User's Manual

Floating License V1.00.00

User's Manual: Client

Target Device

RL78 Family

RX Family

RH850 Family

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(2012.4)

How to Use This Manual

This manual describes the role of the floating license for developing applications and systems for RH850 family, RX family, and RL78 family, and provides an outline of its features.

Readers	This manual is intended for users who wish to using the IDE (CS+ or e^2 studio) and design software and hardware application systems.
Purpose	This manual is intended to give users an understanding of the floating license to use for reference in developing the hardware or software of systems using these devices.
Organization	This manual can be broadly divided into the following units. 1.GENERAL 2.FUNCTIONS 3.MESSAGE
How to Read This Manual	It is assumed that the readers of this manual have general knowledge of electricity, logic circuits, and microcontrollers.

Conventions

Data significance:	Higher digits on the left and lower digits on the right
Active low representation:	XXX (overscore over pin or signal name)
Note:	Footnote for item marked with Note in the text
Caution:	Information requiring particular attention
Remarks:	Supplementary information
Numeric representation:	Decimal ... XXXX Hexadecimal ... 0xXXXX

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TABLE OF CONTENTS

1. GENERAL 5
1.1 Introduction 5
1.2 Operating Environment 7
2. FUNCTIONS. 8
2.1 Installing Floating License Client 8
2.2 Uninstalling Floating License Client 8
2.3 Using a Floating License 9
2.3.1 Setting up the client 9
2.3.2 Acquiring a floating license 11
2.3.3 Confirming the status 11
2.3.4 Acquiring an offline license 13
2.3.5 Releasing an offline license 15
2.3.6 Change options. 16
2.4 Resetting When the Server Is Changed 17
3. MESSAGE 18
3.1 Message Types 18
3.2 Internal Errors 19
3.3 Fatal Errors 19
3.4 Choices 22
Revision Record 23

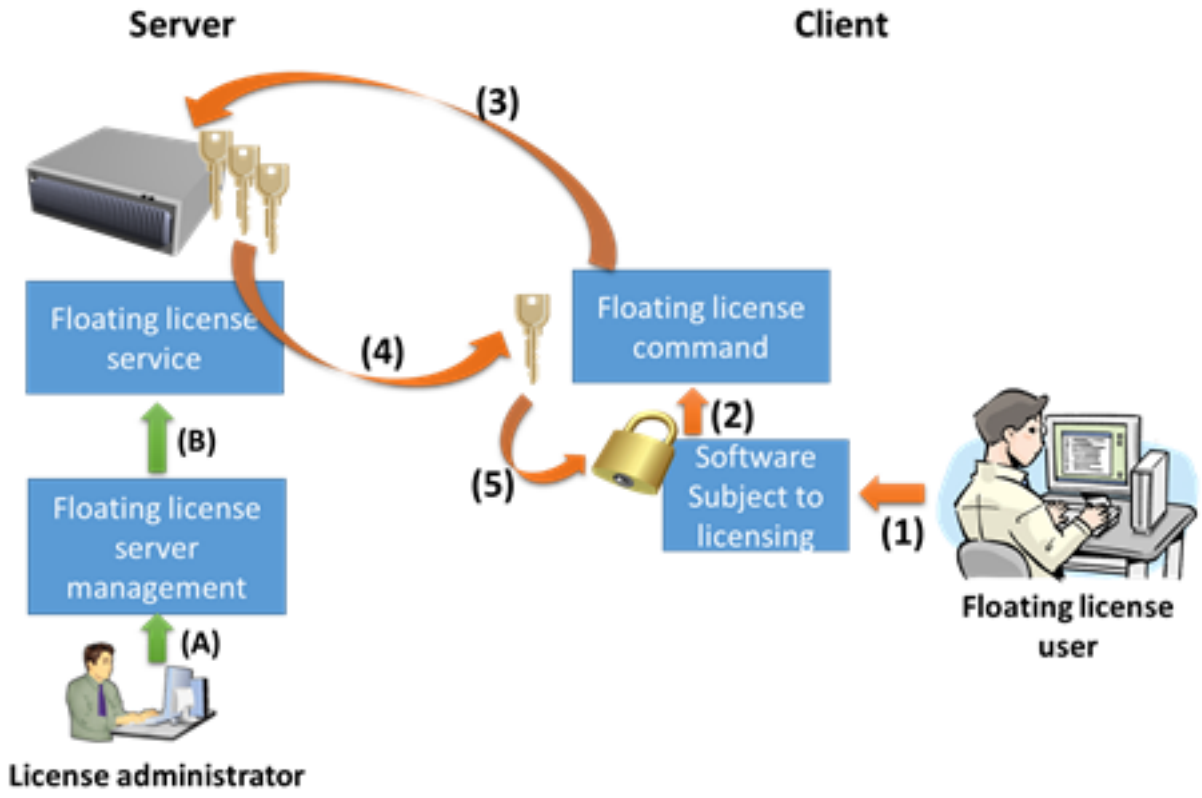
1. GENERAL

This chapter describes the outline of the License in the form of a floating license for managing the license of development environment for developing applications and systems for the microcontrollers (RH850, RX and RL78).

1.1 Introduction

Floating licensing is a licensing approach in which a limited number of licenses for a software are managed by the server and any computer connected to the server can use the software within the number of the licenses.

