IAR Embedded Workbench[®]

Installation and Licensing Guide for IAR Embedded Workbench $^{\mathbb{R}}$





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EDITION NOTICE

Eighth edition: June 2011

Part number: ILG-8

Internal reference: P5, 1.4x, ISUD.

Contents

Figure	es	5
Prefac	ce	7
	Who should read this guide	7
	What this guide contains	7
	Document conventions	8
	Typographic conventions	8
Introd	luction	9
	How IAR Systems licensing works	9
	License types	. 10
	Mobile license	. 10
	PC-locked license	. 10
	Network licenses	. 10
	System requirements	. 10
	Moving a license between computers	.11
	Moving a mobile license	.11
	Moving a PC-locked license using the license transfer functionality	11
	Installing and using two versions in parallel	.11
	Upgrading a product	. 12
	Further information	. 12
Instal	ling a product with a Mobile or PC-locked license	. 13
	Installing a Mobile or PC-locked license	. 13
	Installing IAR Embedded Workbench	. 13
	Activating the license	. 17
	Installing the permanent key	. 20
	Upgrading a product that uses a Mobile or PC-locked licen	se
	21	
	Locating the license number and permanent key	. 21
	Installing the product upgrade	22

Installing a product with a network license	27
Network licenses	
The license server package	
The IAR Embedded Workbench software	
Network requirements for the IAR license server	
Installing a product using a network license	
Installing the license server software	
Activating the license	
Installing the permanent key on the license server computer	
Installing IAR Embedded Workbench on client computers	
Alternative installation procedure	
Using an already installed license server	
Upgrading a product using a network license	
Upgrading the client software	
Upgrading the license server software	
Adding more users to a network license	41
Transferring a license	43
Moving a license locked to a dongle	
Moving a Mobile license	
Moving a network license	
Moving a PC-locked license	44
Installing the product on the new computer	
Creating the transfer ID on the old computer	
Creating the target ID on the new computer	
Creating the license transfer code on the old computer	
Activating the license on the new computer	50
Index	51

4

Figures

1: T	Syping name, company, and license number	14
2: T	Syping the QuickStart key	14
3: S	Selecting the license lock type	15
4: S	Selecting the installation type	16
5: S	Selecting the installation directory	17
6: R	Running the license activation program	18
7: V	/erifying the locking criteria	19
8: C	Choosing registration method	20
9: I	nstalling the permanent license key	21
10:	Locating license information	22
11:	Typing name and company	23
12:	The permanent key when upgrading a license	24
13:	Selecting the upgrade installation directory for a license	25
14:	Selecting the type of upgrade for a license	26
15:	Running the license activation program for a network license	31
16:	Selecting the network license product to register	32
17:	Verifying the locking criteria for a network license	33
18:	Choosing registration method for a network license	34
19:	Installing the permanent network license key	35
20:	Typing name, company, and license number for a network license	36
21:	Providing the permanent network license key	37
22:	Selecting the installation directory for a network license	37
23:	Selecting the installation type for a network license	38
24:	The license transfer process	44
25:	Selecting the license to transfer	45
26:	Receiving the transfer ID	45
27:	Importing the license	46
28:	Reading the transfer ID from a file	46
29:	Receiving the target ID	47
30:	Reading the target ID from file	48
31:	Receiving the license transfer code	49

32:	Reading the	license transfer	code from file		50
-----	-------------	------------------	----------------	--	----

Preface

Welcome to the Installation and Licensing Guide for IAR Embedded Workbench®. It contains detailed information about how to install an IAR Embedded Workbench product, how to activate the license, register the product, and how to install a product upgrade.

Who should read this guide

You should read this guide if you:

- Are about to install a Mobile, PC-locked, or 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.

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 different license types.
- Installing a product with a Mobile or PC-locked license describes step by step how to install and activate a single-user license. It also describes how to upgrade or re-install IAR Embedded Workbench.
- *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 the client software.
- *Transferring a license* gives detailed descriptions of how to move a license to another computer, either temporarily or permanently.

Document conventions

TYPOGRAPHIC CONVENTIONS

This guide 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. Note that this style is also used for cpuname, configfile, libraryfile, and other labels representing your product, as well as for the numeric part of filename extensions—xx.
[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.
X	Identifies instructions specific to the IAR $Embedded$ $Workbench {\ensuremath{\mathbb{B}}}$ IDE interface.
	Identifies instructions specific to the command line interface.
	Identifies helpful tips and programming hints.
1	Identifies warnings.

Table 1: Typographic conventions used in this guide

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 IAR Embedded Workbench® product comes with a software license. There are two types of IAR Systems *license keys* associated with a license:

- The *QuickStart key*, which allows you to use the product for 30 days after installation
- The *permanent key*, which opens up the product for permanent usage.

You install IAR Embedded Workbench using the QuickStart key. This allows you to start using the product immediately after installation and 30 days onward. The QuickStart key is included in the welcome letter of your product package.

During the 30-day period, you must *activate* your license by registering the product with IAR Systems. After registration, you will obtain the permanent key from IAR Systems. By installing the permanent key, the product is opened up for permanent usage. Registering the product also entitles you to one year of free upgrades and prioritized technical support, depending on your purchased product.

As it can take up to 5 business days until you receive the permanent key, you should register the product as soon as possible after installation.

Note: If you do not activate and register your product, you will be unable to run it after the 30-day period.



Note: Before you make any major configuration changes to the hard disk—like reformatting the disk, changing the file system, or exchanging the hard disk for a new one—or altering the IAR Systems part of the registry, a license transfer to another computer must be performed. Otherwise, the license management system will not recognize your license. After the configuration changes have been made, the license can be transferred back to the original computer.

