcard (*) character for the username.

Other Options

REPORTLOG

Controls the creation of the Report log. For more information, refer to “5.9.3.2 Report Log Output” on page 37.

RESERVE

This command reserves the specified number of licenses, of the specified product, for the specified client.

The number of reserved licenses is subtracted from the number of available licenses, so you must be careful not to create a situation where only the specified client would be able to use the software.

Format: RESERVE (number of licenses) (product name) [user|host|group|host_group|internet|internet_group] (name or IP address)

Example: RESERVE 2 spotlight group aanda

In this example, two licenses of Spotlight will be reserved for the specified aanda group.

ROAM_MAX_DAYS

This command specifies the maximum number of days that a license of the given product can be borrowed.

Format: ROAM_MAX_DAYS (borrowing days) (product name)

Example:

ROAM_MAX_DAYS 3 architect

ROAM_MAX_DAYS -1 landmark

In the example, the maximum borrowing time period for the Architect license is three days. A negative number means the license cannot be borrowed.

The default maximum time for borrowing is 30 days. The parameter can be set to any number of days within 30 days.

ROTATE

This command saves and closes the current Report log, and creates a new log file. The parameter after the ROTATE command specifies the frequency to creating the new log.

Format: ROTATE [daily|weekly|monthly|#days]

Example: ROTATE daily

In this example the Report log file is saved every day with a different name.

5.11 Adding the Vectorworks Site Protection Server to an Environment with an Existing License Management Software (RLM)

If the environment already has a License Management Software (RLM) installed, follow the steps below to add the Vectorworks Site Protection Server functionality.

1. Use the installer to install the License Manager for the Vectorworks Site Protection Server into the existing RLM server's folder.

The `vektorwrx` file will be installed.

2. Copy the license file (.lic) into the folder of the existing License Management Software (RLM) or into the folder specified by the License Management Software.
3. Follow the instructions in “5.6.4 Rereading/Restarting the License Files” on page 27 to launch the Vectorworks Site Protection Server License Manager (`vektorwrx`).

Use caution; if some RLM server options were already set, those settings may affect the Vectorworks Site Protection Server License Manager.

5.12 Changing the Administration Screen's Port Number

As described in “5.2 The Reprise License Server Administration Screen” on page 16, the Administration screen, which shows a variety of information about the Vectorworks License Server, is accessible through a web browser. The default port number used to show the Administration screen is 5054. If you need to change the port number, perhaps because port number 5054 is already assigned to another application, or due to some other reason, follow the steps below.

1. Open the Command prompt (on Windows) or the Terminal (on Mac).
2. Enter the following startup option to launch the RLM server.

```
rlm.exe -ws NNNNN
```

(where NNNNN is the port number)

This startup option has to be set every time after the RLM server is shut down.

If a Windows service is used for the startup, the port number can be changed in the Service settings. For more information, refer to “5.8 Windows Service Settings” on page 31.

For information on how to change other port numbers, refer to “5.7 Modifying the Port Number of the Vectorworks License Server” on page 29.

6 Miscellaneous Topics

6.1 Access Rights to the Vectorworks Folder

If access rights are restricted on the Vectorworks software (Client) folder or files, it may affect normal operation of Vectorworks software. If the usable applications are restricted at the OS level, that could also prevent Vectorworks software from starting normally.

6.1.1 Precautions Regarding Folder and File Access Rights

- Before installation, make sure that the access rights to the installation folder (application folder, and so on) are set to Read/Write.
- After installation, do not change the access rights for the Vectorworks folder or for the files and folders within (leave it as set, to Read/Write.)

- In multi-user OS environments, if the installation is performed for only one user account, then after logging in with a different user account, Vectorworks software may not launch. Verify that the Vectorworks folder is set to Read/Write for all user accounts that may be using Vectorworks software.

The precautions mentioned above are for saving the settings in the Vectorworks folder (and folders within) while the Vectorworks software is running. If the settings are not saved correctly, the Vectorworks software may become inoperable.

6.1.2 Precautions Regarding Application Access Rights

- In Mac OS X, applications can be restricted by user account. If Vectorworks does not start up, check that setting.
- On Windows, the shortcut created after installation is for all users, so the configuration of the user who installed it last is be linked to the shortcut. When multiple users are using the same system, select a Windows user to perform the setup.

6.2 Uninstalling the Vectorworks Site Protection Server

Follow these procedures if it becomes necessary to uninstall the Vectorworks Site Protection Server.

The Vectorworks Site Protection Server consists of the following items.

- Vectorworks License Server
- Dongle driver
- Vectorworks Software (Client)
- Other files

The uninstall procedure is explained for each OS.

After uninstalling the dongle driver, you must restart the computer. After the restart, log in as an Administrator.

6.2.1 Windows

Stopping and Removing the rlm Service

1. Open the rlm property of the running service, and stop the service.
2. Remove the Windows service. Refer to “5.8 Windows Service Settings” on page 31 for instructions.

Vectorworks License Server

If the Vectorworks License Server is running, refer to “5.3 Shutting Down the Vectorworks License Server” on page 18, and shut the server down.

If you are using a Windows service, refer to “5.8.4 Stopping the Windows Service” on page 34. Remove the Vectorworks License Server using the Uninstall function in the Control Panel (the exact name varies by OS version; for example Adding or removing a program, or Uninstall a program).

Vectorworks Software

Use the following uninstaller to remove Vectorworks 2015.

Vectorworks Installation disc > Utilities folder > Uninstaller folder

Other Files

Use the following procedure to remove the dongle driver and dll files.

Precautions

Sometimes the dll files are used by other software, and removing them could result in malfunctions. It is not recommended to remove a dll file, unless you are absolutely sure that it is not used outside of Vectorworks.