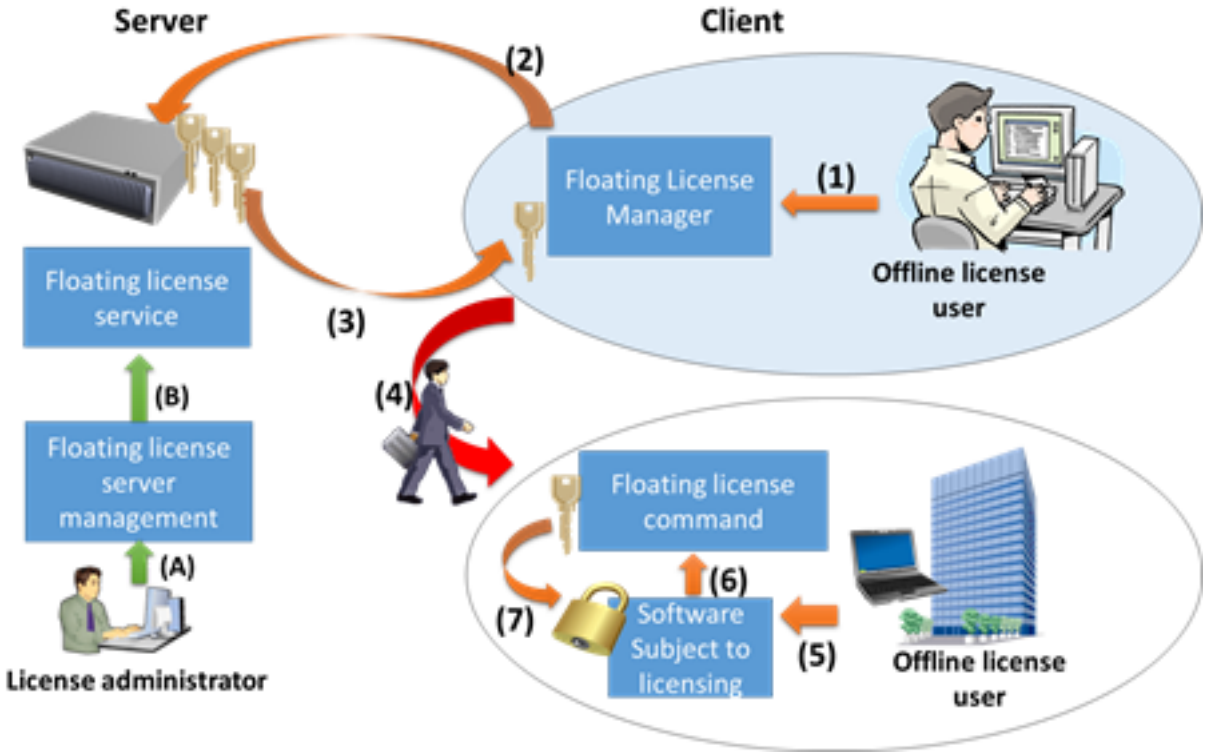
Figure 1.1 System structure of floating license



- (1)Launch
- (2)Request for license
- (3)Request for floating license
- (4)Floating license is granted
- (5)License if confirmed
- (A)License key is added
- (B)License is added or deleted

A floating license cannot be used unless the computer is connected to the server. Offline licensing is a mechanism that occupies the license for a certain period in order to use the license in a state disconnected from the network environment.

Figure 1.2 System structure of offline license



- (1)Request for offline license
- (2)Request for offline license
- (3)Offline license is granted
- (4)Take out
- (5)Launch
- (6)Request for license
- (7)License is confirmed
- (A)License key is added
- (B)License is added or deleted

1.2 Operating Environment

A floating license operates in the following environment.

- Hardware
  - Processor of 1 GHz or higher
  - Main memory: Min. 1 Gbyte (Min. 2 Gbytes for 64-bit Windows), at least 2 Gbytes are recommended
  - Display: Resolution of 1024 x 768 or higher, at least 65536 colors
- OS
  - Windows Vista (32 bits and 64 bits): Business and Enterprise
  - Windows 7 (32 bits and 64 bits): Professional and Enterprise
  - Windows 8 (32 bits and 64 bits): Pro and Enterprise
  - Windows 8.1 (32 bits and 64 bits): Pro and Enterprise
- Runtime library
  - .NET Framework 4
    ".NET Framework 4" is required. Cannot operate correctly in ".NET Framework 4 Client Profile".
- Development environment
  - CC-RL V1.01.00 or later
  - CC-RX V2.03.00 or later
  - CC-RH V1.02.00 or later
- License
  - RL78 License Pack 1 (CC-RL) or later
  - RX License Pack 2 (CC-RX) or later
  - RH850 License Pack 1 (CC-RH) or later

2. FUNCTIONS

This chapter describes functions of a floating license client.

2.1 Installing Floating License Client

Insert the CD in the drive of each client's PC. The preparing to Install page appears automatically.
If the page does not appear automatically, double-click “Setup.exe” in the route directory of the CD.

Click the [Begin Client Setup] button, the floating license client setup begins.

Caution The floating license client setup must be conducted with administrator privileges.

2.2 Uninstalling Floating License Client

You can uninstall the floating license using [Programs and Features] in the control panel. Select “Renesas MCU Tools Floating License” and click the [Uninstall] button.

Caution Uninstalling the floating license client must be conducted with administrator privileges.

2.3 Using a Floating License

This section describes how to use a floating license.

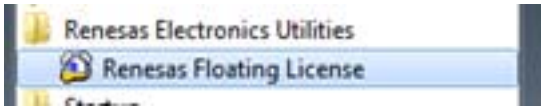
2.3.1 Setting up the client

Start up the client GUI from the start menu and make initial settings.

Caution Set up the client after the server settings was finished.

(1) Launch the client GUI
Select Windows [Start] menu >> [All Programs] >> [Renesas Electronics Utilities] >> [Renesas Floating License].

