## User's Manual



## **License Management**

IM 32Q01C60-31E

vigilantplant.



## Introduction

This manual describes how to manage licenses, which is a process required to activate and deactivate CENTUM VP and ProSafe-RS software packages.

Prerequisites for using this manual include completing the installation and preliminary configuration of the CENTUM VP and ProSafe-RS software packages.

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This manual is structured as follows:

- Overview of license management Provides an overview of license management.
- Managing licenses for the first time
   Describes how to manage licenses for the first time.
- Maintaining license projects
   Describes how to maintain a license project.

## **Safety Precautions for Use**

#### Safety, Protection, and Modification of the Product

- To protect the system controlled by the Product and the Product itself and to ensure safe operation, please observe the safety precautions described in this Manual. Yokogawa Electric Corporation ("YOKOGAWA") assumes no liability for safety if users fail to observe the safety precautions and instructions when operating the Product.
- If the Product is used in a manner not specified in the User's Manuals, the protection provided by the Product may be impaired.
- If any protection or safety circuit is required for the system controlled by the Product or for the Product itself, please install it externally.
- Use only spare parts that are approved by YOKOGAWA when replacing parts or consumables of the Product.
- Do not use the Product and its accessories such as power cords on devices that are not approved by YOKOGAWA. Do not use the Product and its accessories for any purpose other than those intended by YOKOGAWA.
- Modification of the Product is strictly prohibited.
- The following symbols are used in the Product and User's Manuals to indicate the accompanying safety precautions:



Indicates that caution is required for operation. This symbol is labeled on the Product to refer the user to the User's Manuals for necessary actions or behaviors in order to protect the operator and the equipment against dangers such as electric shock. In the User's Manuals, you will find the precautions necessary to prevent physical injury or death, which may be caused by accidents, such as electric shock resulting from operational mistakes.

- dentifies a protective conductor terminal. Before using the Product, you must ground the protective conductor terminal to avoid electric shock.
- Light Identifies a functional grounding terminal. A terminal marked "FG" also has the same function. This terminal is used for grounding other than protective grounding. Before using the Product, you must ground this terminal.
- → Indicates an AC supply.
- --- Indicates a DC supply.
- Indicates the ON position of a power on/off switch.
- Indicates the OFF position of a power on/off switch.

#### ■ Notes on Handling User's Manuals

- Hand over the User's Manuals to your end users so that they can keep the User's Manuals on hand for convenient reference.
- Thoroughly read and understand the information in the User's Manuals before using the Product.
- For the avoidance of doubt, the purpose of the User's Manuals is not to warrant that the Product is suitable for any particular purpose but to describe the functional details of the Product.
- Contents of the User's Manuals are subject to change without notice.

• Every effort has been made to ensure the accuracy of contents in the User's Manuals. However, should you have any questions or find any errors, contact us or your local distributor. The User's Manuals with unordered or missing pages will be replaced.

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- No part of the Software Product may be transferred, converted, or sublet for use by any third-party, without prior written consent from YOKOGAWA.

#### **Documentation Conventions**

#### Symbols

The following symbols are used in the User's Manuals.



Identifies instructions that must be observed to avoid physical injury, electric shock, or death.



Identifies instructions that must be observed to prevent damage to the software or hardware, or system failures of the Product.



Identifies important information required to understand operations or functions.

TIP

Identifies additional information.

SEE ALSO Identifies referenced content.

In online manuals, you can view the referenced content by clicking the links that are in green text. However, this action does not apply to the links that are in black text.

#### Typographical Conventions

The following typographical conventions are used throughout the User's Manuals.

#### Commonly Used Conventions throughout the User's Manuals

A Mark

Indicates that a space must be entered between character strings.

#### Example:

.ALAPIC010A-SC

Character string enclosed by braces { }
 Indicates character strings that may be omitted.

#### **Example:**

.PR $\Delta$ TAG{ $\Delta$ .sheet name}

#### Conventions Used to Show Key or Button Operations

Characters enclosed by brackets []
 When characters are enclosed by brackets in the description of a key or button operation, it indicates a key on the keyboard, a button name in a window, or an item in a list box displayed in a window.

#### Example:

To alter the function, press the [ESC] key.

#### Conventions of a User-defined Folder

User-defined folder name enclosed by parenthesis ()
 User definable path is written in a pair of parentheses.

#### **Example:**

(RS Project Folder) \SCS0101

If the RS Project Folder is C:\MYRSPJT, the above path becomes C: \MYRSPJTSCS0101.

#### Drawing Conventions

Drawings used in the User's Manuals may be partially emphasized, simplified, or omitted for the convenience of description.

Drawings of windows may be slightly different from the actual screenshots with different settings or fonts. The difference does not hamper the understanding of basic functionalities and operation and monitoring tasks.

#### Integration with CENTUM

The Product can be integrated with CENTUM VP or CENTUM CS 3000. In the User's Manuals, the integration with CENTUM VP or CENTUM CS 3000 is referred to as "Integration with CENTUM."

In the User's Manuals, the explanations for integrating the Product with CENTUM VP or CENTUM CS 3000, the glossary for various features of CENTUM VP is used instead of the glossary for CENTUM CS 3000. For example, the term "CENTUM VP System Alarm View" is used instead of "CENTUM CS 3000 System Alarm window." Nevertheless, if the features for integrating the Product with CENTUM VP and CENTUM CS 3000 are different, both features will be explained separately.



ALSO For more information about the functions and usage of CENTUM VP components for integrating the Product with CENTUM VP, refer to:

User's Manuals (IM), Technical Information (TI), and General Specifications (GS) of CENTUM VP

For more information about the features and usage of CENTUM CS 3000 components for integrating the Product with CENTUM CS 3000, refer to:

User's Manuals (IM), Technical Information (TI), and General Specifications (GS) of CENTUM CS 3000

#### Explanation of Hardware and Software Behaviors in the User's **Manuals**

In the User's Manuals, system behaviors are explained assuming that the latest versions of YOKOGAWA software and hardware at the time of publication of the User's Manuals are in-

If additional precise information about the safety of legacy versions of software or hardware is required, a link to the corresponding explanation is provided. Please refer to the information according to your system.

#### Station Types

A safety control station (hereafter referred to as SCS) is named according to the type of the safety control unit used in it.

Table Info-1 Names of SCS and Safety Control Unit Used

Name of SCS	Model of the safety control unit
SCSV1-S	SSC10S/SSC10D
SCSP1-S	SSC50S/SSC50D
SCSP2-S	SSC60S/SSC60D
SCSU1-S	SSC57S/SSC57D

In the User's Manuals, the following abbreviations may be used to describe functions of these SCS as a whole.

- SCSV1: Abbreviation of SCSV1-S
- SCSP1: Abbreviation of SCSP1-S
- SCSP2: Abbreviation of SCSP2-S
- SCSU1: Abbreviation of SCSU1-S

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## **License Management**

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# 1. Overview of license management

This section provides an overview of license management.

## 1.1 License management

This section provides an overview of license management and License Manager, which is a software used to manage licenses.

#### About license management

A license is the right to use a CENTUM VP or ProSafe-RS software package.

If you install the CENTUM VP or ProSafe-RS software package on a PC but do not grant a license, you will not be able to use the software package.

To use a CENTUM VP or ProSafe-RS software package, you need to allocate a license to every PC installed with the software package that you want to activate. In addition, you can delete licenses for software packages that are no longer used on a specific PC. In this manual, these operations are referred to as activating and deactivating a software package.

License management is the process by which you determine which software package to use on which PC, distribute or delete licenses for each individual PC, and activate or deactivate the software packages.

#### About License Manager

License Manager is the license management software designed specifically to manage CENTUM VP or ProSafe-RS licenses.

License Manager is automatically installed when you install a CENTUM VP or ProSafe-RS software package on a PC. License Manager for CENTUM VP is installed when you install the CENTUM VP software package. Similarly, License Manager for ProSafe-RS is installed when you install the ProSafe-RS software package.

You can also install License Manager only, without installing the CENTUM VP or ProSafe-RS software package.

The following figure shows the License Manager window.

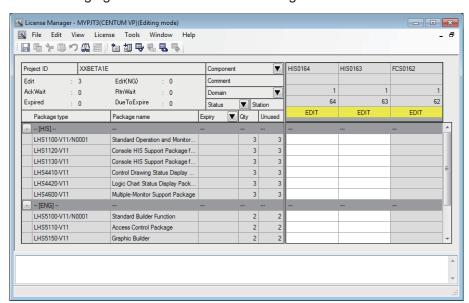


Figure 1.1-1 License Manager

### 1.1.1 License management targets

This section describes the products that are managed in license management and the scope for managing licenses.

#### Products managed in license management

In License Manager, you can manage the licenses of the following products:

- CENTUM VP R5.01 or later
- ProSafe-RS R3.01 or later

TIP

In versions of CENTUM VP or ProSafe-RS that were released earlier than these versions, usage rights to software packages are verified during the installation of the packages.

#### Scope of license management

In CENTUM VP or ProSafe-RS, a project that defines the license management targets is referred to as a license project.

A license project manages the same scope specified by the project ID.

TIP

- CENTUM VP and ProSafe-RS are managed as two separate systems. For this reason, the license projects for CENTUM VP and ProSafe-RS are also managed separately.
- System engineering information is managed in a project, whereas system license information is managed in a license project.
- Software that is bundled in hardware is not managed in license management. For example, software
  that is bundled with hardware, such as CENTUM VP basic control functions, communication gateways
  (CGW), and bus converters (BCV) are not managed in license projects. On the other hand, recipe management stations and stations dedicated to engineering are managed in the license project.

#### Managing licenses for multiple systems

In License Manager, you can manage multiple CENTUM VP projects and ProSafe-RS projects. This makes it possible to manage license projects for multiple projects.

You can manage license projects for both CENTUM VP and ProSafe-RS by installing License Manager for both CENTUM VP and ProSafe-RS on one PC.

#### 1.1.2 How license management works

This section describes the system configuration for license management and the process for managing licenses.

#### ■ License management system configuration

License Manager is installed on all PCs installed with the CENTUM VP or ProSafe-RS software package. You can use License Manager on one of these PCs to manage licenses for the entire license project, and License Manager on the remaining PCs to manage their own licenses.

A PC that manages licenses for one entire license project is called a license management station, while a PC whose licenses are being managed is called a license-assigned station.

TIP If you use a PC that is installed with only License Manager to manage license projects, the PC is regarded as the license management station.

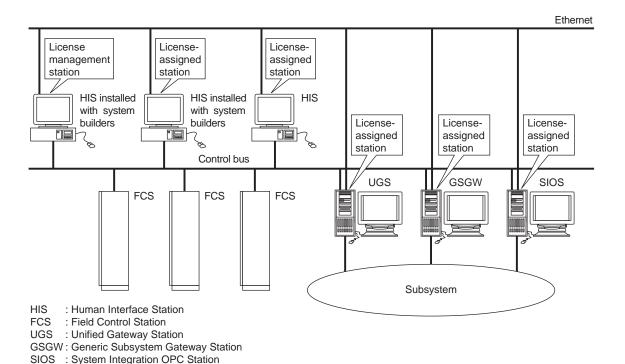
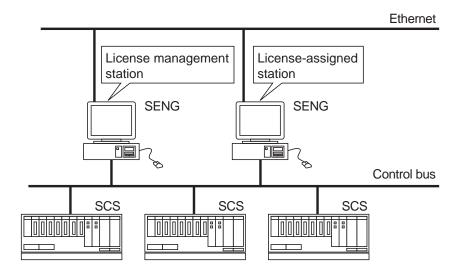


Figure 1.1.2-1 Example of the license management system configuration for CENTUM VP



SENG: Safety Engineering PC SCS: Safety Control Station

Figure 1.1.2-2 Example of the license management system configuration for ProSafe-RS

TID

As a general rule, to set up a license management station, you should use a PC that is installed with CENTUM VP or ProSafe-RS software package and is running 24 hours a day. However, you can also use a PC that is installed with only License Manager, and not with any CENTUM VP or ProSafe-RS software package.

#### License management process

Yokogawa provides usage rights for purchased software packages in the form of license key files. License key files are stored on license media (CD-R) and supplied to users.

The license management station recognizes purchased licenses by reading the license key files from the license media. After you assign licenses to each station, distribute the licenses to activate the software packages accordingly.

