

Floating License Server V2.02.00

User's Manual

Target Device RL78 Family RX Family RH850 Family

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Rev.1.00 2018.06

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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 software and hardware app	users who wish to using the IDE (CS+ or e ² studio) and design lication 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 reade circuits, and microcontroller	ers of this manual have general knowledge of electricity, logic s.	
Conventions	Data significance: Active low representation: Note: Caution: Remarks: Numeric representation:	<u>High</u> er digits on the left and lower digits on the right XXX (overscore over pin or signal name) Footnote for item marked with Note in the text Information requiring particular attention Supplementary information Decimal XXXX Hexadecimal 0xXXXX	

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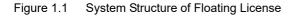
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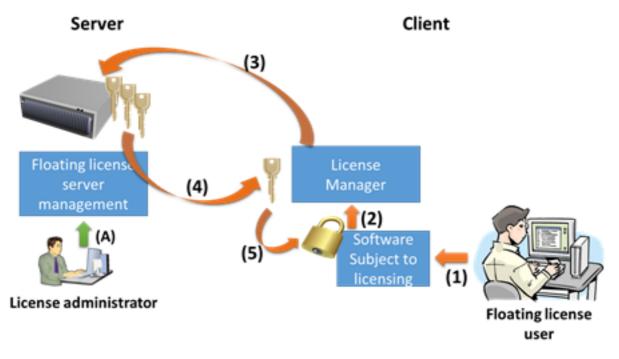
1. GENERAL

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

A floating license is a form of license where a limited number of licenses for software are managed through a server and any computer connected to the server can use the software within a set number of licenses.

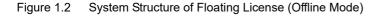


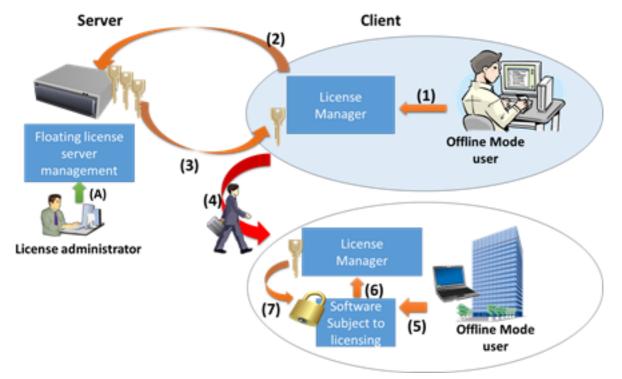


- (1)Launch
- (2)Request for license
- (3)Request for floating license
- (4)Floating license is granted
- (5)License if confirmed
- (A)License key is added



A floating license cannot be used unless the computer is connected to the server. Offline mode 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)Request for floating license (offline mode)
- (2)Request for floating license (offline mode)
- (3)Floating license (offline mode) is granted
- (4)Take out
- (5)Launch
- (6)Request for license
- (7)License is confirmed
- (A)License key is added

For both node locked and floating licenses, some licenses have no limit on the period of validity, while for others, the period is one year. Once the period of a time-limited license has expired, the development tool covered by the license cannot be used. To distinguish between the periods of validity, we denote the licenses with and without time limits as annual and permanent, respectively.

- Floating License (permanent)
- Floating License (annual)



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 7 (32 bits and 64 bits): Professional and Enterprise
- Windows 8.1 (32 bits and 64 bits): Pro and Enterprise
- Windows 10 (32 bits and 64 bits): Pro and Enterprise
- Windows Server 2008: Standard and Web Server (Server Core environment is unsupported)
- Windows Server 2008 R2: Standard and Web Server (Server Core environment is unsupported)
- Windows Server 2012: Standard (Server Core environment is unsupported)
- Windows Server 2012 R2: Standard (Server Core environment is unsupported)
- Windows Server 2016: Standard (Server Core environment is unsupported)
- Runtime library
 - .NET Framework 4.5.2
- License
 - Compiler V1 for RL78 (CC-RL) or later Standard edition Floating License (permanent) Standard edition Floating License (annual) Professional edition Floating License (permanent) Professional edition Floating License (annual)
 - Compiler V2 for RX (CC-RX) or later Standard edition Floating License (permanent) Standard edition Floating License (annual) Professional edition Floating License (permanent) Professional edition Floating License (annual)
 - Compiler V1 for RH850 (CC-RH) Standard edition Floating License (permanent) Standard edition Floating License (annual) Professional edition Floating License (permanent) Professional edition Floating License (annual)
 - Compiler V1 for RH850 (CC-RH) or later Standard edition Floating License (permanent) Standard edition Floating License (annual) Professional edition Floating License (permanent) Professional edition Floating License (annual) Upgrade (version) Standard edition Floating License (permanent) Upgrade (version) Professional edition Floating License (permanent)

Registering an Upgrade (version) Floating License (permanent) and a Floating License (permanent) as the source of the upgrade with the floating license server allows you to use the functions enabled by a Floating License (permanent) at the destination of the upgrade.