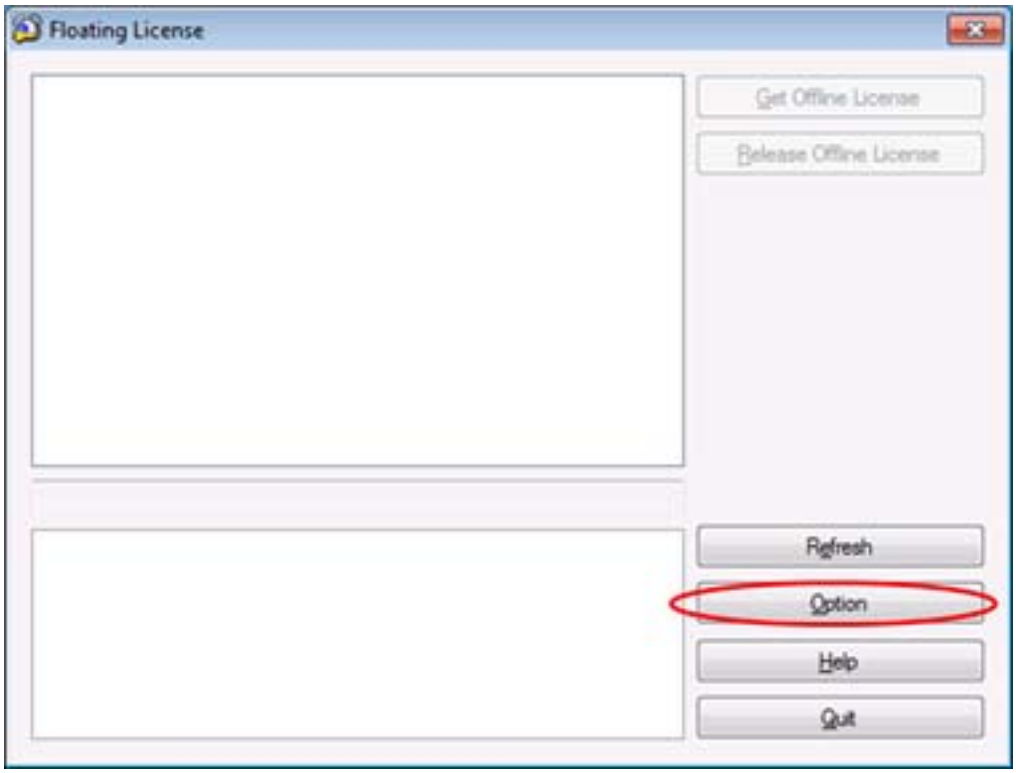
Figure 2.1 Start up the client GUI



Remark Windows 8 or Windows 8.1, select [Renesas Floating License] on the start screen.

The option dialog box is opened at the first startup.
If it is not opened, click the [Option] button.

Figure 2.2 Open the Floating License Option dialog box

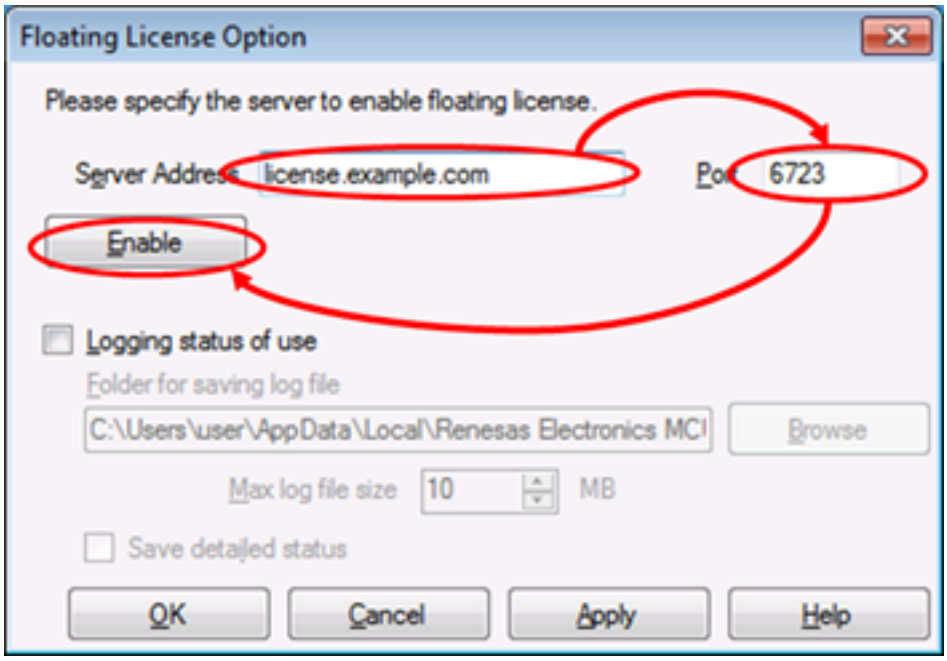


The Floating License Option dialog box will open.

(2) Connect the license server
Enter the IP address (example: 192.168.0.1) or host name (example: license.example.com) of the license server into [Server Address], the port number specified by the license server administrator into [Port]. If you don't know, please contact the license server administrator.

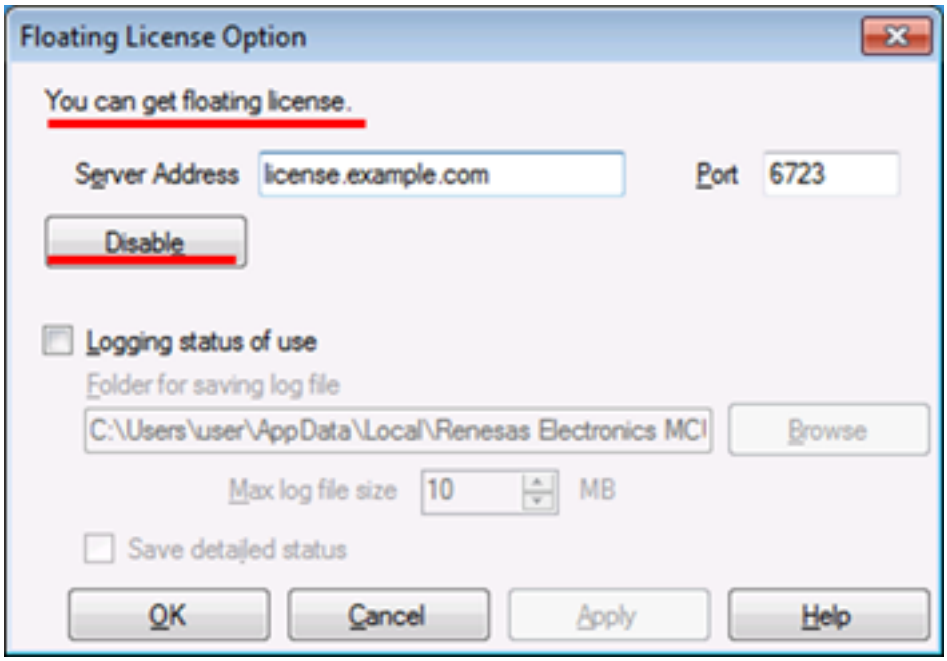
Click the [Enable] button.