Licenses are assigned to the following three stations:

- License-assigned stations
   Are assigned licenses for the CENTUM VP or ProSafe-RS software packages installed on the license-assigned stations.
- License management station
  Is assigned licenses for the CENTUM VP or ProSafe-RS software packages installed on
  the license management station itself. (\*1)
- FCS/SCS
   Are assigned licenses for the Options software used in FCS or SCS.
- \*1: Excludes stations installed only with License Manager.

TIP

Licenses for software that is bundled with hardware, such as FCS or SCS basic software, are not managed by License Manager.

After assigning licenses, distribute the licenses to the stations. At this point, the licenses that have been assigned to each station are distributed as follows:

- Licenses assigned to license-assigned stations
  Distributed from the license management station to the relevant license-assigned station.
- Licenses assigned to the license management station
   Distributed from the license management station to itself.

Licenses assigned to an FCS or SCS
 Licenses assigned to an FCS are distributed to the HIS installed with the system builders, while licenses assigned to an SCS are distributed to the SENG.

After licenses have been distributed, activate the CENTUM VP or ProSafe-RS software package by accepting the licenses on each station.

#### 1.1.3 Overview of license management process

This section describes the license management process when building a license project for the first time, and the tasks that need to be completed before and after the process.



#### **IMPORTANT**

Before performing the actual license management process, first prepare the information that is required for the process.

#### Tasks to be completed before starting license management

Before starting license management, you need to perform the following tasks:

- Install the software package Install the CENTUM VP or ProSafe-RS software package on all PCs where you want to run the software package.
- Select the license management station
   From the PCs installed with License Manager, select a PC to use as the license management station. License Manager is automatically installed on PCs installed with CENTUM VP or ProSafe-RS. For a PC that is not installed with the CENTUM VP or ProSafe-RS software package, you need to install License Manager manually.

TIP

To check license consistency for the entire system, it is recommended that you use a PC that is running continuously as the license management station. However, license-assigned stations and FCS/SCS stations will continue to operate normally even if the license management station stops.

#### Building a license project for the first time

This section describes the license management process when building a CENTUM VP or Pro-Safe-RS license project for the first time.

License management includes tasks performed on the license management station and the license-assigned stations.

#### Tasks performed on a license management station

First, start License Manager on the license management station.

The tasks performed on a license management station are as follows:

- Create new license projects
   Create a license project. When creating a license project, specify a name for the license project.
- 2. Read the license

Read the license key file from the license media and register the available licenses. At this point, you need to enter the Project ID number.



#### **IMPORTANT**

- The license key file needs to be read by License Manager within the validity period printed on the license media. If the validity duration expires, you will not be able to read the license key file using License Manager. If the validity duration has expired, contact Yokoqawa.
- You must retain the license key file even after expiration because it is used when restoring a license project.
- Specify the stations
   Specify the stations whose licenses need to be managed.
- 4. Assign licenses to the stations Assign available licenses to each station.
- 5. Check license consistency Check that the basic software and options software have been combined correctly and that the licenses have been properly assigned.
- 6. Distribute licenses to stations
  Distribute licenses to the license-assigned stations through the network or by using external media.

#### Tasks performed on a license-assigned station

After you distribute licenses from the license management station to a license-assigned station, start License Manager on the license-assigned station.

Perform the following task:

Accept the licenses
 Using License Manager, accept the licenses to activate the software packages.

TIP

When you distribute licenses for the first time, they are accepted automatically. For the second and subsequent distributions, you need to perform the task to accept licenses.



#### **IMPORTANT**

You need to perform this task on all license-assigned stations. In addition, you also need to perform the same task for the license management station if you are assigning licenses to the station itself and activating its software package.

#### Tasks to be performed after licenses have been accepted

On the license management station and license-assigned stations, perform the procedures required for the individual packages that have been activated.

SEE

ALSO For more information about work required after activation, refer to:

B4., "Configuring Function-Specific Settings on SENG" in Installation (IM 32Q01C50-31E)

## 1.2 License Manager

This section describes License Manager, the software that is used to manage CENTUM VP and ProSafe-RS licenses.

#### 1.2.1 License Manager function

This section describes the functions of License Manager on the license management station and license-assigned stations.

#### Functions of License Manager on a license management station

You can use the following functions of License Manager on a license management station:

- Manage licenses
   Create license projects and perform license management for the entire system, such as
   the assignment, distribution, and modification of licenses.
- Monitor the status of assigned licenses
   Monitor the status of assigned licenses for the entire system.
- Automatically back up license management information
   Automatically back up license management information to prepare for the possibility of a license management station failure.
- Redistribute licenses
   Redistribute licenses to a replacement license-assigned station if the original station fails.
- Accept licenses distributed to the local station
   Accept licenses that have been distributed to the license management station itself, and activate or deactivate the CENTUM VP or ProSafe-RS software packages.

#### Functions of License Manager on a license-assigned station

You can use the following functions of License Manager on a license-assigned station:

- Accept distributed licenses
   Accept licenses and activate or deactivate the CENTUM VP or ProSafe-RS software packages.
- Monitor distributed licenses
   Monitor licenses that have been distributed to the local station.

#### User privileges in License Manager 1.2.2

This section describes the user privileges in License Manager.

#### Privileges that entitle users to license management

The License Manager functions that you can use vary according to your user privileges. If you are part of a user group that has Administrator privileges, you can have maintenance privileges for License Manager. Only users with maintenance privileges can operate a license management station in Editing mode.

Table 1.2.2-1 User groups with maintenance privileges

Product name	User group		
Froduct name	Legacy model(*1)	Standard model(*1)	
CENTUM VP	Administrators	CTM_MAINTENANCE, CTM_MAINTENANCE_LCL	
ProSafe-RS	Administrators	PSF_MAINTENANCE, PSF_MAINTENANCE_LCL	

<sup>\*1:</sup> This is the security model that is configured in IT security.



ALSO For more information about Editing mode, refer to:

"■ Operation modes" on page 1-13

# 1.2.3 Starting and exiting License Manager and working with the operation modes

This section describes how to start and exit License Manager and the operation modes.

#### Starting License Manager

From the Start menu on the license management station or a license-assigned station, select [All Programs] > [YOKOGAWA License] > [License Manager].

License Manager starts.

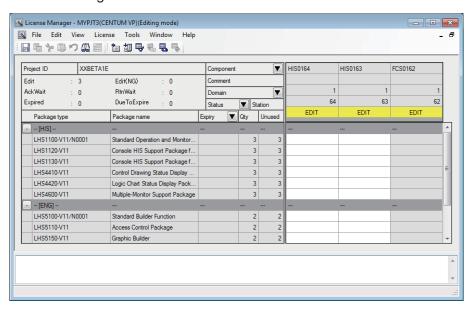


Figure 1.2.3-1 License Manager on the license management station

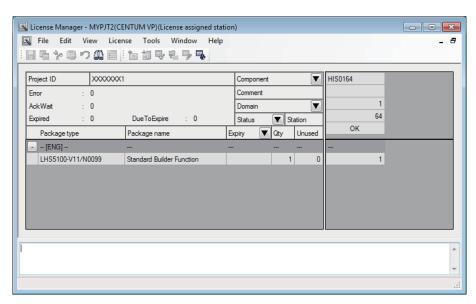


Figure 1.2.3-2 License Manager on a license-assigned station

TIP

When starting License Manager on the license management station from the second time onwards, a dialog box may appear to confirm whether you want to open data you were working with. The dialog box appears if you had closed License Manager after modifying the license assignments but without distributing them in the previous session. When this dialog box appears, click [Yes] to open the license project in the state where license assignments were being modified, but not distributed. Otherwise, click [No] to open the license project in the most recent status when licenses were distributed successfully.

#### Exiting License Manager

From the License Manager menu bar, select [File] > [Exit].

#### Operation modes

The functions that can be used in License Manager change according to the operation mode. The following table shows the functions that can be used in each License Manager operation mode:

Table 1.2.3-1 Operation modes in License Manager

Station	Operation mode	Functions
License-manage- ment station	Editing mode	Create a new license project Read licenses from the license media Define license management targets Assign licenses to license-assigned stations Distribute licenses to license-assigned stations Accept licenses distributed to its local station and activate or deactivate the installed software packages.
	Monitoring mode	Display the status of assigned licenses on license-assigned stations
License-assigned stations	Assigned station mode	Accept licenses distributed to local stations and activate or deactivate the installed software packages.  Display the status of assigned licenses for its local stations

#### Switching operation modes

You can switch between the different operation modes of the license management station in the following ways:

#### Switching from Monitoring mode to Editing mode

From the License Manager menu bar, select [View] > [Editing mode].

#### Switching from Editing mode to Monitoring mode

From the License Manager menu bar, select [View] > [Monitoring mode].

#### Functions of License Manager and user privileges

The functions in License Manager that are available for use vary according to your user privileges.

Only users with maintenance privileges can operate a license management station in Editing mode.

The following table shows the License Manager functions available for the different stations and their operation modes:

Table 1.2.3-2 License Manager functions available for the different stations and their operation modes

		Station			
Category	gory License Manager function		Management Station (Monitoring mode)	Assigned Station	
Managing li-	Create a new license project	Yes	Yes (*1)	Yes (*1)	
cense informa- tion	Delete a license project	Yes	No	No	
	Modify the properties of a license project	Yes	No	No	
	Back up a license project	Yes	No	No	
	Restore a license project	Yes	Yes (*1)	Yes (*1)	
Defining the sta-	Add a station	Yes	No	No	
tion configura- tion	Delete a station	Yes	No	No	
	Modify station properties	Yes	No	No	
Managing licen-	Add a license	Yes	No	No	
ses	Move a license	Yes	No	No	
	Delete a license	Yes	No	No	
	Merge new installation licenses with upgrade installation licenses	Yes	No	No	
Editing license	Assign a license	Yes	No	No	
assignments	Import a package list	Yes	No	No	
	Export a package list	Yes	Yes	Yes (*2)	
	Check consistency	Yes	No	No	
	Export the status of license assignments that are being edited	Yes	No	No	
Distributing and accepting licen-	Distribute a license (through the network)	Yes	No	No	
ses	Distribute a master license (through the network) (*3)	Yes	No	No	
	Accept a license (through the network)	Yes	Yes (*1)	Yes (*1)	
	Distribute a license (using external media)	Yes	No	No	
	Distribute a master license (using external storage media) (*3)	Yes	No	No	
	Accept a license (using external media)	Yes	No	Yes (*1)	
	Return a license (using external media)	Yes	No	No	
Monitoring the li- cense status	Monitor the status of assigned licenses	No	Yes	Yes (*2)	
	Export the status of assigned licenses to a file	No	Yes	Yes (*2)	
Other	Switch to Editing mode	No	Yes (*1)	No	
	Switch to Monitoring mode	Yes	No	No	

Only available for users with maintenance privileges
Only applicable for licenses distributed to that license-assigned station
The Distribute Master licenses function redistributes assignment information that has already been distributed.

#### 1.2.4 Names of different parts of License Manager

This section lists the names of the different parts of License Manager.

#### Main window

The following figure shows the names of the different parts of the License Manager main window.

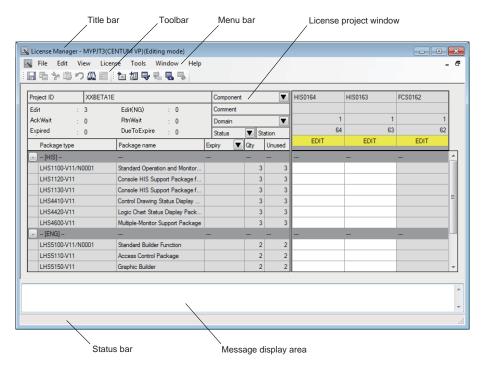


Figure 1.2.4-1 License Manager main window

#### License project window

The following figure shows the names of the different parts of the license project window.

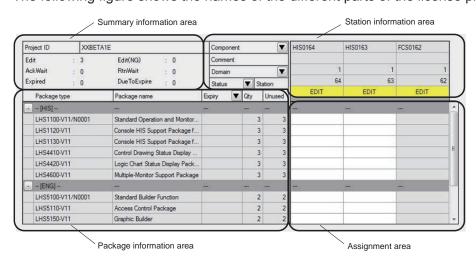


Figure 1.2.4-2 License project window

#### summary information area

The summary information area shows the Project ID and the status of assigned licenses for the entire license project.

