IAR Systems®

Licensing Guide

LG_LMS2-3

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Contents

Preface 5

Who should read this guide 5

What this guide contains 5

Further information 6

Document conventions 6

Typographic conventions 6

Introduction 9

How IAR Systems licensing works 9

License types 10

Introduction to the IAR License Manager 10

Briefly about the IAR License manager 10

Briefly about the License Wizard 10

Network licenses 10

Using different versions of license servers 11

The IAR License Server package 11

Your IAR product 11

Clients with commuter authorization 12

System requirements 12

Network requirements for the license server 12

Installing a product with a network license 13

Installing a product using a network license 13

Installing the IAR License Server 13

Activating the license 18

Installing an IAR product on client computers 22

License management 25

Managing your licenses 25

Switching between different licenses for a product 25

Checking out a product for commuter authorization 26

Maximum number of commuter authorizations 26

Activating your license while offline 26
Transferring your license to another computer while offline 31
Choosing a network license manually 32
Updating a product that uses a network license 32
Adding more users to a network license 34
Transferring network licenses 34
Manually starting and stopping the license server 35
Logging license server activities 36
Enabling the logging 36
Specifying the size of the log files 37
Backing up the log files 37
Disable backing up log files 37
The log file format 37
Reference information on the IAR License Manager 39
Reference information 39
IAR License Manager main window 39
License Details dialog box 43
Servers dialog box 45
Licensing concepts 47
Index 49

Preface

Welcome to the Licensing Guide. It contains detailed information about how to install an IAR product that uses a network license and how to manage your licenses. You will also get detailed reference information on the IAR License Manager.

For information about how to install and license an IAR product that uses a mobile or PC-locked single-user license, see the *Installation and Licensing Quick Reference* booklet in your product box.

Who should read this guide

You should read this guide if you:

- Are about to install a Network license and need more information about installation and licensing than is available in the *Quick Reference* booklet
- Have a Network license and are about to install the license server
- Are about to upgrade your existing license
- Need to transfer your license to another computer
- Are about to use the IAR License Manager.

What this guide contains

This guide contains these chapters:

- *Introduction* gives a general introduction to the installation and licensing procedure and describes the differences between the different license types with the main focus on network licenses.
- *Installing a product with a network license* gives a step-by-step description of how to install both the license server software and the client software in a multi-user environment. This chapter also describes how to upgrade both the license server and your IAR product clients.
- *License management* gives step-by-step descriptions of how to perform some typical tasks for network licenses.
- *Reference information on the IAR License Manager* gives reference information on the IAR License Manager—a tool for managing your licenses.

- *Licensing concepts* lists and describes terms related to licensing in general.

FURTHER INFORMATION

If this guide does not answer your questions or solve your problems concerning the installation or licensing, you can:

- Read the release notes for recent information that might not be included in this guide. The release notes are available in the Information Center and on the product installation media.
- See the technical notes on the Technical Support pages on the IAR Systems web site: `www.iar.com/support`
- Contact IAR Systems Technical Support for technical support. Information about how to access our Technical Support can be found on the IAR Systems web site: `www.iar.com`/support.

Be prepared to provide the following information: your license number, the type of license lock you use, when and where you purchased the product, and a detailed description of the problem.

Document conventions

When, in the IAR Systems documentation, we refer to the programming language C, the text also applies to C++, unless otherwise stated.

When referring to a directory in your product installation, for example `doc`, the full path to the location is assumed, for example

`c:\Program Files\IAR Systems\Embedded Workbench 6.`*`n`*`\`*`cpuname`*`\doc`

or

`c:\Program Files\IAR Systems\visualSTATE 7.`*`n`*`\doc`.

TYPOGRAPHIC CONVENTIONS

The IAR Systems documentation set uses the following typographic conventions:

Style	Used for
`computer`	• Source code examples and file paths. • Text on the command line. • Binary, hexadecimal, and octal numbers.
`parameter`	A placeholder for an actual value used as a parameter, for example *`filename`*`.h` where *`filename`* represents the name of the file.

Table 1: Typographic conventions used in this guide

Style	Used for
`[option]`	An optional part of a command.
`[a|b|c]`	An optional part of a command with alternatives.
`{a|b|c}`	A mandatory part of a command with alternatives.
bold	Names of menus, menu commands, buttons, and dialog boxes that appear on the screen.
italic	• A cross-reference within this guide or to another guide. • Emphasis.
…	An ellipsis indicates that the previous item can be repeated an arbitrary number of times.
	Identifies helpful tips and programming hints.
	Identifies warnings.

Table 1: Typographic conventions used in this guide (Continued)

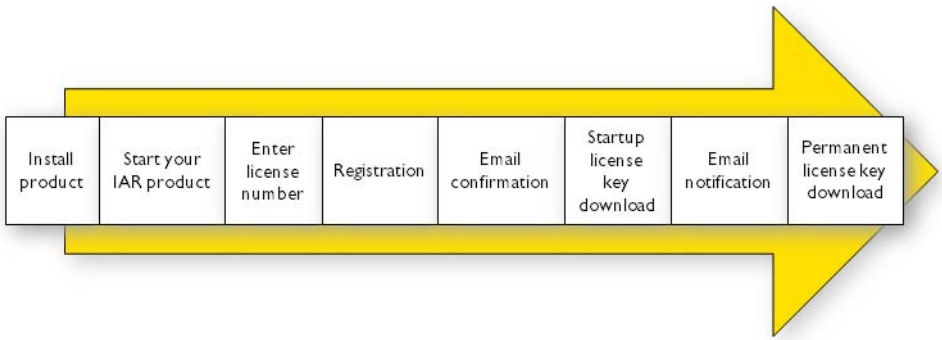
Introduction

This chapter introduces the IAR Systems licensing system. It gives an overview of the installation and license activation procedure, and of the different license types.

How IAR Systems licensing works

Each product from IAR Systems comes with a software license.

When you start your IAR product for the first time after you have installed it, you activate your license by entering your License Number and registering the license. A license wizard will guide you through the process:



In the welcome letter of your product package, you will find a license number. The automatic activation will give you a *Startup license* that allows you to start using the product immediately after installation and 30 days onward.

When you have finished your purchase, you will be able to activate your permanent license. You are now also entitled to up to one year of free updates and prioritized technical support, depending on your purchased product.

A license manager is installed together with your IAR product to help you manage your licenses. For more information about how to use the IAR License Manager, see *License management*, page 25.