Upgrade (version) Floating License (permanent)	Floating License (permanent) that is the source of the upgrade	Floating License (permanent) that is the destination of the upgrade
Compiler Upgrade (version) Standard V2 for RH850 (CC-RH)	Compiler Standard V1 for RH850 (CC-RH)	Compiler Standard V2 for RH850 (CC-RH)
	Compiler Professional V1 for RH850 (CC-RH)	
Compiler Upgrade (version) Professional V2 for RH850 (CC- RH)	Compiler Professional V1 for RH850 (CC-RH)	Compiler Professional V1 for RH850 (CC-RH)

Example When "Compiler Upgrade (version) Standard V2 for RH850 (CC-RH)" and "Compiler Professional V1 for RH850 (CC-RH)" are registered with the floating license server, the state is the same as that after the following licenses have been registered.

- Compiler Professional V1 for RH850 (CC-RH)
- Compiler Standard V2 for RH850 (CC-RH)
- **Caution** An Upgrade (version) Floating License (permanent) cannot be used in combination with a Floating License (annual).



2. FUNCTIONS

This chapter describes functions of a floating license server.

2.1 Installing Floating License Server

Insert the CD in the drive of floating license server'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 Server Setup] button, the floating license server setup begins.

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

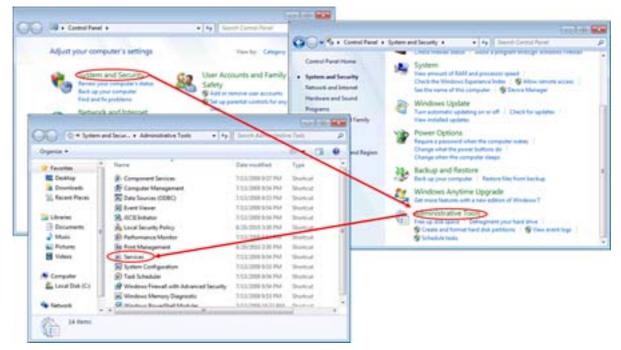
The floating license service is registered to the Windows services and it will be automatically started when the PC is booted up. After the service has been enabled with an option, the server continues to operate even after logging off or before logging on.

You can confirm the status of the Windows services by the following process.

(1) Open the Services snap-in

Select Control Panel >> [System and Security] >> [Administrative Tools], and double-click [Services].

Figure 2.1 Open Services Snap-in



The Services snap-in will open.



(2) Confirming the Windows services

"Renesas MCU Tools Floating License Service" is displayed in the Windows services list.

	ew Help					
Services (Loca	Name	Description	Status	Startup Type	Log On As	2
	Remote Registry	Enables rem		Manual	Local Service	
	Renesas MCU Tools Floating License Se			Automatic	Local System	
	Ch Routing and Remote Access	Offers routi	12. 15	Disabled	Local System	Ļ
	RPC Endpoint Mapper	Resolves RP	Started	Automatic	Network Servi	
	C Secondary Logon	Enables star		Manual	Local System	- F
·	Extended Standard					



2.2 Uninstalling Floating License Server

You can uninstall the floating license using [Programs and Features] in the control panel. Select "Renesas MCU Tools Floating License Server" 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 server

Start up the server administrator from the start menu and make initial settings.

 Launch the server administrator GUI Select the Windows [Start] menu >> [All Programs] >> [Renesas Electronics Utilities] >> [Renesas Floating License Server Administrator].

Figure 2.3 Launch the Server Administrator Gl

Renesas Electronics Utilities	Devic
Renesas Floating License Server Ad	dministrator
Startup	Defau

Caution Launching the server administrator GUI must be conducted with administrator privileges.

Remark In Windows 8.1, select [Renesas Floating License] on the start screen. In Windows 10, select Windows [Start] menu >> [All apps] >> [Renesas Electronics Utilities] >> [Renesas Floating License Server Administrator].

The Floating License Server Administrator window will open.



(2) Open the server option dialog box Click the [Option] button.

Floating License Server Administrator	
	ådd License
	Benove License
	Stop Offine Mode by Eoroe
	Refresh
	Option
	Help
	About

Figure 2.4 Open the Floating License Server Option Dialog Box

The Floating License Server Option dialog box will open.



Specify the port number to be used by the license server in [Server Port]. If there is a problem in the initial value (6723), change the port number.

Clicking the [Enable] button starts the floating license server.