Figure 2.3 Floating License Option dialog box (disabled)



When connection to the license server is successful, the display changes to that shown on the below.

Figure 2.4 Floating License Option dialog box (enabled)



Click the [OK] button to close the dialog box.

2.3.2 Acquiring a floating license

You don't need to take a particular action to acquire a floating license.
Starting the software subject to licensing automatically acquires a floating license.
The license will be returned automatically when the license was out of date. If the license will be required, the software subject to licensing automatically acquires a floating license again.

2.3.3 Confirming the status

Start up the client GUI from the start menu.
Select Windows [Start] menu >> [All Programs] >> [Renesas Electronics Utilities] >> [Renesas Floating License].

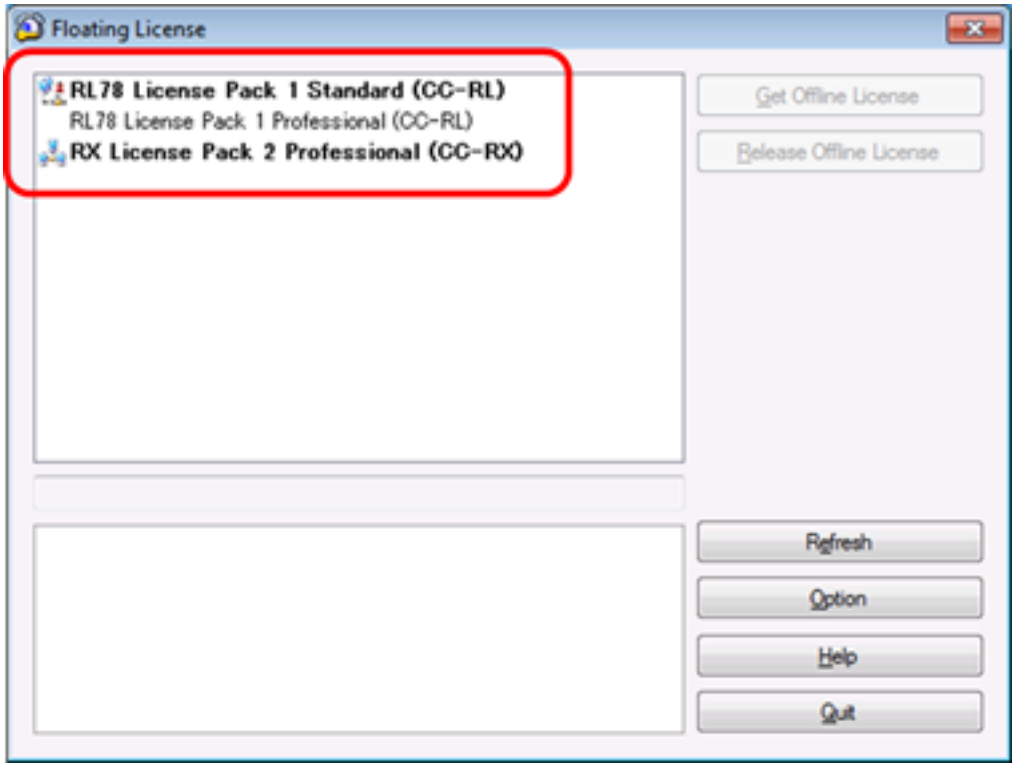
Remark Windows 8 or Windows 8.1, select [Renesas Floating License] on the start screen.

The Floating License window will open.

The license name is displayed by a bold font, and the license status is indicated by an icon.

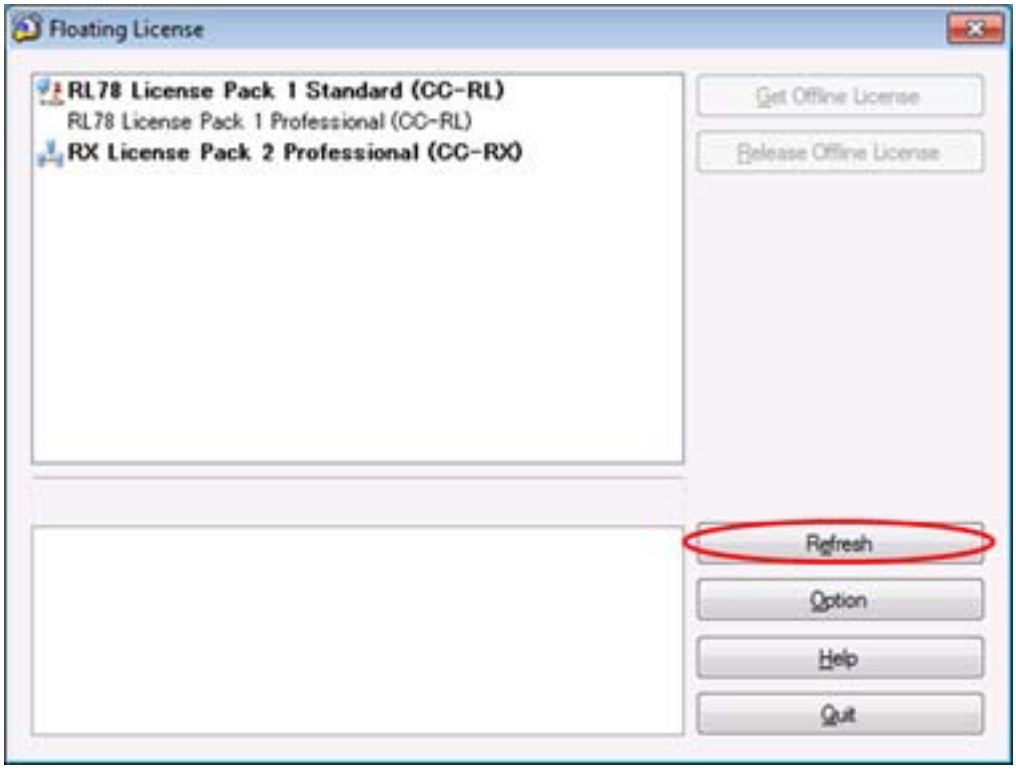
	Using as the floating license.
	Using as the offline license.