In License Manager on the license management station, this area shows the status of assigned licenses for the entire license project. In License Manager on the license-assigned station, the area shows the status of licenses assigned to the local station.

The following items appear in the summary information area:

- Project ID
- Status display: The information displayed varies according to different operation modes, as shown in the following table.

Table 1.2.4-1 Status display details

Station	Status	Description	Status applicable for
License manage- ment station	Edit	Number of stations with licenses that are being edited	Entire license project
(Editing mode)	Edit(NG)	Number of stations that are diagnosed with errors in the consistency check	
	AckWait	Number of stations waiting for license acceptance	
	RtnWait	Number of stations waiting for a license to be returned	
	Expired	Number of stations with an expired license	
	DueToExpire	Number of stations with licenses that will expire within 30 days	
License manage-	Error	Number of stations with a license error	Entire license project
ment station (Monitoring mode)	Unknown	Number of stations for which the status cannot be confirmed due to a communication error	
	AckWait	Number of stations waiting for license acceptance	
	RtnWait	Number of stations waiting for deleted licenses to be returned using external media	
	Expired	Number of stations with an expired license	
	DueToExpire	Number of stations with licenses that will expire within 30 days	
License-assigned	Error	License error	Local station
station	Expired	Licenses have expired.	
	DueToExpire	Licenses will expire within 30 days.	
	AckWait	Waiting for license acceptance	

#### Package information area

The package information area shows the software packages with the licenses that are available for use.

In License Manager on the license management station, this area shows the managed software packages. In License Manager on the license-assigned station, this area shows the software packages that have been assigned a license on the local station.

The following items appear in the package information area:

- Package type: The package model specification code for the license (example: LHS1100-V10/N0003)
- Package name: The package name for the license
- Expiry: If the license has an expiry date, the expiry date appears
- Qty: The number of licenses
- Unused: The number of licenses not assigned to any station

If you exceed the number of unused licenses when assigning licenses, there is a change in the background color of the cell that indicates the number of unused licenses.

Table 1.2.4-2 Background color of the unused cell

Background color	Description		
White	The number of unused licenses for this software package is more than 0		
Red	The number of unused licenses for a software package is a negative value. This is because you assigned more licenses than the quantity you own for a station.		

#### Station information area

The station information area shows the stations that have been assigned licenses.

In License Manager on the license management station, stations for the entire license project appear. In License Manager on the license-assigned station, only the local station appears.

TIP

If FCS or SCS licenses have been assigned, they are distributed to license-assigned stations installed with the engineering function. For this reason, if the following conditions are satisfied, License Manager on the relevant license-assigned station displays in this area, the corresponding FCS or SCS in addition to the local station

- If the license-assigned station is CENTUM VP, system builders are assigned. If it is ProSafe-RS, the SENG software is assigned.
- · The FCS or SCS software has been assigned.

The following items appear in the station information area:

- Component: The station name
- Comment: Station comments
- Domain: The domain numbers of the stations
- Station: The station numbers of the stations
- Status: The status of assigned licenses for the stations

Table 1.2.4-3 The status of assigned licenses for a station

Station	Status of as- signed licenses	Background color	Status	Description
License manage- ment station	ОК	No back- ground color	Normal	Licenses have been distributed and accepted
(Editing mode)	EDIT	Yellow	Warning	License assignment is currently being edited
	AckWait	Yellow	Warning	Licenses have been distributed and are waiting for acceptance
	RtnWait	Yellow	Warning	Waiting for deleted licenses to be returned using an external storage media
	Edit(NG)	Red	Error	License assignment is currently being edited (there is an error in the assignment details).

Continues on the next page

Table 1.2.4-3 The status of assigned licenses for a station (Table continued)

Station	Status of as- signed licenses	Background color	Status	Description
License manage- ment station	ОК	No back- ground color	Normal	Licenses are being assigned successfully.
(Monitoring mode) (*1)(*2)	DueToExp	Yellow	Warning	Licenses will expire within 30 days
	Unknown	Yellow	Warning	Cannot confirm status due to a communication error
	NoLicense	Red	Error	No license
	Error	Red	Error	There is a license error
	Expired	Red	Error	Licenses have expired
License-assigned stations (*1)	ОК	No back- ground color	Normal	Licenses are being assigned successfully.
	DueToExp	Yellow	Warning	Licenses will expire within 30 days
	Error	Red	Error	There is a license error
	Expired	Red	Error	Licenses have expired
	NoLicense	Red	Error	No license

<sup>\*1:</sup> When the licenses are waiting for acceptance, the prefix \* is added to the character strings indicating the status of assigned licenses. (Example: \*OK)

#### Assignment area

In the assignment area, you can view whether a license has been assigned to a station.

In License Manager on the license management station, you can view whether licenses have been assigned for the entire system. In Editing mode, you can modify the license assignment.

In License Manager on a license-assigned station, you can view the license assignment status for the local station.

The background color of this area also indicates the license assignment status.

Table 1.2.4-4 Background display of the assignment area

Background color	Description
White	This cell can be assigned licenses.
Yellow	License assignment was modified for this cell.
Red	This cell was diagnosed with errors in the consistency check.
Gray	This cell cannot be assigned licenses.



SEE ALSO For more information about consistency checks, refer to:

"■ Building a license project for the first time" on page 1-7

When the licenses are waiting to be returned, the prefix \*\* is added to the character strings indicating the status of assigned licenses. (Example: \*\*OK)

## 2. Managing licenses for the first time

This section describes how to manage licenses for a system for the first time.

# 2.1 Process for managing licenses for the first time

This section describes the items required for managing licenses for the first time and the basic workflow for activating the software package.

#### Requirements

You need the following items to start managing licenses:

- License media (license key files)
- A license sheet that lists the Project IDs for CENTUM VP or ProSafe-RS

#### Basic workflow

The basic workflow for managing licenses for the first time is shown in the following figure. Follow this workflow to activate a software package.

The steps until license distribution are performed using the License Manager on the license management station.

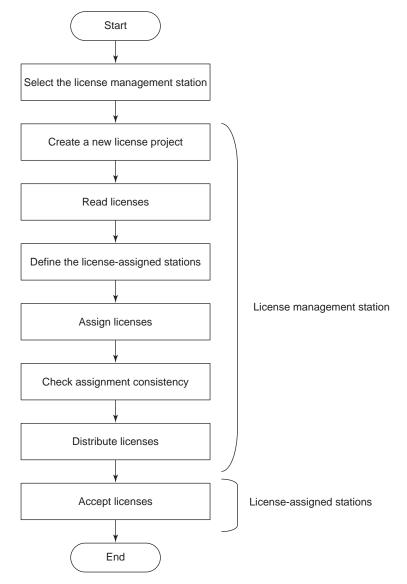


Figure 2.1-1 Steps for managing licenses for the first time

#### Selecting the license management station

From the PCs installed with License Manager, select a PC to use as the license management station. If there are any PCs that operate 24 hours a day, it is recommended that you select that PC from the perspective of the consistency check.

## 2.2 Creating new license projects

This section describes how to create a license project for license management. When creating a license project, specify a backup folder.

TIP

You can distribute licenses even if you do not specify a backup folder. However, in License Manager, license projects are automatically backed up when a license project is saved. For this reason, you should specify a backup folder first.

#### Creating a license project

Follow these steps to create a license project:

- 1. Log on to the license management station PC as a user with maintenance privileges.
- From the Start menu, select [All Programs] > [YOKOGAWA License] > [License Manager].

License Manager starts.

- From the menu bar, select [File] > [New] > [Project].
   The Create new license project dialog box appears.
- 4. Specify the following information:
  - In the Project name box, type a name for the license project using a character string containing between 1 and 8 characters.

You can use uppercase single-byte English letters, numeric characters, hyphens (-), and underscores (\_). However, the first character must be an uppercase English letter.

- From the System type drop-down list, select a system product name.
- Click [OK].

The license project is created and the license project window appears in the License Manager window.

TIP

If you are managing licenses for multiple systems on one PC, create a license project using this procedure.

#### Specifying a backup folder

For the license project backup folder, you need to specify a folder that is on the hard drive of another PC on the same network, or a hard drive that has been added to your PC, and that is writable by everyone. You can also specify a shared folder on the file server that has been set up using the IT Security Setting tool.

Follow these steps to specify a backup folder for license projects:

- 1. In the license project window, select the Project ID field.
- 2. From the menu bar, select [File] > [Property]. The License project property dialog box appears.
- 3. Click the [...] button next to the Backup folder box. The folder selection dialog box appears.
- 4. Select the drive and folder for the backup. In the Comments box, type some comments if required.
- Click [OK].The backup folder for the license project has now been specified.

### ■ Deleting a license project

Follow these steps to delete a license project:

- 1. In the license project window, select the Project ID field.
- 2. From the menu bar, select [File] > [Delete].
  A dialog box appears to confirm whether you want to delete the license project.
- 3. Click [Yes]. The license project is deleted.

## 2.3 Reading a license

Licenses are read by the PC that is designated as the license management station. This section describes how to read a license key from the license media and register the license in the license project.

#### Reading a license

When reading a license, you need the license media and license sheet.

Follow these steps to read a license:

- 1. Insert the license media into the drive of the license management station.
- From the License Manager menu bar, select [License] > [Add licenses].
   The folder selection dialog box appears.
- 3. Select the drive in which you inserted the license media.
- 4. Click [OK].
  A dialog box appears to confirm the Project ID number.
- 5. Enter the Project ID number that is listed on the license sheet.
- Click [OK].
   A confirmation dialog box appears to confirm whether you want to save the license project.
- Click [Yes].
   The license key is read from the license media. If you click [No], the read operation is terminated.

When the license is read, the Project ID number and package types (license information) displayed in the license project window are updated.

#### TIP

- If the entered project ID number and the project ID number stored on the license media do not match, an error occurs. Enter the correct project ID number.
- If there is more than one license media with the same project ID, read the licenses from each license media. From the second media onwards, you do not need to enter the Project ID number.

# 2.4 Defining stations to which licenses need to be assigned

This section describes how to define stations.

On the license management station, you can define each PC and FCS or SCS to which you want to assign a license, as a license-assigned station. You can also define the license management station itself as a license-assigned station and assign licenses to it.

TIP

As an alternative to the manual data entry described in this section, you can also import station configuration and license assignment information from a package list. A package list is a CSV file that describes the configuration of stations and license assignment information for each of the stations.

SEE ALSO

For more information about importing package lists, refer to:

"■ Importing a package list" on page 3-28

#### Defining a license-assigned station

Follow these steps to define a license-assigned station:

From the License Manager menu bar, select [File] > [New] > [Station].
 Alternatively, in the station information area in the license project window, right-click and select [Add station].

The Add station dialog box appears.

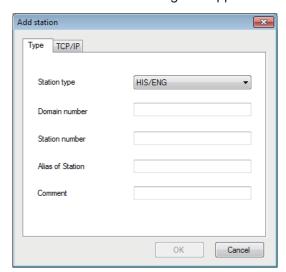


Figure 2.4-1 Add station dialog box

- In the Type tab, specify station type settings.The options are described in the following "Options in the Add station dialog box" section.
- Click the [TCP/IP] tab.
   In the Host Name box under the Ethernet TCP/IP Settings, the default computer name appears.

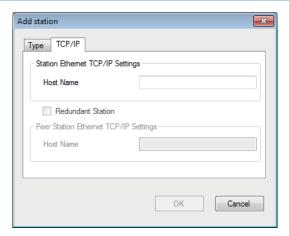


Figure 2.4-2 Add station dialog box

- Specify a computer name, if required. If you selected FCS or SCS from the Station type drop-down list, you do not need to specify any TCP/IP tab items.
- Click [OK]. The defined station is added to the license project window.

In Station type, if you selected a station which can be made redundant, the Redundant Station check box becomes available. To make a station redundant for UGS, select the [Redundant Station] check box and specify the Peer Station Ethernet TCP/IP settings.

SEE

ALSO For more information about UGS redundancy, refer to:

"■ Defining a redundant station" on page 2-18

#### Add station dialog box specifications

The items that you specify in the Type tab of the Add station dialog box are as follows:

- Station type Select the station type from the drop-down list. Only the stations that can be defined for the product being managed by the license project appear.
- Domain number Specify the domain number of the control bus.