Figure 2.5 Floating License Server Option Dialog Box (Disabled)

Floating License	Server Option		
Please specify	the server port to enable f	loating licen	se server.
Server Port	6723		
Faith			
Enable			
Offer the up	per-level license if lower-l	evel license	is emoty.
			in angly.
Eolder for savin		e Dectoraio	MCII David
	s\Common Files\Renesa	-	s MCU Browse
Max log file size	10 ≑	MB	
Save the usa	ge condition of Floating Li	cense	
Start date	4/ 1/2016	—	12:00:00 PM
_			12.00.00114
End date	4/ 2/2016		12:00:00 PM
Saye	4/ 2/2016		
	4/ 2/2016		

When the server has started, the display changes to that shown on the below.



Figure 2.6 Floating License Server Option Dialog Box (Enabled)

Floating License	Server Option			
This computer is	managing Floating I	License.		
Server Port	6723			
Disable				
	per-level license if low	wer-level license	is empty.	
Eolder for saving				
C:\Program File	s\Common Files\Rer	nesas Bectronic	s MCU Brow	se
Max log file size	10	÷ MB		
Save the usag	e condition of Floatin	ng License		
Start date	4/ 1/2016		12:00:00 PM	1
End date	4/ 2/2016		12:00:00 PM	٢
Sa <u>v</u> e]			
📃 Save detaije	ed status			
<u>о</u> к	Cancel	Apply		p

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



2.3.2 Setting up the firewall

A firewall needs to be set up in order to receive license requests from clients. Enable reception by the port number set in [Server Port] through the firewall setting. If the Windows firewall is used, set up as follows.

(1) Open the Windows firewall option

Select Control Panel >> [System and Security] >> [Windows firewall] >> [Advanced settings].

Figure 2.7 Open the Windows Firewall Window

A Control Fund a	• 4 Devel Cartal Para	q.	
Adjust your computer's setting	ngs Versity Care	m	
		G + % + Control Farm	d + System and Security + . + Ay Securi Commil Fame
Annual Security Secur	na del catery 9 200 - and access	Control Faund Harris System and Security	Action Center Revealed processing of the status and reaches source Overget View Account Control reactions Tracklehead compare compare positions
G	ity + Windows Frenand + 4g Sourch C	and the second se	Windows Frankel
Camical Panel Home	Help protect your computer with Wind	tows Firewall	Chart Wood and an Adam a program Homogh Mindows
Allow a program or feature	Windows Fernall can help present hackers or mail		System View encourt of MML and processor speed
Benugh Wendows Formall	access to your computer through the brannel or a		Dack the Windows Experience Index 🔮 Alice sensite as
(5) Change nutification settings (6) Tam Windows Feesall on an	How items a freewall help period an use puter?		See the name of this computer - Service Manager
đ		A CHARTER OF	Windows Update Turn automatic updates to an aff (Deck for updates (
S Reduce deleuto	Hgme or work (private) netwo	rks Connected ®	Ves related splates
Troublesheet my network	Naturality at huma or work where you links and to the heliwork	food the people and devices	Power Options Report of patients when the computer patient
	Windows Fermal state: On		Change what the power buffers as Change when the computer steeps
		preachans he programs that the list of allowed programs	38. Backup and Restore
	Active home (or work (private) 🛛 📓 Native network)	ok 2	S. Andreas and and the State Particular States
Sea alla		when Windows Firewall	
Auton Center			

The Windows firewall window will open.

Caution Setting up a windows firewall must be conducted with administrator privileges.



(2) Add a firewall rule Select the [Inbound rules]>>[New Rule].

Figure 2.8 Add a Firewall Rule

Windows Firewall with D Inbound Rules	Bankow Children And		Actions
Outpound Rules	Name @ Remote Volume Management (RPC-EPM_	Group .	Inbound Fules A
Connection Securit Monitoring	Routing and Remote Access (GRE-In) Routing and Remote Access (J2TP-In) Routing and Remote Access (J2TP-In) Secure Socket Tunneling Protocal (SSTP) SAMP Trap Service (UDP In) SMMP Trap Service (UDP In) Windows Collaboration Computer Name) Windows Collaboration Computer Name Windows Collaboration Computer Name Windows Collaboration Computer Name Windows Collaboration Computer Name	SIMP Trap SIMP Trap Windows Collaborat Windows Collaborat Windows Communi Windows Frewall fo Windows Frewall fo Windows Frewall fo Windows Frewall fo Windows Frewall fo	 ♥ Filter by P

The New Inbound Rule Wizard dialog box will open.



- (3) Set up a filawall rule
 - (a) Specify the rule type Select [Port] and click the [Next] button.

