

# License Management

IM 33J01C20-01EN



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# 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.

This manual is structured as follows:

- Overview of license management  
Provides an overview of license management.
- Basic operations in license projects  
Describes the basic operations in managing licenses.
- Maintaining license projects  
Describes how to maintain a license project.
- Upgrading the Licenses from CENTUM VP R5 to R6, or from ProSafe-RS R3 to R4  
Describes how to update licenses when a product is upgraded.
- Working with upgrade licenses  
Describes how to operate the upgrade licenses.

# 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.
- Be sure to confirm the specifications and required settings of the devices that are used in combination with the Product by referring to the instruction manual or other documents of the devices.
- 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. This symbol for the Product indicates the possibility of dangers such as electric shock on personnel and equipment, and also indicates that the user must refer to the User's Manuals for necessary actions. In the User's Manuals, this symbol is used together with a word "CAUTION" or "WARNING" at the locations where precautions for avoiding dangers are described.

<French> Signale qu'il faut faire preuve de prudence. Ce symbole pour le produit signale la possibilité d'un danger pour le personnel et l'équipement comme un choc électrique, et signale également que l'utilisateur doit se référer au Manuel de l'utilisateur afin de prendre les mesures nécessaires. Dans le Manuel de l'utilisateur, ce symbole est utilisé conjointement avec la mention «CAUTION» ou «WARNING» aux endroits où sont décrites les précautions pour éviter les dangers.



Indicates that caution is required for hot surface. Note that the devices with this symbol become hot. The risk of burn injury or some damages exists if the devices are touched or contacted.

<French> Signale qu'il faut faire preuve de prudence avec la surface brûlante. Les appareils sur lesquels est apposé ce symbole risquent de devenir brûlants. Tout contact physique ou matériel avec ces appareils risque de provoquer des brûlures ou des dommages.



Identifies a protective conductor terminal. Before using the Product, you must ground the protective conductor terminal to avoid electric shock.



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 that a component such as a power supply switch is turned ON.
- Indicates that a component such as a power supply switch is turned OFF.

## ■ 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.

## ■ Warning and Disclaimer

- Except as specified in the warranty terms, YOKOGAWA shall not provide any warranty for the Product.
- YOKOGAWA shall not be liable for any indirect or consequential loss incurred by either using or not being able to use the Product.

## ■ Notes on Software

- YOKOGAWA makes no warranties, either expressed or implied, with respect to the Software Product's merchantability or suitability for any particular purpose, except as specified in the warranty terms.
- Purchase the appropriate number of licenses of the Software Product according to the number of computers to be used.
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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.



**WARNING**

Indicates precautions to avoid a danger that may lead to death or severe injury.



**CAUTION**

Indicates precautions to avoid a danger that may lead to minor or moderate injury or property damage.

**IMPORTANT**

Indicates important information required to understand operations or functions.

**TIP**

Indicates additional information.

**SEE  
ALSO**

Indicates 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

- Character string to be entered  
The characters that must be entered are shown in monospace font as follows:

**Example:**

```
FIC100.SV=50.0
```

- ▼ Mark  
This symbol indicates the description for an item for which you should make a setting in the product's engineering window.  
  
While operating an engineering window, the help information for the selected item can be accessed from "Builder Definition Items" in the Help menu. Listing more than one definition item after this symbol implies that the paragraph on the page describes more than one definition items.

**Example:**

```
▼ Tag Name, Station Name
```

- Δ Mark  
Indicates that a space must be entered between character strings.

**Example:**

```
.ALΔPIC010Δ-SC
```

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

**Example:**

```
.PRΔTAG{Δ.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 key on the operation 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 Used in Command Syntax or Program Statements

The following conventions are used within a command syntax or program statement format:

- Characters enclosed by angle brackets < >  
Indicate character strings that user can specify freely according to certain guidelines.

### Example:

```
#define <Identifier> <Character string>
```

- "..."  
Indicates previous command or argument that may be repeated.

### Example:

```
lmax (arg1, arg2, ...)
```

- Characters enclosed by brackets [ ]  
Indicate character strings that may be omitted.

### Example:

```
sysalarm <format character string> [, <output value>...]
```

- Characters enclosed by separators | |  
Indicates character strings that can be selected from more than one option.

### Example:

```
opeguide | <format character string> [, <output value>...] |  
          OG, <element number>
```

## ■ 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.

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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 software package.

To activate a software package, allocate a license to every computer where the software package that you want to activate is installed. In addition, you can delete licenses for software packages that are no longer used on a specific computer. 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 computer, distribute or delete licenses for each individual computer, and activate or deactivate the software packages.

The following table describes the license types.

**Table 1.1-1 License types**

Type	Description
Software license	License required to use the product software
Version upgrade license	License required to upgrade the version of the software license
Upgrade license	License required to apply the revisions when the product software is revised Types of upgrade licenses are as follows: <ul style="list-style-type: none"><li>• Upgrade license (revision up/patch)</li><li>• Upgrade license (revision up)</li><li>• Upgrade license (patch)</li></ul>

## ■ About License Manager

License Manager is the software program designed specifically to manage licenses.

License Manager is automatically installed when you install a product to be managed in license management on a computer. You can also install License Manager solely on a computer.

The following figure shows the License Manager window.

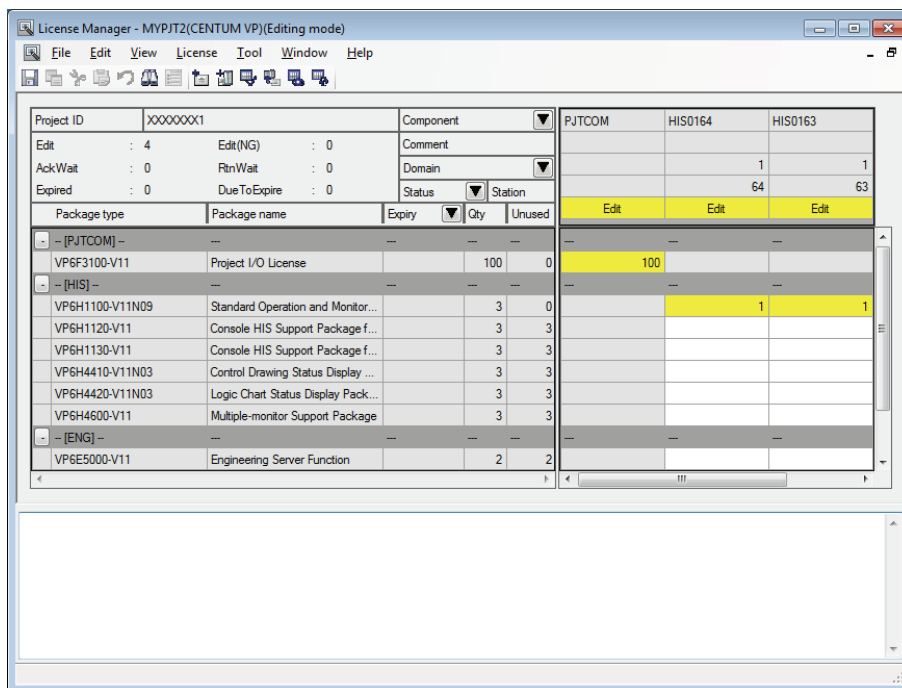


Figure 1.1-1 License Manager

SEE  
ALSO

For more information about the products managed in license management, refer to:

“■ Products managed in license management” on page 1-4

## 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

License Manager manages the licenses of the following products:

- CENTUM VP R5.01 or later
- ProSafe-RS R3.01 or later
- PRM R4.01 or later

#### TIP

The software that is bundled with hardware is not managed in the license management. For example, the software bundled with Communication Gateway Unit (CGW) or Bus Converter (BCV) is not managed.

#### SEE ALSO

For more information about license management of PRM, refer to:

Plant Resource Manager License Management (IM 30B05A40-01EN)

### ■ License management of iDefine used for ProSafe-RS

License Manager does not manage the license of iDefine that is used in ProSafe-RS engineering.

#### SEE ALSO

For more information about license management for iDefine, refer to:

License User Guide (PR03076-MAN-971\_02)

### ■ Scope of license management

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.

In ProSafe-RS, do not register SCS projects that belong to different license projects to the same RS project.

#### 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 projects, "VP project" of CENTUM VP and "RS project" and "SCS project" of ProSafe-RS, whereas system license information is managed in a license project.

### ■ Managing licenses for multiple systems

You can use License Manager on a single computer to manage license projects for multiple projects.

In addition, if you install License Managers for different products on a computer, you can manage licenses of multiple products by using their respective License Managers.

### ■ Different Version of License

A license can be distributed to the station if the license version and the software version that is installed in the station is identical.



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For example, CENTUM VP R6 licenses are available to distribute only to the station that is installed with the CENTUM VP R6 software, not to the station that is installed with the CENTUM VP R5 software.

Similarly, CENTUM VP R5 licenses are available to distribute only to the station that is installed with the CENTUM VP R5 software, not to the station that is installed with the CENTUM VP R6 software.

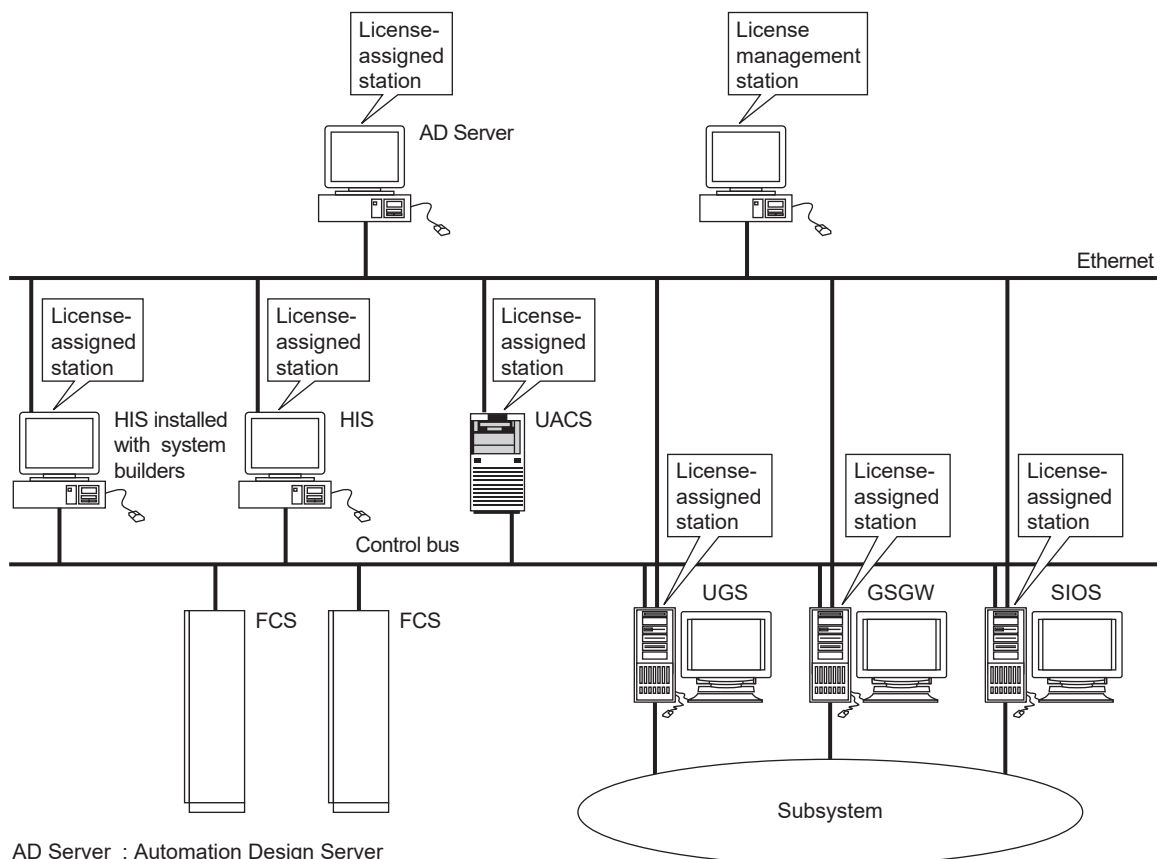
## 1.1.2 How license management works

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

### ■ License management system configuration

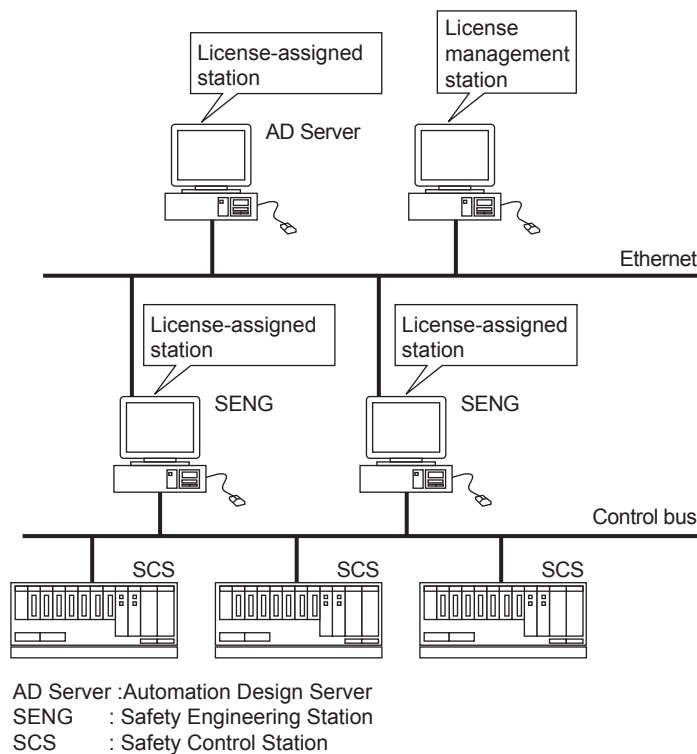
License Manager is installed on every computer where a license management target product is installed. You can use License Manager on one of these computers to manage licenses for the entire license project, and License Manager on the remaining computers to manage their own licenses.

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



AD Server : Automation Design Server  
 HIS : Human Interface Station  
 FCS : Field Control Station  
 UGS : Unified Gateway Station  
 GSGW : Generic Subsystem Gateway Station  
 SIOS : System Integration OPC Station  
 UACS : Unified Alarms & Conditions Server

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



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

#### TIP

As a general rule, to set up a license management station, you should use a computer where a license management target product is installed and is running 24 hours a day. You can also use a computer where only License Manager is installed.

## ■ Configuration for management of multiple projects by AD server

When multiple engineering projects are managed by using the AD server, a station that has a license of the Engineering Server Function is required to be included in one of license projects for engineering project. Avoid registering the station having the license of the Engineering Server Function for multiple license projects. Specifically, perform following instructions.

- When the AD server is the station that has only the Engineering Server Function  
 Create a station that has only the Engineering Server Function in just one license project. Assign the license of the Engineering Server Function in the license project for which the station that has only the Engineering Server Function has been registered.
- When the AD server is the station that carries functions other than the Engineering Server Function  
 Assign and distribute the license of the Engineering Server Function only in one license project.

The following figure shows that a station that has the AD server is defined in the license project (LPJT-A) for PJT-A and that the License Manager station in LPJT-A distributes the license of the Engineering Server Function.

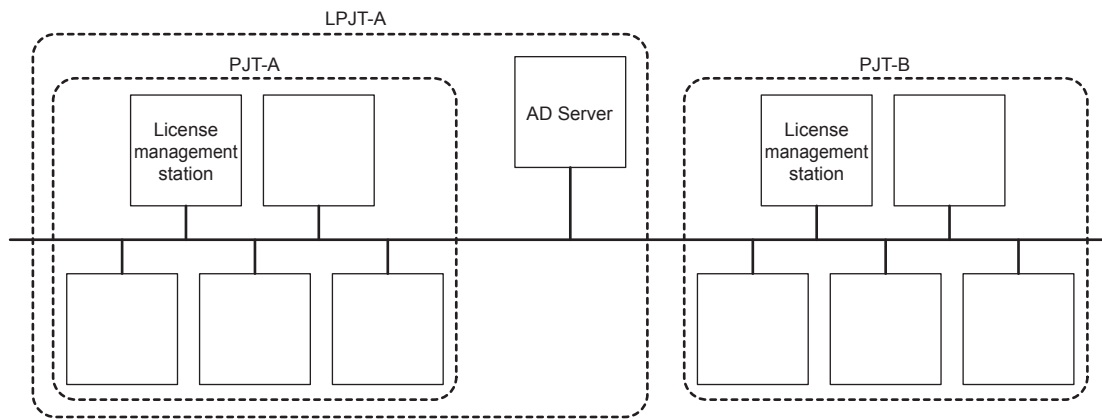


Figure 1.1.2-3 When AD server manages multiple projects