1. Select the Uninstall function from the Control Panel (the exact name varies by OS version; for example Adding or removing a program, or Uninstall a program).
2. Right-click on Sentinel Runtime and select **Uninstall**.
3. Uninstall the dll files listed below.

Depending on the OS used, some of the dll files listed below may not be installed.

If a dll is listed here, but it is not on the list of programs installed on the computer, you can safely ignore it.

- Microsoft Visual C++2005 Redistributable
- Microsoft Visual C++2008 Redistributable-x86 9.0.30729.17
- Microsoft Visual C++2010 Redistributable-x64 10.0.30319
- Microsoft Visual C++2010 Redistributable-x86 10.0.30319
- Microsoft Visual C++2012 Redistributable-x64 11.0.60610
- Microsoft Visual C++2012 Redistributable-x86 11.0.60610
- Microsoft Visual C++2012 Redistributable-x86 11.0.61030

6.2.2 Mac

Vectorworks License Server

1. If the Vectorworks License Server is running, refer to “5.3 Shutting Down the Vectorworks License Server” on page 18, and shut the server down.
2. Delete the Vectorworks Network License file from the hard drive of the server PC.
3. Restarting the OS finishes the removal.

Dongle driver

Delete the HASP Device Drivers using the Uninstaller in the Dongle Support folder on the hard drive.

Vectorworks Software

Use the following uninstaller to remove Vectorworks 2015.

Vectorworks Installation disc > Utilities folder > Uninstaller folder

6.3 Vectorworks File and Folder (Client)

6.3.1 Storage Location

If the Vectorworks (Client) software installed correctly, a folder called VW2015_Net_SG is created on the hard drive. The contents of this folder, including the Plug-Ins folder and the Workspaces folder, and all other files installed there, are *absolutely required* items. Vectorworks cannot function without them.

6.3.2 The Role of Each Folder and File

Folder or file name	Description
Vectorworks (the program /.exe)	This is the actual program.
Plug-Ins (folder/.vsm/.vso, etc.)	This folder contains Vectorworks/specific plug-ins. They should be in the same directory as the Vectorworks software.

Folder or file name	Description
Workspaces (folder/.vwv)	This folder contains the Vectorworks-specific workspaces. They should be in the same directory as the Vectorworks software.
VWHelp (folder/.xml, etc.)	This folder contains the Vectorworks Help System and the VectorScript Function Reference in HTML format.
Libraries (folder/.vwx, etc.)	This folder contains various resource files used by the Resource Browser, such as standard default resources, home and office furniture, external components, machines and appliances sample data, steel cross sections, drafts, equipment, maps, electrical symbols, and more. It also contains template files including fixed class and layers and template files that are used when opening a new file.
Extras (folder/.vwx, etc.)	This folder contains various sample files for the English version of Vectorworks software.
Plant Database (folder)	This folder contains a database of plants (if Landmark or Designer was added to Vectorworks Fundamentals as an upgrade).
InstLog.txt (document)	This is a log file that was created by the installer when setting up Vectorworks-related programs and plug-ins.
Other files and folders	Other files and folders used by the Vectorworks software.

6.4 Precautions for Handling the Dongle (Hardware Protection Key)

6.4.1 Precautions for Connection

Do not plug in or unplug the dongle while the computer is turned on. Even though the dongle is designed to withstand plugging in and unplugging while the power is on without damage, depending on the computer or the printer, such actions could cause malfunctioning, internal data corruption, or physical damage to the device. Do not apply excessive force when plugging in or unplugging the dongle, as this can result in damage to the dongle or to the computer. Verify the shape and orientation of the socket before gently plugging in the dongle.

6.4.2 Precautions for Installing the Driver

A specific driver is needed for recognizing the dongle. The dongle driver must be installed before plugging in the dongle. For more information about the installation, refer to “2.2 Installing the Dongle Driver and Connecting the Dongle” on page 4.

On Windows, log in as an Administrator for the installation, to be able to change the system settings.

6.4.3 Conflicts with Other Manufacturers' Dongles

Tests are regularly conducted to verify correct operation when other manufacturers' dongles are also present on the system. However, for more reliable operation, connect our dongle to a USB port that has a higher priority than other ports. The priority order of USB ports depends on the actual machine used. Refer to the manual for your PC.

6.4.4 USB Port for the Dongle

When successfully connected to a USB port, the LED on the dongle lights up. Please note that depending on the machine and the environment, some USB ports may be disabled by a setting. In that situation, the dongle's LED will not turn on and the dongle cannot function.

6.5 Unblocking the Firewall for the Vectorworks License Server (Windows)

When using the Vectorworks License Server, any firewall blocking must be disabled. The unblocking method varies by the OS version. Refer to the manual for your OS for more information.

Windows XP 32/64bit

When running as a program:

1. The Windows Security Alert dialog box opens.
2. Click **Unblock**.

When running as a service:

1. Go to Control Panel > Windows Firewall, and then select Allow a program through Windows Firewall > Exceptions tab > Add Port to add the port.
2. Name: Add an appropriate name (for example: RLM Service, Port number:5053, Protocol: TCP)
3. Click **OK**.

Windows Vista 32/64bit

When running as a program:

1. The Windows Security Alert dialog box opens.
2. Click **Unblock**.

When running as a service:

1. Go to Control Panel > Windows Firewall, and then select Turn Windows Firewall on or off > Exceptions tab > Add Program to add the program.
2. Use the Browse button to specify the rlm.exe or vektorwrx.exe (in the Vectorworks Network License folder), and then click **OK**.