Figure 2.9 New Inbound Rule Wizard (Rule Type)

New Inbound Rule Wicard	
Rule Type	
Select the type of frewall rule to	peale.
Steps:	
 Rule Type 	What type of rule would you like to create?
Protocol and Pata Action Profile Name	Brogram Rule that controls connections for a program. Port
	Rule flot controls connections for a TCP or UCP pot. Prodefined BranchCache Vortext Remeval (Uses HTTP) Rule that controls connections for a Windows experience. Custom rule.
	Learn more about tale trans

[Protocol and Ports] will open.



 (b) Specify the protocol and ports
 Select [TCP] and [Specific local ports], and specify the port number specified in "2.3.1 Setting up the server" (initial value of 6723).
 Click the [Next] button.



🚔 New Inbound Rule Wize	el
Protocol and Ports	
Specify the protocols and port	a to which this rule applies.
Steps:	
· Rule Type	Does this rule apply to TCP or UDP?
Protocol and Ports	(ICP
 Action 	O NOS
· Frolie	
 Name 	Does this de apply to all local ports or specific local ports?
	O Al local ports
	Specific local porta: (5723
	Example 40, 4(3, 5000-5010
	Δc
	A CONTRACT OF A
	A A A A A A A A A A A A A A A A A A A
	Learn more about protocol and ports
	and the second
	< Back (Set >) Cancel

[Action] will open.



(c)

Specify the action Select [Allow the connection] and click the [Next] button.

Figure 2.11	New Inbound Rule Wizard (Action)	
-------------	----------------------------------	--

New Inbound Rule Wizar	đ	12.50
Action		
Specify the action to be taken	when a connection matches the conditions specified in the rule.	
Steps:		
· Rule Type	What action should be taken when a connection matches the specified conditions?	
 Protocol and Parts 	Allow the connection	
 Action 	This includes connections that are protected with iPaec as well as those are not.	
a Prole	Allow the connection if it is secure	
• Name	This includes only obsprections that have been authenticated by using Place. Connections will be secured using the settings in Place properties and rules in the Connection Security Rule node.	
	Laam mere about actions	-

[Profile] will open.



(d) Specify the profile

Hold the initial state (all check boxes are selected) or uncheck unnecessary boxes according to the network environment, and click the [Next] button.

Figure 2.12	New Inbound Rule Wizard (Profile)
i igaio Ei i E	How mooding Hard (Freme	/

New Inbound Rule Wite	d	12.5
Profile		
Specify the profiles for which the	tis rule applies.	
Steps:		
· Rule Type	When does this rule apply?	
Protocol and Parts	\sim	
 Action 	2 Domain	
a Polle	Applies when a computer is connected to its corporate domain.	
 Name 	Public Public Applies where is connected to a private network location. Public Applies where is connected to a public network location.	
	Laam more about confilms (Back Red > Cancel	

[Name] will open.



(e) Specify the name

Specify a name that is recognizable when to be changed later (example: Renesas Floating License Server), and click the [Finish] button.

New Inbound Rule Wicard		2.5
Name		
Specify the name and description	of this rule.	
Steps:		
· Rule Type		
 Protocol and Parts 		
a Action		
@ Profile	None	
a Name	Renesas Roating License Server	
	Resorption (optional)	
	N N	
	N 1	
	c Back Finish Cancel	
		100

Figure 2.13 New Inbound Rule Wizard (Name)

The New Inbound Rule Wizard dialog box will close, and the set rule is added to the list of [Inbound Rules].

And a start of the second			
Windows Feewall with	Inbound Rules		Actions
Bebound Rules Outbound Rules Connection Securit Monitoring	Name Renexa: Floating License Server Renexa: Floating License Server Renexa: Floating License Server Renexa: Annual Server Renexa: Server	Connect to a Netwo Connect to a Netwo	Internet Fules → If New Rule V Filter by R V Filter by S Vess Refeate Export Lis Help Renesas Floats
	Core Networking - Destination Unreacha Core Networking - Dynamic Host Config Core Networking - Dynamic Host Config Core Networking - Internet Group Mana	Core Networking Core Networking Core Networking	Duable R Cut Cut Cupy Delete

Figure 2.14 Windows Firewall window (Inbound Rules)



2.3.3 Adding a license

(1) Open the Add License dialog box

Click the [Add License] button of the Floating License Server Administrator window.

Figure 2.15 Open the Add License Dialog Box

Floating License Server Administrator	
	Add License
	Bemove License
	Stop Offline Mode by Earce
	Rgfresh
	Qption
	Help
	Qut

The Add License dialog box will open.



(2) Enter the license key

Enter the license key in [Add following License keys] text box of the Add License dialog box, and click the [Add] button.