License types

When purchasing IAR Embedded Workbench you can choose between three kinds of permanent licenses: the Mobile or PC-locked licenses for single users and the network license for multiple users.

MOBILE LICENSE

A *Mobile license* is a single-user license, locked to a hardware lock (dongle). A *dongle* is a device that you attach to the computer's USB port or parallel port. The license can then be used on another computer by moving the dongle.

The dongle is generic, which means that you only need one dongle even if you run IAR Embedded Workbench for several different target processors on the same computer.

Note: If you want to lock your license to a dongle, you have to order it specifically when buying your IAR Systems product.

PC-LOCKED LICENSE

A *PC-locked license* is a single-user license, locked to the computer where the software is installed. This means that the license can only be used on this specific computer, unless you *transfer* the license.

NETWORK LICENSES

A *network license* is a multi-user license, located on a *license server computer* and used by multiple users on a network. The network license is locked either to a dongle that you attach to the computer's USB port (or parallel port), or to the computer where the license server software is installed.

The network license can be used on all *client computers* on the same subnetwork where the license server is installed. However, the network license is made for a maximum number of concurrent users, and the license server software keeps track of the current number of users.

SYSTEM REQUIREMENTS

For information about systems requirements:

- For client computers, see the Release notes on your product CD
- For the license server computer (network licenses only), see the *Release notes* on your license server CD.

Note: To install software, you must have administrator privileges to the system.

Moving a license between computers

You can move your license to a another computer, no matter if your license is locked to a dongle (a Mobile license) or to your PC (PC-locked license).

MOVING A MOBILE LICENSE

If you regularly work on two or more computers, you should use a Mobile license. By installing IAR Embedded Workbench on each of your computers, and locking the license to a dongle, you only need to move the dongle when switching to another computer.

See *Moving a license locked to a dongle*, page 43, for a detailed description of the procedure.

Note: If you need a license that can be moved easily between different PCs, contact your nearest IAR Systems office or your local distributor and you will be offered a dongle. Do not install the product until you have received the dongle.

MOVING A PC-LOCKED LICENSE USING THE LICENSE TRANSFER FUNCTIONALITY

If you need to transfer your license from one computer to another and you have a license that is locked to a computer—for example, when upgrading to a new PC—you should use the license transfer functionality. It allows you to export the license from one computer and import it to another computer.

See Moving a PC-locked license, page 44, for a detailed description of the procedure.

Installing and using two versions in parallel

If you want to install two versions of IAR Embedded Workbench on the same computer, you must make sure the new version is placed in an installation directory separate from the old version to avoid confusion. Before running the new software version for the first time, you must start the old version and make sure the **Reload last workspace at startup** option is turned off (on the **Project** page in the **Tools>Options** dialog box), otherwise a project file opened in the wrong version might become unusable in its original software version.

If you start the software by double-clicking a project file, it is the software version that was last run that is started, regardless of which version the project file was created in. This could make the project files unusable if the wrong version is started by mistake. To avoid this, always start the correct version of the software first, and then open the desired project file from the **File** menu.

Also make sure to check the compatibility of the object files created by the different versions. This information can be found in the release notes of your product.

Upgrading a product

You perform a product upgrade on the same computer where a previous version of the same product already is installed. You cannot change the license type and license lock when installing the upgrade.

You can replace your existing product installation with the upgrade, that is, use exactly the same installation directory. In that case, you first need to create backup copies of all files you might have modified. You should then uninstall the previous product version, before you install the upgrade.

To uninstall IAR Embedded Workbench, select the appropriate **Uninstall IAR Embedded Workbench** item from the Windows Control Panel. If you have created your own files in the installation directory, they will remain intact.

For details about upgrading a Mobile or PC-locked license, see *Upgrading a product that uses a Mobile or PC-locked license*, page 21.

For information about upgrading a network license, see *Upgrading a product using a network license*, page 40.

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 CD.
- View the technical notes on the Technical Support pages on the IAR Systems web site: www.iar.com
- Contact your IAR Systems software distributor for technical support. The contact information is available on the IAR Systems web site: www.iar.com.

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.

Installing a product with a Mobile or PC-locked license

This chapter describes how to install and activate Mobile and PC-locked licenses, and how to re-install or upgrade your installation.

Installing a Mobile or PC-locked license

The IAR Embedded Workbench installation is a three-stage procedure:

- I Install IAR Embedded Workbench using the QuickStart key, which allows you to use the product for 30 days.
- **2** During this 30-day period, activate your license by registering the product with IAR Systems. Within 5 business days, you will receive the permanent key for your license.
- **3** Install the permanent key. This opens up the product for permanent use.

Note:

- To install the software, you must have administrator privileges to the system.
- If you are to install a product upgrade, you should not follow the installation procedure described below. Instead, follow the instructions in *Upgrading a product that uses a Mobile or PC-locked license*, page 21.

INSTALLING IAR EMBEDDED WORKBENCH

- After the date is set correctly on your computer. After the initial installation, the date must not be changed until you have received and installed the permanent license key.
- **2** Remove any dongles.
- **3** Insert the IAR Embedded Workbench installation CD. The installation program should start automatically. If it does not, run the autorun.exe program from the CD.
- 4 Click Install IAR Embedded Workbench.
- **5** Accept the license agreement when prompted.