LICENSE TYPES

There are three kinds of permanent licenses:

- *Mobile license*—a single-user license locked to a dongle (hardware lock)
- *PC-locked license*—a single-user license locked to the computer where the software is installed
- *Network license* for multiple users.

This guide describes the Network license and how to manage it. For more information about the Mobile and PC-locked license types, see the *Quick Reference* booklet supplied in the product package.

Introduction to the IAR License Manager

This section introduces you to the IAR License Manager.

BRIEFLY ABOUT THE IAR LICENSE MANAGER

The IAR License Manager is a program—automatically installed when you install your IAR product or the IAR License Server—that you can use to administrate your licenses.

The IAR License Manager is local to a specific installation directory and automatically detects all IAR products that use this version of the licensing system and are installed in the same directory.

Start the IAR License Manager either from the Windows **Start** menu or from the **Help** menu in your IAR product.

BRIEFLY ABOUT THE LICENSE WIZARD

The License Wizard leads you step by step through the license activation process. It will start automatically when you start your IAR product if there are installed products without valid licenses. You can also start it from the **License** menu in the IAR License Manager.

Network licenses

A *Network license* is a multi-user license that is located on a *license server computer*. A license server computer is a PC with the IAR License Server installed. Individual installations of IAR products are installed on other computers (clients) in the same network.

The network license makes it possible to use your IAR product from any of the client computers on the network. The network license allows for a maximum number of concurrent users, and the license server keeps track of the current number of users.

The network license is locked to the computer where the license server is installed, either to the computer itself or to an attached dongle. With the dongle, you can easily transfer the license server to a different server computer.

The license server is generic and you can use it for all IAR products you install.

USING DIFFERENT VERSIONS OF LICENSE SERVERS

Your IAR product requires version 2.*x* of IAR License Server. Note that some IAR Embedded Workbench products require version 1.4*x* or older of the license server. A new and an old server cannot coexist on the same computer unless virtual machines are used.

THE IAR LICENSE SERVER PACKAGE

When you order a network license, you receive:

- One installation media with the IAR License Server
- One dongle (only if explicitly ordered)
- One installation media with your IAR product.

The license server consists of two components:

- The IAR License Manager, which is used for administrating licenses. The IAR License Manager is also installed with your IAR product to administrate licenses on the client computers.
- The Sentinel RMS License Manager, which is the actual license server.

Install the license server on a computer that you want to use for the license server.

YOUR IAR PRODUCT

The IAR product can be installed on as many client computers as you want.

Using a network license, the IAR product requests permission to run from the license server each time you perform an activity that requires a license, for example compiling and linking.

When the activity is finished, the permission to use the network license remains locked to that client for another 30 minutes before it is released to another client. In the IAR License Manager you can view the status of the license.

CLIENTS WITH COMMUTER AUTHORIZATION

A network license includes a commuter feature, which makes it possible to use your IAR product for a limited number of days without being connected to the license server. For more information, see *Checking out a product for commuter authorization*, page 26.

SYSTEM REQUIREMENTS

For information about systems requirements:

- For client computers, see the *Release notes* on the installation media
- For the IAR License Server computer (network licenses only), see the *Release notes* on your IAR License Server installation media.

Note: To install and activate the product, you must have administrator privileges on the computer and an internet connection. If IAR License Manager cannot get access to the internet, see *Activating your license while offline*, page 26.

NETWORK REQUIREMENTS FOR THE LICENSE SERVER

If you have a network license, each client installation will automatically search for license servers on the subnet.

The client–server communication is handled via the UDP protocol at port 5093 on an IP network.

If a firewall or network bridge is installed on the license server computer, for example Windows Firewall, UDP packets must be allowed to be routed through server port 5093.

In network configurations where the broadcast function is not available or the license server is on a different subnet, you must manually point out the server from the client. For information about how to do this, see *Servers dialog box*, page 45.

UDP broadcast packets at port 5093 are also used every time your IAR product is started and periodically for as long as the IAR License Manager is running. The broadcasts are made to find available license servers on the network. No broadcasts are made during the time that a licensed product is being used.

The IAR License Manager uses the https communication protocol to fetch license keys from IAR Systems. The Windows settings for internet proxy are used.

Installing a product with a network license

This chapter gives information to the system or network administrator about how to install the IAR License Server on the designated server and the IAR products on the client computers.

For information about network licenses, see *Network licenses*, page 10.

Installing a product using a network license

The recommended way to install a product with a network license is the following three-stage procedure:

1. Install the IAR License Server on a server computer.
2. Activate and register the license using the IAR License Manager on the server.
3. Install your IAR product on the client computers and start using the network license.

Note: To install products from IAR Systems, you must have administrator privileges to the system.

Important: If you wish to add a network license to an already installed IAR License Server, go directly to *Activating the license*, page 18, for instructions. Ignore the installation procedure described below.

INSTALLING THE IAR LICENSE SERVER

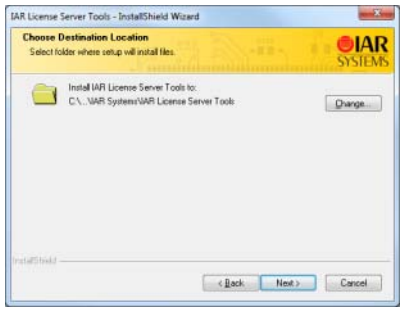
Note: Unless you use a dongle, it is important that you decide from the beginning which computer to use for the license server, because the license server will be locked to that computer.

1. Choose a suitable server computer for the license server; see the release notes on your license server installation media regarding system requirements.
2. Remove any dongles.
3. Insert the IAR License Server installation media. The installation program should start automatically. If it does not, run the `autorun.exe` program from the installation media.

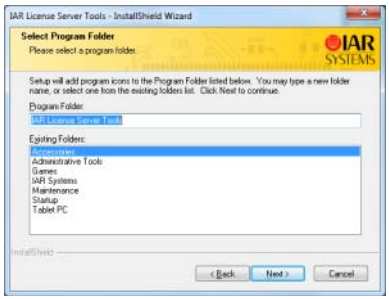
4 Click **Install the IAR License Server**. This will first install the IAR License Manager and then immediately continue with the Sentinel RMS License Manager.