For stations not connected to the control bus, leave this blank.

- Station number
  - Specify the station number of the local station that is connected on the control bus.

For stations not connected to the control bus, leave this blank.

- Alias of station
  - You can enter a station alias of your choice. Enter up to eight single-byte alphanumeric characters. If you specify a station alias, the station alias appears with higher priority than the station name in the component area of the license project window.
- Comment You can enter a comment of your choice.

When you add a station, an automatic check is performed to check for errors relating to duplications and input range. If there is an error in the specified information, the Station properties error dialog box appears. Check the details of the error and change the specifications.

#### List of station name and computer name default values

Station names are automatically determined based on the station type, domain number, and station number.

The station name format is as follows:

Station type dd (domain number) ss (station number)

Example: HIS0164

The CENTUM VP and ProSafe-RS station types and their corresponding automatically determined station names and default computer names are as follows:

Table 2.4-1 Station names and default computer names in CENTUM VP

Station type	Station name	Default computer name
HIS/ENG	HIS[ddss]	HIS[ddss]
FCS	FCS[ddss]	N/A
SIOS	BCVO[ddss](SIOS)	E[ddss]
GSGW	FCS[ddss](GSGW)	GSGW[ddss]
APCS	FCS[ddss](APCS)	APCS[ddss]
UGS	BCVU[ddss](UGS) BCVU[ddss](UGS)(Peer) (*1)	E[ddss] E[ddss](Peer) (*1)
PC	STN[ddss] (*2)	None

<sup>\*1:</sup> The second redundant station (Peer).

Table 2.4-2 Station names and default computer names in ProSafe-RS

Station type	Station name	Default computer name
HIS/SENG (*1)	HIS[ddss]	HIS[ddss]
SENG	STN[ddss] (*2)	None
SCS	SCS[ddss]	N/A

<sup>\*1:</sup> This is a station defined as HIS on CENTUM VP System View.

## ■ When using virtual test functions

When you use virtual test functions, provide either of the following settings for the PC where you run the FCS simulator or SCS simulator:

- For a PC installed with a control bus interface card or Vnet/IP interface card, define it in the same manner as when you define an HIS, SENG, or other station.
- For a PC not installed with a control bus interface card or Vnet/IP interface card, define it
  with the station type "PC". You do not need to specify the domain number and station
  number.

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<sup>\*2:</sup> If a domain number or station number is not specified, a station name is not automatically determined.

<sup>\*2:</sup> If a domain number or station number is not specified, a station name is not automatically determined.

#### 2.5 Assigning licenses to license-assigned stations

Using License Manager on the license management station, you can assign licenses to the stations on which you want to use the CENTUM VP or ProSafe-RS software packages.

Even in an environment for virtual testing that does not include any actual stations, licenses are required according to the number of stations defined in the CENTUM VP or ProSafe-RS project.

#### Assigning licenses

- 1. In the license project window, select a cell in the assignment area.
- Enter the number of licenses assigned to each station. To assign a license, enter 1. If you do not want to assign a license, leave it blank. The status of stations that have been assigned a license changes to EDIT and the background color of the respective cell changes to yellow.

TIP

If licenses cannot be assigned to a station, you cannot enter the number of licenses in that cell.

SEE

ALSO For more information about status display, refer to:

"■ License project window" on page 1-15

#### Copying license assignment information

Follow these steps to copy license assignment information from one station to another:

- In the license project window, click the name of the station from which you want to copy information.
- From the License Manager menu bar, select [Edit] > [Copy]. Alternatively, right-click the station name and select [Copy].
- 3. Select the name of the station to which you want to paste the information.
- From the menu bar, select [Edit] > [Paste]. Alternatively, right-click the name of the station and select [Paste].

The status of the station to which you pasted the license assignment information changes to EDIT and the background color of the respective cell changes to yellow.

To cut and paste the license assignment information for a station, select [Cut] instead of [Copy].

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#### Checking license assignment consistency 2.6

Using License Manager, you can perform consistency checks to find errors related to license assignments. For example, you can find errors such as exclusions and dependencies of software packages on stations assigned with licenses.

In the consistency check, all stations that have been assigned licenses are checked.

A consistency check is automatically performed when licenses are distributed, but you can also perform a check at any time.

ALSO For more information about items verified during a consistency check, refer to:

Appendix 1., "Items checked in the license assignment consistency check" on page App.1-1

#### Checking the consistency of license assignment

To perform a consistency check, from the License Manager menu bar, select [License] > [Check consistency].

The consistency check results appear in the message area. If an error is detected, the corresponding cell in the assignment area changes to red. Modify the assignment to rectify the error.

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# 2.7 Distributing and accepting licenses through a network

This section describes how to distribute assigned licenses from the license management station to a license-assigned station through a network, and how to activate the licenses.

#### Distributing a license to license-assigned stations through a network

Follow these steps to distribute a license from the license management station to a license-assigned station through a network:



#### **IMPORTANT**

The license-assigned station to which the license is being distributed must be running.

From the License Manager menu bar, select [License] > [Distribute licenses].
 A list of the stations that have been assigned a license and have the EDIT status appears in the Distribute licenses dialog box.

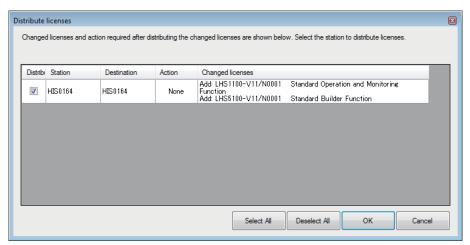


Figure 2.7-1 Distribute licenses dialog box

In the Distribute licenses dialog box, the Action column indicates the actions required to accept the license assignment changes on the license-assigned station, and the Changed licenses column indicates the package names of licenses. When distributing licenses for the first time, all licenses are shown in the format: "Add: <Package type>."

- In the Distribute column, select the Distribute check box for the stations to which you want to distribute a license. By default, all stations are selected as distribution destinations.
- 3. Click [OK].

License Manager automatically checks the following:

- Is there consistency in the license assignments for the stations to which licenses need to be distributed?
- Has the number of licenses distributed to the license-assigned stations exceeded the number of licenses of the software package?
- On the license-assigned stations for distribution, are there any errors in the version number, language, station type, and assignment exclusions between products?

- 4. If there are no errors in the check, a dialog box appears to confirm whether you want to save the license project.
- Click [Yes].
   The licenses are distributed to the stations targeted for distribution. If you click [No], the distribution operation is terminated.

When distribution of the license to the license-assigned stations is successful, the status of the station is updated from EDIT to AckWait.

TIP

After the licenses have been accepted on the distribution destination station, the status of the station changes to OK.

If a warning is generated during the license check, a warning message appears in the message area and then a confirmation dialog box appears. The license is distributed to the target station after confirmation is received.

If the operation to send the license information fails, and an error occurs during the license check, distribution of the license to the target stations is suspended and an error message appears in the message area. Remove the cause of the error and distribute the license again. If you selected multiple stations, you need to distribute licenses to all destinations. If distribution to any station fails, the entire distribution operation fails.

#### Distributing FCS or SCS licenses

FCS or SCS licenses are viewed when generating and downloading the system builders. For this reason, distribute FCS/SCS licenses as follows:

- For CENTUM VP
   The distribution destination for FCS licenses is stations assigned with a Standard Builder Function (LHS5100/LHM5100) license, rather than the actual FCS.
- For ProSafe-RS
   The distribution destination for SCS licenses is stations assigned with the Safety System Generation and Maintenance Package(CHS5100) license, rather than the actual SCS.

If multiple stations appear in the distribution destination, the status of the FCS or SCS station changes to OK once a license is assigned to at least one station.

#### Accepting a license and activating a software package on a licenseassigned station

After CENTUM VP or ProSafe-RS software package is installed, the licenses initially distributed through the network are accepted automatically. After the licenses have been accepted, the status of the license-assigned station changes to OK.

The software package is activated on stations to which licenses have been distributed. You do not need to perform any procedures using License Manager on the license-assigned stations. When you start License Manager on a license-assigned station, the assignment status for the local station appears and you can confirm the license status in the station information area.

**TIP** 

When distributing licenses to a license-assigned station two or more times, you need to accept the licenses on the license-assigned station. The software packages are activated when you restart the station after accepting the licenses.

# 2.8 Distributing and accepting licenses using external storage media

You can use external storage media to distribute licenses to a station that cannot communicate with the license management station, and activate software packages.

To distribute licenses using external storage media, first save the "license file" generated by License Manager on the license management station to an external storage medium. When this license file is read by the license-assigned station, the software package becomes available on that station.



#### **IMPORTANT**

It is recommended that you use an unused CD-R for the external storage media to avoid virus infection.

#### License files

A license file is a file that stores licenses assigned to stations. A license file is generated for each station.

#### Distributing licenses using external storage media

To distribute licenses using external storage media, first generate the license file using License Manager on the license management station.

Follow these steps to create license files:

- 1. From the License Manager menu bar, select [License] > [External storage media] > [Distribute licenses].
  - The stations that have been assigned licenses and have the EDIT status appear in the distribute licenses using external storage media dialog box.
- 2. Select the Distribute check box for the stations to which you want to distribute a license.
- 3. Click [OK].
  - A license assignment consistency check is performed for the stations to which licenses need to be distributed. If the consistency check does not return any errors, a dialog box appears to confirm whether you want to save the license project.
- Click [Yes].
  - A dialog box appears to specify a folder. If you click [No], the license file is not generated.
- 5. Specify the folder to which you want to save the license files.
- 6. Click [OK].
  - In the folder that you specified for generating the license file, a folder with a different ID is created for each station, and the license file is exported. When the license file is saved, the status of the station is updated from EDIT to OK.

If a consistency error occurs, the process of saving the license file to target stations is terminated, and an error message appears in the message area. Remove the cause of the error and distribute the license again.

## License file names, paths, and validity durations

The names, paths, and validity durations for license files are as follows:

• License file names and paths [user-specified\_folder]\[station\_ID]\[project\_name]. [station\_name].lf

Example: F:\PC001\MYPJT.PC001.lf

License file validity durations
 The validity duration for license files is three days. Ensure that you load a license file onto the license-assigned station within three days after the file is created. If the validity duration has expired, you will not be able to load the file.

TIP

If you are unable to load the license file because the validity duration has expired, or if you lose the license file, use the Distribute Master licenses function to redistribute the license.

#### Activating a software package using external storage media

A license distributed using external storage media needs to be read by the license-assigned station and the software package needs to be activated. The procedure for activating a software package is as follows.

Store the license file generated on the license management station on external storage media.



#### **IMPORTANT**

On the license-assigned station, stop the antivirus software, and applications of products that you started and for which you want to accept licenses.

- Log on to the license-assigned station as a user with maintenance privileges.
- 2. Insert the external storage media containing the license file into the drive.
- From the Start menu, select [All Programs] > [YOKOGAWA License] > [License Manager].
   License Manager starts.
- 4. From the menu bar, select [License] > [External storage media] > [Accept licenses]. The folder selection dialog box appears.
- 5. From the external storage media drive, select the folder containing the license file.
- Click [OK].
   If the license file has not expired or if there are no errors in the license file, the Accept licenses dialog box appears.
- 7. Click [OK].

  The license file is read and the software package is activated. In addition, the license project window is updated and you can check the assignment status for the local station.

#### 2.9 Monitoring the status of assigned licenses

You can perform the following license monitoring using License Manager on the license management station and license-assigned stations:

- License management station Monitor the status of assigned licenses in the entire license project.
- License-assigned stations Monitor the status of assigned licenses to the local station.

#### Monitoring the status of assigned licenses

From the License Manager menu bar on the license management station, select [View] > [Monitoring mode].

As soon as you switch to Monitoring mode, the status of assigned licenses appears for stations to which licenses have been distributed.

If you want to retrieve the most current assignment status from each station, on the menu bar, select [View] > [Refresh].

TIP

Stations in the license project, to which a license has not been distributed are not displayed.

On license-assigned stations, the status of assigned licenses for the local station appears as soon as License Manager starts.

SEE

ALSO For more information about status display, refer to:

"■ License project window" on page 1-15

#### Monitoring the status of assigned licenses in the task tray

You can monitor the status of assigned licenses by viewing the icons displayed in the task tray.