6 Type your name, company, and the 17-character license number available in your welcome letter:

IAR Embedd	ed Workbench 🛛 👂	K
Enter User	Information SYSTEM	2 5
Enter your i license nun	name, the name of your company and your IAR Embedded Workbench nber.	
Name:	John Smith	
Company:	The Company	
	Can be found on the CD cover, or via e-mail registration	
License#:	9900-007-882-2837	
InstallShield —		
	< Back Next > Cancel	

Figure 1: Typing name, company, and license number

7 Type the 16-character QuickStart key available in your welcome letter:

IAR Embedded Workbench 🛛 🗙	
Enter Licen	se Key
The license QuickStart k If you have	key can be either your QuickStart key or your permanent key. If you enter the key (found on the CD cover), you have 30 days to try the product out, received the permanent key via email, you paste it into the License Key textbox.
License #:	9900-007-882-2837
License Key	у.
U3AB74B8	7263UDE 4
- Read Lice	ense Key From File
C:	Browse
InstallShield —	
	< Back Next > Cancel

Figure 2: Typing the QuickStart key

Note: If you are re-installing the software and you have already registered it, you should type or paste the permanent key instead of the QuickStart key.

8 Select the type of license lock you wish to use.

AR Embedded Workbench for MSP430 4.20.1	
Select Type of License Lock	SYSTEMS
Specify the hardware you would like to lock the lic product is registered at IAR Systems and what type	ense to. Your choice will affect how your s of permanent key you will recieve.
	Lock type information
O My computer	Hardware Dongle.
• Hardware dongle	The license will be locked to a hardware dongle.
InstallShield	< Back Next > Cancel

Figure 3: Selecting the license lock type

If you have a:

- PC-locked license, select My computer as the type of license lock.
- Mobile license, select **Hardware dongle** as the type of license lock. Do not attach the dongle until the installation program instructs you to do so. Do not select this option if you have not received a dongle.

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



Figure 4: Selecting the installation type

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

Note that this step does not always apply.

IAR Embed	ded Workbench 🛛 🔀
Choose D Select fo	lder where setup will install files.
	Install IAR Embedded Workbench to: C:\\IAR Systems\Embedded Workbench Change
nstallShield –	< Back Next > Cancel

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

Figure 5: Selecting the installation directory

If your new installation is incompatible with an existing installation, a dialog box informs you and you must then choose another installation directory.

- **I** Review the settings for the installation and click **Install** to install the program files.
- **12** Attach the dongle when you are instructed to do so by the installation program.

ACTIVATING THE LICENSE

At this point, you can use IAR Embedded Workbench for a period of 30 days. To open up the product for permanent use, you have to activate the license: first register the product with IAR Systems to receive a permanent key, and then install the permanent key.

If you do not register the product, you will be unable to use the software after the 30-day period.

Registering the product

When the program files have been installed, a license activation program is started:



Figure 6: Running the license activation program

2 The next dialog box shows the product information to be sent to IAR Systems. Verify that the product information is correct.

3 In the next dialog box, verify the locking criteria:



Figure 7: Verifying the locking criteria

4 In the next dialog box, select how to register:



Figure 8: Choosing registration method

• Register now using your installed web browser.

You must fill in all fields marked with an asterisk (*). Make sure to click the **Submit** button on the resulting web page to send the information to IAR Systems.

• Register later.

The information you typed during the installation is saved. However, you must remember to run the license activation program at a later time to send the information to IAR Systems. You do this by selecting **IAR Systems License Activation** in the Windows **Start** menu.

5 Finish the activation program and the installation program.

INSTALLING THE PERMANENT KEY

Within 5 business days after sending in your registration, the permanent key will be sent to you via the email address that you typed into the registration form. Install the permanent key as follows:

Select and copy the permanent key from the email message, according to the instructions included in the message.

- 2 Choose IAR Systems License Manager from the Windows Start menu. (Requires administrator privileges.)
- 3 In the License Manager window, choose License>Install.
- **4** Paste the permanent key into the text field:

Install License	
License key:	Close
SUS4472NU9HHNYS9RFHWLWJBAQGBFGGAUSJRNMF264T3JNY7 XSK647X/U4TGSADYETWSM681LGRH5E0AH0PHAAW4SGX2G30 QFEDDFA4JHNF3HCDXWTA2AZLQCN4TDTLWK00EQ3XQVCKQ3Q4 RSJSHFXQUFZWIRT3RR0T5H0GZ4ZVB#F6ature: EWCHIP Version: 01_WIN Stand-alone license (dongled:USB-8007) (Licno:1012-345-613 -8420)	Install
□ Optional for Network licenses □ Specify a license server (name or TCP/IP address) to be contacted	Input file

Figure 9: Installing the permanent license key

5 Click Install.

You are now finished with the IAR Embedded Workbench installation.

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

Upgrading a product that uses a Mobile or PC-locked license

You perform a product upgrade on the same computer where a previous version of the same product already is installed. You cannot change the license type and license lock when installing the upgrade.

LOCATING THE LICENSE NUMBER AND PERMANENT KEY

The license number and permanent key can be found by using the IAR License Manager.

Start the IAR Systems License Manager from the Windows Start menu. (Requires administrator privileges.)

2 Locate your product in the window, and double-click the license listed below the product to display the license number and permanent key.



Figure 10: Locating license information

The license number can also be found in the letter accompanying the upgrade.

The permanent key can also be found in the email message you received from IAR Systems after you registered the original product.

INSTALLING THE PRODUCT UPGRADE

Before you install the upgrade, decide if you wish the upgrade to completely *replace* your existing product installation, or if you wish to keep your existing installation and install the upgrade in another directory.

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

- Make copies of linker configuration files, libraries, and any other product files 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 by selecting the appropriate **Uninstall IAR Embedded Workbench** item from the Windows Control Panel.