Windows 7 or 8 32/64bit

When running as a program:

1. The Windows Security Alert dialog box opens.
2. Click **Allow access**.

When running as a service:

1. Go to Control Panel > Windows Firewall > Allow a program or feature through Windows Firewall, and select the program.
2. Click **Allow another program**, then use the **Browse** button to specify the rlm.exe or vektorwrx.exe (in the Vectorworks Network License folder).
3. Click **OK**.

Windows Server 2003 R2 32/64bit

When running as a program:

1. The Windows Security Alert dialog box opens.
2. Click **Unblock**.

When running as a service:

1. Select Control Panel > Windows Firewall > Add port.
2. Name: Add an appropriate name (for example: RLM Service, Port number: 5053, Protocol: TCP)
3. Click **OK**.

Windows Server 2008 32/64bit

When running as a program:

1. The Windows Security Alert dialog box opens.

2. Click **Unblock**.

When running as a service:

1. Go to Control Panel > Windows Firewall, and then select Allow a program through Windows Firewall > Exceptions tab > Add Port to add the port.
2. Name: Add an appropriate name (for example: RLM Service, Port number: 5053, Protocol: TCP)
3. Click **OK**.

Windows Server 2008 R2 or 2012 64bit

When running as a program:

1. The Windows Security Alert dialog box opens.
2. Select **Private Network and Public Network**, and then click **Allow access**.

When running as a service:

1. Go to Control Panel > System and Security > Check Firewall Status > Allow a program or feature through Windows Firewall.
2. Click **Allow another program** button, then use the **Browse** button to specify the rlm.exe or vektorwrx.exe (in the Vectorworks Network License folder).
3. Click **OK**.

7 Troubleshooting

This section describes countermeasures to use when problems occur. You can also refer to a list of other frequently asked questions and new information published by Technical Support on product-specific Q&A pages.

Visit the technical support knowledgebase at kbase.vectorworks.net

7.1 Problems with Startup and Authentication

The following section summarizes common causes of startup and authentication problems both on the server and the client PC. When problems occur, check these issues first.

Common causes of startup and authentication problems on the server/client

- Are you logged in with a non-administrator account?
Administrator rights are necessary for installing and running the RLM. If you are logged in as a user, log out, and log back in as an Administrator.
- Are there any restrictions on accessing the necessary folders?
To use the system, Read/Write (full control) access must be enabled on the Vectorworks Network License folder and the VW2015_Net_SG folder for any account. Refer to the manual of your OS, and set the folder access rights accordingly. Consult your network administrator if possible.
- Are the time settings out of sync?
A large difference between the time stamp of the server and the client can lead to authentication problems. Check the time settings and adjust if inconsistent.
- Are different port numbers set for the Vectorworks License Server in the license file and in the login settings?
Make sure the port numbers are set to the same value in the license file and in the client's Login Settings dialog box. If there is no need to specify a particular port number, then use the default value (5053).
- Did you enter the correct IP address in the Login Settings dialog box?

Check the IP address of the server PC, and correct it as needed.

- Is there a restriction posed by security software or an OS function?

A restriction placed on either the server or the client by security software or an OS function can lead to authentication problems. Check the settings of the security software. It may be necessary to change the firewall settings.

7.2 Troubleshooting

The following section summarizes some information about problems with the server and the client PC.

First read “7.1 Problems with Startup and Authentication” on page 52.

Problem: The Vectorworks License Server does not launch.

Possible causes and solutions:

- Is there a problem with the dongle?

Check the following:

- Dongle plug-in status (forgot to plug it in?)
- Dongle light status (on or off?)

If the light is off:

- Restart the PC.
 - If this does not solve the problem, reinstall the dongle driver.
- Is there a problem with the location of the license file?

- Is the license file in the correct folder?

By default, it should be placed in the Vectorworks Network License folder.

- Other problems

The Debug log may provide some hints about the cause of the problem.

Refer to “5.5 The Vectorworks License Server Status Screen” on page 21. Click the SHOW rlm Debug log button to verify the operational status.

The various error indications are described in “7.3.1 Vectorworks License Server Errors” on page 55. That list may provide information about the cause of the problem.

Problem: The client software does not launch.

Possible causes and solutions:

- Is there a problem with the firewall settings?

Check whether communication is blocked by a firewall setting on either the server or the client.

- Is the network operating normally?

Network problems may lead to an inability to perform the authentication process.

Verify the connection between the server and the client by pinging. If there is a problem, check the general status of the network.

- Is the IP address of the server PC set to a dynamic setting?

Setting the server PC's IP address to dynamic may lead to discrepancies with the connection settings of the Vectorworks client software.

If the server PC's IP address is set to dynamic, such as DHCP, change the setting to a fixed IP address.

- Is there a mistake in the port number entered for the connection target in the Login Settings dialog box?

If the **Automatically find server** setting is disabled, then make sure it is set to the port number used by the Vectorworks License Server.

If there is no need to specify a particular port number for the Vectorworks License Server, then use the default value (5053).

- Is there an access restriction posed by one of the settings of the Vectorworks License Server?

If there is an unintentional access restriction, check the ISV option settings again.

Problem: The Vectorworks software is shut down, but the Vectorworks License Server's license count does not decrease.

Possible causes and solutions:

- Is there any software or hardware blockage for network communication?

Network signal interference or outage may result in erroneous license counts.

Verify the connection between the server and the client by pinging. If there is a significant delay, check the general status of the network.

Set up a temporary simple network (client PC > HUB > server PC) to verify operation.

- Has a forced shut down occurred on the Vectorworks software?

If the software was forced to shut down after the network connection was lost, or for some other reason the shutdown signal did not reach the Vectorworks License Server, the license count would not decrease and it would be temporarily incorrect.

Check the following:

- Monitor the status for about an hour
- Restart the Vectorworks software that was forced to shut down, and perform a correct shut down.