Figure 2.5 Floating License window



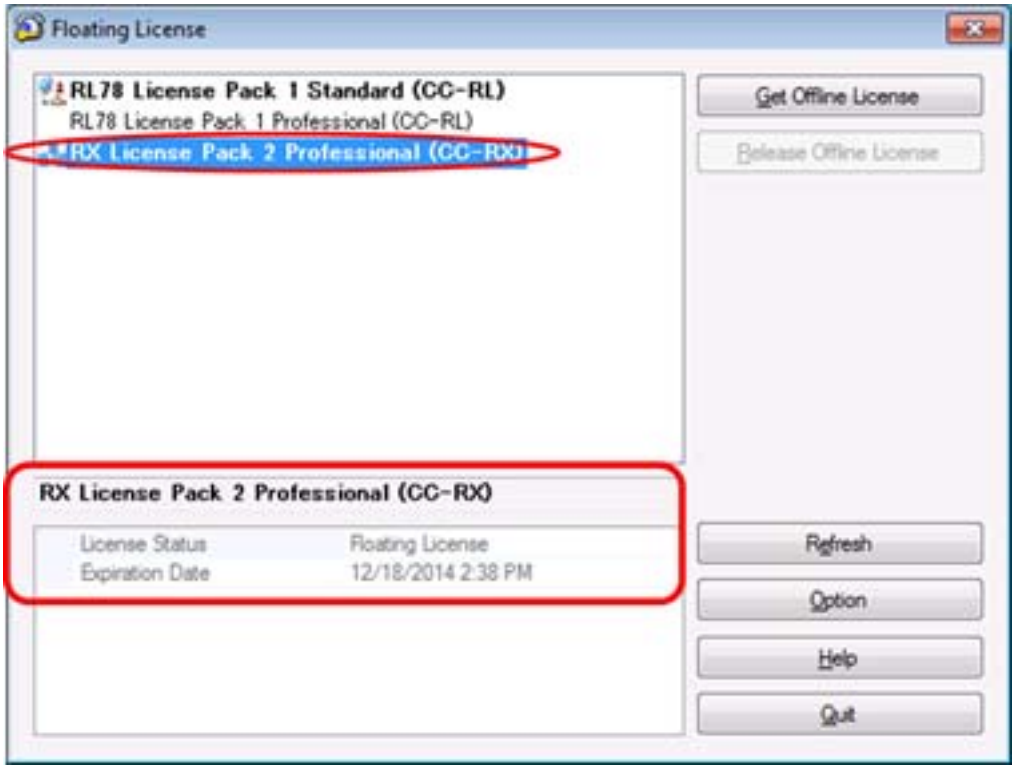
If the displayed contents of the GUI are old, click the [Refresh] button to update the displayed information.

Figure 2.6 Refresh the displayed information



And click the license name. The license status is displayed in the bottom part of the window.

Figure 2.7 Detailed information for the license status

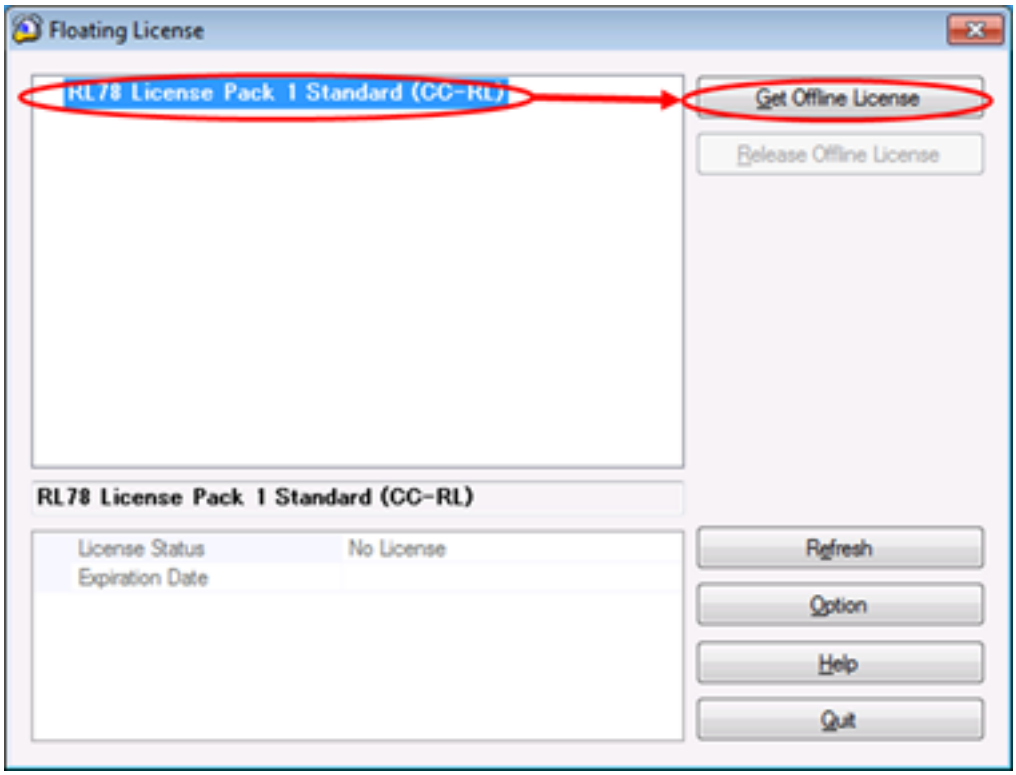


2.3.4 Acquiring an offline license

A floating license cannot be used unless the computer is connected to the server. Offline licensing is a mechanism that occupies the license for a certain period in order to use the license in a state disconnected from the network environment.