Then perform the following steps on the computer where you currently have the product installed:

- I Insert the IAR Embedded Workbench installation CD. The installation program should start automatically. If it does not, run the autorun.exe program from the CD.
- 2 Click Install IAR Embedded Workbench.
- **3** Accept the license agreement when prompted. By clicking the **Accept** button, you confirm that you have read and understood the license agreement.
- **4** Type your name and company. The 17-character license number should already be filled in. If it is not, you must type the license number of the product you are upgrading; see *Locating the license number and permanent key*, page 21.

IAR Embedd	ed Workbench	×
Enter User	Information	EIAR SYSTEMS
Enter your i license nun	name, the name of your company and your IAR Embedded Workbench nber.	
Name:	John Smith	
Company:	The Company Can be found on the CD cover, or via e-mail registration	
License#:	9900-007-882-2837	
InstallShield —	< Back Next >	Cancel

Figure 11: Typing name and company

5 The permanent key should already be filled in. If it is not, you must provide the permanent key of the product you are upgrading; see *Locating the license number and permanent key*, page 21.

IAR Systems Product Setup
Enter License Key
The license key can be either your QuickStart key or your permanent key. If you enter the QuickStart key (found on the CD cover), you have 30 days to try the product out. If you have received the permanent key via email, you paste it into the License Key textbox.
License #: 1001-112-168-1240
License Key:
SUS4472NU9HHNYS9RFHwLWIBAQGBFGGAUSJRNMF264T3JNY7X9K647XUUTGSAD YETWSM681LGRH5EOAH0PHAAW4SG×ZG300FEDDFA4JHNF3HCDXWTA2AZLQCN4TD TLWK00EQ3XQVCKQ3Q4RSJ3HFXQJF2WIRT3RRQT5H0G242V98HFeature: EWCHIP Version: 01_WIN Stand-alone license (dongled:US8-8007) (Licno:1012:345-613-8420)
Read License Key From File
C: Browse
InstallShield
< Back Next > Cancel

Figure 12: The permanent key when upgrading a license

6 Accept the default installation directory or specify a directory of your choice. If you want the installation directory to be the same as in the previous installation, make sure you have first uninstalled the previous version.



Figure 13: Selecting the upgrade installation directory for a license

If your new installation is incompatible with an existing installation, a dialog box will inform you and you must then choose another installation directory.



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

Figure 14: Selecting the type of upgrade for a license

If you choose **Custom**, select the components you want to install in the next dialog box. Note that this step does not always apply.

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

You are now finished with the IAR Embedded Workbench upgrade.

Installing a product with a network license

This chapter gives information to the system or network administrator about how to install the IAR Systems license server software on the designated server and IAR Embedded Workbench® on the client computers.

Network licenses

A network license is a multi-user license, consisting of license server software on one PC, and individual installations of IAR Embedded Workbench on other computers—clients—in the same network. The network license is locked to the computer where the license server software runs, either to the server itself or to the dongle attached to it.

The network license can be used by all client computers where IAR Embedded Workbench is installed. However, the network license is made for a maximum number of concurrent users, and the license server software keeps track of the current number of users. Note that you will have one license number for all client installations, independent of the number of users the license covers.

THE LICENSE SERVER PACKAGE

When you order a network license, you receive:

- 1 CD with the license server software
- 1 dongle (if explicitly ordered)
- 1 client package with IAR Embedded Workbench.

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

The use of a dongle is optional but recommended. With the dongle attached to the license server computer you can easily move the license server software to a different server computer, for example, in case of server failure. If the dongle is not attached during installation, the network license will be locked to that specific server computer.

The license server software is generic and you can use this program for all IAR Embedded Workbench products you install.

THE IAR EMBEDDED WORKBENCH SOFTWARE

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

Each time an IAR Embedded Workbench using a network license starts up, it requests permission to run from the license server. If the maximum number of concurrent users has not been reached, the license server will grant permission to use the network license.

When a client stops using the product, the permission to use the network license remains locked to that client for another thirty minutes before it is released to another client. In the IAR License Manager program you can view the status of the license. This program is installed with the product.

Network requirements for the IAR license server

If you use network licensing, the license server will be contacted automatically to obtain a license.

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 between the client and the server, for example Windows Firewall. You have to configure it to allow inbound traffic on UDP port 5093.

UDP broadcast packets at port 5093 are also used in these situations:

- During installation of the tools on a client computer to automatically find and set up the server location in the license.ini file.
- During a broadcast from the IAR license manager when Show all is selected.
- As a last resort, if the client computer does not find/know any server.

In network configurations where the broadcast function is not available or the license server is not yet up and running, the server location must be manually typed in the license.ini file.

The license.ini file is located at X:\Program Files\Common Files\IAR systems\Licenses\Embedded Workbench\yy\zz\, where X is the drive where the operating system is installed, yy is the product name, and zz is the feature version.

In the license.ini file, the Loc0 entry must be added under the [LicenseLocation] category:

Syntax:

LocX=<feature name>,<feature version>,server:<IP address>

The LocX defines where to find the specific feature. x must start from 0, and if there are more than one licensed component (feature), the x numbers must be in continuous order.

Example:

```
[LicenseLocation]
Loc0=EWV850,01_WIN,server:192.10.1.1
Loc1=EWV850-R,01_WIN,server:192.10.1.1
```

Installing a product using a network license

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

- I Install the IAR License Server software on a server computer.
- **2** Activate your network license by registering the product with IAR Systems. Within 5 business days, you will receive the permanent key for your license.
- **3** Install the permanent key on the license server.
- **4** Install IAR Embedded Workbench on the client computers, by using the permanent key.