ALSO For more information about the icons displayed in the task tray, refer to:

"Displaying the status of assigned licenses in the task tray" on page App.2-1

### Notifying of alarms

When an abnormal license assignment status is detected, system alarms are generated and you can confirm the massages.

On stations that do not receive system alarm messages, a dialog box appears, notifying you to confirm them.

ALSO For more information about alarms, refer to:

Appendix 3., "Messages" on page App.3-1

## 2.10 Saving license projects

You can save station definitions and license assignments that you have been editing before distributing licenses. This data is saved as "work-in-progress" data in the license project. To save a license project, from the License Manager menu bar, select [File] > [Save].

When you open License Manager the next time, you can choose to either open the "work-in-progress" data, or open the (master) data for which licenses have been distributed.

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#### 2.11 Managing redundant station licenses

If you make individual stations redundant, you need to assign licenses to each redundant station and then distribute and accept them.

TIP

You cannot make an existing station redundant by changing the station properties. To change an existing station to a redundant station, you must delete the existing station first, and then define a new redundant station.

#### Defining a redundant station

Follow these steps to define a redundant station:

- 1. On the license management station, start License Manager in Editing mode.
- From the menu bar, select [File] > [New] > [Station]. The Add station dialog box appears.
- In the Station type drop-down list of the Type tab, select a station and specify the following items:
  - Domain number
  - Station number

You can type a station alias and comments of your choice.

- 4. In the Station Ethernet TCP/IP Settings section of the TCP/IP tab, type the name of the first computer.
- Select the Redundant Station check box. The Peer Ethernet TCP/IP Settings section becomes available.
- In the Peer Ethernet TCP/IP Settings section, type the name of the second computer.
- Click [OK].

Two rows showing the redundant stations are added to the license project window. If there is an error in the information specified, the Station properties error dialog box appears. Change the information according to the error details.

### Assigning licenses to redundant stations

When assigning licenses to redundant stations, ensure that the assignment information is the same on both stations.

SEE

ALSO For more information about assigning licenses, refer to:

"■ Assigning licenses" on page 2-10

### Distributing licenses to redundant stations

To distribute licenses to redundant stations, select both stations and distribute licenses at the same time. You cannot distribute licenses to one station only.

SEE ALSO

For more information about distributing licenses through a network, refer to:

"Distributing a license to license-assigned stations through a network" on page 2-12

## Accepting licenses on redundant stations

For redundant stations, accept licenses on both stations.

SEE ALSO For more information about accepting licenses, refer to:

"■ Accepting a license and activating a software package on a license-assigned station" on page 2-13

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# 3. Maintaining license projects

This section describes how to maintain license projects.

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#### 3.1 Reading additional licenses on a license management station

The procedure for reading additional purchased licenses on a license management station is the same as that for reading new licenses.

SEE ALSO For more information about reading licenses, refer to:

"■ Reading a license" on page 2-6

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## 3.2 Modifying licenses

This section describes how to modify license assignments within the same license project, and how to distribute and accept licenses after changing the assignments.

The following figure shows the workflow of assigning licenses of the software packages that are required by a station.

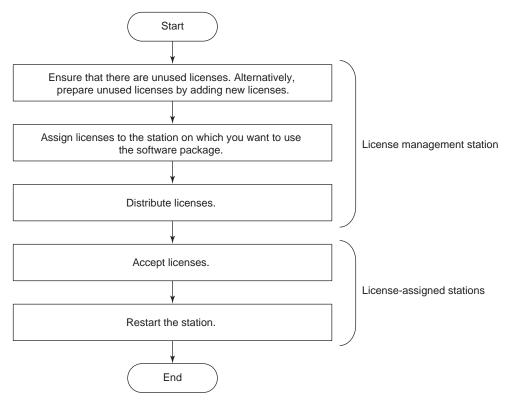


Figure 3.2-1 Assigning software package licenses to a station

The following figure shows the workflow of deleting licenses of a software packages that are no longer required from a station.

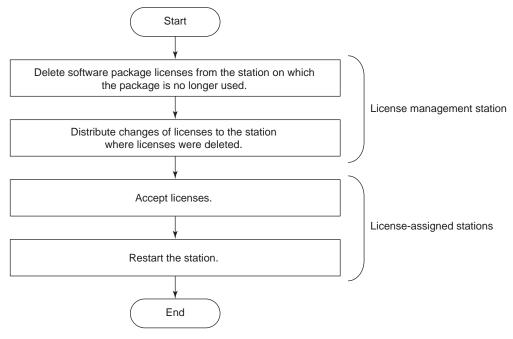


Figure 3.2-2 Deleting software package licenses from a station

The following figure shows the workflow of moving the license of a software package that is no longer used on a certain station to another station.

#### **Example:**

Moving a license from HIS0163 to HIS0162

HIS0163: Station from which a software package license is deleted.

HIS0162: Station to which the software package license is assigned.

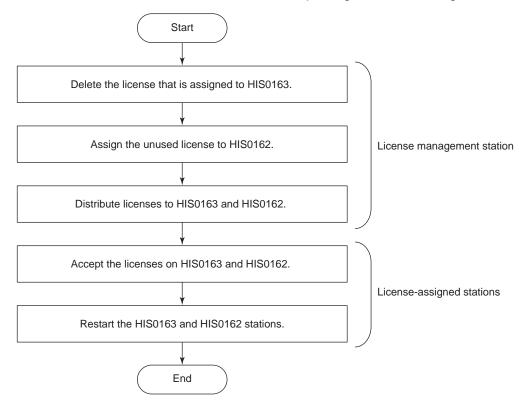


Figure 3.2-3 Moving a software package license between stations

### 3.2.1 Modifying license assignments

You can add or delete licenses on a license-assigned station by using License Manager on the license management station.

#### Adding a license to a license-assigned station

Follow these steps to add a license to a license-assigned station:

- 1. On the license management station, start License Manager in Editing mode.
- Select the cell corresponding to the software package that you want to add to the licenseassigned station, and enter 1.
   The background color of the cell changes to yellow and the status of the station to which the license has been added changes to EDIT.
- From the license management station, distribute the license to the station to which the license has been added.
- 4. On the license-assigned station, start License Manager and accept the license changes. The software package is activated.

TIP

- · Status after distribution: AckWait; Background color after distribution: Yellow
- · Status after acceptance: OK; Background color after acceptance: No background color

SEE

For more information about assigning licenses, refer to:

"■ Assigning licenses" on page 2-10

For more information about distributing licenses, refer to:

3.2.2, "Distributing modified licenses" on page 3-7

For more information about accepting licenses, refer to:

3.2.3, "Accepting modified licenses" on page 3-9

### Deleting a license from a license-assigned station

Follow these steps to delete a license from a license-assigned station:

- 1. On the license management station, start License Manager in Editing mode.
- Select the cell corresponding to the software package that you want to delete from the license-assigned station. On the keyboard, press the [Delete] key.
   The cell becomes empty and its background color changes to yellow. The status of the station from which the license has been deleted changes to EDIT.
- 3. From the license management station, distribute licenses to the station from which the license has been deleted.
- 4. On the license-assigned station, start License Manager and accept the license changes. The software package is deactivated.

TIP

- · Status after distribution: AckWait; Background color after distribution: Yellow
- Status after acceptance: OK; Background color after acceptance: No background color

SEE ALSO For more information about assigning licenses, refer to:

"■ Assigning licenses" on page 2-10

For more information about distributing licenses, refer to:

3.2.2, "Distributing modified licenses" on page 3-7

For more information about accepting licenses, refer to:

3.2.3, "Accepting modified licenses" on page 3-9

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### 3.2.2 Distributing modified licenses

When license assignments are changed on the license management station, you need to distribute the affected licenses from the license management station to the license-assigned stations.

The procedure for distributing licenses is different depending on whether the station is connected to a network.

#### Distributing licenses with assignment changes through a network

The procedure for distributing licenses with assignment changes through a network is the same as that for distributing new licenses.

While distributing licenses, stations whose status has been changed to EDIT as a result of the license assignment being changed (added or deleted) for that station, appear in the Distribute licenses dialog box.

In the Distribute licenses dialog box, the Action column indicates the action(s) required to accept the distributed licenses on the license-assigned station. The Changed licenses column indicates the names of packages with license assignment changes.

- Added licenses: "Add: <package type>"
- Deleted licenses: "Del: <package type>"

Select the Distribute check box for stations to which you want to distribute a license and click [OK].

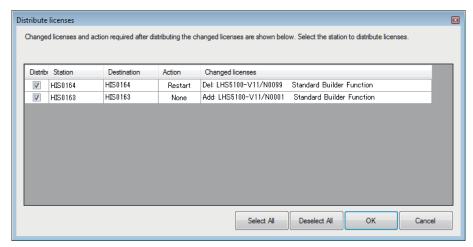


Figure 3.2.2-1 Distribute licenses dialog box

After licenses have been successfully distributed to the license-assigned stations, the status of the station changes from EDIT to AckWait.

SEE

For more information about distributing licenses to license-assigned stations through a network, refer to:

"Distributing a license to license-assigned stations through a network" on page 2-12

# Distributing licenses with assignment changes using external storage media

The procedure for distributing licenses with assignment changes to the stations that are not connected to the network is the same as that for distributing new licenses.

SEE ALSO For more information about distributing license with assignment changes using external storage media, refer to:

"■ Distributing licenses using external storage media" on page 2-14

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### 3.2.3 Accepting modified licenses

This section describes the procedure for activating and deactivating software packages with license changes. To accept licenses that have been distributed to the license-assigned stations, you need to replace the existing license file with the new license file on the respective stations. You must restart the stations after accepting the modified licenses. The software packages are either activated or deactivated based on the license changes.

The procedure for accepting licenses is different depending on whether the station is connected to a network.

#### Accepting licenses with assignment changes through a network

Follow these steps to accept modified licenses on license-assigned stations that have received licenses through a network:



#### **IMPORTANT**

On the license-assigned station, stop the antivirus software, and applications of products that you started and for which you want to accept licenses.

- 1. Log on to the license-assigned station as a user with maintenance privileges.
- From the Start menu, select [All Programs] > [YOKOGAWA License] > [License Manager].
   License Manager starts and the assignment status of the local station appears in the license project window. In the summary information area, confirm that the status of the station is AckWait and there are licenses that are waiting to be accepted.
- From the menu bar, select [License] > [Accept licenses].
   The modified licenses and the actions required after acceptance appear in the Accept licenses dialog box.

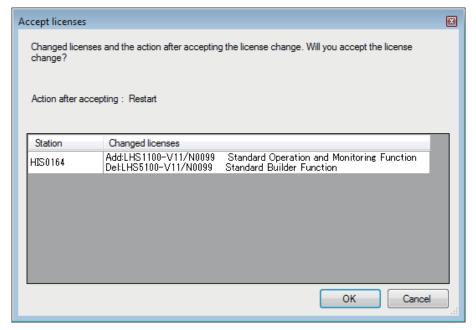


Figure 3.2.3-1 Accept licenses dialog box

 Click [OK].
 A dialog box appears, asking you to confirm whether the applications of the product whose license you are accepting have been closed.

- If the applications are not running, click [Yes]. If the applications are still running, click [No]. The license acceptance operation is terminated.
- When there is a need to restart the station after accepting licenses, a dialog box appears, asking whether you want to continue with accepting licenses.
- Click [Yes]. The acceptance operation starts. After the acceptance operation is completed, the station restarts automatically and the software packages are either activated or deactivated based on the license changes.

When you accept a license on a license-assigned station, the status of the corresponding station changes from AckWait to OK in License Manager on the license management station.

#### Accepting licenses with assignment changes using external storage media

When you distribute licenses using external storage media, the license-assigned station reads the modified licenses and activates or deactivates the software package. You can accept modified licenses using external storage media in the same way as you activate a license using external storage media. When you restart the stations after accepting licenses, software packages are either activated or deactivated based on the modified licenses.

When you delete previously distributed licenses, a returned license file is created on the license-assigned station. A returned license file is a file that stores information confirming that a license that was distributed using external storage media has been deleted and is no longer in use. A dialog box appears, asking you to specify the location where you want to save the returned license file.