5 Click **Next** to confirm that you have read and understood the license agreement.

6 Choose the destination folder where the IAR License Manager will be installed.



7 Select the folder for the program icon on the **Start** menu.

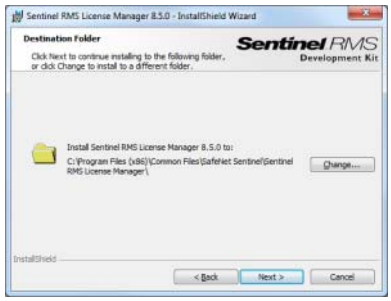


8 When the IAR License Manager has been installed, the installation of the Sentinel RMS License Manager starts.

9 Click **Next** to confirm that you have read and understood the RMS license agreement.

10 Fill in the customer information.

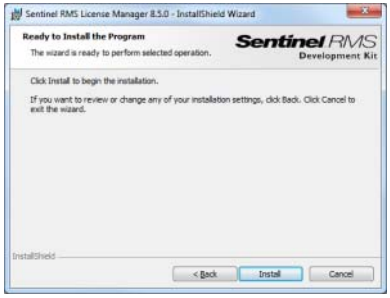
11 Choose a destination folder where the license server will be installed. The default directory is `C:\Program Files\Common Files\SafeNet Sentinel\Sentinel RMS License Manager`.



12 On the Setup Type page, select either **Complete** or **Custom** (by default, this does not install the dongle drivers).

13 On the next page you should unblock UDP traffic on port 5093, which is necessary for the client computers to access the server.

14 Click **Install** to install the Sentinel RMS License Manager.



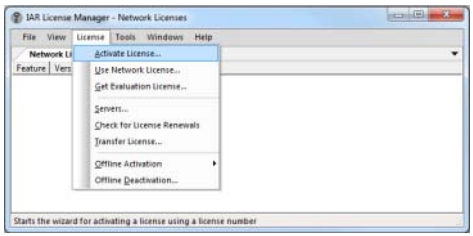
Normally, you do not need to start the license server manually. It will automatically start after the installation and restart every time you restart the computer. If you for some reason need to start the license server manually, see *Manually starting and stopping the license server*, page 35.

ACTIVATING THE LICENSE

Before you can use your network license, you must activate it.

1. On the license server computer, start the **IAR License Manager** from the Windows **Start** menu.

2. Choose **License>Activate License**.



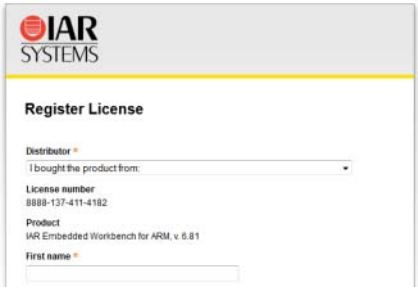
Alternatively, if the IAR License Manager cannot get access to the internet, you can renew your license by selecting **Offline Activation** from the **License** menu and enter your license number.

3. If you have a dongle, attach it to your computer.

4. Type your license number and click **Next**. The license number can be found in the Welcome letter.

5 In the next step, click **Register**.

6 The License Wizard opens a registration web page at IAR Systems where you register your license.



When you have completed the registration form, an email will be sent to the address you specified. Open the email when you receive it and click on the link in this email to verify the registration. The registration procedure is now completed.

Click **Next** in the License Wizard to continue with the license activation.

7 Click **Next** to confirm that you want to activate the license on the computer you are using.

8 If your network license is using a dongle, you must now to lock the license to the dongle. (If your license will not use a dongle, skip this step.) Connect the dongle to your computer, and make sure that no other dongle is connected.

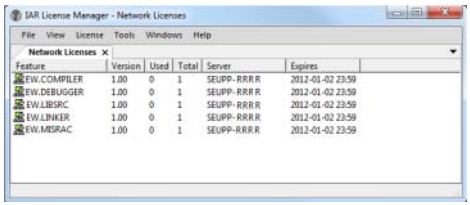
Alternatively, if your dongle has not arrived, you can temporarily lock your license to your computer. Select the corresponding check box.

Note: It is possible to lock the license to another dongle than the one provided with the product package, for example, if you want to lock several products to the same dongle. In that case, carefully consider the consequences. Once the dongle is confirmed, the lock cannot be undone.

9 The License Wizard now confirms your license details. Click **Next** to finish the activation.

Note: Your permanent license might include a time-limited evaluation of features that are not part of the license you have bought.

10 In the IAR License Manager, choose **View>Network Licenses** to view the installed licenses.



11 You can now close the IAR License Manager. The server will be running in the background and you can at any time start the manager again to view or administrate the licenses.

12 You will receive a notification by email when the permanent license is available.

To get your permanent license, perform the following steps on your license server computer:

1 Start the IAR License Manager from the Windows **Start** menu.

2 On the **License** menu, choose **Check for License Renewal** and follow the instructions.

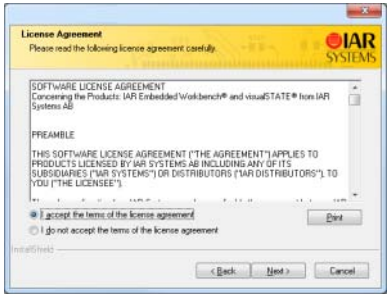
Alternatively, if the IAR License Manager cannot get access to the internet, you can renew your license by selecting **Offline Activation** from the **License** menu and enter your license number.

INSTALLING AN IAR PRODUCT ON CLIENT COMPUTERS

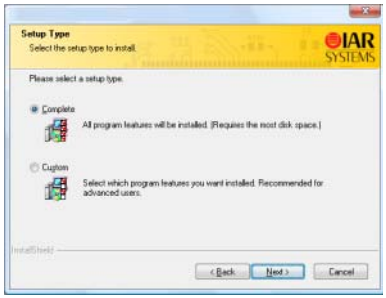
The following steps should be repeated on each client computer.

If you already have the new version of the product installed (an evaluation version), go directly to step eight.

1. Insert the installation media. The installation program should start automatically. If it does not, run the `autorun.exe` program from the installation media.
2. Click **Install...** to start the installation.
3. Read and accept the license agreement when prompted.



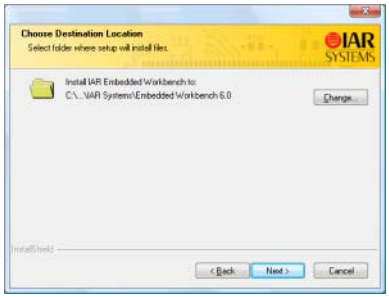
4. If prompted, select either a **Complete** or a **Custom** installation:



If you select **Custom**, select the components you want to install in the next dialog box.