Note:

- To install the software, you must have administrator privileges to the system.
- The procedure described below does not allow you to install and run IAR Embedded Workbench on the client computers until you have received the permanent key from IAR Systems. If you need or want to run IAR Embedded Workbench on the client computers immediately after receiving your product package, see *Alternative installation procedure*, page 38.

Important: If you wish to add this network license to an already installed IAR License Server, see *Using an already installed license server*, page 39, for instructions. Do not follow the installation procedure described below.

INSTALLING THE LICENSE SERVER SOFTWARE

The permanent key you receive after registering is only valid for the computer you registered the product from.

Note: Unless you use a dongle, it is *very* 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.

- Choose a suitable server computer for the license server software, see the release notes on your license server CD for recommendations.
- **2** Configure your firewall to allow inbound traffic on UDP port 5093.

- **3** Remove any dongles.
- **4** Insert the IAR License Server installation CD. The installation program should start automatically. If it does not, run the autorun.exe program from the CD.
- 5 Click Install the IAR License Server.
- **6** Accept the license agreement when prompted. Select **I accept the terms of the license agreement** and click **Next**, to confirm that you have read and understood the license agreement.
- 7 Confirm the settings for the installation or modify and then review them. Click **Next** to install the program files.

The server files will be installed in the Common Files directory. The license server software will start automatically after installation. It will also start automatically every time you restart the computer.

8 You will be asked if you want to activate a network license. Select **Activate a network license** and click the **Finish** button.

ACTIVATING THE LICENSE

Before you use your network license, you must activate it: first register the product with IAR Systems to receive a permanent key, and then install the permanent key.

Registering the product

When the program files have been installed, a license activation program is started:



Figure 15: Running the license activation program for a network license

Note that the license activation program can also be started from the Windows start menu.

Click Next.

2 In the License Activation application, select **For license server, register a network license**, and type the 17-character license number of the IAR Embedded Workbench product that you want to register.

🛢 IAR Sy	stems License Act	ivation v1.12A					×
S ne	elect a lice ew license	nse from the lis number to regis	t or er ster	nter a	SYS	IAR STEMS	
	License Number 1000-213-569-7205 9998-244-609-4370	Product Name IAR Embedded Workbench for R IAR Embedded Workbench for N	enesas M1 EC V850	Version 3.10A 3.30A	Registered No Unknown	HostID Valid None	
•	For license serv	er, register a network lic	ense.			1	
	License numbe	r: 9000-063-016-5052					
•	Do not register	any products right now.	7.				
			< Ba	ack	Next >	Cancel	

Figure 16: Selecting the network license product to register

3 The next dialog box shows the product information to be sent to IAR Systems. Verify that the product information is correct. Note that for network licenses, only the license number is filled in.

4 In the next dialog box you will be asked to verify the locking criteria. If your license server uses a dongle, select **Hardware dongle** and make sure the dongle is attached to the license server computer.



Figure 17: Verifying the locking criteria for a network license

- **5** In the next dialog box you must choose how to send in your registration to IAR Systems, choose between:
 - Register using your web browser-this is the recommended way of registering.
 - Register later—the information you typed is saved in the Windows registry. In case of a failure during the registration procedure, you can find the information also in a file called registration.txt in the program folder, for example ...\IAR Systems\Embedded Workbench 6.x\Product_Name\registration.txt. However, you must remember to run the license activation program at a later time to

send this file to IAR Systems, by selecting **IAR Systems License Activation** on the Windows **Start** menu.

€	IAR Systems License Activation v1.12A
	Choose how to register your product Register online now: These options require that you are connected to the Internet.
	 Register now using your web browser Register later:
	 Register later by starting this IAR License Activation program from the Start menu
	Note that it may take a few days after you register until you receive your permanent license key.
	< Back Finish Cancel

Figure 18: Choosing registration method for a network license

Select your choice and click Finish.

6 In the form, type your contact information. In the web form, you must fill in all fields marked with an asterisk (*), and in the email form all fields in boldface. Make sure to click the **Submit** button on the resulting web page, or the **Send** button in the email form, to send the information to IAR Systems. When you have submitted the registration, exit the installation program.

Within five business days after submitting your registration, you will receive the permanent key via email. Then you should:

- Install the permanent key on the license server computer as described in *Installing the permanent key on the license server computer*, page 35.
- Install the client software as described in *Installing IAR Embedded Workbench on client computers*, page 36.

When activating products with a network license, it is important that you register only the *license server* installation. Do not send in registration information from computers in the network where you have installed IAR Embedded Workbench only.

INSTALLING THE PERMANENT KEY ON THE LICENSE SERVER COMPUTER

Within five business days after sending in your registration, the permanent key will be sent to the email address that you typed into the registration form. Install the permanent key as follows:

- I If the server computer has a firewall, for example Windows Firewall, you have to configure it to allow inbound traffic on UDP port 5093. How to do this depends on which firewall you are using. For some versions of the Windows Firewall you define an *exception* for the port. For others, you choose **Advanced Settings** and define a new *inbound rule* for the port.
- **2** Select and copy the permanent key from the email message, according to the instructions included in the message.
- **3** Choose **IAR Systems License Manager** from the Windows **Start** menu. (Requires administrator privileges.)
- 4 In the License Manager window, choose License>Install.
- **5** Paste the permanent key into the text field:

Install License	
License key:	Close
SUS4472NU9HHNYS9RFHWLWJBAQGBFGGAUSJRNMF264T3JNY7 X9X647/XUJ4TG5ADYETWSM681LGRH5E0AH0PHAAW4SGX2G30 QFEDDFA4JHNF3HCDXWTA2A2LQCN4TDTLWK00EQ3XQVCK03Q4 RSJSHFXQJF2WIRT3RRQT5H0GZ4ZVB#F6ature: EWCHIP Version: 01_WIN Stand-alone license (dongled:USB-8007) (Licno:1012-345-613 -8420)	İnstall
Optional for Network licenses Specify a license server (name or TCP/IP address) to be contacted	Input file

Figure 19: Installing the permanent network license key

6 Click **Install**. You will be prompted to verify that you are indeed installing a network license.

Note: To see your license, you must choose View>All Servers.