If this does not solve the problem, try restarting the Vectorworks License Server.

Problem: The Renderworks, Architect, Landmark, Spotlight, or Designer modules were installed, but they don't function properly.

Possible causes and solutions:

- Installation and launching issues

The modules cannot function unless installed and launched using the Vectorworks Site Protection Server installation disc.

If you are using several product lines, check the printed label to make sure you are using the correct installation disc.

- Are the plug-in modules enabled when launching the Vectorworks software?

When Vectorworks launches, go to the Login Settings dialog box and open the Modules dialog box. The modules should be selected there, otherwise they will not be available.

For more information on how to change the module conditions, refer to “3.3 Launching the Client” on page 11.

- Is there a usage restriction posed by a setting of the Vectorworks License Server?

If there is an unintentional access restriction, check the ISV option settings again.

- If the modules were installed as add-ons:

Check the following:

- Was the license file in the Vectorworks Network License folder updated?

- If the Vectorworks License Server uses a port other than the default, was this change correctly made in the settings of the updated license file?

Problem: The add-on licenses are not available in the Vectorworks License Server, and/or not reflected in the Vectorworks software count.

Possible causes and solutions:

If licenses were added on (but the number of licenses available remains unchanged), check the following:

- Was the license file in the Vectorworks Network License folder updated?
- If the Vectorworks License Server uses a port other than the default, was this change correctly made in the settings of the updated license file?

7.3 Error Messages

7.3.1 Vectorworks License Server Errors

These error messages appear in the Execution prompt or in the Debug log during runtime.

Message: Could not access the license

Possible causes and solutions:

The license file is missing or corrupted. Make sure the license file is present at the specified location, and it is not corrupted. You can also copy the license file from the installer package and to the necessary location again.

Message: Error in license count or hostid

Possible causes and solutions:

There is an incorrect license file. The remaining licenses are loaded correctly. Copy the license file from the installer package to the necessary location again.

Message: No license file for this host

Possible causes and solutions:

- The host name is incorrect or different in the license file.
- There are multiple license files, and they all have an incorrect host name setting.

If there are multiple RLM license files in use, the host names are added to all of them. If one host name has an error, but another host name is valid, that valid host name will be used for all licenses.

To avoid this error, use localhost in all license files.

Message: License product list displays rlm_roam instead of products

Possible causes and solutions:

Only licenses locked to an existing dongle can be loaded. Perhaps the dongle is not connected correctly, causing the malfunction.

- Reconnect the dongle and verify that the light is on.
- Connect the dongle to a different USB port.
- If possible, verify whether the dongle works on another server PC.

Message: Duplicate license

Possible causes and solutions:

Multiple licenses of the same product were found on the server. Delete the duplicate licenses.

Message: The following license has errors

Possible causes and solutions:

The Vectorworks License Server attempts to specify the type of the error. Any unaffected licenses remain loaded. A license with the critical error cannot be loaded.

The license with the critical error likely contains an error related to the ISV, the product, or the version. Replace the problematic license by copying one from the original package.

Message: Port xxxx in use

Possible causes and solutions:

The default port number is used by another application or another instance on the server PC. Another possibility is that the server software and the service were launched at the same time, or the port number was never entered.

Normally, if the port number is incorrect or unknown or its status is busy, the default port number still can be used, and no error would be generated. However, if the default port number is already in use, the Vectorworks License Server waits until the port is free.

Message: Cannot create log file

Possible causes and solutions:

There is a problem when writing the log file to the server PC.

- Using a log file is optional. By default, all errors are displayed in the Command window.
- Check whether the server PC functions correctly, and whether you are logged in with Administrator rights.

In the previous versions of the Vectorworks Network software, the log file and the error file were separate, but in Vectorworks Site Protection Server, the errors are included in the Debug log file.

Message: Cannot set server lock; lockfile problems

Possible causes and solutions:

There is more than one server software program on the same machine, and the other server is already running.

For security reasons, multiple copies of the server software cannot run at the same time on the same machine. The server software and the service cannot be launched at the same time, even with unique port numbers.

7.3.2 Vectorworks Client Errors

This section describes error messages that are specific to the Network Version; they may occur during startup or when using the software.

Message: Connection to server lost

Possible causes and solutions:

The connection was lost between the Client and the Vectorworks License Server.

Click **Retry** to attempt to reconnect.

If the connection was unsuccessful, check the following:

- Check whether the network is working normally.
- Check the operating status of the server PC.
- Check the operating status of the Vectorworks License Server.
- If the Vectorworks License Server was restarted, the connection to the Client is lost. Either retry the connection, or restart the Client.
- If a connected Client is removed by the Remove setting of the Vectorworks License Server, then the connection will be lost. Please contact your administrator.

Message: Can't connect to the server.

Possible causes and solutions:

The Client is unable to connect to the Vectorworks License Server. Check the following:

- Check whether the network is working normally.
- Check the operating status of the server PC.
- Check the operating status of the Vectorworks License Server.
- Go to the Login Settings, and check whether the Connection > Primary Server item is set to the username or host name. If yes, change it to the IP address.
- Check whether the IP address and the port number of the connected server PC is set correctly in the Login Settings.
- If the **Automatically find server** option is selected in the Login Settings, disable it, and enter the IP address of the server PC manually.
- Verify the Vectorworks License Server ISV options to see whether there is an access restriction setting based on the IP address.

Message: Borrowing for the following modules doesn't allow an expiration time of day(s):

Possible causes and solutions:

The allowed borrowing time period is set to fewer days than the requested borrowing time period. Decrease the borrowing time period of the software to the permitted time frame.

Message: Borrowing for the following modules is disabled:

Possible causes and solutions:

The user is not allowed to borrow the requested modules. Only borrow modules for which you have permission.