(1) Open the Get Offline License dialog box
When the client is connected to the server, click the license name and the [Get Offline License] button in the Floating License window.

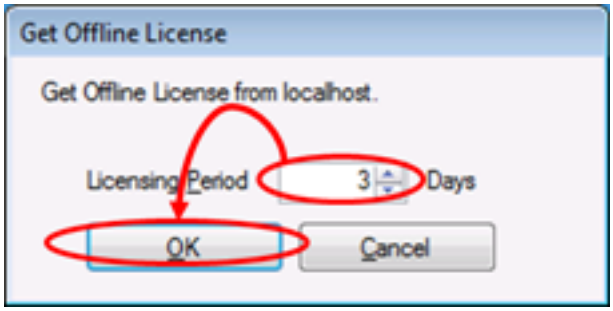
Figure 2.8 Floating License window before acquiring an offline license



The Get Offline License dialog box will open.

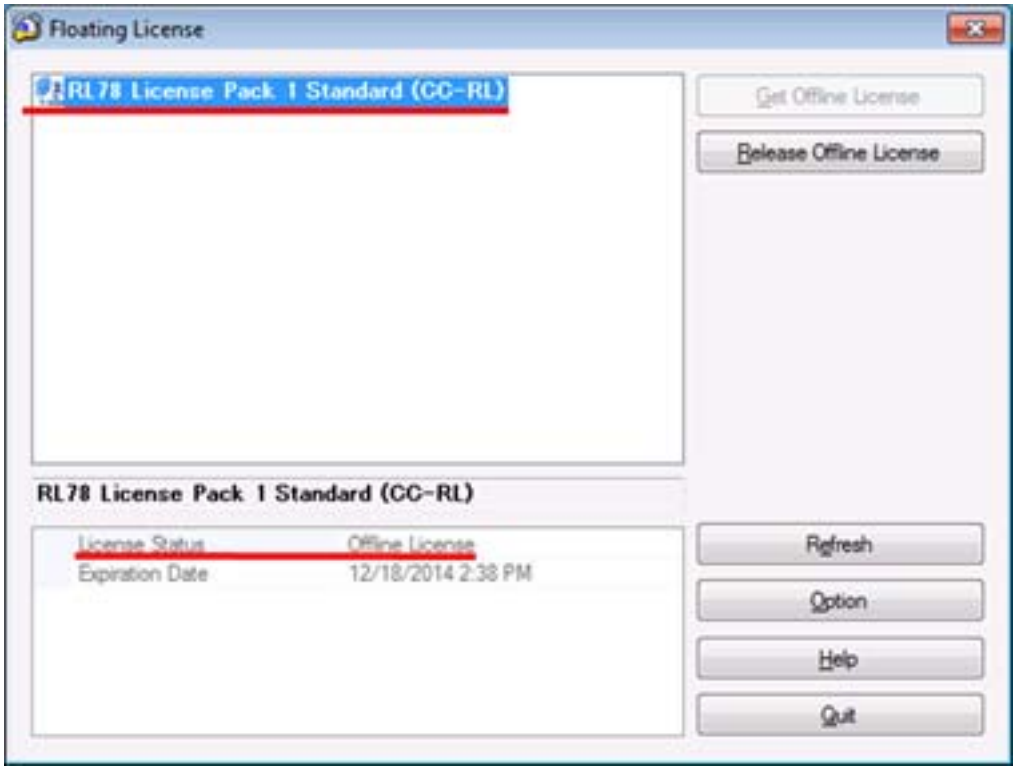
(2) Enter the license period
Enter the license period in [License Period], and click the [OK] button.

Figure 2.9 Get Offline License dialog box



An offline license is acquired from the server, and update the displayed information in the Floating License window.
During the valid period of the offline license, the license can be ongoingly used even in a circumstance where the license server cannot be connected.

Figure 2.10 Floating License window after acquiring an offline license



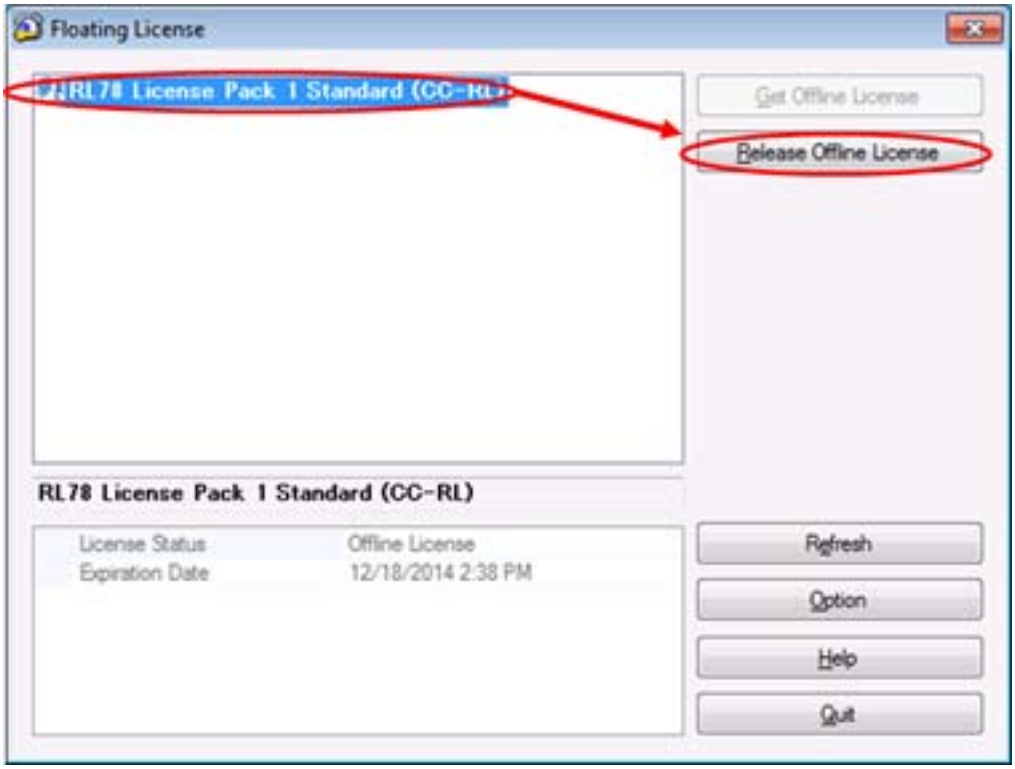
The license will be returned automatically when the license was out of date.