You are now finished with the installation of the IAR License Server, but before you continue with the installation of IAR Embedded Workbench on the client computers:

• Make the 17-character license number and the permanent key available to each client computer; either send it via email or save it to a network file to which the client computers have access.

• Start the IAR License Manager on the server and verify that you can see the product license you just installed.

INSTALLING IAR EMBEDDED WORKBENCH ON CLIENT COMPUTERS

The following steps should be repeated on each client computer.

- I Insert the IAR Embedded Workbench installation CD. The installation program should start automatically. If it does not, run the autorun.exe program from the CD.
- 2 Select Install IAR Embedded Workbench.
- **3** You must accept the license agreement when prompted. By clicking the **Accept** button, you confirm that you have read and understood the license agreement.
- **4** Type your name, company, and the 17-character license number that has been made available by the one who installed the permanent key on the license server computer:

IAR Embedd	ed Workbench 🛛 🔀
Enter User	Information
Enter your license nur	name, the name of your company and your IAR Embedded Workbench nber.
Name:	John Smith
Company:	The Company
	Can be found on the CD cover, or via e-mail registration
License#:	9900-007-882-2837
InstallShield —	
	< Back Next > Cancel

Figure 20: Typing name, company, and license number for a network license

5 Provide the permanent key, which has been made available by the one who installed the permanent key on the license server computer:

IAR Embedde	d Workbench for MSP430 4.20.1 🛛 🛛 🔀
Enter Licens	se Key
The license QuickStart k If you have i	key can be either your QuickStart key or your permanent key. If you enter the .ey (found on the CD cover), you have 30 days to try the product out, eceived the permanent key via email, you paste it into the License Key textbox.
License #:	9900-007-882-2837
License Key	r.
RXA9w52 7024s1ISH V5VJVDI10	KORTGU7RVGT91AV564A52J26M7Z41J8584M0RXJPWMJSUJ70MT858VAVFD VS3ZRW3SAUECMRDCRSVQNECKUD1LMC2CWTJ13ETSSBPNR0E1M3QEZ4 J3JIC8E4# Feature: EW Version: 1.2_WIN
- Read Lice	nse Key From File
C:	Browse
InstallShield —	
	< Back Next > Cancel

Figure 21: Providing the permanent network license key

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



Figure 22: Selecting the installation directory for a network license

If your new installation is incompatible with an existing installation, you need to choose another installation directory.

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

IAR Embedded	Workbench for MSP430 4.20.1
Setup Type Select the setu	up type to install.
Please select	a setup type.
• Complete	All program features will be installed. (Requires the most disk space.)
Custom	Select which program features you want installed. Recommended for advanced users.
nstallShield	< Back Next > Cancel

Figure 23: Selecting the installation type for a network license

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

8 Review the settings for the installation and click Next to install the program files.

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

You are now finished with the IAR Embedded Workbench installation.

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

Alternative installation procedure

The regular installation procedure does not give you the possibility to install and run IAR Embedded Workbench on the client computers until you have received the permanent key from IAR Systems. Receiving the key can take up to five business days

after registration. If you want to run IAR Embedded Workbench on the client computers immediately after receiving your product package, proceed as follows:

- I Install the client software as described in *Installing IAR Embedded Workbench on client computers*, page 36, with the following exception: in step number 5, on page 37, instead of providing the permanent key, type the QuickStart key available in your welcome letter.
- **2** Install the license server software as described in *Installing the license server software*, page 29.
- **3** Activate the license by registering the License Server product as described in *Registering the product*, page 31.
- **4** When you receive a permanent key from IAR Systems, send the permanent key and the license number by email to each client computer, and make sure that inbound traffic on UDP port 5093 is allowed on the server (see *Installing the permanent key on the license server computer*, page 35).
- **5** Make sure that the license server software is up and running on the license server computer.
- **6** On each client computer, install the permanent key as described in *Installing the permanent key*, page 20.

Note: You should be aware that the installation procedure described above has some disadvantages compared to the regular procedure:

- It requires you to perform an additional set of steps on each client computer.
- A subsequent product upgrade will require you to manually provide the permanent key on each client computer when you install the IAR Embedded Workbench upgrade.

Using an already installed license server

If you already have an IAR License Server installed and you wish to use it for your new IAR Embedded Workbench product, proceed as follows:

- On the license server computer, choose **IAR Systems License Activation** from the Windows **Start** menu. In the license activation application, click **Next**.
- Continue to activate your license as described from step 2 in *Activating the license*, page 30.

Upgrading a product using a network license

It is possible to receive new versions of both the IAR Embedded Workbench software and the license server software.

You perform a product upgrade on the same computer where a previous version of the same product already is installed. You continue to use the same license type and license lock after installing the upgrade.

UPGRADING THE CLIENT SOFTWARE

Before you install the upgrade on the client computers, decide if you wish the upgrade to completely *replace* your existing product installation, or if you wish to keep your existing installation and install the upgrade in another directory. If you wish to replace your existing installation, first do as follows:

- Make copies of linker configuration files, libraries, and any other product files 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 by selecting the appropriate Uninstall IAR Embedded Workbench item from the Windows Start menu.