Problem: The Vectorworks software is frozen.

Possible causes and solutions:

Immediately shut down the Vectorworks software.

A line including "IN(client exit)" is added to the Debug log of the Vectorworks License Server, and the license is automatically returned to the Vectorworks License Server.

If there is no communication between the Vectorworks License Server and the Vectorworks software for a predetermined time (the default is one hour), then the license file is automatically returned to the Vectorworks License Server.

The allowable time period when communication must occur can be changed by using the TIMEOUT or TIMEOUTALL option in the ISV server option settings. However, it cannot be set to a period shorter than one hour.

7.4 FAQ

The following section includes some frequently asked questions in Q&A format. Please check this list before contacting technical support.

Vectorworks License Server

Q. What should I do when an error is displayed?

A. Section "7.3 Error Messages" on page 55 describes error messages and information. Check for the cause of the problem, and try the suggested solution.

Q. Are virtual machines (virtual OS environments) supported?

A. Currently they are not supported. It is necessary to install the software on a physical server.

Q. Can the License Manager be controlled remotely?

A. The installation must be performed in the local environment, but the Administration screen can be viewed and operated remotely. You can access the Administration screen by typing `http://server PC's IP address:host number` into the browser.

Q. What type of dongle is used by the License Manager of the Vectorworks Site Protection Server?

A. It is a single-license SafeNet HL USB dongle (HASP HL).

Q. Can the license borrowing restrictions be customized?

A. Yes, you can use the ISV server setting commands.

- To shorten the borrowing time period from the default 30 days, use the `ROAM_MAX_DAYS` setting command
- To allow only certain users to borrow licenses, use `INCLUDEALL_ROAM`
- To prevent certain users from borrowing licenses, use `EXCLUDEALL_ROAM`

Use these commands as they best fit your needs: for example, if there are a lot of users that you want to prevent from borrowing, use `INCLUDEALL_ROAM` to permit borrowing only to specified users instead. For more information, refer to “5.10.1 ISV Server Option Settings” on page 42.

Client

Q. Borrowing a license does not work on the Vectorworks client. What should I do?

A. There may be a restriction imposed by an ISV server option on the Vectorworks License Server. Check the ISV option settings.

Vectorworks Site Protection Backup Server

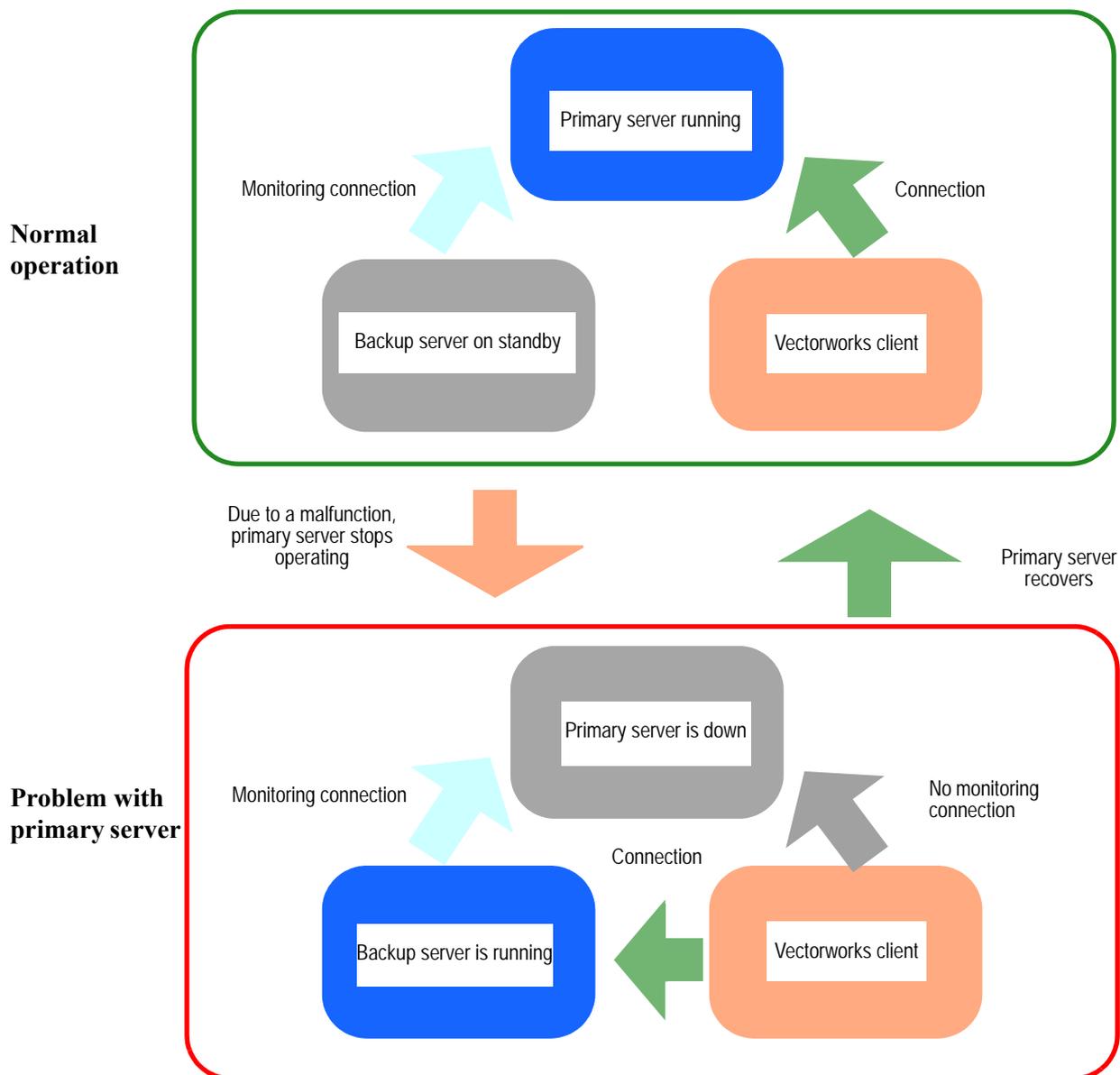
1 Vectorworks Site Protection Backup Server Overview

1.1 Introduction

Thank you for purchasing the Vectorworks Site Protection Server.