More than one license can be entered in the text box at a time.

Figure 2.16 Add License Dialog Box

d License	
dd following License keys	
	Add
	Cancel
cense key is case-insensitive and does not contain phabetical "0".	

Figure 2.17 Enter the License Keys

Add License	
Add following License keys XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Add Qancel
License key is case-insensitive and does not contain alphabetical "0".	

- **Caution 1.** Enter the license key compliant with the floating license. The Add License dialog box show the invalid key error if the non-compliant license key is entered.
- **Caution 2.** To register an Upgrade (version) Floating License (permanent), a Floating License (permanent) must have been registered as the source of the upgrade. Start by adding the Floating License (permanent) to the floating license server or add the Upgrade (version) License and Floating License (permanent) at the same time.



The SOFTWARE LICENSE AGREEMENT dialog box appears if you have not yet accepted the license agreement for addition of a node locked license.



the second se
1.13
is

Select [Accept] and click on the [OK] button. The node locked license you have added is now available.



The Add License dialog box will close, and the entered license key is added to the list in the Floating License Server Administrator window.

Figure 2.19	Floating License Server	Administrator Window After	Adding the License Keys
-------------	-------------------------	----------------------------	-------------------------

License Pack 2 Professional (CC-RX)	Add License
	Bernove License
	Stop Offine Mode by Earc
xxxxx,xxxxx,xxxxx,xxxxx,xxxxx,xxxxx,xxxx	
	Refresh
	Contraction of the second seco
	Qption
	Qption Help



2.3.4 Assigning a floating license to the client

When the floating license server receive a license request from a client, the server assigns an unused license to the client.

The term of validity of a floating license is 30 minutes from the time that the license is acquired. The term of validity of a floating license (offline mode) is the days designated by the client (max. 99 days).

2.3.5 Confirming the license usage status

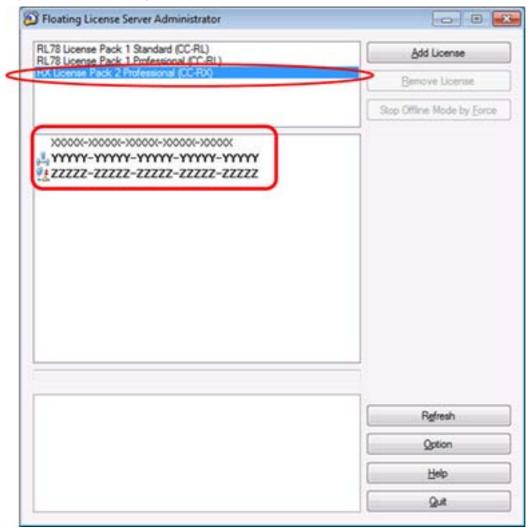
If a license name is selected, license keys are indicated in below.

A license in use is displayed in boldface, and the license status is indicated by an icon.

	Using as the floating license.
2	Using as the offline license.
	The expiration date of an annual floating license is approaching.
X	This annual floating license is no longer available because it is out of date.



Figure 2.20 License Usage Status





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

Figure 2.21 Refresh the Displayed Information

Add License
Bemove License
Stop Offine Mode by Earce
Refresh
Qption
- Burn
Help



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

Figure 2.22 Detailed Information for the License Status

78 License Pack 1 Standard 78 License Pack 1 Professio	(CC-RL) col (CC-RL)	Add License
Ucense Pack 2 Professiona	(CC-RX)	Bemove License
		Stop Offline Mode by Eo
>00000(->00000(->00000(->0	0000-300000	1
YYYYY-YYYYY-YYYYY		
77777-77777-77777	-11111-11111	
License Pack 2 Profe	ssional (CC-RX)	
License Pack 2 Profe		
Client IP Address	192.168.0.2	
Client IP Address Serial Number	192.168.0.2 0x00000000	Rgfresh
Client IP Address Serial Number License Key	192.168.0.2 0x00000000 222222-22222-22222-22222-22222-22222-2222	
Client IP Address Senal Number License Key License Type	192.168.0.2 0x00000000 222222.22222.22222.22222.222 Floating License (permanent)	Refresh
Client IP Address Senal Number Ucense Key Ucense Type Ucense Status	192.168.0.2 0x00000000 222222.22222.22222.2222.	Qption
Client IP Address Senal Number License Key License Type	192.168.0.2 0x00000000 222222.22222.22222.22222.222 Floating License (permanent)	
Client IP Address Senal Number Ucense Key Ucense Type Ucense Status	192.168.0.2 0x00000000 222222.22222.22222.2222.	Qption



2.3.6 Deleting a license

Select a license key on the Floating License Server Administrator window, and click the [Remove License] button.