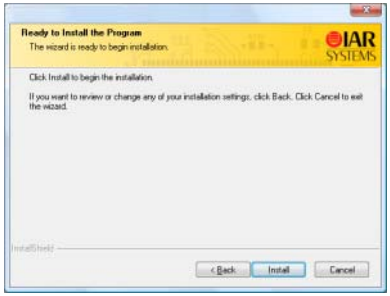
Note that this step does not always apply.

5 Accept the default installation directory or specify a directory of your choice:



6 Choose a folder in the Windows **Start** menu where you want to place the IAR product start shortcut.

7 Review the settings for the installation and click **Install** to install the program files.



You are now finished with the IAR product installation.

Make sure to repeat the steps above on each client computer where you want to be able to run your IAR product.

8 When you first start your IAR product on a client computer, it will find the license server and suggest that you use it. If the client does not find the license server automatically, you can point it out manually, see *Servers dialog box*, page 45.

9 You can now start using your IAR product.

Note: If you are upgrading from a size-limited IAR Embedded Workbench version, make sure to perform a **Rebuild All** command when you build your project for the first time using the new version.

License management

This chapter describes how to perform some tasks related to license management.

Managing your licenses

This section gives information about some tasks that you might need to perform. For some of the tasks there are also step-by-step descriptions.

More specifically, you will get information about:

- Switching between different licenses for a product
- Checking out a product for commuter authorization
- Maximum number of commuter authorizations
- Activating your license while offline
- Transferring your license to another computer while offline
- Choosing a network license manually
- Updating a product that uses a network license
- Adding more users to a network license
- Transferring network licenses
- Manually starting and stopping the license server.

See also the *Quick Reference booklet* for information about transferring a license to another computer.

SWITCHING BETWEEN DIFFERENT LICENSES FOR A PRODUCT

You can have several licenses for the same product installed on your computer. The license that was last activated will be used. To switch to an older version of the license, to another product variant, or to a network license, follow this procedure:

1. In the IAR License Manager, choose **View>Product List** and double-click the product to display the **License Details** dialog box.
2. Select the license you want to use from the **Selected license** drop-down list.

CHECKING OUT A PRODUCT FOR COMMUTER AUTHORIZATION

To check out a license from a network server:

1. Start the IAR License Manager.
2. Right-click on the product and choose **Check Out**.
3. In the **Check Out** dialog box that is displayed, specify for how many days (maximum 15 days) you want to check out a product with commuter authorization.

   You can now use the product without being connected to the license server.
4. To terminate the commuter authorization before it expires automatically, right-click on the product and choose **Check In**.

   The license will automatically be returned after the specified number of days.

MAXIMUM NUMBER OF COMMUTER AUTHORIZATIONS

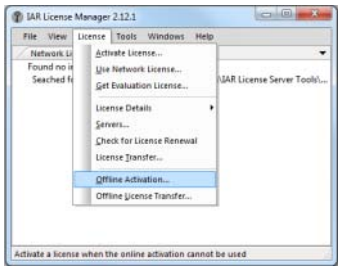
To set the maximum number of commuter authorizations to be, for example, 25% of the total number of licenses, use the `LSERVOPT` environment variable with the `-com` option on your license server computer:

```
LSERVOPTS=-com 25
```

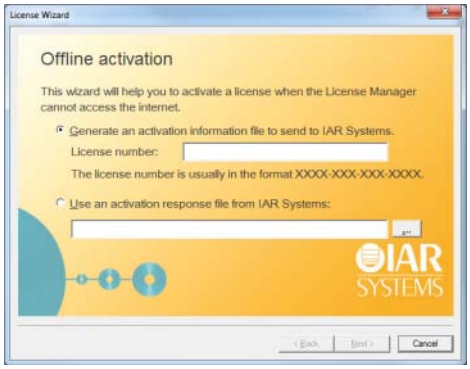
ACTIVATING YOUR LICENSE WHILE OFFLINE

To activate your license even if the IAR License Manager cannot access the internet:

1. In the IAR License Manager, choose **License>Offline Activation**.



2 In the wizard that appears, type your license number to generate an *activation information file* and click **Next**.



3 On the next page, specify whether the license should be locked to your computer or to a dongle. If your license should be locked to a dongle, but you have not received it yet, select **Yes, but I have not received the dongle yet**. You will then be able to lock the license temporarily to your computer while you wait for the dongle.

4 If you chose to lock the license to a dongle directly (by selecting **Yes** on the previous page) you will be asked to connect the dongle before proceeding.

Connect the dongle and click **Refresh dongle list**.

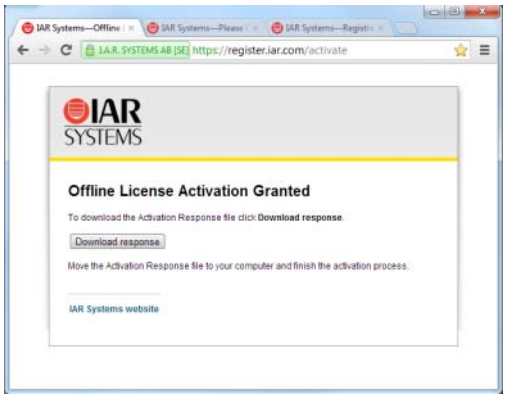
5 Next, specify where to save the activation information file.

6 Next, the wizard displays the URL `https://register.iar.com/activate`.

7 Go to a computer with internet access and browse to that web page. There you will be able to upload the generated activation file.

8 If you have not registered your license you will be asked to do that before proceeding.

9 At the end of the activation process you will be able to download an activation response file.



Bring that file to the computer where you want to use your license.

10 On the computer where you want to use your license, click **Next** in the wizard. Browse to the activation response file and click **Next** again.

You have now activated your license.

11 If you have temporarily locked your license to the computer and finally receive your dongle, repeat the offline activation, but choose to lock the license to the dongle.

12 When your license has been approved by IAR Systems, repeat the offline activation again to finally activate your permanent license.

TRANSFERRING YOUR LICENSE TO ANOTHER COMPUTER WHILE OFFLINE

A transfer involves deactivating and activating the license. Note that this procedure does not apply to Mobile licenses. For information about online license transfers, see the *Quick Reference* booklet.