## ■ 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 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.

### TIP

The license management station permits license update from CENTUM VP R5 to R6, and from ProSafe-RS R3 to R4.

Licenses are assigned to the following stations:

- License-assigned stations  
Licenses for the software packages installed on the license-assigned stations are assigned.
- License management station  
Licenses for the software packages installed on the license management station itself are assigned. (\*1)
- FCS/SCS  
Are assigned licenses for the software used in FCS or SCS.
- PJTCOM  
PJTCOM is a virtual station in which the Project I/O License is assigned.

\*1: The station with only License Manager installed is excluded.

### TIP

Licenses for software that is bundled with hardware 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 station installed with system builders, whereas licenses assigned to an SCS are distributed to SENG.

- Licenses assigned to PJTCOM

In a CENTUM VP configuration, the licenses assigned to PJTCOM are distributed to the station installed with the system builders. In a ProSafe-RS configuration, they are distributed to the SENG.

After licenses have been distributed, activate the software packages by accepting the licenses on each station.

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**SEE  
ALSO**

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

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### 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.

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#### IMPORTANT

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

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

Before starting license management, you must perform the following tasks:

- Install the software package

Install the software packages on all computers where you want to run the license management target product.

- Select the license management station

If you want to use a computer as license management station only, install License Manager.

In other cases, select a computer installed with license management target product as a license management station. License Manager is automatically installed on computer installed with license management target product.

#### TIP

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

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

This section describes the license management process when building a 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:

1. 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 Yokogawa.
  - You must retain the license key file even after expiration because it is used when restoring a license project.
- 

3. 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.

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**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.

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**■ 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.

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## 1.2 License Manager

This section describes the functions, user privileges, operation, and window structures of License Manager.



## 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 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 to activate or deactivate the software packages.
- Monitor distributed licenses  
Monitor licenses that have been distributed to the local station.

## 1.2.2 User privileges in License Manager

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	
	Legacy model(*1)	Standard model(*1)
CENTUM VP	Administrators	CTM_MAINTENANCE, CTM_MAINTENANCE_LCL
ProSafe-RS	Administrators	PSF_MAINTENANCE, PSF_MAINTENANCE_LCL

\*1: This is the security model that is configured in IT security.

**SEE  
ALSO**

For more information about Editing mode, refer to:

“■ Operation modes” on page 1-16

## 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

Start License Manager on the license management station or a license-assigned station.

License Manager window appears.

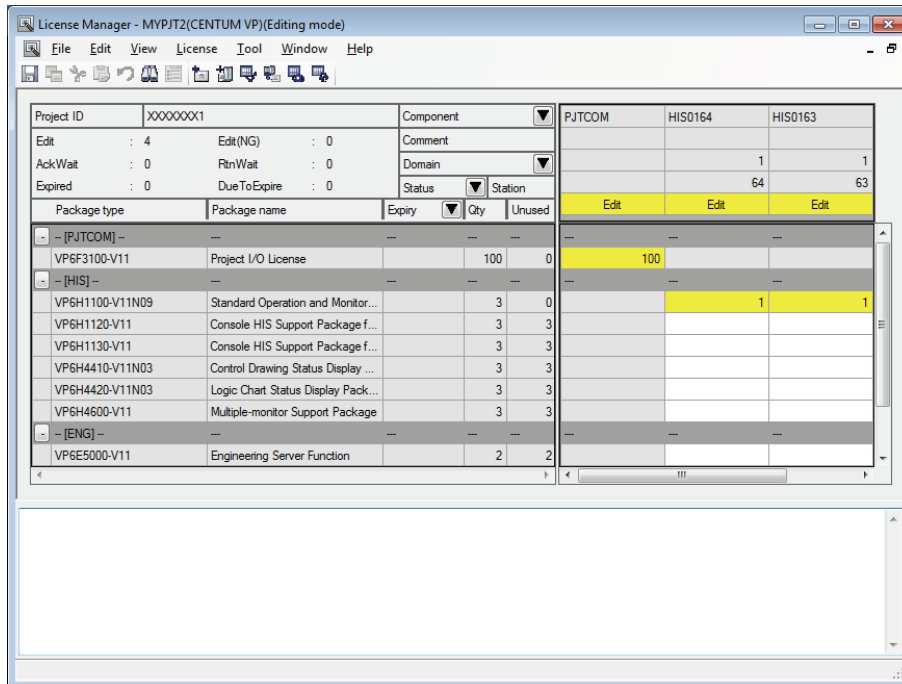


Figure 1.2.3-1 License Manager on the license management station

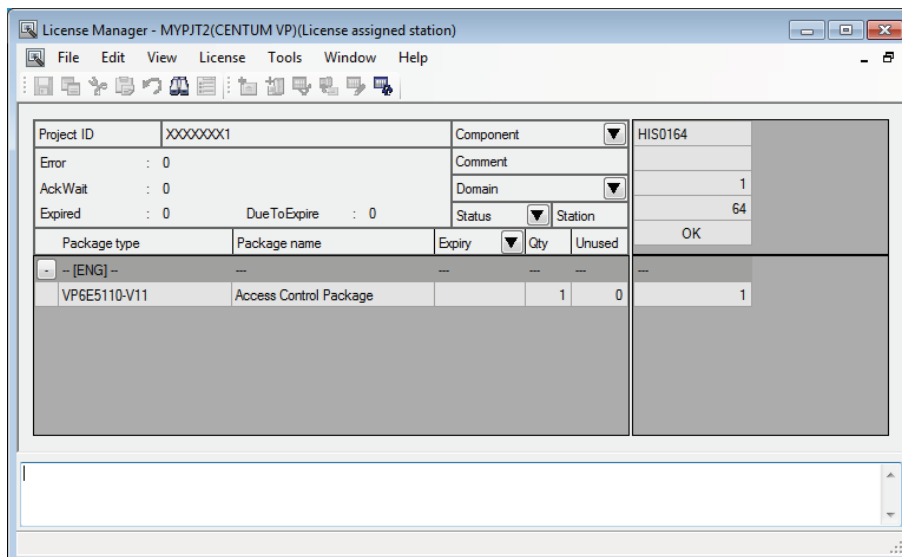


Figure 1.2.3-2 License Manager on a license-assigned station

**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-management 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

Category	License Manager function	Station		
		Management station (Editing mode)	Management station (Monitoring mode)	Assigned station
Managing license information	Create a new license project	Yes	Yes (*1)	Yes (*1)
	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 station configuration	Add a station	Yes	No	No
	Delete a station	Yes	No	No
	Modify station properties	Yes	No	No
Managing licenses	Add a license	Yes	No	No
	Move a license	Yes	No	No
	Delete a license	Yes	No	No
	Merge new installation licenses with upgrade installation licenses	Yes	No	No
	Upgrade a license	Yes	No	No
Editing license assignments	Assign a license	Yes	No	No
	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 licenses	Distribute a license (through the network)	Yes	No	No
	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 license 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

\*1: Only available for users with maintenance privileges

\*2: Only applicable for licenses distributed to that license-assigned station

\*3: The Distribute Master licenses function redistributes assignment information that has already been distributed.

## 1.2.4 Window Structures of License Manager

This section describes the window structures of License Manager.

### ■ Main window

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

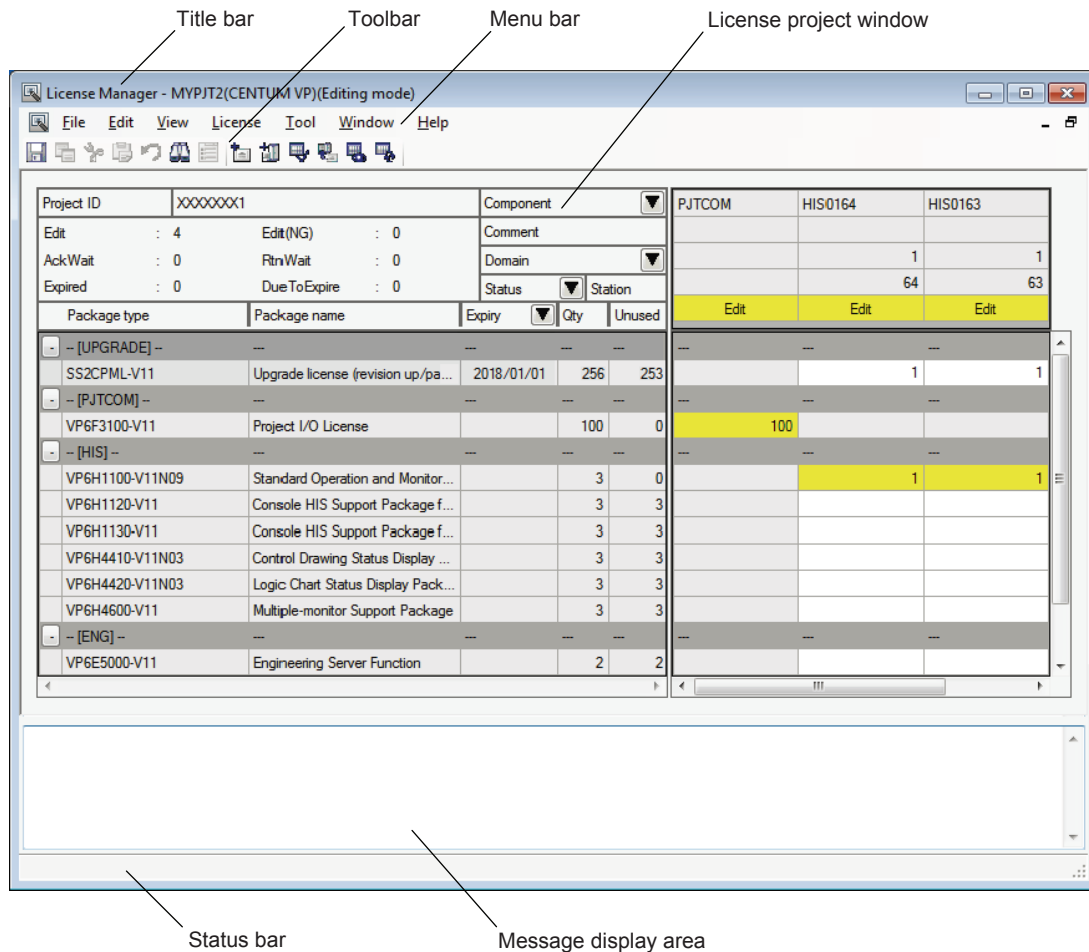


Figure 1.2.4-1 License Manager main window

### ■ License project window

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

The screenshot displays the 'License project window' with four main sections:

- Summary information area:** Contains Project ID (XXXXXX1), Edit (4), AckWait (0), Expired (0), Edit(NG) (0), RtnWait (0), and DueToExpire (0).
- Station information area:** Includes Component (PJTCOM), Comment, Domain, Status, and Station (HIS0164, HIS0163).
- Package information area:** A table listing packages with columns for Package type, Package name, Expiry, Qty, and Unused.
- Assignment area:** A table showing license assignments with columns for Edit, Edit, and Edit.

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 management station (Editing mode)	Edit	Number of stations with licenses that are being edited	Entire license project