Figure 2.23 Floating License Server Administrator Window Before Deleting a License

and send of the set of			
8L78 License Pack 1 Standard 8L78 License Pack 1 Profession 1 Profe	nal (CC-RL)		ådd License
	1001100		Bemove License
		1	Stop Offline Mode by Force
x0000:x0000:x00000:x00 YYYYYYYYYYYYYYYYY	m.mmr		
1X License Pack 2 Profe	ssional (CC-RX)		
	ssional (CC-RX)		
X License Pack 2 Profe Clert IP Address Setal Number	ssional (CC-RX)		Refresh
Client IP Address			2. Thinks
Client IP Address Senal Number	0x00000000	22	Refresh
Client IP Address Serial Number License Key License Type License Status	0x00000000 ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ-		Qotion
Client IP Address Serial Number License Key License Type License Status Client Beginning Date	Gx00000000 ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ- Roating License (permanent)		2. Thinks
Serial Number License Key License Type License Status	Gx00000000 ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ- Roating License (permanent)		Qotion

Caution While an Upgrade (version) Floating License (permanent) is registered, the Floating License (permanent) that is the source of the upgrade cannot be deleted. Start by deleting the Upgrade (version) Floating License (permanent).



The selected license key will be removed in the Floating License Server Administrator window, and the license is no longer subject to management by the license service.



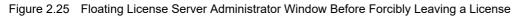
Floating License Server Administrator	
RL78 License Pack 1 Standard (CC-RL) RL78 License Pack 1 Professional (CC-RL)	Add License
RX Ucense Pack 2 Professional (CC-RX)	Bemove License
	Stop Offline Mode by Earce
X0000-X0000-X0000-X0000-X0000X	
	Refresh
	Qption
	Help



2.3.7 Forcibly leaving offline mode

Select a license key of the license in use as a floating license (offline mode) on the Floating License Server Administrator window, and click the [Stop Offline Mode by Force] button.

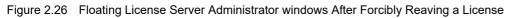
A license in use as a floating license can not be released.



L78 License Pack 1 Standard	(CC-BL)	Add Hannes
78 License Pack 1 Professio	nal (CC-RL)	Add License
K License Pack 2 Professiona	H(CC-RX)	Berrove License
		Stop Offline Mode by Force
Client IP Address	192.168.0.2	Befreeh
Client IP Address Serial Number	192.168.0.2 0x00000000	Rgfresh
Client IP Address Serial Number License Key	192.168.0.2 Gx00000000 ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ-ZZZ	Rgfresh
Client IP Address Serial Number License Key License Type	192.168.0.2 0x00000000 22222-22222-22222-2222-222 Floating License (permanent) E	
Client IP Address Serial Number License Key License Type License Status	192.168.0.2 Gx00000000 ZZZZZ-ZZZZZ-ZZZZZ-ZZZZZ-ZZZ	
Serial Number License Key License Type	192.168.0.2 0x00000000 222222-22222-22222-2222-222 Floating License (permanent) Using(Offline Mode)	Qotion



The selected license key will be unused.



Floating License Server Administrator	
RL78 License Pack 1 Standard (CC-RL) RL78 License Pack 1 Professional (CC-RL) RX License Pack 2 Professional (CC-RX)	Add License
RX License Pack 2 Professional (CC-RX)	Bernove License
	Stop Offline Mode by Force
30000K-30000K-30000K-30000K-30000K	
	Rgfresh
	Refresh Qption

Caution 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.



2.3.8 Saving the states of floating license usage

Log files which have been saved are read and transitions in the states of usage of floating licenses are extracted and output to the CSV files. Using a spreadsheet program such as Microsoft Excel to display the contents of the CSV files as graphs enables checking of transitions in the states of usage under each of the licenses.

Enter the dates and times to start and end logging in [Start date] and [End date] and click on the [Save] button in the Floating License Server Option dialog box.

Figure 2 27	Floating License	- Server (Option	Dialog Box
	I louding Eloono		opuon	Dialog Dor

123 el license if lower-le	vel license	is empty.	
	vel license	is empty.	
	vel license	is empty.	
	vel license	is empty.	
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non Files\Renesas	Bectronic	s MCU Brow	vse
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/2016		12:00:00 PM	l\$
	10 🔄 ition of Floating Lio /2016	10 MB Sition of Floating License /2016	10 MB Sition of Floating License /2016 🐨 12:00:00 PM

Specify the name of the CSV file and the directory for saving the file in the Save As dialog box and click on the [Save] button. Transitions in the number of licenses in use are then saved in the CSV file over the specified period.