SEE

ALSO For more information about accepting licenses using external storage media, refer to:

"■ Activating a software package using external storage media" on page 2-15

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#### 3.2.4 Returning licenses using external storage media

On a license-assigned station, if a previously distributed license is deleted when you accept license modifications using external storage media, a returned license file is generated. When the returned license file is read by the license management station, it is considered as an unused license and can be assigned to another station.

The license management station shows the RtnWait status when licenses are to be deleted and are waiting to be returned from a license-assigned station using external storage media. Therefore, you need to return the licenses promptly.

## SEE

ALSO For more information about status display, refer to:

"■ License project window" on page 1-15

#### Format for the generated returned license file

The file name of the returned license file and the path to which it is exported is as follows:

[user-specified folder]\[station ID]\[project name].[station name].rlf

Example: F:\HIS0164\MYPJT.HIS0164.rlf

#### Returning licenses using external storage media

Follow these steps to read a returned license file on the license management station:

- Go to the returned license file that was generated by the license-assigned station when accepting the license, and copy the returned license file to an external storage medium.
- 2. Insert the external storage media into the drive of the license management station.
- 3. On the license management station, start License Manager in Editing mode.
- 4. From the menu bar, select [License] > [External storage media] > [Return licenses]. The folder selection dialog box appears.
- 5. Select the returned license file from the external storage medium.
- Click [OK]. When the returned license file is read, the status of the corresponding station changes from RtnWait to OK, and the number of unused licenses increases. The procedure for returning the license is completed.

#### Regenerating another returned license file

If you cannot find the returned license file, you can generate it again as follows:

- Start License Manager on the license-assigned station where you previously generated the returned license file.
- From the menu bar, select [License] > [External storage media] > [Output returned licen-

A dialog box appears asking you to select the location for generating the returned license

- 3. Select the location where you want to save the returned license file.
- Click [OK].

The returned license file is generated in the specified folder.

#### 3.3 Adding and deleting license-assigned stations

You can add stations to a license project in order to manage the licenses of a station, and delete unnecessary stations from a license project.

If the properties of a station that has been distributed with licenses are changed, you must change the properties of that station to ensure that licenses on that station remain manageable. This can be done by using License Manager on the license management station.

#### Adding a license-assigned station

In License Manager on the license management station, define the station that you are adding as a license-assigned station. The procedure for adding a license-assigned station is the same as that for defining a new license-assigned station.

SEE

ALSO For more information about defining a license-assigned station, refer to:

"■ Defining a license-assigned station" on page 2-7

#### Deleting an unnecessary license-assigned station



#### **IMPORTANT**

- To delete a station from a license project, first delete the licenses that are assigned to that station. You can delete a station even if the status is EDIT. However, when deleting an FCS or SCS station from a license project, first delete the assignments, distribute and accept the licenses, and check that the status is OK before deleting the station. You cannot delete the station if the status is EDIT or AckWait.
- If you delete a license-assigned station that is running, the licenses on that station become deactivated. When you restart the license-assigned station, the station is removed from the license management targets and no licenses are assigned. Use discretion when deleting a station.

Follow these steps to delete a license-assigned station:

- On the license management station, start License Manager in Editing mode.
- 2. Delete the license assignments for the station that you want to delete.
- In the license project window, click the station name.
- From the menu bar, select [File] > [Delete]. Alternatively, right-click the station name and select [Delete station].

The Delete Station dialog box appears.

Click[Yes].

The column of the deleted station is removed from the license project window.

From the menu bar, select [File] > [Save]. The station is deleted.

#### Deleting redundant stations

To delete redundant stations that are no longer required, first delete the licenses that are assigned to both stations.

Then, select the name of either of the stations and delete it. This deletes both stations at the same time from the license project.

#### Changing the properties of a station

Follow these steps to change the properties of a station:

- 1. On the license management station, start License Manager in Editing mode.
- 2. In the license project window, click the station name.
- From the menu bar, select [File] > [Properties].
   Alternatively, right-click the station name and select [Station property].

   The Station property dialog box appears.
- 4. Enter the data for the properties that you want to change and click [OK]. The station properties are changed and the status changes to EDIT.

TIP

If you only change the alias of the station and comments, the station status remains the same.

5. From the menu bar, select [File] > [Save]. The properties are changed.

#### Station properties

The station properties are listed as follows:

**TIP** 

If you want to change properties listed as View only, delete the station, and add a new station.

Table 3.3-1 List of station properties

Property	Attributes
Station type	View only
Domain number	View only
Station number	View only
Comment	Modifiable
Station alias	Modifiable
Host name	Modifiable
Redundant station	View only
Peer host name	Modifiable

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#### 3.4 Redistributing licenses to licenseassigned stations

You can use the Distribute master licenses function to redistribute licenses that were last distributed from a license management station to license-assigned stations. If a license-assigned station fails, you can replicate the license assignments for the station that failed by distributing the master license to the replacement PC that is installed with CENTUM VP or ProSafe-RS software.

#### Master license

A master license is a license that was last distributed to a specified station by the user. A master license file is a file that contains a master license, and the content is different for each station.

The file format of master license files is the same as that of license files.

ALSO For more information about license files, refer to:

2.8, "Distributing and accepting licenses using external storage media" on page 2-14

#### Redistributing a license to redundant stations

If you specify one redundant station as the destination for master license distribution, the most recently distributed license will be redistributed to the specified redundant station only. You do not need to distribute licenses to both stations at the same time.

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#### 3.4.1 Distributing and accepting master licenses through a network

This section describes how to distribute and accept master licenses on stations connected to a network.

#### Distributing and accepting master licenses through a network

Follow these steps to distribute and accept master licenses through a network:

- On the license management station, start License Manager in Editing mode.
- From the menu bar, select [License] > [Distribute Master licenses]. In the Distribute Master licenses dialog box, all stations that have been previously distributed with licenses appear.

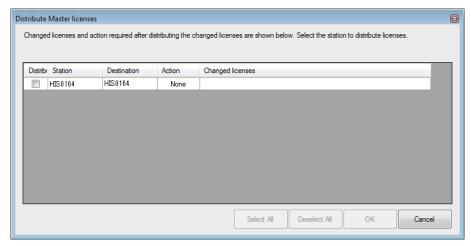


Figure 3.4.1-1 Distribute Master licenses dialog box

- Select the Distribute check box for the stations to which you want to distribute a master license.
- Click [OK]. The master license is distributed to the license-assigned station.

When the master license distribution is completed, the software packages to which licenses were distributed are activated in stations that have None in the Action column.

ALSO For more information about preliminary checking of license information, refer to:

"Distributing a license to license-assigned stations through a network" on page 2-12

For more information about accepting licenses through a network, refer to:

"■ Accepting licenses with assignment changes through a network" on page 3-9

#### 3.4.2 Distributing and accepting master licenses using external storage media

This section describes how to distribute and accept master licenses on stations not connected to a network, by using external storage media.

#### Distributing and accepting master licenses for stations not connected to a network using an external storage media

Follow these steps to distribute and accept master licenses for stations not connected to a network, by using external media:

- 1. On the license management station, start License Manager in Editing mode.
- From the menu bar, select [License] > [External storage media] > [Distribute Master licen-
  - All stations that have been previously distributed with licenses appear in the dialog box.
- 3. Select the Distribute check box for the stations to which you want to distribute a license.
- Click [OK]. A dialog box appears to specify a folder.
- 5. Specify the folder to which you want to save the master license.
- Click [OK]. In the folder that you specified for saving the license file, a folder is created for each station that has been distributed with the master license. The license files are saved to these
- 7. Copy the license file to an external storage medium.



#### **IMPORTANT**

To avoid virus infections, it is recommended that you copy licenses into an unused CD-R.

On the license-assigned station, load the license file that is stored on the external storage medium and accept the master licenses.

SEE

ALSO For more information about accepting master licenses using external storage media, refer to:

"■ Activating a software package using external storage media" on page 2-15

## 3.5 Increasing the software package capacity

Use an upgrade installation license to increase the number of Field Control Stations that can use operation and monitoring functions and standard builder functions.

An upgrade installation license is loaded into License Manager on the license management station, merged with a new installation license, and then distributed to a license-assigned station. An upgrade installation license cannot be distributed independently. It can be distributed as an expanded new installation license after merging it with a new installation license.

This section describes the procedures for increasing the capacity of a software package by merging a new installation license with an upgrade installation license.



#### **IMPORTANT**

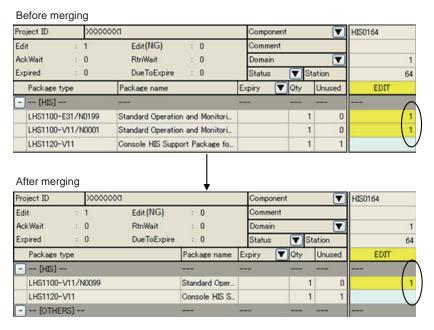
Licenses cannot be split after they have been merged. Use discretion when merging licenses.

#### Increasing the software package capacity

Follow these steps to increase the capacity of a software package:

- 1. On the license management station, start License Manager in Editing mode.
- 2. Read the upgrade installation licenses on the license management station.
- 3. Assign the new installation licenses and upgrade installation licenses to the same station.
- From the menu bar, select [License] > [Merge Licenses].
   A dialog box appears, asking you to confirm the packages for upgrading.
- 5. Click [Yes].

  The new installation licenses and upgrade installation licenses are merged. You can check the merged licenses by viewing the package type.



Making LHS1100-V11/N0099 by merging LHS1100-V11/N0001 with LHS1100-E31/N0099

Figure 3.5-1 Merging new installation licenses with upgrade installation licenses

6. Distribute the expanded license to license-assigned stations, and then accept them on the license-assigned stations.

TIP If there are multiple licenses that can be merged, you can merge them as one group in a single merge opera-

## SEE

ALSO For more information about reading licenses, refer to:

"■ Reading a license" on page 2-6

For more information about assigning licenses, refer to:

"■ Assigning licenses" on page 2-10

For more information about distributing licenses through a network, refer to:

"■ Distributing a license to license-assigned stations through a network" on page 2-12

For more information about accepting licenses through a network, refer to:

"■ Accepting licenses with assignment changes through a network" on page 3-9

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## 3.6 Backing up and restoring a license project

If a license management station fails, you can set up a new license management station by restoring the backed up license project in another station, or in a PC where License Manager was independently installed.

This section describes the procedures for backing up a license project manually and restoring it.

## Manually backing up a license project

Follow these steps to back up a license project manually:

- 1. On the license management station, start License Manager in Editing mode.
- 2. From the menu bar, select [Tools] > [Backup]. The license project is backed up.

SEE ALSO

For more information about specifying the backup folder for the license project, refer to:

"■ Specifying a backup folder" on page 2-4

#### Restoring a license project in another license management station

For this procedure, you will need the license media that contains the purchased license key file.

Follow these steps to restore a license project in another license management station:

- 1. On the station to which you want to restore the license project, start License Manager in Editing mode.
- From the menu bar, select [Tools] > [Restore].
   The folder selection dialog box appears.
- Select the folder that stores the backup of the license project that you want to restore, and click [OK].

TIP

If a license project with the same name already exists, the restore process is terminated.

The Restore license project window appears, displaying a list of license key files required for the restoration.

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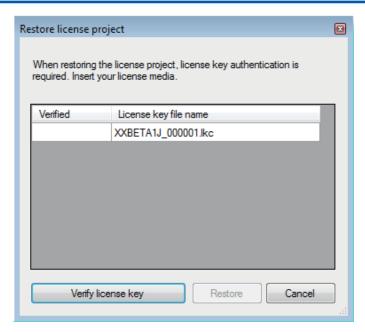


Figure 3.6-1 Restore license project window

- Insert the license medium containing the license key files that you want to verify, and click [Verify license key].
   The folder selection dialog box appears.
- Select the drive for the external storage media and click [OK].
   In the Verified column of the Restore license project window, a check mark appears in the check box that corresponds the license key file name.
- 6. Insert the other license media one by one and verify all the license key files displayed in the Restore license project window.
- When all check marks appear in the check boxes in the Verified column, in the Restore license project window, click [Restore].
   The license project is restored, and a new license project window appears in License Manager.

TIP

After you have restored the license projects on the new license management station, use the Distribute master licenses function to distribute master licenses to license-assigned stations through the network. This enables you to monitor the license assignment status.