	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 management station (Monitoring mode)	Error	Number of stations with a license error	Entire license project
	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	

Continues on the next page

Table 1.2.4-1 Status display details (Table continued)

Station	Status	Description	Status applicable for
License-assigned station	Error	License error	Local 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 table shows the definition items on the package information area. You can switch displaying or hiding the each definition item after you select View from the menu bar in the license manager.

Table 1.2.4-2 Definition items in the package information area

Item	Description	Default
Package type	The package model specification code for the license (example: VP6H1100-V10N03)	Displayed
Internal package type	CENTUM VP R5 package model specification code corresponding to the CENTUM VP R6 package model specification code, or ProSafe-RS R3 package model specification code corresponding to the ProSafe-RS R4 package model specification code (CENTUM VP example: LHS1100-V10/N0003) (*1)	Hidden
Package name	The package name for the license	Displayed
Paid	This item indicates whether the license is paid or free.	Hidden
Expiry	If the license has an expiry date, the expiry date appears. For software licenses, the software package is available until the expiry date. For upgrade licenses, you can install the product revisions or patches that were issued before the expiry date.	Displayed
Ver.	The version number of the license This item is left blank for upgrade licenses.	Hidden
Qty	The quantity of the license This item is fixed to 256 for upgrade licenses.	Always displayed
Unused	The number of licenses not assigned to any station	Always displayed

\*1: The internal package model can be displayed on the definition item in the package information area on some screens, because some software uses the CENTUM VP R5 or ProSafe-RS R3 license package model specification code.

Only for upgrade licenses, the background color of the Expiry cell changes as follows.

Table 1.2.4-3 Background color of the Expiry cell

Background color	Description
White	The current date is before the expiry date of the upgrade license.
Yellow	The current date exceeded the expiry date of the upgrade license.

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 1.2.4-4 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 information of each destination station for assigned licenses.

In the license management station, License Manager shows the information of stations for the entire license project. License Manager on the license-assigned station shows only information of its own station.

#### TIP

- If FCS licenses are assigned by using the license management station, the destination FCS information appears on the station information area in the license-assigned station that is installed with system builders. If SCS licenses are assigned by using the license management station, the destination SCS information appears on the station information area in the license-assigned station that is installed with SENG.
- If Project I/O licenses are assigned to PJTCOM by using the license management station, the PJTCOM information also appears in the station information area on the license-assigned station installed with the system builders or on the SENG specified as the license-assigned station.

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 1.2.4-5 The status of assigned licenses for a station

Station	Status of assigned licenses	Background color	Status	Description
License management station (Editing mode)	OK	No background color	Normal	Licenses have been distributed and accepted
	EDIT	Yellow	Warning	License assignment is currently being edited, or upgrade licenses have been added, but not yet distributed.
	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 1.2.4-5 The status of assigned licenses for a station (Table continued)

Station	Status of assigned licenses	Background color	Status	Description
License management station (Monitoring mode) (*1)(*2)	OK	No background color	Normal	Licenses are being assigned successfully
	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)	OK	No background 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

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

\*2: When the licenses are waiting to be returned, the prefix \*\* is added to the character strings indicating the status of assigned licenses. (Example: \*\*OK)

**SEE  
ALSO**

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

## ● 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 1.2.4-6 Background display of the assignment area

Background color	Description
White	This cell can be assigned licenses.
Yellow	License assignment was modified or added for this cell, or upgrade license was added to extend the expiration 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 1-10

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## 2. Basic operations in license projects

This section describes the basic operations in license projects.

## 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)
- License sheet that lists the project IDs

### ■ 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.

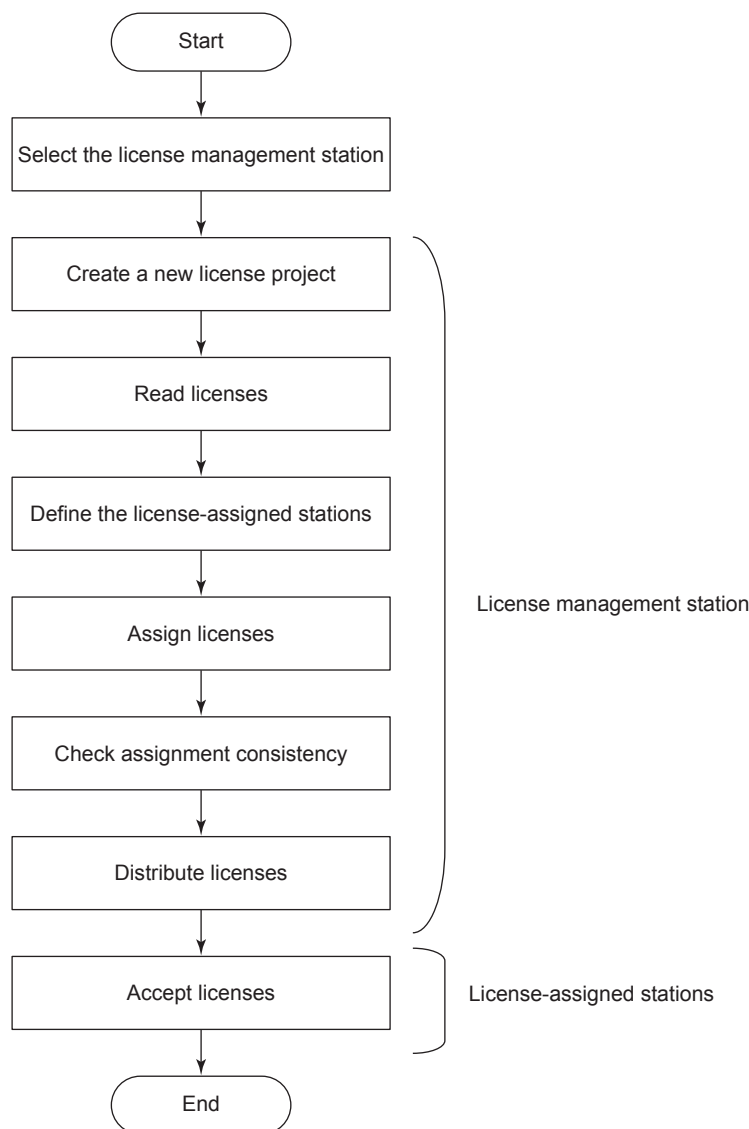


Figure 2.1-1 Steps for managing licenses for the first time

## ■ Selecting the license management station

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

## 2.2 Creating and deleting license projects

This section describes how to create and how to delete 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 computer as a user with maintenance privileges.
2. Start License Manager.  
License Manager window appears.
3. 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.
5. Click [OK].  
The license project is created and the license project window appears in the License Manager window.

**TIP**

When you manage licenses for multiple projects on one license management station, also use this procedure to create license projects.

### ■ Specifying a backup folder

For the license project backup folder, you must specify a folder in the hard drive of another computer on the same network, or a hard drive that is added to your computer, and that is writable by everyone. You can also specify a shared folder on the file server that was configured by using the IT Security 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.
5. 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 license management station. This section describes how to read a license key file from the license medium and register the licenses in the license project.