Then follow the instructions in *Installing IAR Embedded Workbench on client computers*, page 36, for each client computer where you have the previous version of your IAR Embedded Workbench installed.



Make sure to do this on each client computer. You are then finished with the IAR Embedded Workbench upgrade.

For information about locating the license number and permanent key, see *Locating the license number and permanent key*, page 21.

UPGRADING THE LICENSE SERVER SOFTWARE

If you have received an upgrade of the network license server software, 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 software.
- 2 Follow the instructions in *Installing the license server software*, page 29.
- **3** If you are asked to activate the license or register the product, select **Finish the installation without activating a license**. You should not register the license server upgrade, because you already have registered the product when you first installed it.

You are now finished with the IAR License Server upgrade.

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.

Install the new permanent key on the license server computer as described in *Installing the permanent key on the license server computer*, page 35.

Adding more users to a network license

Transferring a license

This chapter describes how you can move a license between computers, using either a dongle or the license transfer functionality.

Moving a license locked to a dongle

If you have a license locked to a dongle, you can use the license on another computer by moving the dongle.

MOVING A MOBILE LICENSE

If you need to transfer your license between computers on a regular basis, you should purchase a Mobile license that includes a dongle to which you lock the license.

- I Install IAR Embedded Workbench on computer A using the QuickStart key as described in *Installing IAR Embedded Workbench*, page 13. Specify hardware dongle as the type of license lock to be used.
- **2** Activate the license and install the permanent key as described in *Activating the license*, page 17.
- **3** Make the license number and the permanent key available to computer B, for instance by saving them to a file.
- **4** Install IAR Embedded Workbench on computer B as described in *Installing IAR Embedded Workbench*, page 13, but with one important exception: instead of using the QuickStart key, type the permanent key. Select **Hardware dongle** as the type of license lock to be used. When the installation program asks you to, move the dongle to computer B.

You can now use IAR Embedded Workbench on both computers by simply moving the dongle between them.

MOVING A NETWORK LICENSE

The network license should typically be locked to the dongle that is included in the product package. To move the network license to a new license server computer, for example in the case of server failure, do as follows:

- I Install the license server software on the new computer as described in *Installing the license server software*, page 29. Do not activate the license or register the product.
- 2 Send the license number and the permanent key by email to each client computer.

3 On each client computer, re-install the permanent key as described in *Installing the permanent key*, page 20.

Moving a PC-locked license

In some cases you might want to transfer your PC-locked license to another computer, for example when purchasing a new computer. To transfer a PC-locked license between two computers, the license must first be de-activated on the old computer and then activated on the new computer. For this to work correctly, license and host information must be transferred between the two computers.

The picture below gives an overview of the license transfer process:



Figure 24: The license transfer process

INSTALLING THE PRODUCT ON THE NEW COMPUTER

- I On the old computer, make the permanent key available to the new computer by saving it to a file. For information on how to locate the permanent key, see *Locating the license number and permanent key*, page 21.
- **2** Install the product according to the instructions in *Installing a Mobile or PC-locked license*, page 13.

CREATING THE TRANSFER ID ON THE OLD COMPUTER

Next you create a *transfer ID* on the old computer, identifying the transfer of the existing license.

- I On the old computer, choose IAR Systems License Manager from the Windows Start menu. (Make sure you run it with administrator privileges.)
- 2 In the License Manager window, choose License>Transfer.

3 Select **Export a license from this PC to another PC** and select the license to transfer:

Transfer License		
What to do		
C Import a license to this P	C from another PC	
Export a license from this	PC to another PC	
Select a license to be ex	ported:	
License Number	Feature	Version
1000-123-456-7890	EWAVR	2.25_WIN
	Next >>	Cancel

Figure 25: Selecting the license to transfer

4 The next dialog box displays the transfer ID, which you will need on the new computer:

Transfer ID code	×
Transfer ID:	
TRANSFER-ID-VPEJXPMYXL2J100BHW01JNZ	ave To File
- Instructions	
Save the Transfer ID to file. Start the IAR License Manager on the PC to which the license will be transferred, and Import the license. Enter this Transfer ID when prompted.	
<< Back Next>>>	Cancel

Figure 26: Receiving the transfer ID

- **5** Click **Save To File** and save the transfer ID to a file that you have access to on the new computer.
- **6** Click **Next** and keep the **Transfer License** dialog box open on the old computer. You will return to the next dialog box later.

CREATING THE TARGET ID ON THE NEW COMPUTER

Next you import the transfer ID to the new computer and create a *target ID*, identifying the new host for the license.

- I On the new computer, choose IAR Systems License Manager from the Windows Start menu. (Make sure you run it with administration privileges.)
- 2 In the License Manager window, choose License>Transfer.
- **3** Select Import a license to this PC from another PC:

ransf	er License		
Wh	at to do		
۲	Import a license to this P(C from another PC	
0	Export a license from this	PC to another PC	:
	Select a license to be exp	ported:	
	License Number	Feature	Version
	1000-123-456-7890	EWAVR	2.25_WIN
		Next>	>> Cancel
		3	

Figure 27: Importing the license

4 In the next dialog box, provide the transfer ID that you received in step number 4, on page 45. Click **Read From File** and locate the file where you saved the transfer ID:

Transfer ID 🔀
Enter the Transfer ID:
Enter the mansier i.D.
TRANSFER-ID-VPEJXPMYXL2J100BHW01JN
Instructions The Transfer ID is obtained and saved to file when exporting the license from the PC where the license currently is installed. Select "Read From File" to open this file.
<< Back Next >> Cancel

Figure 28: Reading the transfer ID from a file

•

Target ID code	×
Target ID: TARGET-ID-TUHWQG0V5FSGGQHAMSNRU A PHSCTA1ITZ2ZLYLX1RKYDAK	Save To File
Instructions Save the Target ID to file. On the PC where the lice currently is installed, enter the Target ID when prom	ense Ipted.
Next >>	Cancel

5 The next dialog box displays the target ID, which you will need on the old computer:

Figure 29: Receiving the target ID

- **6** Click **Save To File** and save the target ID to a file that you have access to on the old computer.
- 7 Click Next and keep the license transfer dialog box open on the new computer. You will return to the next dialog box later.