Figure 2.28 Save As Dialog Box

	raries + 1	Documents + +	49 Search Documents	3
Organize • Nev	w folder		1	· 0
🚖 Favorites 🔜 Desktop		Documents library includes: 2 locations	Arrange by:	Folder •
bownloads		Name	Date modified	Type
2 Recent Places		No items mat	tch your search.	
🧊 Libraries				
Documents				
J Music				
Pictures				
Pictures				
Pictures Videos	10000			
Pictures Videos Computer File game:	FloatingL			

The format of the CSV file is as follows.

...

, name of license 1, name of license 2, ...

date and time specified in [Start date], the number of machines holding licenses under license 1 at the start of logging, the number of machines holding licenses under license 2 at the start of logging, ...

date and time when the number of licenses held changed, the number of machines holding licenses under license 1 before the change, the number of machines holding licenses under license 2 before the change, ... date and time when the number of licenses held changed, the number of machines holding licenses under license 1 after the change, the number of machines holding licenses under license 2 after the change, ...

date and time specified in [End date], the number of machines holding licenses under license 1 at the end of logging, the number of machines holding licenses under license 2 at the end of logging,...

Two lines indicating date and time are output when the number of instances of usage of a license changes; the first line indicates the numbers of licenses in use before the change, and the second line indicates the numbers after the change.



Example of output

,RX License Pack 2 Professional,RL78 License Pack 1 Standard	2016/9/12 11:33:09,4,1
2016/9/12 10:50:00,0,0	2016/9/12 11:33:09,5,1
2016/9/12 10:55:11,0,0	2016/9/12 11:41:24,5,1
2016/9/12 10:55:11,1,0	2016/9/12 11:41:24,4,1
2016/9/12 10:57:23,1,0	2016/9/12 11:41:51,4,1
2016/9/12 10:57:23,2,0	2016/9/12 11:41:51,3,1
2016/9/12 11:00:34,2,0	2016/9/12 11:44:02,3,1
2016/9/12 11:00:34,2,1	2016/9/12 11:44:02,4,1
2016/9/12 11:01:13,2,1	2016/9/12 11:52:29,4,1
2016/9/12 11:01:13,3,1	2016/9/12 11:52:29,5,1
2016/9/12 11:11:23,3,1	2016/9/12 11:55:53,5,1
2016/9/12 11:11:23,4,1	2016/9/12 11:55:53,4,1
2016/9/12 11:11:50,4,1	2016/9/12 12:01:00,4,1
2016/9/12 11:11:50,5,1	2016/9/12 12:01:00,3,1
2016/9/12 11:25:12,5,1	2016/9/12 12:03:09,3,1
2016/9/12 11:25:12,4,1	2016/9/12 12:03:09,2,1
2016/9/12 11:25:53,4,1	2016/9/12 12:14:02,2,1
2016/9/12 11:25:53,5,1	2016/9/12 12:14:02,1,1
2016/9/12 11:27:25,5,1	2016/9/12 12:22:29,1,1
2016/9/12 11:27:25,4,1	2016/9/12 12:22:29,0,1
2016/9/12 11:31:00,4,1	2016/9/12 12:30:00,0,1
2016/9/12 11:31:00,5,1	
2016/9/12 11:31:13,5,1	
2016/9/12 11:31:13,4,1	

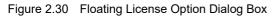
By using a spreadsheet program to convert this CSV file into a scatter diagram, a graph of usage can be created as shown below.



Figure 2.29 Scatter with Straight Lines Created by Microsoft Excel

2.3.9 Change options

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



Construction of the second	is managing	g Hoating	Licent	se.			
Server Port	6723						
Disabl <u>e</u>							
Offer the g		cense f l	ower-le	vel license	is empty.		
Eolder for savin D:\Program Fil	or the state of the local division of the lo	n Files\R	enesas	Bectronic	s MCU	Brow	rse
Max log file size	e	10	-	MB			
Save the usa	ge conditio	n of Floa	ting Lic	ense			
	ge conditio 4/ 1/20	0.0000000	ting Lic	ense	12:00:00	PM	0
Save the usa		16	ting Lic	100 M 100 M 100 M	12:00:00		\±
Save the usa	4/ 1/20	16	ting Lic				

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

- [Offer the upper-level license if lower-level license is empty.] checkbox

Specifies that the server allows the client to use an upper-level license (ex. Professional) when the client requests a lower-level license (ex. Standard) and the server has no available lower-level license, but has an available upper-level license.

If this is checked, the server responds to the client to request an upper-level license.

If this is unchecked, the server responds to the client by an error.

Caution This option must be selected in cases where only a higher-level license (e.g. Professional) is registered on the server but the client is requesting a lower-level license (e.g. Standard). This applies in cases such as where some compiler options which require the Professional edition license are not enabled. This option is de-selected by default in V1.00.00 to V2.01.00 of the floating license server but is selected by default in V2.02.00 and later versions.