## 3.7 Moving licenses to other projects

This section describes the procedure for moving licenses to other license projects.

For example, if an optional software package is no longer needed in one license project, you can move the license for that software package to a different license project and assign it to an HIS or SENG that is managed by that license project.

After loading the migration license key file on License Manager, delete the license from the license project from which it has been moved. This is to allow the license to be moved to a different license project.

Next, you need to create a license key file for the destination license project, and load it in the license project.

#### Migration license key files

To move licenses to other license projects, you will need a separate license medium for storing the migration license key file. Contact YOKOGAWA to request the license medium. The migration license key file contains the following information:

- Project IDs of the source license project and the destination license project
- The package type and version information of the license that you want to move
- · Number of licenses being moved

#### Procedure for moving licenses to other license projects

The following figure illustrates the procedure for moving licenses to another license project.

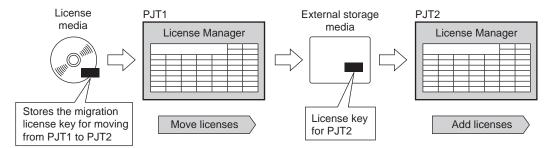


Figure 3.7-1 Moving licenses to another license project

The following flowchart illustrates the workflow for moving licenses to another license project.

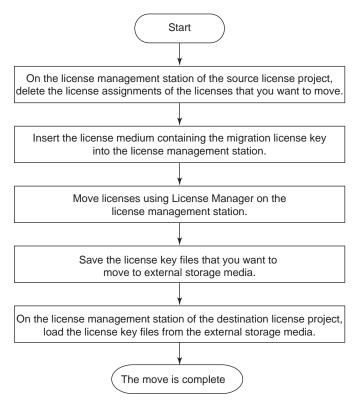


Figure 3.7-2 Workflow for moving a license

#### Moving licenses to another license project

Follow these steps to move a license to another license project:

- 1. On the license management station of the source license project containing the licenses you want to move, start License Manager in Editing mode.
- Ensure that the licenses are released from all the stations by deleting the assignments of the licenses that you want to move. You can do this in the same way you modified license assignments.
- 3. On the license management station, insert the license medium containing the migration license key into the media drive.
- From the menu bar, select [License] > [Move licenses].
   The folder selection dialog box appears.
- Select the migration license key file and click [Open].
   A dialog box appears to confirm whether you want to move the license.

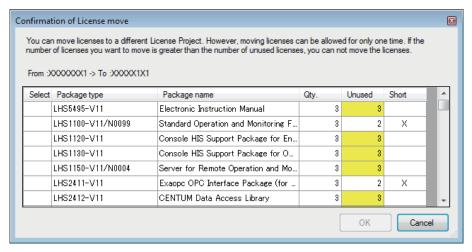


Figure 3.7-3 Confirmation of License move dialog box

6. Check the package type and number of licenses for the license that you are moving and click [OK].

A dialog box appears, asking you to specify the location for saving the license key files that you want to move.

#### TIP

- If the number of unused licenses is less than the number of licenses to be moved, you will not be able to click OK. In this case, the corresponding Short column is selected.
- If the number of unused licenses is more than the number of licenses to be moved, you can select the license that you want to move.
- 7. Specify the location for saving the license key files to be moved.
- Click [OK].
   The license key files for the destination are created in the specified folder.
- 9. Save the created license key files on an external storage media.
- On the destination license management station, start License Manager.
- 11. Read the licenses in the same way as when adding a license. The licenses are successfully moved to another project.

#### SEE ALSO

For more information about reading licenses, refer to:

"■ Reading a license" on page 2-6

For more information about changing license assignments, refer to:

3.2, "Modifying licenses" on page 3-3

## 3.8 Changing the computer name of a licenseassigned station

To change the computer name of a license-assigned station to which licenses are already assigned, you must first delete the station from the license project and change the computer name, then perform the task to add the station to the license project again.

#### Changing the computer name of a license-assigned station

Follow these steps to change the computer name of a license-assigned station:

- 1. On the license management station, start License Manager in Editing mode.
- 2. Delete the license assignments of the license-assigned station for which you want to change the computer name.
- 3. Distribute and accept the licenses.
- In License Manager on the license management station, confirm that the status of the license-assigned station has become OK, and then delete the license-assigned station from the license project.
- 5. Change the computer name.
- 6. Add the license-assigned station to the license project with the new computer name.
- 7. Assign licenses to the license-assigned station and distribute the licenses.
- 8. Restart the license-assigned station.

SEE ALSO

For more information about adding and deleting license-assigned stations, refer to:

3.3, "Adding and deleting license-assigned stations" on page 3-12

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# 3.9 Functions to help with license assignment work

In License Manager, you can use the following functions to help with license assignment work.

- Importing and exporting package lists
   You can use a general text editing tool to create a package list from information for stations that make up a license project and information on license assignments, and import it into a license project. You can also export a package list from a license project.
- Searching for character strings in the license project window
- Folding the display of software packages in the license project window
- Filtering information that appears in the license project window
- Deleting software packages from a license project
- · Creating an assigned licenses status file

### 3.9.1 Importing and exporting package lists

A package list is a CSV file that contains information about the stations that make up a project, and information about the license assignments of each station.

You can define station configurations and license assignments by importing package lists into a license management station.

You can also export a package list from a license management station.

#### Package list file format

The following example shows a CSV-format package list displayed in a spreadsheet application.

	A	В	С	D	Е	F	G
1	@ProjectID	XXXXXXXX0					
2	@Product	CENTUM VP					
3	@StationType					HIS/ENG	HIS/ENG
4	@StationName					HIS0164	HIS0163
5	@ComputerName					CPC001-01	CPC001-02
6	@StationAlias						
- 7	@StationComment						
8	#	PackageType	Paid	Expiry	Ver.		
9	@Package	LHS1100-V11/N0099	Р		R5	1	1
10	@Package	LHS4100-V11	Р		R5	1	1
11	@Package	LHS4150-V11	Р		R5	1	1
12	@Package	LHS4450-V11	Р		R5	1	1
13	@Package	LHS5030-V11	Р		R5	1	1
14	@Package	LHS6510-V11	Р		R5	1	1
15	@Package	LHS6530-V11	Р		R5	1	1

Figure 3.9.1-1 Package list in CSV format

The following table shows examples of identifiers and formats for license management information that are required in a package list, and whether specifying them in the package list is mandatory or not.

Table 3.9.1-1 Identifiers and formats for license management information and whether they are mandatory or not.

Specified items	Identifiers and formats	Details	Required to specify during import?
Project ID	@ProjectID, <project id=""></project>	Project ID for the license project	Required
Product name	@Product, <product_name></product_name>	The product name for the license project	Required
Station type	@StationType ,,,, <station_type_1>, <station_type_2> , , <station_type_n></station_type_n></station_type_2></station_type_1>	All station types in a license project	Required
Station name	@StationName ,,,, <station_name_1>, <station_name_2> , , <station_name_n></station_name_n></station_name_2></station_name_1>	All station names in a license project	Required (*1)
Computer name	@ComputerName,,,, <computer_name_1>, <computer_name_2> , , <computer_name_n></computer_name_n></computer_name_2></computer_name_1>	The computer names of all stations in the license project	Required (*2)
Station alias	@StationAlias ,,,, <station_alias_1>, <station_alias_2> , , <station_alias_n></station_alias_n></station_alias_2></station_alias_1>	The station alias of all stations in the license project	Optional

Continues on the next page

Table 3.9.1-1 Identifiers and formats for license management information and whether they are mandatory or not. (Table continued)

Specified items	Identifiers and formats	Details	Required to specify during import?
Station comment	@StationComment ,,,, <station_comment_1>, <station_comment_2>, , <station_comment_n></station_comment_n></station_comment_2></station_comment_1>	Comments for all stations in the license project	Optional
Package information	@Package, <ms_code>, <paid_flag>, <duration>, <ver- sion="">, <assignment_num- bers_for_station_1="">, <assign- ment_numbers_for_station_2=""></assign-></assignment_num-></ver-></duration></paid_flag></ms_code>	Package license information and assignment information	Required
Comment line	Lines starting with #		Optional

Not required for stations not connected to a control bus. Not required for an FCS or SCS.

Table 3.9.1-2 Identifier format values and descriptions

Specified items	Value	Description
<station_type></station_type>	Same as the station types that can be specified when adding a station. Example: HIS, FCS, GSGW, SIOS, UGS	Station type
<station_name></station_name>	Same as the station name. Leave this blank if there is no domain number and no station number. When importing, the domain number, station number, and redundant station settings are read from the station name. Example: HIS0164, FCS0101, BCVU0163(UGS)(Peer)	Station name
<computer name=""></computer>	The values specified in the station properties. This value is set for the Peer station if the station name ends with (Peer).	Station properties
<station_alias> <station_comment></station_comment></station_alias>	The values specified in the station properties. This value is ignored if the station name ends with (Peer).	Station properties
<paid_flag></paid_flag>	By default, "Paid P" is specified. If the paid flag for the imported package list is blank, it is considered paid.	
<expiration></expiration>	No expiry date: Blank Expiry date: YYYY/MM/DD YYYY Year MM Month DD Day Example: 2012/12/30	License expiry date
<version></version>	R <version_number> Example: R5</version_number>	License version num- ber
<number_assigned></number_assigned>	Number of assigned licenses If there are no assigned licenses at the time of exporting, the exported package list will be blank. If the number of assigned licenses at the time of importing is 0 or blank, the number of assigned licenses is set to 0.	Number of licenses assigned for each station

The permitted capacity for the package list is shown in the following table.

<sup>\*1:</sup> \*2:

Table 3.9.1-3 Permitted capacity for package list

Specified items	Permitted capacity
Maximum number of stations	256
Maximum number of rows of packages	200

#### Importing a package list

Follow these steps to import a package list:

- 1. On the license management station, start License Manager in Editing mode.
- 2. From the menu bar, select [File] > [External File] > [Import]. The file selection dialog box appears.
- 3. Select the package list that you want to import.
- 4. Click [Open].

License Manager automatically checks the license assignments for consistency and checks the package lists, and updates its window with information from the imported package list.

5. From the menu bar, select [File] > [Save]. The imported package list is saved.

Any errors and warnings appear in the message area. Find out the cause and resolve the problem.

#### Import process

The process of importing a package list is as follows:

- Station information
  - If the imported package list contains stations that were not in the license project, the stations and their assignment information are added.

If the imported package list contains stations that are already in the license project, the properties of those stations are overwritten.

The station properties consist of information from the package list, such as <computer name>, <alias of station>, and <station comment>.

The information related to stations not included in the imported package list remains the same when performing the import.

- Assignment information
  - If the imported package list includes assignment information for stations that are already in the license project, the assignment information is overwritten.
  - If the imported package list does not include assignment information for stations that are already in the license project, the current assignment information remains the same.
  - If the license project includes redundant stations, specify the assignment information for both stations in the package list.
- Information on licensed software packages (package type, version)
  If the imported package list contains information on software packages that were not in the license project, set the number of licenses to 0 and add a row.

#### Items checked when importing

When you import a package list, License Manager automatically checks the license assignments for consistency and checks the package lists. If an error is detected, details of the error appear in the message area and the import process is terminated.

The following package list items are checked.

Table 3.9.1-4 Items checked in the package list

Checked item	Description
File type	Checks whether the file is in CSV format.
Entry	Checks whether the following mandatory items have been entered: Project ID Product name Station type Station name Computer name
Product name	Checks whether the product name is the same as that of the license project.
Project ID	Checks whether the project ID is the same as that of the license project.
Packages that can be assigned	Checks that there are no package types that cannot be assigned to the station type.
Redundant station settings	Checks that the assignment details for the first and second station are the same.

#### Exporting a package list

Follow these steps to export a package list:

- 1. Start License Manager.
- From the menu bar, select [File] > [External File] > [Export].
   A dialog box appears to confirm whether you want to save the file.
- 3. Specify the folder to which the package list needs to be exported and a file name for the package list.
- 4. Click [Save].

  The package list for the license information is exported to the specified folder using the specified file name.

# 3.9.2 Searching for characters in the license project window

You can search for character strings in the license project window.