The Vectorworks Site Protection Server uses a Server/Client format to manage licenses when using Vectorworks software. The backup server monitors the operation of the normal server (primary server), and if it determines that the primary server is malfunctioning, the backup server takes over license management from the primary server. The backup server connection can be enabled at the Vectorworks (client) side as well, and then the Vectorworks software client can be launched and used, even if the primary server has malfunctioned. The Vectorworks network version already has advanced stability features, but this setup further enhances its operational stability.

Server Operation Diagram



1.2 About this Chapter

This documentation contains information pertaining to the backup server only.

Before setting up the backup server, and for information beyond the limitations and settings of the backup server, please refer to the information about the primary server in “Vectorworks Site Protection Server” on page 1.

1.3 Limitations of the Backup Server

This section contains information about the limitations and warnings related to using the backup server. Please pay particular attention to the following items during operation.

- Please be aware that although the backup server provides the same functions as the primary server, licenses cannot be borrowed when the backup server is running.
- When switching over to the backup server, or switching back to the primary server, it is necessary to temporarily close the Vectorworks client software.
- The Vectorworks License Server does not have any functionality to report the switch between the backup server and the primary server. That this is due to the web server software specifications used by the Vectorworks Site Protection Server.

1.4 Requirements and Operating Environment

The backup server has the same requirements and operating environment as the Vectorworks Site Protection primary server.

For increased stability, installing the server software and the client software on the same PC is not recommended.

2 Backup Server Software Setup

2.1 Preparations Prior to Setup

Please prepare the following items.

Accessories that were provided with the backup server's product package:

- Dongle
- Backup server license file

Vectorworks Site Protection Server Product Package

The server software dongle driver uses the same Vectorworks Site Protection Server installation disc.

Items Copied from the Vectorworks License Server's Primary Server

Copy the following items:

- The license file from the “Vectorworks Network License” folder (containing complete settings)
The filename consists of the last six digits of the dongle ID and has a (.lic) filename extension.
- The “vektorwrx.opt” file from the “Vectorworks Network License” folder

If you want to make the ISV options settings of the backup server identical to those of the primary server, copy and use the “vektorwrx.opt” file. For more information about the ISV option settings, refer to “5.6 ISV Server Screens” on page 23.

Record the following items

The following information will be necessary for performing the settings. Please write them down.

- Primary server setting info (IP address, port number)

- The name of the license file used on the primary server
- The name of the backup server license file
- The dongle ID numbers of the primary server and the backup server (to verify the file names above)

2.2 Setting Up the Software

First, verify that the primary server of the Vectorworks License Server is operating correctly, and then follow the steps below to set up the backup server.

2.2.1 Installing the Backup Server

1. Use the Vectorworks Site Protection Server installation disc that was supplied in the Vectorworks Site Protection Server package to install the dongle driver.
2. Connect the dongle that was supplied in the backup server product package.
3. Copy the folder from the Vectorworks Site Protection Server installation disc to the backup server PC, using the same procedure as for the primary server.

For more information, refer to “2.3 Installing the Vectorworks License Server” on page 6.

2.2.2 Copying Required Files

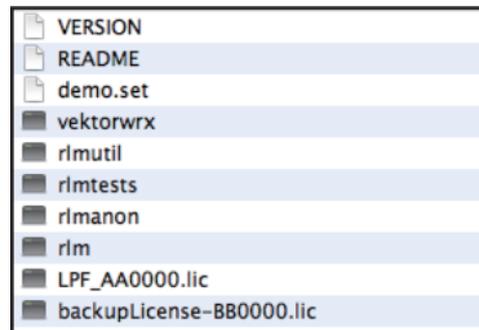
1. Copy the license file that you copied from the primary server into the “Vectorworks Network License” folder on the backup server's PC.
2. Copy the backup server license file that was supplied with the backup server product package into the “Vectorworks Network License” folder on the backup server's PC.

The following figure shows the “Vectorworks Network License” folder of the backup server PC after the license file of the primary server (Dongle ID: AA0000), and the backup license file of the backup server (Dongle ID: BB0000) were copied into it.

The name of the license file is user-specific. It is possible that your folder looks slightly different, but the Dongle ID should be part of the filename. Check your notes about the Dongle IDs that you recorded earlier, and make sure that you copied both types of license files into the folder.



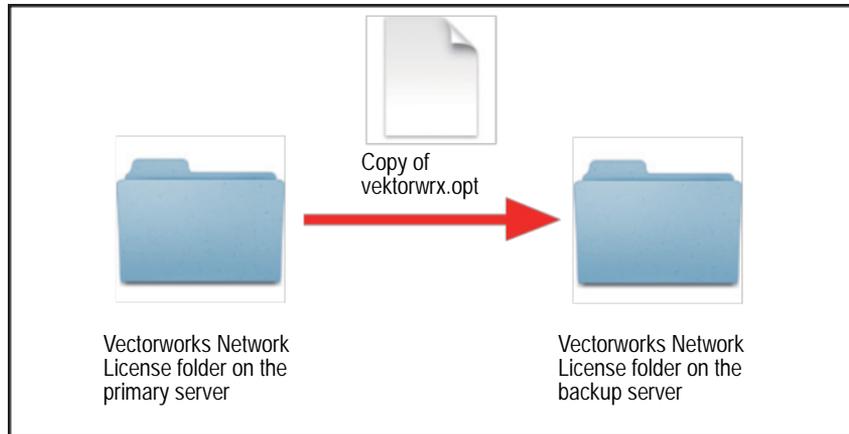
Windows



Mac

3. Copy the ISV options file, optionally.

If the ISV options are already set up on the primary server, using the same file and settings on the backup server creates a seamless backup environment.