- [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.

RENESAS

2.4 Resetting When the Server Is Changed

When the server is to be changed due to a failure or replacement, follow the procedure shown in this document again to start up the server and register license keys.

All of the licenses acquired in the old server become invalid the moment the client connects to the new server.



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
	wessaye type

	Message Type	Description
С	Internal error	Processing terminated (suspended) due to internal error.
Е	Fatal error	Processing terminated (suspended) due to fatal error.
М	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 Inter	nal 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
C0190000	[Message]	Specified device is invalid.
C0190001	[Message]	XXX is empty.
C0190002	[Message]	XXX is too large.
C0190003	[Message]	XXX is too small.

3.

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.
E0172012	[Message]	Failed to save CSV file. XXX
E0172013	[Message]	No log file in log folder.
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.
l	[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
E0180000	[Message]	This license key is invalid.
E0180001	[Message]	XXX This license key is already registered.
E0180010	[Message]	Failed to add the following license. To add an Upgrade (version) License, the license that is the source of the upgrade must be registered. XXX
E0180011	[Message]	Failed to delete the license. The license that is the source of the upgrade cannot be deleted before the Upgrade (version) License is deleted.
E0182000	[Message]	Could not write the license information to XXX.
E0190000	[Message]	Failed to start License Manager.
E0190001	[Message]	Failed to start License Manager. Can not find the folder to store the license information.
E0190002	[Message]	Managing the floating license server requires administrator privileges.



3.4 Information

M0190000	[Message]	Failed to read license information. The file is broken. Please re-enter license keys.
M0190010	[Message]	The version of the license manager you are using is older than that assumed by the floating license server. Update the license manager.
M0190011	[Message]	The version of the floating license server you are using is older than that assumed by the license manager. Update the floating license server.
M0191000	[Message]	Critical Error : XXX
M0191100	[Message]	Critical Error : XXX
M0191200	[Message]	Error : XXX
M0191300	[Message]	Error : XXX
M0191400	[Message]	Warning : XXX
M0191500	[Message]	Warning : XXX
M0191600	[Message]	Required license : XXX
M0191601	[Message]	Local license found.
M0191602	[Message]	Needs renewal.
M0191603	[Message]	Expired.
M0191604	[Message]	Invalid.
M0191605	[Message]	Released.
M0191606	[Message]	Upper level licesne : XXX
M0191607	[Message]	Get new licesne : XXX
M0191608	[Message]	Supported : XXX licenses
M0191700	[Message]	Request : XXX
M0191701	[Message]	Add client : XXX
M0191702	[Message]	Delete client : XXX
M0191703	[Message]	Client unknown.
M0191704	[Message]	Server id is invalid.
M0191705	[Message]	Target license is empty.
M0191706	[Message]	Upper level license is available
M0191707	[Message]	Assigned license (XXX/XXX) : XXX
M0191708	[Message]	Expired license : (XXX/XXX) : XXX
M0191709	[Message]	Released license : (XXX/XXX) : XXX
M0191800	[Message]	Command : XXX
M0191801	[Message]	Getting license : XXX
M0191802	[Message]	Connecting : XXX
	1	1



M0191803	[Message]	Getting upper level license : XXX
M0191804	[Message]	Getting supported licenses : XXX
M0191805	[Message]	Getting license as offline mode : XXX
M0191806	[Message]	Releasing license : XXX
M0191900	[Message]	Starting service.
M0191901	[Message]	Starting HTTP listener.
M0191902	[Message]	Received HTTP request.
M0191903	[Message]	Received next request.
M0191904	[Message]	Getting license list.
M0191950	[Message]	Stop service.
M0191951	[Message]	Stop HTTP listener.
M0191952	[Message]	Bad HTTP request.
M0191953	[Message]	Unknown request.
M0191954	[Message]	Unkown client.
M0191955	[Message]	Invalid server ID.
M0191956	[Message]	Invalid : XXX
M0191957	[Message]	Released : XXX



3.5 Choices

Table 3.5 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?
----------	-----------	--



3.6 Warning

Table 3.6 Warning

W0190002	[Message]	Failed to read license information from XXX. The file is broken.
W0190003	[Message]	Failure in reading license information. The file is corrupted.



Revision Record

Rev.	Date	Description		
		Page	Summary	
1.00	Jun 01, 2018	-	First Edition issued	

Floating License Server V2.02.00 User's Manual

Publication Date:	Rev.1.00	Jun 01, 2018	
Published by:	Renesas Electronics Corporation		



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Floating License Server V2.02.00