1 On a computer with internet connection, go to `https://register.iar.com/deactivate`.

2 Type the license number you want to deactivate.

3 As a response you will get a *deactivation permission* file to download. Bring that file to your computer.

4 In the IAR License Manager, choose **License>Offline License Transfer**.

5 In the dialog box that appears, locate the permission file and click **OK**. A *deactivation confirmation* file will now be created.

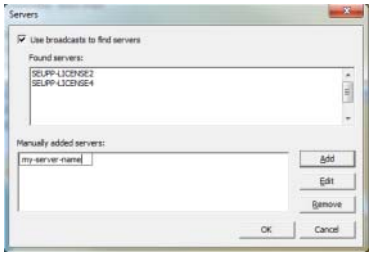
6 Bring that file to the computer with an internet connection and return to the web page.

7 Upload the deactivation ticket and your license is now ready to be activated on another computer.

CHOOSING A NETWORK LICENSE MANUALLY

1. From the IAR License Manager, choose **Licence>Use Network License** to open the wizard.
2. In the list, select the server that you want to use and click **Next**:

3. Alternatively, if the server is not in the list, click **Add a server**. In the dialog box that appears, click **Add** and type the name or IP number of your server:



Note: Entering an incorrect server name might slow down the IAR License Manager.

Click **OK** to return to the wizard.

4. In the wizard, select the right server and click **Next**.

UPDATING A PRODUCT THAT USES A NETWORK LICENSE

To update a product that uses a network license, follow this three-stage procedure:

- *Updating the IAR License Server*, page 33. This step is only applicable if you have received an update of the IAR License Server in addition to the updated IAR product.

- *Renewing a network license*, page 33.
- *Updating your IAR product*, page 33.

A product update is performed on the same computer where the previous version of the product is installed. The same license type and license lock are used after you have installed the update.

Updating the IAR License Server

If you have received an update of the license server, perform the following steps on the computer where you have the current license server installed.

Note: The installation procedure will shut down the license server and make all network licenses temporarily unavailable.

The setup program will uninstall the old version of the license server.

Follow the instructions in *Installing the IAR License Server*, page 13.

You are now finished with the IAR License Server update.

Renewing a network license

When you receive a product update, your license must be renewed.

Note: The network licenses cannot have any commuter authorizations checked out while the license is renewed.

1. Start the IAR License Manager on the license server computer.
2. Choose **License>Check for License Renewals**. This might take some time.
3. If there is new license available, you will be asked to confirm that you want to renew your licenses.
4. On the client computers, you must restart your IAR product or start the IAR License Manager to make it detect the renewed licenses.

   You are now finished and the updated license can be used.

Updating your IAR product

Before you install your updated IAR product on the client computers, decide whether you wish the update to completely *replace* your existing product installation, or whether you wish to keep your existing installation and install the update in another directory.

If you want to use multiple versions in parallel, make sure to install the new version in a different directory.

If you wish to replace your existing installation, first do as follows:

- Make copies of any product files that you have modified in your existing installation. These files will otherwise be overwritten. Your own files will remain intact.
- Uninstall the current version of the product.
- If you are using IAR Embedded Workbench, uninstall the runtime library source code (this step is only applicable if such source code has previously been installed).

Then follow the instructions in *Installing an IAR product on client computers*, page 22, for each client computer with the previous version of your IAR product installed, that you want to update.

You are then finished with the update.

ADDING MORE USERS TO A NETWORK LICENSE

If the number of concurrent users permitted by your network license is not sufficient, you can add more users to the license. To do this, you must contact your software distributor or IAR Systems to purchase an extended network license.

You will get an email notification when your purchase is finished. To activate your license with the new entitlements, perform one of these steps:

- Renewing a network license—looking for renewals for all activated licenses on the computer. If you have many licenses installed this might take some time (roughly up to one minute per license number). In this case, it might be better to perform the second step instead.
- Activating the license—renewing a specific license. You will need to specify the same license number as when the original license was activated. One advantage with this alternative is that only that license number is checked. This option can also be used if renewals fail due to, for example, a changed locking criterion.

TRANSFERRING NETWORK LICENSES

A network license can only be transferred to another server computer if the license is locked to a dongle. If you must transfer a network license that is locked to the server computer, you must contact IAR Systems.

To transfer the network licenses to a new license server computer, for example in the case of server failure, do as follows:

1. Install the IAR License Server on the new computer as described in *Installing the IAR License Server*, page 13. Do not activate the license or register the product.
2. Connect the dongle to the new license server computer.

3 Start the IAR License Manager and activate your product, using the license number, see *Activating the license*, page 18. If you have more than one product, you must repeat this step for each license number.

4 On the client computers, start the IAR License Manager and choose the new license server as the license provider:

- Choose **License>Use Network License**
- Select your product and click **Next**
- Select the new license server and click **Next**.

You have now transferred the license server to the new computer.

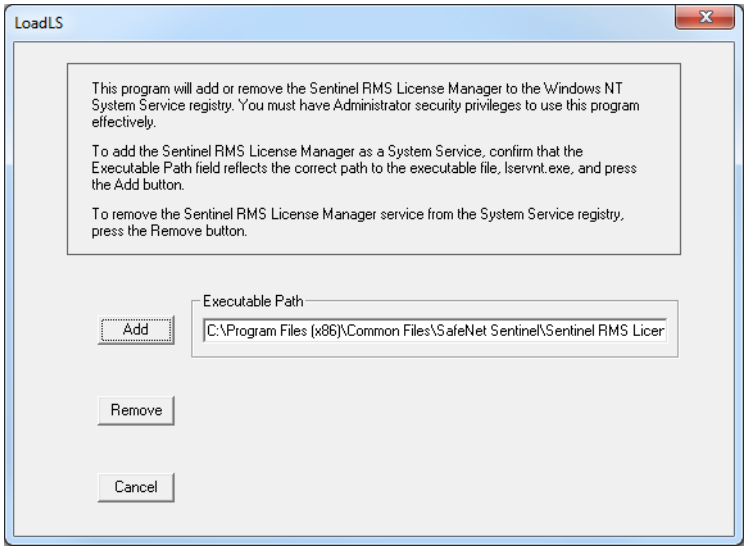
MANUALLY STARTING AND STOPPING THE LICENSE SERVER

Normally, you do not need to start or stop the license server manually. It starts automatically when the computer is started. But if you for some reason need to start it manually, it is possible.

The license server runs as a Windows service. To find out if it is running, you can check the Windows list of services. How to display that list depends on which Windows version you are using. The service is called *Sentinel RMS License Manager*.