### ■ Reading a license

When reading a license, you need a license medium.

When reading a license for the first time in a newly created license project, project ID written in the license sheet is required.

Follow these steps to read a license:

1. Insert the license media into the drive of the license management station.
2. 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].
5. Perform one of the following operations:
  - When you read a license for the first time in a newly created license project, a dialog box to verify project ID is displayed. Enter the project ID number mentioned in the license sheet.
  - If a license has already been read in the license project, move to step 6.
6. Click [OK].  
A confirmation dialog box appears to confirm whether you want to save the license project.
7. Click [Yes].  
The license key file is read from the license medium. If you click [No], the read operation is terminated.

When the license key file 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 medium with the same project ID, read the license key file from each license medium.
- Under the folder that you specify by selecting [License] > [Add licenses], you can place only one license key file. If you use license key files by copying them from the license medium to a local disk or somewhere else, you must create a folder to store each individual license key file.



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

Note that, if you read Project I/O Licenses on the license management station, a license-assigned station of PJTCOM is automatically defined. And PJTCOM is added to the license project window.

### 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 3-29

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

## ■ Defining a license-assigned station

Follow these steps to define a license-assigned station:

1. 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.

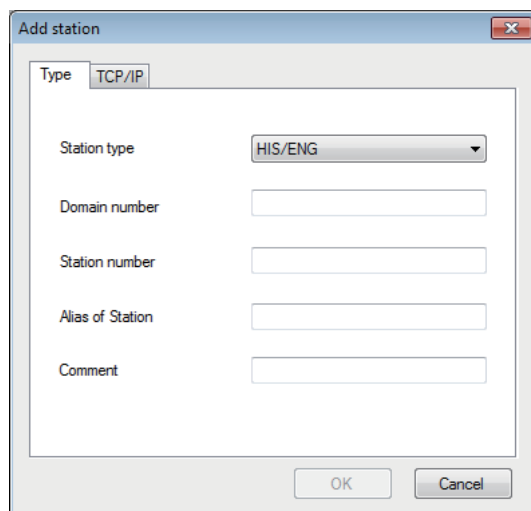


Figure 2.4-1 Add station dialog box

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

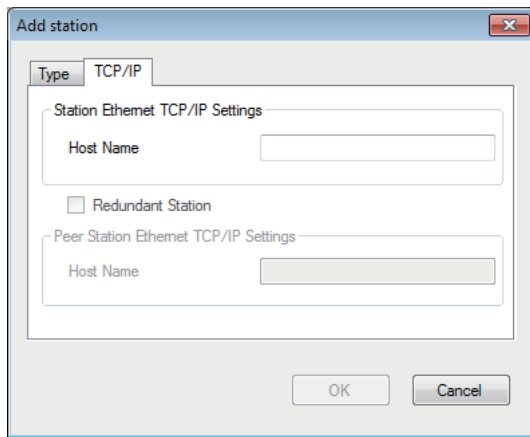


Figure 2.4-2 Add station dialog box

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

#### TIP

To use a network switchover type UGS, select "UGS" in Station type. To use a computer switchover type UGS, select "UGS2" in Station type. If you select UGS in Station type, the [Redundant Station] check box becomes available. If you select UGS2 in Station type, the [Redundant Station] check box is grayed out and becomes unavailable.

#### SEE ALSO

For more information about redundancy of UGS, refer to:

A1., "UGS" in Unified Gateway Station Reference (IM 33J20C10-01EN)

For more information about PJTCOM, refer to:

■ "Station name and computer name default values" on page 2-9

For more information about computer switchover type redundancy, refer to:

2.11, "Managing licenses of a computer switchover type UGS" on page 2-20

For more information about network switchover type redundancy, refer to:

2.12, "Managing licenses of a network switchover type redundant UGS" on page 2-22

## ■ 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.

## ■ 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 following table shows the CENTUM VP and ProSafe-RS station types, automatically determined station names, and default computer names.

**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 (*1)	BCVU[ddss](UGS) BCVU[ddss](UGS)(Peer) (*2)	E[ddss] E[ddss](Peer) (*2)
UGS2 (*3)	BCVU[ddss](UGS)	E[ddss]
UACS	UACS[ddss]	E[ddss]
PC (*4)	STN[ddss] (*5)	None
PJTCOM (*6)	PJTCOM	N/A

\*1: Select this station type when using a network switchover type UGS.

\*2: This is the second computer for a network switchover type redundant UGS.

\*3: Select this station type when using a computer switchover type UGS.

\*4: The station type of an AD server that does not coexist with Operation and Monitoring Function and system builders is "PC". The station name is same as the computer name.

\*5: If a domain number or station number is not specified, a station name is not automatically determined.

\*6: A virtual station assigned with Project I/O Licenses. Only one PJTCOM can be defined in a license project. It is automatically created when you add the license key.

**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
PC (*3)	None	None
PJTCOM (*4)	PJTCOM	N/A

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

\*2: If a domain number or station number is not specified, the station name will be the same as the computer name.

\*3: The station type of an AD server that does not coexist with SENG is "PC."

\*4: A virtual station assigned with Project I/O Licenses. Only one PJTCOM can be defined in a license project. It is automatically created when you add the license key.

## ■ When using virtual test functions

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

- For a computer installed with a control bus interface card or Vnet/IP interface card, define it in the same manner as when you define an HIS, UACS, SENG, or other station.
- For a computer 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.

## ■ Relationship of License Project and AD Project in ProSafe-RS

In ProSafe-RS R4 or later, all RS projects corresponding to the station (SCS) defined for the license project, must be registered in the same AD project. This relationship is shown in the figure below.

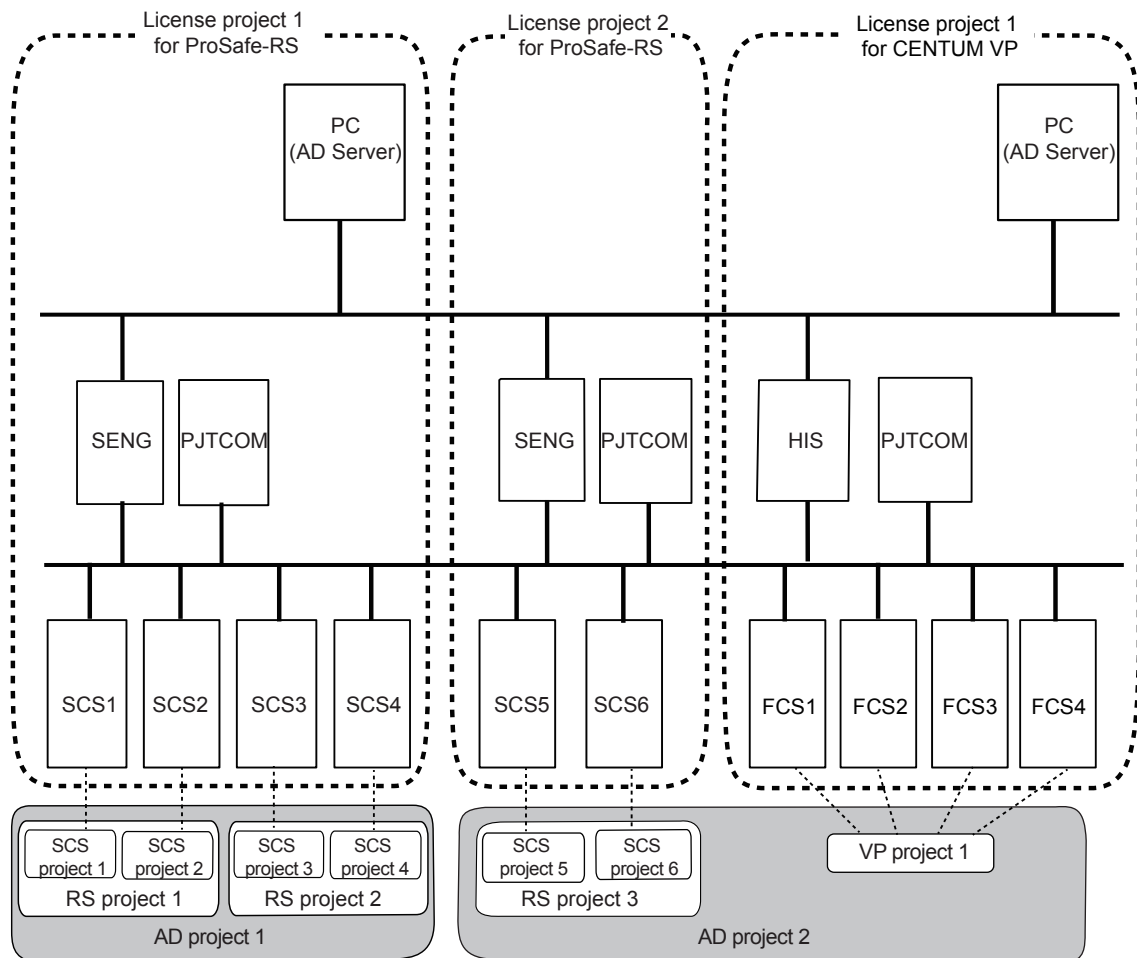


Figure 2.4-3 Relationship of License Project and AD Project in ProSafe-RS

## 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 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.
2. Type the number of licenses assigned to each station.
  - To assign a license, type 1. If you do not want to assign a license, leave it blank.
  - As for the project I/O license, the quantity of the license is shown in the cell in the assignment area of PJTCOM. Ensure that the quantity that is shown in the cell is the same as the quantity of the project I/O license that is provided.

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 1-18

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

### ■ Copying license assignment information

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

1. In the license project window, click the name of the station from which you want to copy information.
2. 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.
4. 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 relevant cell changes to yellow. If the number of available licenses is exceeded as a result of the [Paste] operation, the status changes to NG. In this case, review the license assignment information.