To set the ISV options of the backup server to be the same as those of the primary server, then copy the “vektorwrx.opt” file from the primary server into the “Vectorworks Network License” folder on the backup server PC.

If you want to set the ISV server options on the backup server independently, then refer to “2 Vectorworks License Server Setup” on page 3 for more information about the setup procedures.

2.3 Backup Server Settings

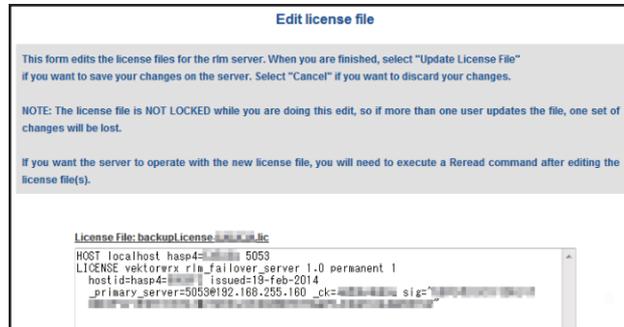
2.3.1 License File Settings

Open the “Reprise License Server Administration” screen on the backup server (as displayed below), and edit the backup server's license file.

1. Launch rlm (rlm.exe) on the backup server PC. For more information launching the executable, refer to “5.2 The Reprise License Server Administration Screen” on page 16.

Just as for the primary server, in a Windows environment you can launch rlm by registering it as a Windows service. However, it is best launch it first as an executable to verify that it starts up correctly, and then set it up as a service. The verification procedure is described later in “2.5 Verifying Backup Server Operation” on page 65.

2. Open the browser window on the backup server PC, and enter `http://localhost:5054` into the URL field.
3. The Administration screen opens.



Edit the required sections as shown in the following example:

```

HOST localhost hasp4=XXXXXX(dongle ID) 5053
LICENSE vektorwxr_lm_failover_server 1.0 permanent 1
hostid=hasp4=XXXXXX (Primary Server's Dongle ID) issued=19-feb-2014
_primary_server=5053@localhost _ck=4d59b4680a sig="60P0451SC1FCDK31YSMXCF
VV153HT31B7ATM27R22G10VSD8BB7B7HGAP5JXSAH1644QR92TUR"

```

Edit the marked places in the first and fourth rows.

- ① 5053: Set the Port number of the backup server, if needed. The default setting is 5053.
- ② 5053: Enter the port number of the primary server.
- ③ localhost: Enter the IP address of the primary server.

Do not edit any other portions of the license file. The server may become inoperable.

The backup server's IP address and Port number will have to be entered on the Login setting dialog box on the Vectorworks client. If you modify the value in ① in the example, make sure you make a note of it.

8. When you finished editing, click **Update License File**.
9. The path of the modified license file displays on the screen. Click **Back to Status** to return to the Status screen of the Administration screen.

To reflect the changes in the license file (.lic), restart the ISV server.

10. Click **Reread/Restart Servers** from the left side of the Administration screen.
11. The Reread/Restart Servers screen opens.
12. Click REREAD/RESTART.



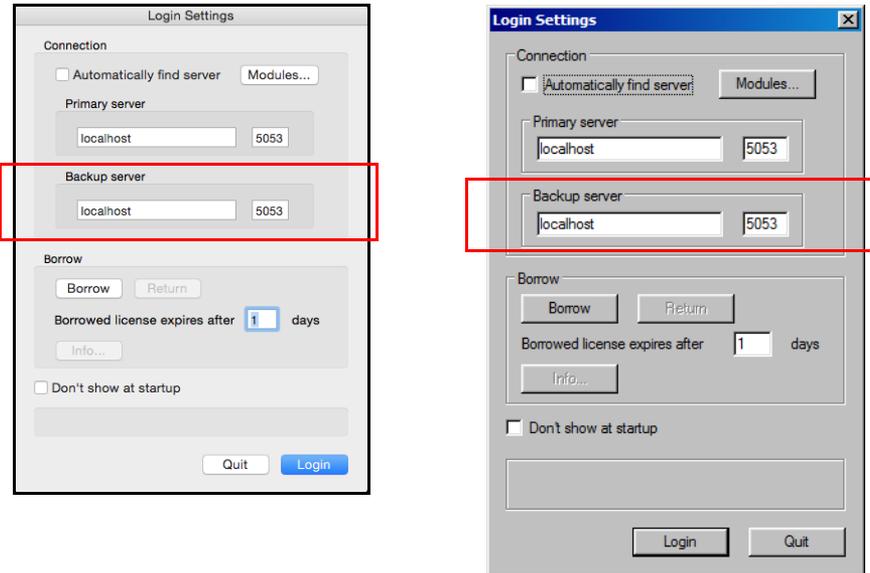
The license information reloads.

2.4 Client Settings

Settings are also required on the client software side. Make sure you have the backup server's IP address and Port number handy.

1. Launch the Vectorworks software.

The Login Setting dialog box opens.