CREATING THE LICENSE TRANSFER CODE ON THE OLD COMPUTER

Next you import the target ID to the old computer and create a *license transfer code* that will activate the license on the new computer. In the process, the license will become inactive on the old computer.

I On the old computer, provide the target ID you received above. In the dialog box, click **Read From File** and locate the file to which you saved the target ID:

Target ID
Enter the Target ID:
TARGET-ID-TUHWQG0V5FSGGQHAMSN RUPHSCTA11TZ2ZLYLX1RKYDAK
Instructions
The Target ID is saved to file on the PC to which the license will be transferred. Select "Read From File" to open this file.
Clicking "Transfer" will execute the license transfer from this PC.
<< Back Transfer Cancel

Figure 30: Reading the target ID from file

2 Click **Transfer**. The license now becomes inactive and can no longer be used on the old computer.

3 The next dialog box displays the license transfer code, which you will need on the new computer:



Figure 31: Receiving the license transfer code

4 Click **Save To File** and save the license transfer code to a file that you have access to on the new computer.



Warning: If you lose the license transfer code, you will not be able to activate the license on the new computer. This means that the license cannot be used on any computer.

5 Click **End** to complete the transfer of the license on the old computer.

ACTIVATING THE LICENSE ON THE NEW COMPUTER

Finally, you import the *license transfer code* to the new computer.

I On the new computer, provide the license transfer code you received above. In the dialog box, click **Read From File** and locate the file to which you saved the transfer code:

Transfer Completion
Enter the License Transfer code:
LICENSE-TRANSFER-4467B21CBAD678DC2 422FFB86D48EECC2EF291ADDE3CE039808 3DF68933EC07428081226C2A0678DFF48H4 B0BE80E52A39628858A5D5864C624C71F2E FF6CAF8ED7AA7018F759580314E6FD876FC 1088A134435D029E7017489D09D15AAB97B LISENUETIONS
The License Transfer code is saved to file on the PC from which the license has been transferred. Select "Read From File" to open this file.
< Back Complete Cancel

Figure 32: Reading the license transfer code from file

2 Click Complete to complete the transfer of the license to the new computer.

The license has now been activated on the new computer.

A

activating the license	
Mobile or PC-locked	17
network	
alternative installation procedure	38

B

back-up copies									 		12
back-up files									 		22
bold style, in this guide.									 		. 8

C

client computers
installing IAR Embedded Workbench (network license) 36
system requirements10
upgrading a product with network license
command line options, typographic convention
command prompt icon, in this guide
components to install
selecting for a Mobile or PC-locked license 16
selecting on client computers (network license)38
computer style, typographic convention
conventions, used in this guide
copyright notice2

D

disclaimer	2
distributor, of software 1	2
document conventions	8
dongle	
using with Mobile license1	0
using with network license2	27

Ε

edition, of this	guide	2

fraa	product	ungradas															(ì
nee	product	upgrades	 • •	•••	•••	•••	•••	•••	•••	•	• •	• •	٠	 ٠	• •	• •	• >	,

Η

hardware lock. See dongle

IAR Embedded Workbench installing on client computers (network license)36 sharing license server software between IAR products . 39 installation directory, using for product upgrade.....12 IAR Embedded Workbench on client computers....36

license activation program	1	18, 2	31
----------------------------	---	-------	----

License Manager
license server computer
selecting
system requirements10
license server software
installing
installing permanent key
network requirements
upgrading40
using for several products
license types
lightbulb icon, in this guide

M

Mobile licenseinstalling13installing a product upgrade21moving between computers43system requirements10moving a license11permanently (PC-locked)44temporarily43

Ν

network administrator
network license10
adding more users41
alternative installation procedure
installing
installing a product upgrade40
locking to dongle
moving to other license server computer
system requirements10
network requirements for license server
number of users, changing41

0

overview of	
installation and licensing	9
license keys	9
license types.	10
transferring a license	11

Ρ

parameters, typographic convention
part number, of this guide2
PC-locked license
installing
product upgrade
system requirements
permanent key9
installing for Mobile or PC-locked license
installing on client computers (netwerok license)37
product upgrades, free
publication date, of this guide

Q

Quick Reference booklet	7
QuickStart key	9

R

reference information, typographic convention8
registered trademarks2
registering the product
Mobile or PC-locked license
network license
release notes
requirements, for network hosting license server28

-•

S

software distributor
stand-alone license10
system requirements
client computer
network license
systems administrator7

Т

technical notes
technical support12
tools icon, in this guide
trademarks
transferring a license
Mobile
network
overview of
permanently (PC-locked)
two versions in parallel
types, of licenses10
typographic conventions

U

upgrading a product	12
license server software	40
Mobile or PC-locked license	21
network license on client computers	40
users, adding to network license	41

V

vendor, of software	• •				•		•	•	•	 •		. 1	2
version number, of this guide	• •				•		•	•	•	 •	•		2

W

warnings icon, in this guide	3
web browser	
using to register a Mobile or PC-locked license 20)
using to register a network license	3
web site, IAR Systems	2