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

## 2.6 Checking license assignment consistency

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.

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**SEE  
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

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### ■ Checking the consistency of license assignment

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

The consistency check result appears in the message display area. If an error is detected, the corresponding cell in the assignment area changes to red, modify the assignment to rectify the error.

## 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.

1. 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.

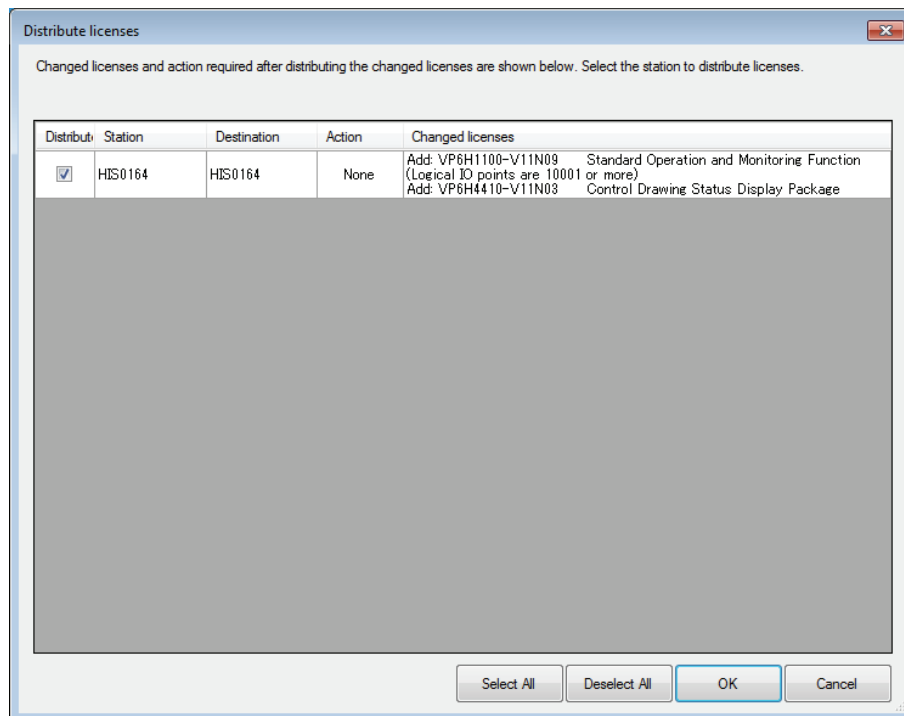


Figure 2.7-1 Distribute licenses dialog box

- In the Distribute licenses dialog box, the Action column indicates the actions required to accept the license assignment changes on the license-assigned station. 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>."
2. In the Distribute column, select the 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.
  5. 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 verification, a warning message appears in the message display area and 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 verification, distribution of the license to the destination stations is suspended and an error message appears in the message display 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 FCS

The distribution destination for FCS licenses is stations assigned with a Standard Engineering Function license, not the actual FCS.

---

**TIP** All stations that are assigned with a Standard Engineering Function license must be connected to the network. If the stations cannot be connected to the network at the time, distribute the licenses to all the stations that are assigned with a Standard Engineering Function license through an external storage medium.

---

- For SCS

The distribution destination for SCS licenses is the stations assigned with SENG, not the actual SCS.

---

**TIP** All SENGs must be connected to the network. When temporarily the stations cannot be connected to the network, distribute the licenses to all SENGs via an external storage medium.

---

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.

### ● Distributing Licenses to PJTCOM

- For CENTUM VP R6

The licenses are distributed to the station to which the license for the basic engineering functions is assigned.

- For ProSafe-RS R4

The licenses are distributed to the SENG.



**SEE  
ALSO**

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

## ■ Accepting a license and activating a software package on a license-assigned station

After the license management target product 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 by 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. In the Distribute column, select the 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.
4. 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 destination stations is terminated, and an error message appears in the message display 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.If

- 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.

1. 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.
3. Start License Manager.  
License Manager window appears.
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.
6. 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.

**TIP**

If the version of the license to be distributed and the version of the software in the destination station does not match, the license cannot be accepted.

## 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 1-18

### ● 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.

#### SEE 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 messages.

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

#### SEE ALSO

For more information about system alarm messages that are generated when an error is detected in the status of an assigned license, refer to:

Message Number 0373 in 2.4, “Communication Related Messages (Message Nos. 0301 to 0397)” in Operating Messages (IM 33J05A30-01EN)

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.

## 2.11 Managing licenses of a computer switchover type UGS

To manage the licenses of a computer switchover type UGS, you must assign a station name for computer switchover type UGS to the target UGS. License Manager recognizes a pair of UGSs that make up a computer switchover type redundant UGS as one station. You must assign licenses for redundancy to that station.

**TIP**

When you use a computer switchover type redundant UGS, licenses for redundancy are required. When you use a computer switchover type UGS in a non-redundant configuration, only the license for Unified Gateway Station (UGS2) Standard Function is required.

### ■ Defining a computer switchover type UGS

Follow these steps to define a computer switchover type UGS:

1. On the license management station, start License Manager in Editing mode.
2. From the menu bar, select [File] > [New] > [Station].  
The Add station dialog box appears.
3. In the Station Type drop-down list of the Type tab, select "UGS2" and specify the following items:
  - Domain number
  - Station number

**TIP**

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.
5. Click [OK].  
The defined UGS is added to the license project window as one station.

### ■ Assigning licenses to a computer switchover type UGS

Assign licenses for a computer switchover type UGS.

**SEE  
ALSO**

For more information about assigning licenses, refer to:

“■ Assigning licenses” on page 2-11

### ■ Distributing licenses to a computer switchover type UGS

You can distribute licenses in the same manner as other cases.

**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 2-13

### ■ Accepting licenses on a computer switchover type UGS

For a computer switchover type redundant UGS, accept licenses only on the active UGS.

For a non-redundant computer switchover type UGS, you can accept licenses in the same manner as other cases.

---

**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 2-15
-

## 2.12 Managing licenses of a network switchover type redundant UGS

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 network switchover type redundant UGS

Follow these steps to define a network switchover type redundant UGS:

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