The executable file for the service is located where you installed the Sentinel RMS License Manager during the installation of the IAR License Server Tools. The default directory depends on Windows version and language, but would typically be something like this: `C:\Program Files\Common Files\SafeNet Sentinel\Sentinel RMS License Manager`

In that directory there is a subdirectory `WinNT` where the server files are located. The name of the server executable file is `Lservnt.exe`. To start and stop it, you run `loadls.exe` (which requires administrator privileges).



Click **Add** or **Remove** to start or stop the service. If you accidentally click **Add** when the service is already running, or **Remove** when the service is not running, your will get an error message.

Logging license server activities

You can activate logging of a license server's activities. Typically, this is useful for monitoring which users are using which licenses and how much.

ENABLING THE LOGGING

To enable logging, set this environment variable on the license server computer:
`LSERVOPTS=-l` *`path_to_log_file`*

For example: `LSERVOPTS=-l C:\ServerLog\logfile.txt`

You must restart the license server for the changes to take effect.

Note: If the environment variable is set globally (for example in Windows system properties), it might affect other products.

SPECIFYING THE SIZE OF THE LOG FILES

Use the `-z` option to specify the maximum size of the log file. The size can be specified in bytes, for example `-z 2000` for 2000 bytes, in kilobytes, for example `-z 2k` for two kilobytes, or in megabytes, for example `-z 2m` for two megabytes.

For example: `LSERVOPTS=-z 2m -l C:\ServerLog\serverlog.txt`

BACKING UP THE LOG FILES

If the maximum size of the file is reached, as specified by the `-z` option, the license server copies (renames) the original log file to a backup file, which has the same name but with two numeric digits appended to its name. The logging continues in the file with the original name.

Assume this example:

The administrator has specified the maximum size of the log files as 2 Mbytes. When the size reaches 2 Mbytes, the license server adds a suffix at the end of the log files. For example: `serverlog.txt.00`, `serverlog.txt.01`, `serverlog.txt.02` up until `serverlog.txt.99`. Once this limit is reached, the license server starts generating the backup files using the same log file name series starting from `00`, which means the old log files will be overwritten. If you need more log files, you must write your own script which will back up the first 100 log files to another location (storing the content), which means it is no longer a problem when the first log files are overwritten.

DISABLE BACKING UP LOG FILES

To disable the automatic backing up of log files, add the `-x` option to the `LSERVOPTS` environment variable on the license server computer.

THE LOG FILE FORMAT

The log information is recorded in the log file, one entry per line in this format:

Element	Description
Server–LFE	Customer-defined log file encryption level as specified by the license server `-lfe` option.
License–LFE	Vendor-defined log file encryption level. If this is non-zero, this element overrides Server–LFE.
Date	The date the entry was created, in the format: Day-of-week Month Day Time (hh:mm:ss) Year, for example Wed Oct 10 08:40:46 2012.
Time-stamp	The time stamp of the entry.
Feature	The name of the feature.

Table 2: The log file elements

Element	Description
Ver	The version of the feature.
Trans	The transaction type. 0 indicates an issue, 1 a denial, and 2 a release.
Numkeys	The number of licenses in use after the current request/release. (Encrypted if encryption level is set to 3 or 4.)
Keylife	How long, in seconds, the license was used. Only applicable after a license release.
User	The user name of the application associated with the entry.
Host	The host name of the application associated with the entry.
LSver	The version of the Sentinel RMS Development Kit license server.
Currency	The number of licenses handled during the transaction. (Encrypted if the encryption level is set to 3 or 4.)
Comment	The text passed in by the license application.

Table 2: The log file elements (Continued)

A typical entry might appear as:

```
# Startup Sentinel RMS Development Kit v7.00 Fri Aug 13 17:33:31
1999  934590811 jsmith 140 4294489039

2 0 MTI1 Fri Aug 13 17:33:33 1999  934590813 99 v 0 1 0 jsmith
jsmith 7.00 1 - MA== 754986 OTM1MzQ1Nzk5

2 0 MTI1 Fri Aug 13 17:33:33 1999  934590813 99 v 2 0 0 jsmith
jsmith 7.00 1 - MQ== 905242 MTY2MDIyOA==

# Shutdown Sentinel RMS Development Kit v7.00 Fri Aug 13 17:33:34
1999  934590814 jsmith 4294489039 Mg== 2058783
```

Reference information on the IAR License Manager

This chapter describes how to use the IAR License Manager—a tool for managing your IAR product licenses.

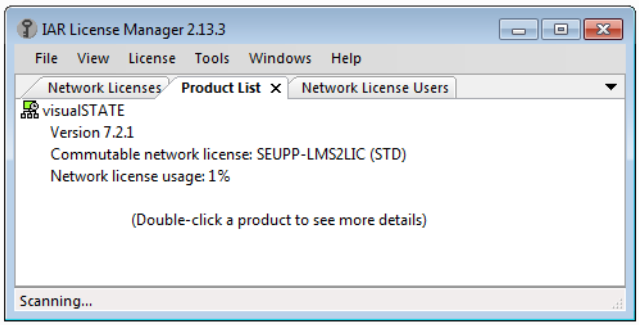
Reference information

This section gives reference information about these windows and dialog boxes:

- *IAR License Manager main window*, page 39
- *Servers dialog box*, page 45

IAR License Manager main window

The IAR License Manager is available from the **Help** menu in your IAR product. Alternatively, the IAR License Manager is also available from the Windows **Start** menu.



Use this window to manage your IAR product licenses.

File menu

The menu contains this command:

Exit	Exits the IAR License Manager.

View menu

The menu contains these commands:

Refresh	Updates network license usage information, dongle status, etc. This is automatically done every 15 seconds.
Product List	Opens the **Product List** page in the display area, which lists all installed products. Double-click a product in the list to display a dialog box where you can get detailed information about the licenses for that product, see *License Details dialog box*, page 43.
Network Licenses	Opens the **Network Licenses** page in the display area, which lists all available network licenses.
Network License Users	Opens the **Network License Users** page in the display area, which lists all users on the local network using network licenses.
Dongle List	Displays a dialog box where all connected dongles are listed.

License menu

The menu contains these commands:

Activate License	Starts the License Wizard to activate a license using a license number.
Use Network License	Starts the License Wizard to start using a network license from a license server.
Get Evaluation License	Starts the License Wizard to get an evaluation license.
License Details	Displays the **License Details** dialog box, see *License Details dialog box*, page 43.
Servers	Displays the **Servers** dialog box which lists all automatically identified servers and manually added servers. See *Servers dialog box*, page 45.
Check for License Renewal	Checks if there are any new versions available for any of the activated licenses on the computer. Note that this command might take several minutes.