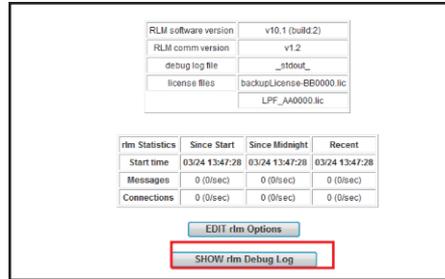
If **Automatically find server** is selected, deselect the option.

2. Enter the backup server's Port number and IP address into the backup server fields.
Use Latin characters for the input. Use periods as the delimiter for the IP address.
3. Click **Login** to launch the Vectorworks client software.

2.5 Verifying Backup Server Operation

Once the settings for the backup server software and the client software are complete, the following procedure verifies their operation. After a forced stop of the primary server, confirm that management automatically switches over to the backup server. For the procedure, it is assumed that the previous steps were successful and that the primary and the backup servers are running, and the client's Vectorworks software is also running.

1. Exit the client's Vectorworks software.
2. Click **Shutdown** from the left side of the primary server's Administration screen to temporarily stop the ISV server.
3. Launch the client's Vectorworks software.
4. Click **Status** from the left side of the backup server's Administration screen, and then click **SHOW rlm Debug log** in the middle of the screen. The Operational Log of the backup server displays.



5. Alternatively, click **Status** from the left side of the Administration screen, then click the Debug Log button of the ISV server at the bottom of the screen. Verify the connection status of the Vectorworks client that is being tested.



ISV Servers						
Name	port	Running	Restarts	Server Status	License Usage	Debug Log
vektorwrx	50052	Yes	0	vektorwrx	vektorwrx	vektorwrx

The backup server automatically runs based on the status of the primary server, and the operational status is recorded in the Debug log of the backup server. For more information on the Debug log and its output settings, refer to “5.6.3 Displaying the Debug Log” on page 26.

The contents of the Debug log window are described with an example.

```

03/14 13:13 (vektorwrx) "5053@192.168.255.160" now DOWN - rereading licenses ①
03/14 13:13 (vektorwrx) ==== Reread request by state change @ failover host
====
03/14 13:14 (vektorwrx) Portable Hostid Removed, rereading license files ②
03/14 13:14 (vektorwrx) ==== Reread request by failure@hostid ====
03/14 13:15 (vektorwrx) Portable Hostid Removed, rereading license files
03/14 13:15 (vektorwrx) ==== Reread request by failure@hostid ====
03/14 13:16 (vektorwrx) "5053@192.168.255.160" now UP - rereading licenses ③
03/14 13:16 (vektorwrx) ==== Reread request by state change @ failover host
=====

```

- ① Entry related to server malfunction

```

“(Machine's Port number)” @ (Machine's IP address)” now DOWN - rereading licenses
==== Reread request by state change @ failover host=====

```

The first line indicates that the license cannot be read due to a malfunction of the primary server.

The second line indicates that the backup server had read the licenses and started to provide license verification.

- ② Entry related to server stopping

```

Portable Hostid Removed, rereading license files
===== Reread request by failure@hostid =====

```

While the backup server is providing the licenses instead of the primary server, it continues to monitor the primary server. While this logging is occurring, the primary server stopped, so the reading of the license fails. Therefore, the backup server continues to provide the license verification.

6. When the verification test is complete, exit the Vectorworks client, and then click **Reread/Restart Servers** from the left side of the primary server's Administration screen to start the primary server.
 7. Look at the Debug log on the backup server. ③ in the example marks the entry related to the primary server's recovery.
- ③ Entry related to server recovery

```
“(Machine's Port number) @ (Machine's IP address)” now UP - rereading licenses
===== Reread request by state change @ failover host=====
```

The first line indicates that the primary server has recovered.

The second line indicates that the backup server stopped providing license verification.

Switching between servers may take several minutes.

If the backup server is run by a Windows service (Windows only), register the server as a service.

3 Backup Server Functionality

3.1 Overview of the Backup Server's Functionality

During normal operation of the primary server, the backup server monitors the primary server every two minutes. If you click on the Status > Server Status > vektorwrx button from the backup server's Administration screen, the Status window of the backup server displays, but no licenses appear in the License pool when the backup server is in monitoring mode.

License pool status												
Product	Pool	Ver	Expires	count	soft lim	inuse	res	hostid	timeout	share	transactions	Show License Usage
rfm_roam	1	1.0	permanent	Uncounted	0	0	0	ANY	0	None	0	usage...

When a malfunction is detected at the primary server, the backup server will be running and providing licenses within one minute. At that time, if you reload the backup server's Status window, any licenses previously administered by the primary server are listed in the License pool. You can confirm that the backup server has now become the server that verifies the licenses.

License pool status												
Product	Pool	Ver	Expires	count	soft lim	inuse	res	hostid	timeout	share	transactions	Show License Usage
fundamentals	1	2014	permanent	80	80	0	0		0	None	0	usage...
architect	2	2014	permanent	80	80	0	0		0	None	0	usage...
landmark	3	2014	permanent	80	80	0	0		0	None	0	usage...
spotlight	4	2014	permanent	80	80	0	0		0	None	0	usage...
renderworks	5	2014	permanent	80	80	0	0		0	None	0	usage...
designer	6	2014	permanent	80	80	0	0		0	None	0	usage...
rfm_roam	7	1.0	permanent	Uncounted	0	0	0	ANY	0	None	0	usage...

When the backup server detects that the primary server has recovered and it is running, it stops providing the license verification and returns to monitoring mode. If you reload the Status window, the License pool is empty again.

3.2 Backup Server Maintenance

If you add Fundamentals licenses or modules on the primary server's side, and/or modify the ISV options, then follow the steps described earlier in this chapter to maintain equivalent settings for the backup server's license file and options. Then click **Reread/Restart Servers** from the left side of the Administration screen to restart the ISV server and load the settings. This maintains consistency with the primary server.