#### Performing a search

Follow these steps to use the License Manager search function:

- 1. Open the license project in which you want to search for text.
- 2. From the License Manager menu bar, select [Edit] > [Find]. The Find dialog box appears.
- In the Find string box, enter the search text and click [Find next].
   The search starts from the upper-left part of the license project window and moves towards the right. It continues downward when the row is completed.
   The cursor moves to a result that matches the search text.

If there are no matches, a message appears.

### 3.9.3 Folding the display of a license project

In the license project package information area, there is a list of software packages for each station type.

You can display or hide the package type by expanding or folding the license project rows.

#### Collapsing the display

In the license project window, click the [+] and [-] collapse buttons on the left of the package type.

The rows are collapsed so that only the applicable package type appears.

Click the [+] and [-] buttons to switch between the normal display and collapsed display.

# 3.9.4 Filtering information that appears in the license project window

You can filter the view to show only the station columns and software package rows that match the conditions selected in the license project window.

You can select the following conditions:

- · Filtering by domain number
- Filtering by station status
- Filtering by license paid/free and expiry date (time-limited/open-ended)

You can specify multiple filtering conditions independently. If you are filtering using multiple filtering conditions, only the columns and rows that match all of the conditions appear.

For example, if you filter by FCS, all station types other than FCS stations are collapsed and only the FCS packages appear.

#### Filtering contents

Follow these steps to filter the display:

- 1. In the license project window, click the Filter button for attributes that you want to filter by.
- 2. From the drop-down menu that appears, select the filter conditions.

  Only the station columns and license rows that match the selected conditions appear.

#### 3.9.5 Deleting software packages from a license project

You can delete software packages from license projects if they meet both of the following two conditions:

- Software packages that do not have licenses assigned to a station
- The number of available licenses is zero (\*1), or the software packages cannot be used as they have expired.
- When creating a license project, if you imported a package list that contains software packages whose license quantity is zero, a row is added for that software package indicating zero license quantity.

#### SEE

ALSO For more information about importing package lists, refer to:

3.9.1, "Importing and exporting package lists" on page 3-26

#### Deleting software packages

Follow these steps to delete a software package:



#### **IMPORTANT**

Deleted software packages cannot be restored. Use discretion when deleting a software package.

- On the license management station, start License Manager in Editing mode.
- 2. In the license project window, select the software package that you want to delete. You can only select one software package.
- From the menu bar, select [License] > [Delete license]. The Delete license dialog box appears.
- Click[Yes]. The software package is deleted.

#### 3.9.6 Creating an assigned licenses status file

In License Manager, you can create the license assignment status as a text file. Follow these steps to create a file:

- 1. On the license management station, from the License Manager menu bar, click [View] and select one of the following export modes:
  - Editing mode
  - · Monitoring mode

You do not need to select a mode for a license-assigned station.

- 2. From the menu bar, select [Tool] > [Output report].
- 3. In the file selection dialog box, specify the following items:
  - Folder in which the file should be created
  - File name
- 4. Click [Save].

A text file is saved to the specified folder.

#### Structure of the assigned licenses status file

The following tables describe the structure of the file containing information about assigned licenses.

#### Header

The following information is saved in the Header section:

Table 3.9.6-1 Information in the Header section

Title	Description
License Manager Report [Station name] ([Mode])	[Station name] ([Mode]) The name of the station that generated the file and the mode of the license project Example: HIS0164 (Monitoring mode)
Date	The local date on which the file was generated

#### Project Information

The following information about the license project is saved in the Project Information section:

Table 3.9.6-2 Information in the Project Information section

Title	Description
Product	Product name
Project ID No	Project ID number
Project name	License project name
Comment	Comments about the license project
License Admin	License management flag 1: License management station 0: License-assigned station
Backup folder	The backup folder for the license project

The information that is saved changes according to the license project mode. The information that is saved in each mode is as follows:

· Editing mode

Table 3.9.6-3 Information saved in Editing mode

Title	Description
Edit	Number of licenses with an Editing status
Edit(NG)	Number of stations that returned an error in the consistency check
AckWait	Number of stations waiting for license acceptance
RtnWait	Number of stations waiting for licenses to be returned
Expired	Number of stations with expired licenses.
DueToExpire	Number of stations with licenses that will expire in 30 days or less

#### Monitoring mode

Table 3.9.6-4 Information saved in Monitoring mode

Title	Description
Error	Number of stations with license errors
Expired	Number of stations with expired licenses
DueToExpire	Number of stations with licenses that will expire in 30 days or less
Unknown	Number of stations for which the status cannot be tracked
AckWait	Number of stations waiting for license acceptance
RtnWait	Number of stations waiting for licenses to be returned

#### · Assigned station mode

Table 3.9.6-5 Information saved in Assigned Station mode

Title	Description
Error	Number of stations with license errors
Expired	Number of stations with expired licenses
DueToExpire	Number of stations with licenses that will expire in 30 days or less
AckWait	Number of stations waiting for license acceptance

#### Package List

The following information about the license package is saved in the Package List section:

For each package, items in the Package List section are assigned a consecutive number starting from one, and each item is saved in a new line.

Table 3.9.6-6 Information in the Package List sections

Title	Description
No	A consecutive number starting from one is automatically saved for each license
PackageType	Package model
PackageName	Package name

Continues on the next page

Table 3.9.6-6 Information in the Package List sections (Table continued)

Title	Description
Paid	Shows whether it is paid or free Paid: P Free: F
Expiry	Validity duration Time-limited: Expiry date and time Non-time-limited: -
Ver.	Version
Qty	Number of licenses
Unused	Number of unused licenses

#### Station Information and Station Information-Package

Information about stations is saved in the Station Information section. Information about licenses assigned to a station is saved in the Station Information-Package section.

The following information is saved in the Station Information section:

Table 3.9.6-7 Information in the Station Information section

Title	Description
StationType	Station type
Domain,Station	[Domain number][Station number] Example: 1, 63 Empty if there is no domain or station
StnName	Station name
Alias	Alias of station
Comment	Comment
Computer	Computer name
Status	The status that appears in the license window. (*1)

<sup>\*1:</sup> The text that appears is different in Editing mode and Monitoring mode.

The following items are saved in the Station Information-Package section:

Table 3.9.6-8 Information in the Station Information-Package section

Item	Description
No	A consecutive number starting from one is automatically saved for each license.
PackageType	Package model
PackageName	Package name
Paid	Shows whether it is paid or free Paid: P Free: F
Expiry	Validity duration Time-limited: Expiry date and time Non-time-limited: -
Ver.	Version
Assign	Number of licenses assigned to the displayed station (*1)

<sup>\*1:</sup> The number may be different in Editing mode and Monitoring mode.

# Appendix 1. Items checked in the license assignment consistency check

The following tables list and describe the items checked for each license or station.

#### Table Appendix 1-1 Items checked for each license

Checked item	Description
Excess assignment	Checks that the total number of licenses assigned to each station does not exceed the number of licenses available in the license project.

#### Table Appendix 1-2 Items checked for each station

Checked item	Description
Station properties	Checks whether there are any mistakes in the following station properties: Input range Setting category Station identification conditions
Dependency	Checks that all required package types have been assigned to software packages that need to be assigned together at the same time.
Exclusion	Checks that package types with exclusion relationships have not been assigned to the same station.
Packages that can be assigned	Checks that there are no package types that cannot be assigned to the station type.
Expired licenses	Checks that expired licenses have not been assigned.
Upgrade installation license	Checks that upgrade installation licenses have not been assigned independently.
Exceeded assignment limit	Checks whether the number of assigned licenses has exceeded the number of licenses that can be assigned to one station.
Redundant station	Checks that the assignment details are the same on the first station and the second station.

# Appendix 2. Displaying the status of assigned licenses on a license-assigned station

#### Displaying the status of assigned licenses on a License Manager

When you open License Manager on a license-assigned station, the license project window for the local station appears.

The status of the local station appears in the summary information area. The displayed items and corresponding responses are as follows:

#### Table Appendix 2-1 Status and response

Status	Description	Response
Error	Number of stations with a license error	Check the details of the license error.
Expired	Number of stations with an expired license	Check the expired licenses.
DueToExpire	Number of stations with licenses that will expire in 30 days or less	Check the licenses that will expire in 30 days or less.
AckWait	Number of stations waiting for license acceptance	Accept the distributed licenses.

#### Displaying the status of assigned licenses in the task tray

An icon that indicates the status of assigned licenses for the local station appears in the task tray.

The icons displayed in the task tray and the corresponding responses are as follows:

#### Table Appendix 2-2 Icons and responses

Icon	Description	Response
8	Licenses have been assigned successfully (The status in Monitoring mode is OK).	_
<b>6</b>	There is an error in the license. (a status of either Error, Expired, or NoLicense in Monitoring mode)	Check the details of the license error.
	The licenses will expire in 30 days or less (the status in Monitoring mode is DueToExpire).	Check the licenses that will expire in 30 days or less.
Ę	Licenses have been distributed and are waiting to be accepted. Licenses have currently been assigned successfully (The status in Monitoring mode is OK).	Accept the distributed licenses.
<b>.</b>	Licenses have been distributed and are waiting to be accepted. There is currently an error in the license. (a status of either Error, Expired, or NoLicense in Monitoring mode)	Accept the distributed licenses.
<u></u>	Licenses have been distributed and are waiting to be accepted. The licenses will expire in 30 days or less (the status in Monitoring mode is DueToExpire).	Accept the distributed licenses.

## Displaying the status of assigned licenses in the HIS system message banner

The status of assigned licenses for the local station appears in the system status icon display area of the HIS system message banner. If there is a license error or warning, or if a license is waiting for acceptance, an icon appears.

The following example shows the status of assigned licenses displayed in the HIS system message banner.



Figure Appendix 2-1 Example of the HIS system message banner display

The icons displayed in the system status icon display area and the corresponding responses are as follows:

Table Appendix 2-3 Icons and responses

Icon	Description	Response
No display	Licenses have been assigned successfully.	-
	There is an error in the license.	Check the details of the license error.
	The licenses will expire in 30 days or less.	Check the licenses that will expire in 30 days or less.
ę	Licenses have been distributed and are waiting to be accepted. Licenses have currently been assigned successfully.	Accept the distributed licenses.
<b>S</b> .	Licenses have been distributed and are waiting to be accepted. There is currently an error in the license.	Accept the distributed licenses.
E.	Licenses have been distributed and are waiting to be accepted. The licenses will expire in 30 days or less.	Accept the distributed licenses.

## **Appendix 3. Messages**

The format for messages is as follows:

Station name (STNddss) message

Example: STN0164 License is not Accepted

The messages that appear on the station and the corresponding responses are as follows:

#### Table Appendix 3-1 Messages and corresponding responses

Message	Meaning	Action
STNddss License is not Accepted	A distributed license is not accepted.	Start the license manager and accept the license.
STNddss License Expired (LHS1100, LHS1120)	The license expired.	Renew the license or remove the station assignment.
STNddss License due to Expire on 2011/12/22 (LHS1100, LHS1120)	The license expired on 2011/12/22. The warning message appears 30 days before the license expiration date.	Renew the license or remove the station assignment.
STNddss License Error (License is Invalid)	The license information is not correct.	Redistribute the license.
STNddss License Error (Different from License Manager)	The license information on local station and on license management station is not consistent.	Redistribute the license.
STNddss License Error (Duplication with STNxxxx)	The license for STNddss station is distributed to multiple stations.	Redistribute the license.
STNddss License Error (ProjectID1 and Projec- tID2(STNxxxx) are de- tected)	Licenses with different project IDs were assigned to stations(*1)in the same system. For example, STNddss was assigned with licenses for ProjectID1, while STNxxxx was assigned with licenses for ProjectID2. ProjectID1: The project ID of the license project for the local station. ProjectID2: The project ID of the license project for the other station. STNxxxx: Name of the station (or computer) that uses a different project ID from the local station.	Check whether the licenses in the same project have the same project ID.

<sup>\*1:</sup> This refers to all PC-based stations that are defined in System View as well as in license projects.

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Introduction ProSafe-RS document map has been removed, descriptions of "Safety, Protection,

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1.1.3	Changed the description about the processing at the first license distribution.
2.1	Changed the items required for license management.
2.4	Added notes on using virtual test functions.
2.5	Added a note on using virtual test functions.
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1.1.3	Changed the reference destination.
1.2.3	Changed the procedure for starting License Manager as a user with maintenance privileges.
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■ For Questions and More Information

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