License Transfer	Displays the **License Transfer** dialog box where you can select a PC-locked license that you want to transfer to another computer. Note that this command can only be performed a limited number of times per year.
Offline Activation	Starts a wizard for activating your license when your license server cannot access the internet. For more information, see *Activating your license while offline*, page 26.
Offline License Transfer	Displays a dialog box where you can choose to deactivate your license even if your computer is not connected to the internet. Typically, you do this if you want to transfer your license to another computer. For more information, see *Transferring your license to another computer while offline*, page 31.

Tools menu

The menu contains these commands:

Options	Displays the **Options** dialog box, where you can re-enable all previously suppressed dialog boxes.
Extract Optional Packages	Extracts source code libraries that were delivered with your product.

Windows menu

The menu contains this command:

Close	Closes the currently selected page in the display area of the IAR License Manager main window.

Help menu

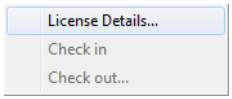
The menu contains these commands:

Collect Diagnostic Information	Displays the **Collect Diagnostic Information** dialog box and starts collecting diagnostic information. The progress is displayed in the dialog box. When finished, click **Explore Results** to view the information. Typically, this information can be useful if you contact IAR support.

Installation and Licensing Quick Reference	Opens the *Installation and Licensing Quick Reference* booklet as a PDF.
Licensing Guide	Opens the *Licensing Guide* as a PDF.
About	Displays information about the IAR License Manager.

Context menu (product list)

This context menu is available on the **Product List** page:



These commands are available:

License Details	Displays the **License Details** dialog box, see *License Details dialog box*, page 43.
Check in	Checks in a network license which you previously have checked out with commuter authorization.
Check out	Checks out a network license with commuter authorization which means you can use it as a PC-locked license for a limited time.

Context menu (network licenses)

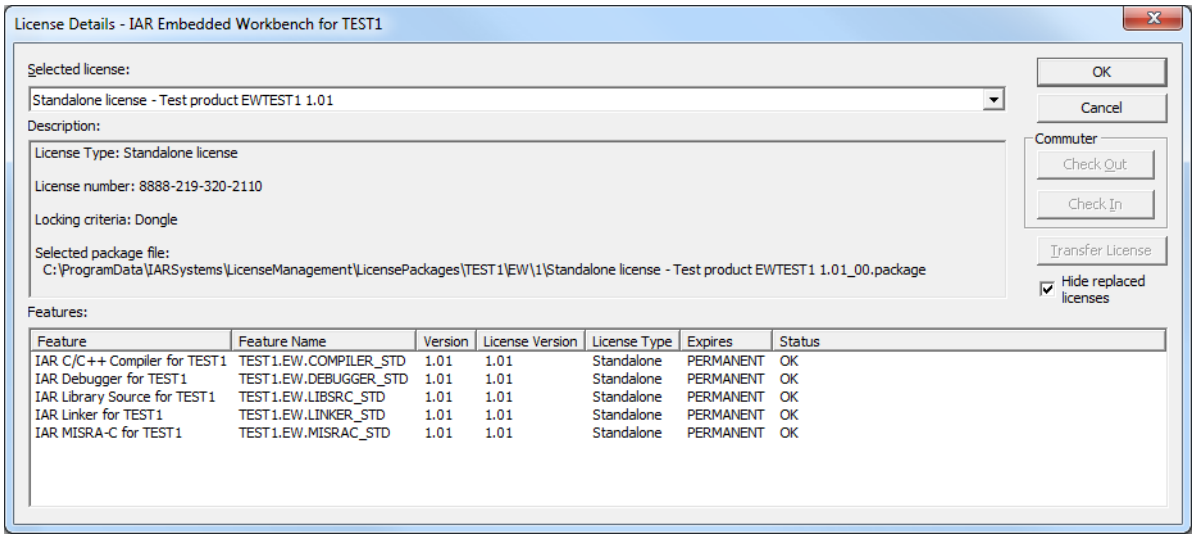
This context menu is available on the **Network License** page:

This command is available:

Delete	Deletes the selected network license from the server. This can only be performed on the license server computer.

License Details dialog box

The **License Details** dialog box is displayed when you double-click on a selected product in the **Product List** in the IAR License Manager.



Use this dialog box to choose between available licenses and to get detailed information about the selected license.

Selected license

Lists all licenses that you have activated for this product and available network licenses. Select the license that you want to use.

Description

Lists detailed information for the selected license.

Features

Displays all licensable features in the product and their license status in these columns:

Feature	The name of the feature
Feature name	The internal feature name.
Version	The feature version of the installed product component.

License Version	The version of the license. It must be greater than or equal to the version of the installed feature.
License Type	The license type.
Expires	Can be either: ● The expiration date, for time-limited licenses ● `Permanent`, for permanent licenses.
Status	The status of the license; either `OK` or an error message.

Buttons

These buttons are available:

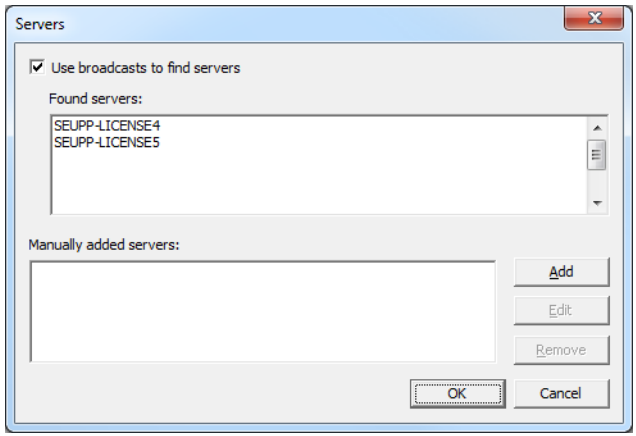
Check Out	Checks out a network license with commuter authorization which means you can use it as a PC-locked license for a limited time.
Check In	Checks in a network license which you previously have checked out with commuter authorization.
Transfer License	Deactivates the selected license, which means that you can activate it on another computer. Note that this command can only be performed a limited number of times per year.

Hide replaced licenses

Hides replaced licenses. A license is replaced when you renew your licenses, for example when you replace the startup license with the permanent license or when you activated a later version. Note that the replaced licenses are still available.