2.3.5 Releasing an offline license

You can release the offline license prior to out of date.

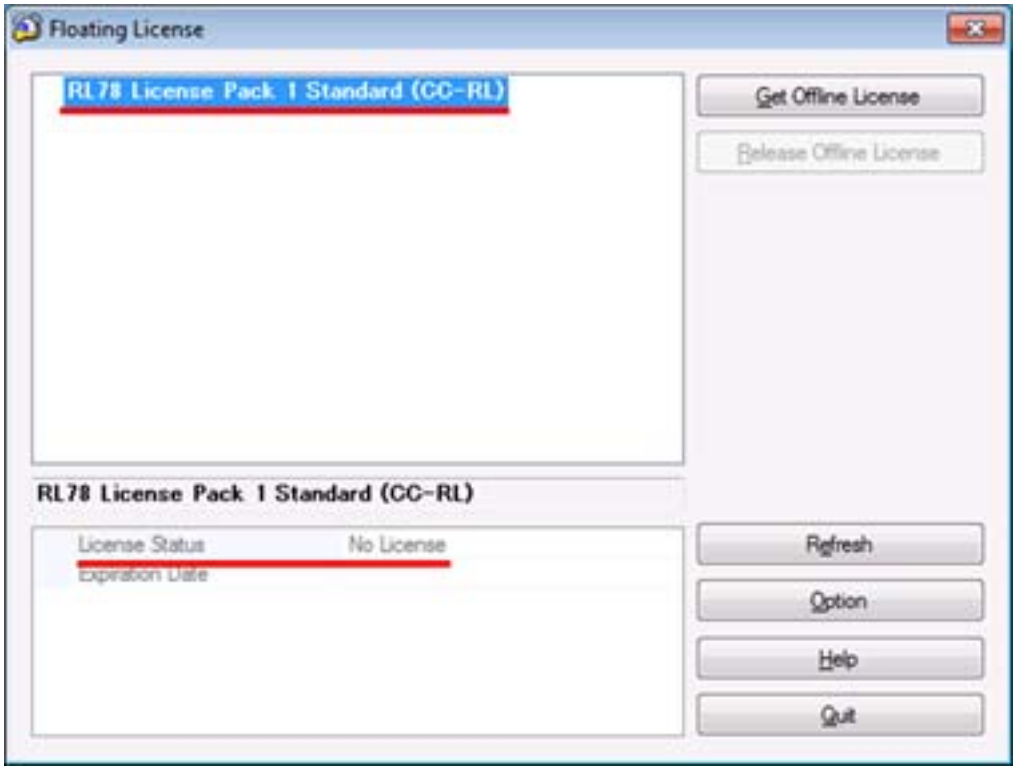
When the client is connected to the server, click the license name and the [Release Offline License] button in the Floating License window.

Figure 2.11 Floating License window before releasing an offline license



An offline license is returned to the server, and the displayed information in Floating License window is updated.

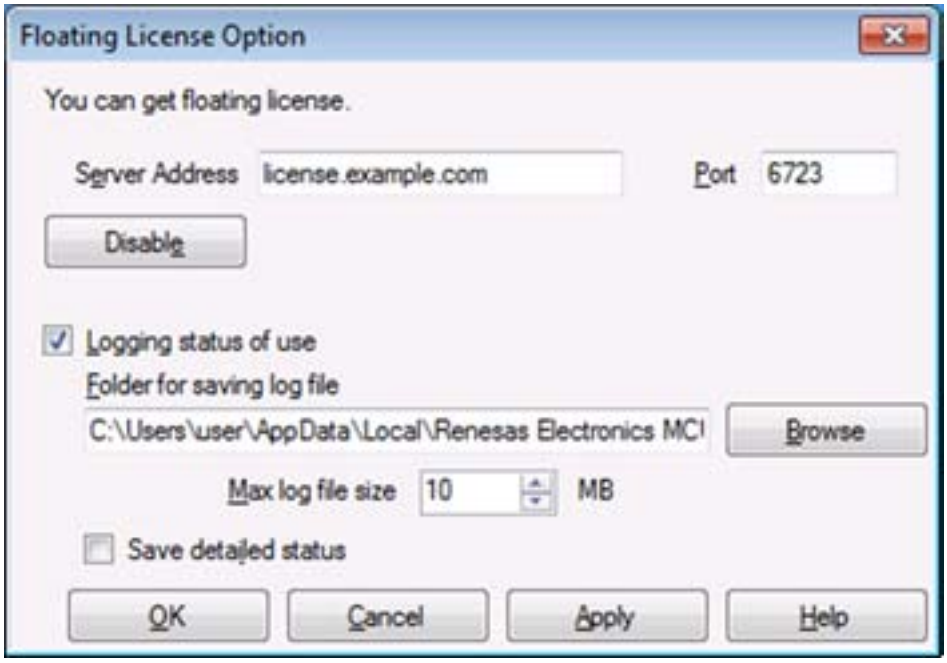
Figure 2.12 Floating License window after releasing an offline license



2.3.6 Change options

Below is the description of other options of the floating license client.
In the Floating License window, click the [Option] button.
The Floating License Option dialog box will open.

Figure 2.13 Floating License Option dialog box



In this dialog box, the following options can be changed.