**TIP**

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.
5. Select the Redundant Station check box.  
The Peer Ethernet TCP/IP Settings section becomes available.
6. In the Peer Ethernet TCP/IP Settings section, type the name of the second computer.
7. Click [OK].  
Two columns showing the network switchover type redundant UGS 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 a network switchover type redundant UGS

When assigning licenses to a network switchover type redundant UGS, 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 2-11

### ■ Distributing licenses to a network switchover type redundant UGS

To distribute licenses to a network switchover type redundant UGS, 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 2-13



## ■ Accepting licenses on a network switchover type redundant UGS

For a network switchover type redundant UGS, 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 2-15



---

## 3. Maintaining license projects

This section describes how to maintain license projects.

## 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:

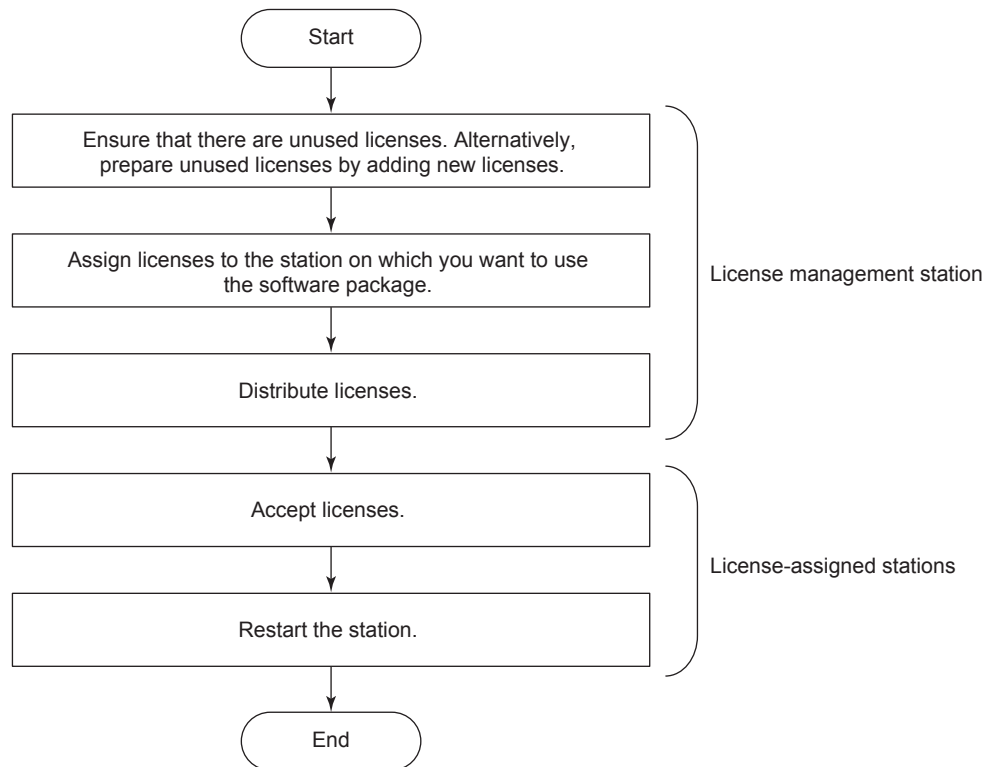
“■ Reading a license” on page 2-6

---

## 3.2 Modifying licenses

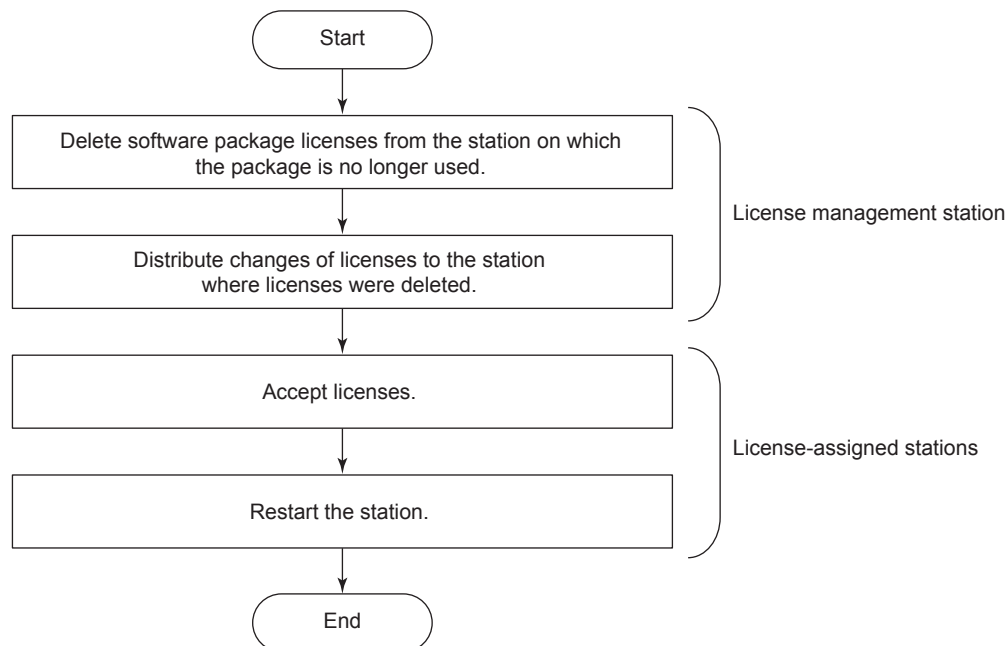
This section describes how to modify license assignments within the same license project, and how to distribute and accept licenses after changing the assignments.

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**

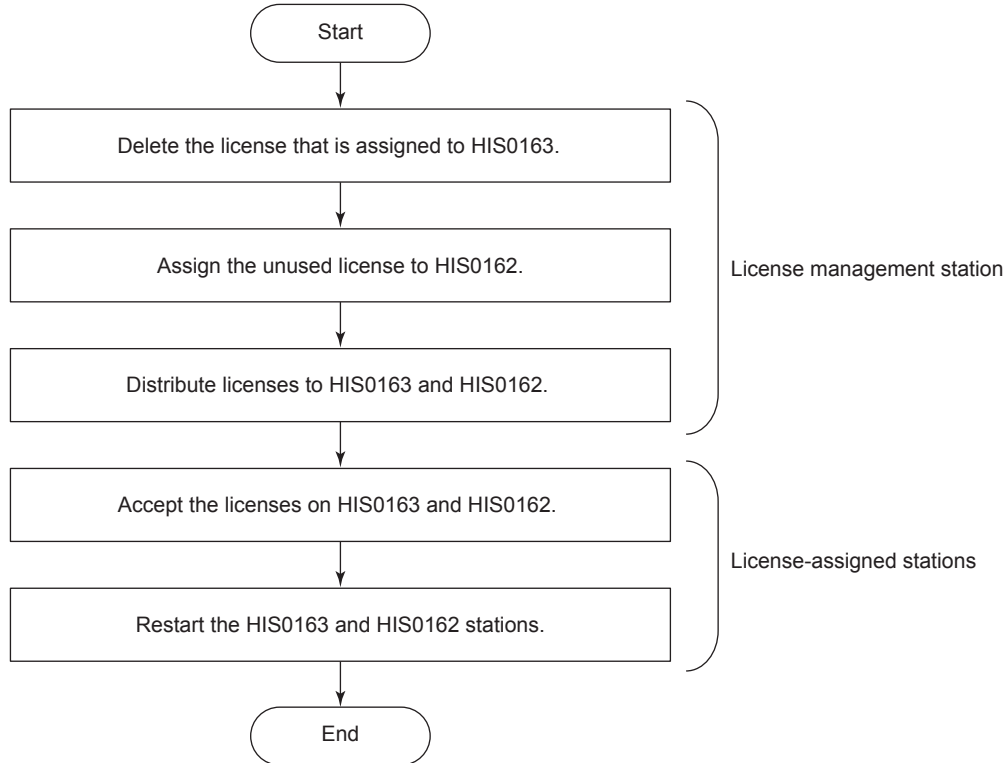
The following figure shows the workflow of moving the license of a software package that is no longer used on a certain station to another station.

**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.
2. Select the cell corresponding to the software package that you want to add to the license-assigned station, and enter 1.
  - As for the project I/O license, the quantity of the license is added in the cell in the assignment area of PJTCOM. Ensure that the quantity that is shown in the cell is the same as the quantity of the project I/O license that is provided.

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.

3. 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 ALSO

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

For more information about assigning licenses, refer to:

“■ Assigning licenses” on page 2-11

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.
2. 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 2-11

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



## 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].

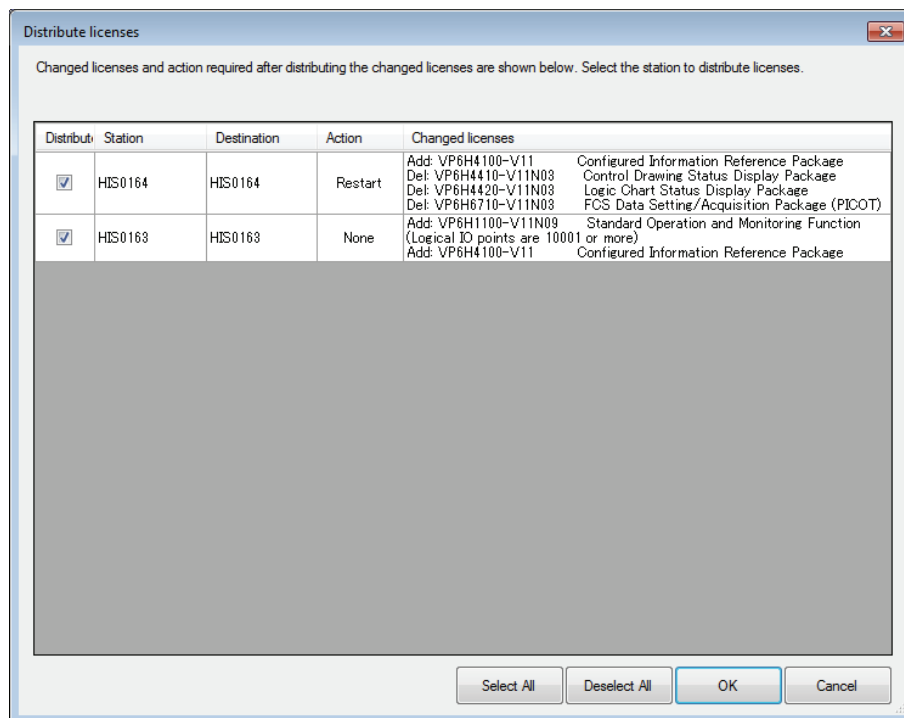


Figure 3.2.2-1 Distribute licenses dialog box

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

#### SEE ALSO

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 2-13

---

## ■ 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 by using external storage media, refer to:

“■ Distributing licenses by using external storage media” on page 2-16

---

### 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.
2. Start License Manager.  
License Manager appears 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.
3. From the menu bar, select [License] > [Accept licenses].  
The modified licenses and the actions required after acceptance appear in the Accept licenses dialog box.

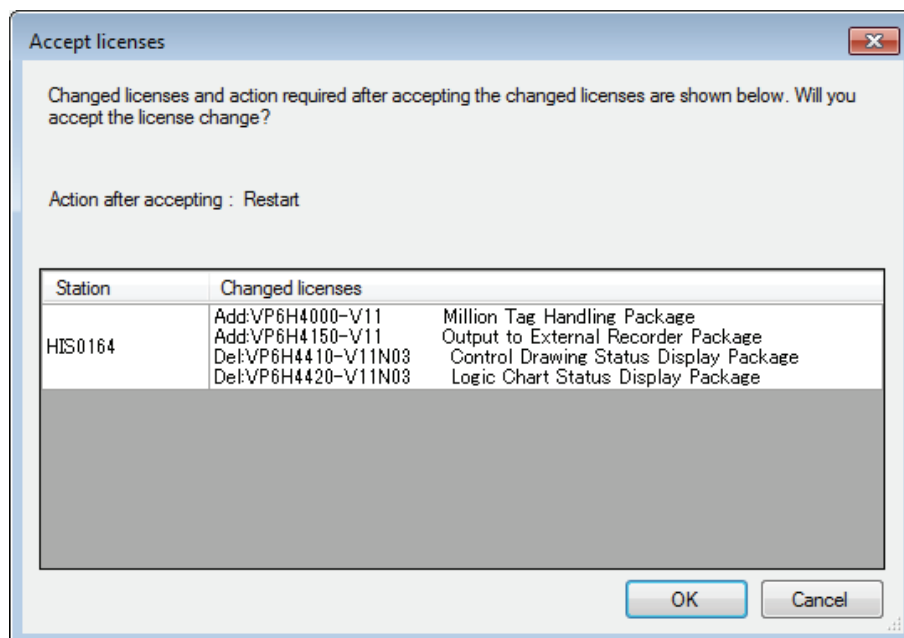


Figure 3.2.3-1 Accept licenses dialog box

4. Click [OK].  
A dialog box appears, asking you to confirm whether the applications of the product whose license you are accepting have been closed.
5. If the applications are not running, click [Yes].

---

If the applications are still running, click [No]. The license acceptance operation is terminated.

6. 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.
7. 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.

**TIP**

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 by using external storage media, refer to:

“■ Activating a software package using external storage media” on page 2-17

---

### 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 1-18

#### ■ 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:

1. 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.
6. 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:

1. Start License Manager on the license-assigned station where you previously generated the returned license file.
2. From the menu bar, select [License] > [External storage media] > [Output returned licenses].  
A dialog box appears asking you to select the location for generating the returned license file.
3. Select the location where you want to save the returned license file.
4. 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:

1. On the license management station, start License Manager in Editing mode.
2. Delete the license assignments for the station that you want to delete.
3. In the license project window, click the station name.
4. From the menu bar, select [File] > [Delete].  
Alternatively, right-click the station name and select [Delete station].  
The Delete Station dialog box appears.
5. Click [Yes].  
The column of the deleted station is removed from the license project window.
6. 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.
3. 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

## 3.4 Redistributing licenses to license-assigned stations

You can use the Distribute master license function to redistribute licenses that were last distributed from the license management station to license-assigned stations. If a license-assigned station fails, you can replicate the license assignments for the failed station by distributing the master license to the replacement computer where the license management target product is installed.

### ■ 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.

**SEE  
ALSO**

For more information about license files, refer to:

2.8, "Distributing and accepting licenses using external storage media" on page 2-16

### ■ 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.



### 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:

1. On the license management station, start License Manager in Editing mode.
2. 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.

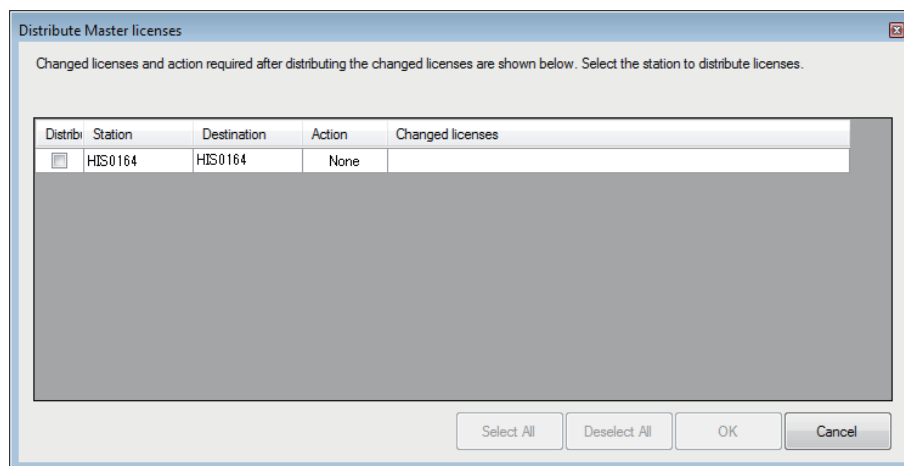


Figure 3.4.1-1 Distribute Master licenses dialog box

3. Select the Distribute check box for the stations to which you want to distribute a master license.
4. 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.

#### SEE ALSO

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

“■ Distributing a license to license-assigned stations through a network” on page 2-13