Servers dialog box

To open the **Servers** dialog box, choose **License>Servers** in the IAR License Manager.



Use this dialog box to manually point out license servers that the IAR License Server for some reason does not automatically detect.

Note that manually added non-existing servers will seriously increase response times in the IAR License Manager.

Use broadcasts to find servers

Enables broadcasts to find servers automatically on a subnet. If you disable this option, you must manually add the servers that you want to use. All references to automatically found servers will be removed.

Found servers

Lists automatically detected license servers.

Manually added servers

Lists manually added license servers.

Buttons

These buttons are available:

Add Adds a license server to the list. Click **Add** and type the name or IP number of the license server that you want to add.

Edit	Edits the name of an already added license server. Select a license server and click **Edit** to edit the license server.
Remove	Removes an already added license server. Select a license server and click **Remove** to remove the license server.

Licensing concepts

This chapter lists terms related to licensing.

Commuter authorization
A network license that you can check out from the server and use as a PC-locked license for a limited time.

Entitlement
The features your license entitles you to. In other words, the features that will be enabled and the period they can be used for.

Evaluation license
A free license that is limited in time or in function. For a time-limited evaluation license, the same product version can only be evaluated once on a specific computer.

Feature
A feature in the installed software that is enabled or disabled depending on the entitlement in your license. There is a license key for each feature.

License activation
The procedure to get the license keys from IAR Systems.

License key
A string that contains information that allows the license to verify your entitlements.

License number
A unique identifier of a license, which is used in the license activation and in contact with IAR Systems support.

License package
License keys and license information stored in a file. A license package is created on your computer when you activate a license.

License registration
All licenses must be registered with IAR Systems. During registration, contact information about the license owner is collected, most notably the email address. At the end of the registration process an email is sent to the registered address to verify that it is correct.

License server
A PC with the IAR License Server installed.

License transfer
Deactivating a license and returning it to IAR Systems, to be able to reactivate it on another computer.

Mobile licence
A single-user license that is locked to a dongle, and thus can be used on any computer where the product is installed when the dongle is connected.

Network license
A multi-user license that is located on a license server computer. This license can be used by any computer on the local network.

Offline activation
License activation requires the IAR License Manager to connect to IAR Systems over the internet. If that is not possible, there is a backup routine called *Offline activation*.

PC-locked license
A single-user license that is locked to the computer hardware and can be used on this computer only.

Permanent license
A license without a time limit.

Product
The product is what you have bought from IAR Systems. In addition to the software you have installed, the documentation, and optionally a dongle, it is a license package that entitles you to use a number of the features in the software.

Startup license
A time-limited license that you get immediately when you activate your newly purchased product.

A

Activate License (License menu) 40
activating license
  network 18
  while offline 26

B

bold style, in this guide 7
broadcast 12

C

Check for License Renewal (License menu) 40
Check in (Product List context menu) 42
Check out (Product List context menu) 42
client computers
  installing IAR products 22
  system requirements 12
  updating a product 33
Collect Diagnostic Information (Help menu) 41
command line options, typographic convention 6
commuter authorization 12
  checking out 26
  definition of 47
  maximum number of 26
components to install, selecting 22
computer style, typographic convention 6
conventions, used in this guide 6
copyright notice 2
C++ terminology 6

D

Delete (Network Licenses context menu) 42
disclaimer 2
distributor, of software 6
document conventions 6
dongle
  included in license server package 11
  Mobile license locked to 10
Dongle List (View menu) 40

E

edition, of this guide 2
Entitlement, definition of 47
Evaluation license, definition of 47
Extract Optional Packages (Tools menu) 41

F

Feature, definition of 47
File menu (IAR License Manager) 39
Found servers (Servers dialog box) 43, 45
free product updates 9

G

Get Evaluation License (License menu) 40

H

Help menu (IAR License Manager) 41

I

IAR License Manager main window 39
IAR products, installing on client computers 22
IAR Systems web site 6
IAR Technical Support 6
installation directory 6
installing
  IAR products on client computers 22
  license server 13
  network license 13
  product update 32

italic style, in this guide 6–7

L

License activation, definition of 47
License Details dialog box 43
License Details (License menu) 40
License key, definition of 47
License menu (IAR License Manager) 40
License number, definition of 47
License package, definition of 47
License registration, definition of 47
license server 10
  definition of 47
  installing 13
  manually starting and stopping 35
  network requirements 12
  system requirements for computer 12
  updating 33
license transfer
  definition of 47
  network 34
  while offline 31
License Transfer (License menu) 41
license types 10
lightbulb icon, in this guide 7
LSERVOPTS (environment variable)
  enabling logging 36
  maximum number of commuter licenses 26

M

Manually added servers (Servers dialog box) 45
Mobile license 10
  definition of 47

N

network administrator 5
network license
  definition of 47
  installing 13
  installing a product upgrade 32
  introduction to 10
  moving to other license server computer 34
  pointing out manually 32
  system requirements 12
Network License Users (View menu) 40
Network Licenses context menu 42
Network Licenses (View menu) 40
network requirements for license server 12

O

Offline Activation (License menu) 41
Offline activation, definition of 47
Offline Deactivation (License menu) 41
overview of
  installation and licensing 9
  license types 10

P

parameters, typographic convention 6
part number, of this guide 2
PC-locked license 10
  definition of 47
Permanent license, definition of 47
Product List context menu 42
Product List (View menu) 40
product updates, free 9
Product, definition of 47
publication date, of this guide 2

Q

Quick Reference booklet 5

R

reference information, typographic convention 7
registered trademarks 2
release notes 6
requirements, for network hosting license server 12

S

Servers dialog box 45
Servers (License menu) 40
software distributor 6
Startup license, definition of 47
system requirements
  client computer 12
  network license 12
systems administrator 5

T

technical notes 6
technical support 6
terminology 6
Tools menu (IAR License Manager) 41
trademarks 2
transferring a license
  network 34
  while offline 31
types, of licenses 10
typographic conventions 6

U

UDP, unblock traffic 17
updating
  a product on client computers 33
  license server 33
Use broadcast to find servers (Servers dialog box) 45
Use Network License (License menu) 40

V

vendor, of software 6
version number, of this guide 2
View License Details (Product List context menu) 42
View menu (IAR License Manager) 40

W

warnings icon, in this guide 7
web site, IAR Systems 6
Windows menu (IAR License Manager) 41