- [Logging status of use] checkbox
  If this is checked, the status of the usage of the license is recorded in the log files. If this is unchecked, the log files are not saved.
- [Folder for saving log file] text box
  Specifies the path for the folder in which the log files are to be saved. If the [Browse] button is clicked, the folder can be specified in the [Browse for folder] dialog box.
  Logs are recorded with the numerical part of the file name changed for every 3 Mbytes with a file name of “FloatingLicense.xxx.log” (xxx is a 3-digit numerical value).
- [Max log file size] spin box
  Specifies the maximum size of log files. When recording a log immediately after the maximum size has been reached, the oldest log file is deleted to keep the file size within the size of this setting.
- [Save detailed status] checkbox
  If this is checked, the internal operations of programs are also recorded. If this is unchecked, only acquiring and releasing of licenses and their results are recorded.

2.4 Resetting When the Server Is Changed

When the server has been changed due to a failure or replacement, enter the new server's [Server Address] and [Port] in the option dialog box. After the settings have been changed, all existing licenses are revoked.

3. MESSAGE

This chapter describes internal error messages, fatal error messages, abort error messages, information messages, choice messages and warning messages that Floating License outputs.
The message is output to the Message dialog box or log file, etc...

3.1 Message Types

The message types (1 alphabetic character) when Floating License is operated are as follows.

Table 3.1 Message Type

Message Type		Description
C	Internal error	Processing terminated (suspended) due to internal error.
E	Fatal error	Processing terminated (suspended) due to fatal error.
M	Information	Informational message. Check the message and continue the process.
Q	Choice	This type of message is displayed when a choice is necessary in order to carry on with the next operation. It performs the selected action.
W	Warning	Warning message. Check the message and continue the process.

3.2 Internal Errors

Table 3.2 Internal Errors

C0171000	[Message]	An internal error occurred. Failed to get a license. XXX
C0171001	[Message]	An internal error occurred. Failed to send license request. XXX
C0171002	[Message]	An internal error occurred. Failed to send license request.
C0171003	[Message]	An internal error occurred. Failed to respond to a license request. XXX

3.3 Fatal Errors

Table 3.3 Fatal Errors

E0172000	[Message]	Getting a license is timed out.
E0172001	[Message]	Command-line option is invalid.
E0172002	[Message]	Failed to load license file.
E0172003	[Message]	Failed to load option file. XXX
E0172004	[Message]	Failed to load option file. XXX
E0172005	[Message]	Failed to save option file. XXX
E0172006	[Message]	Failed to save option file. XXX
E0172007	[Message]	Failed to load license information. XXX
E0172008	[Message]	Server address or port settings is invalid. XXX
E0172009	[Message]	Failed to save license information. XXX
E0172010	[Message]	Server address or port settings is invalid. XXX
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.
E0172011	[Message]	Failed to receive response from license server. XXX
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.
E0172020	[Message]	Response from license server is invalid.
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.

E0172021	[Message]	Response from license server is invalid.
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.
E0172022	[Message]	No available license in license server.
E0172023	[Message]	No available license in license server. But upper level license is available.
E0172024	[Message]	License server respond invalid server.
	[Action by User]	Disable the floating license in the option dialog box and enable it again.
E0172025	[Message]	License server respond invalid client.
	[Action by User]	Disable the floating license in the option dialog box and enable it again.
E0172026	[Message]	Clock gap between server and client is too large.
	[Action by User]	Check the client PC's clock. If the clock is correct, ask the floating license server administrator to check the server PC's clock.
E0172027	[Message]	License server respond unknown license.
	[Action by User]	The licence server version may be old. Ask the floating license server administrator to check the version of the floating license.
E0172028	[Message]	License is out of date.
E0172040	[Message]	Failed to connect license server. License server respond XXX.
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.
E0172041	[Message]	A connection with the server has timed out.
	[Action by User]	Check [Server Address] and [Port] in the option dialog box. Ask the floating license server administrator to check that the service is running. A request may be blocked by the server PC's firewall. Ask the floating license server administrator to check that the client request is allowed. A request may be blocked by the client PC's personal firewall or other security software. Allow to conduct http and https communication.
E0172042	[Message]	A connection with the server could not be established. Cannot find server or DNS error.
	[Action by User]	Check [Server Address] in the option dialog box. If this does not resolve the problem, please specify [Server Address] by the IP address.
E0172043	[Message]	Failed to connect license server.
	[Action by User]	Check [Server Address] and [Port] in the option dialog box. If this does not resolve the problem, ask the floating license server administrator to check that the service is running.
E0172044	[Message]	A connection with the server was denied.
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.

E0172045	[Message]	The server returned an error (XXX).
	[Action by User]	Check [Server Address] and [Port] in the option dialog box.
E0172046	[Message]	A connection with the proxy server could not be established. Cannot find server or DNS error.
	[Action by User]	Check [Internet Option] in the control panel to bypass a proxy server. Ask your network administrator about proxy settings.
E0172047	[Message]	A connection with the proxy server could not be established.
	[Action by User]	Check [Internet Option] in the control panel to bypass a proxy server. Ask your network administrator about proxy settings.
E0174010	[Message]	Failed to load option file. XXX
E0174011	[Message]	Failed to save option file. XXX
E0174012	[Message]	Failed to load license information. XXX
E0174013	[Message]	Failed to save license information. XXX
E0174014	[Message]	Failed to start license service. XXX
E0174015	[Message]	Failed to receive request from client. XXX
E0174016	[Message]	Client request is invalid.
E0174017	[Message]	No available license.
E0174018	[Message]	No available license. But upper level license is available.
E0174019	[Message]	A request is send to invalid server.
E0174020	[Message]	A request is send from unknown client.
E0174021	[Message]	Clock gap between server and client is too large.
E0174022	[Message]	A request is required unknown license.
E0174023	[Message]	License is out of date.
E0174100	[Message]	This license key is invalid. XXX
E0174101	[Message]	This license key is already registered. XXX
E0174102	[Message]	Can not delete the license in use. XXX

3.4 Choices

Table 3.4 Choices

Q0174110	[Message]	This function should be used when a client cannot release a license because there was trouble in the client's PC. Normally, a license should be released from the client. Do you still want to continue?

Revision Record

Rev.	Date	Description	
		Page	Summary
1.00	Jul 01, 2015	-	First Edition issued

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