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.
2. From the menu bar, select [License] > [External storage media] > [Distribute master licenses].  
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.
4. Click [OK].  
A dialog box appears to specify a folder.
5. Specify the folder to which you want to save the master license.
6. 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 folders.
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 2-17
-

## 3.5 Increasing the software package capacity

If you need to increase the number of I/O that can be handled by FCS or SCS, add a Project I/O License.

If you need to increase the number of I/O points that can be handled by Operation and Monitoring Function and Basic Engineering Function, add a Project I/O License for expansion.

**TIP**

For example, use an upgrade installation license when you increase the number of Field Control Stations that can be handled by Operation and Monitoring Function and Standard Builder Function in CENTUM VP R5.

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 divided after they have been merged. Perform merging licenses very carefully.

---

### ■ 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.
4. 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.

## Before merging

Project ID	XXXXXXXX1	Component	PJTCOM	HIS0164
Edit	: 2	Edit(NG)	: 0	
AckWait	: 0	RtnWait	: 0	
Expired	: 0	DueToExpire	: 0	
Package type	Package name	Expiry	Qty	Unused
-- [PJTCOM] --	--	--	--	--
VP6F3100-V11	Project I/O License		100	0
-- [HIS] --	--	--	--	--
VP6H1100-E11N59	Standard Operation and Monitoring...		1	0
VP6H1100-V11N05	Standard Operation and Monitoring...		3	2
VP6H1120-V11	Console HIS Support Package for ...		3	3

## After merging

Project ID	XXXXXXXX1	Component	PJTCOM	HIS0164
Edit	: 2	Edit(NG)	: 0	
AckWait	: 0	RtnWait	: 0	
Expired	: 0	DueToExpire	: 0	
Package type	Package name	Expiry	Qty	Unused
-- [PJTCOM] --	--	--	--	--
VP6F3100-V11	Project I/O License		100	0
-- [HIS] --	--	--	--	--
VP6H1100-V11N05	Standard Operation and Monitoring...		2	2
VP6H1100-V11N09	Standard Operation and Monitoring...		1	0
VP6H1120-V11	Console HIS Support Package for ...		3	3

Making VP6H1100-V11N09 by merging VP6H1100-V11N05 with VP6H1100-E11N59

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

- 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 operation.

**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 2-11

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

“■ Distributing a license to license-assigned stations through a network” on page 2-13

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

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

## 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 on a computer where License Manager alone is 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.
2. From the menu bar, select [Tools] > [Restore].  
The folder selection dialog box appears.
3. Select the folder that stores the backup of the license project that you want to restore, and click [OK].

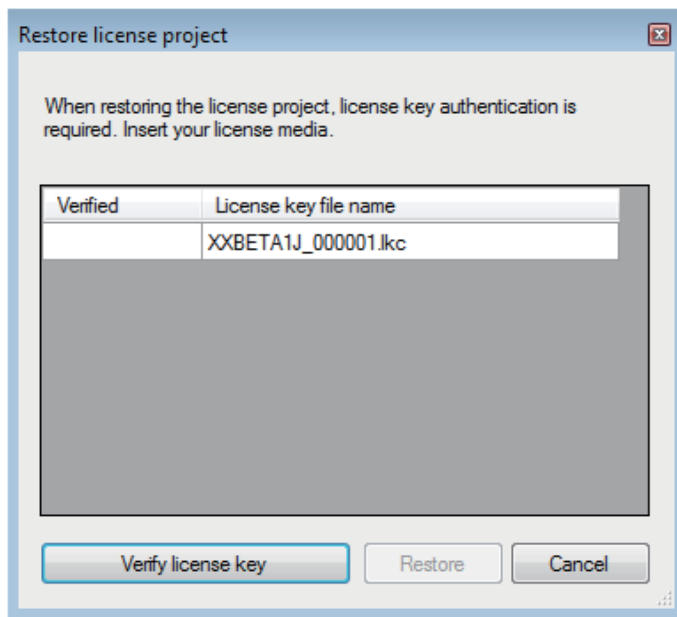
---

**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.



**Figure 3.6-1 Restore license project window**

4. 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.
5. 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.
7. 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.

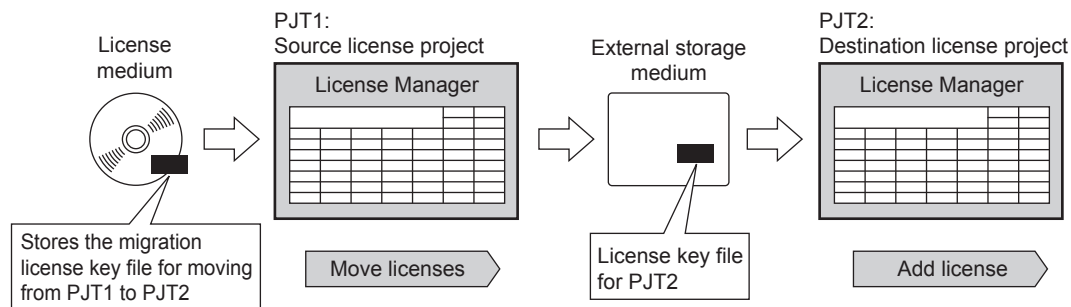
### ■ Migration license key files

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

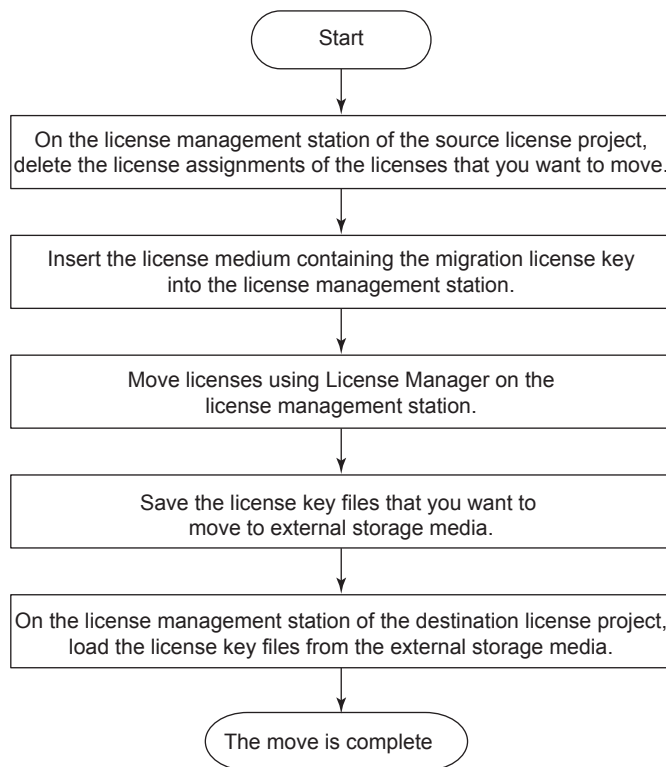
### ■ Procedure for moving licenses to other license projects

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.



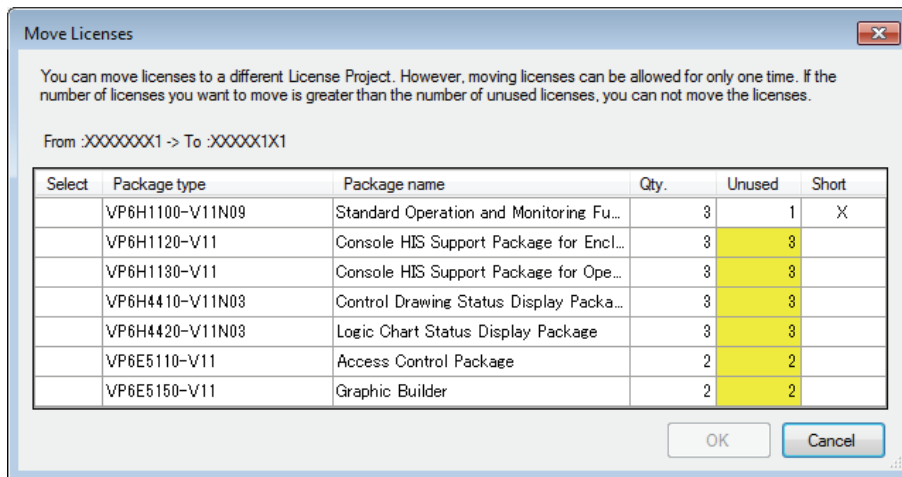
**Figure 3.7-2 Workflow for moving a license**

## ■ 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.
2. 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.
4. From the menu bar, select [License] > [Move licenses].  
The folder selection dialog box appears.
5. 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.
8. 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.
10. 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.

## IMPORTANT

When you restore a license project, specific license key files are required. So, you must keep the following license medium and license key files:

- License medium that stores the migration license key file
- License key files moved to the destination project that were created on the license management station of the source project

The file names of the license key files are as follows:

- Migration license key file: <SrcProjectID>\_<SerialID>.lkc
- License key files moved to the destination project: <ProjectID>\_<SerialID>.lkc

ProjectID: Project ID of the destination project

ProjectID: Project ID of the source project

SerialID: ID that is assigned when the license key is issued

---

**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 license-assigned 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.
4. 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

---

## 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 package licenses 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	B	C	D	E	F	G	H
1	@ProjectID	XXXXXXXX1						
2	@Product	CENTUM VP						
3	@StationType					PJT.COM	HIS/ENG	HIS/ENG
4	@StationName					PJT.COM	HIS01 64	HIS01 63
5	@ComputerName						HIS01 64	HIS01 63
6	@StationAlias							
7	@StationComment							
8	#	PackageType	Paid	Expiry	Ver.			
9	@Package	VP6F31 00-V1 1	P		R6	100		
10	@Package	VP6H1 100-V1 1 N09	P		R6		1	1
11	@Package	VP6H41 00-V1 1	P		R6		1	1
12	@Package	VP6H41 50-V1 1	P		R6		1	1
13	@Package	VP6H44 50-V1 1	P		R6		1	1
14	@Package	VP6H65 10-V1 1	P		R6		1	1
15	@Package	VP6H65 30-V1 1	P		R6		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 ID for the license project	Required
Product name	@Product , <product_name>	The product name for the license project	Required
Station type	@StationType ,,,, <station_type_1> , <station_type_2> ,... , <station_type_N>	All station types in a license project	Required
Station name	@StationName ,,,, <station_name_1> , <station_name_2> ,... , <station_name_N>	All station names in a license project	Required (*1)
Computer name	@ComputerName,,,, <computer_name_1> , <computer_name_2> ,... , <computer_name_N>	The computer names of all stations in the license project	Required (*2)
Station alias	@StationAlias ,,,, <station_alias_1> , <station_alias_2> ,... , <station_alias_N>	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>	Comments for all stations in the license project	Optional
Package information	@Package, < MS_code > , <paid_flag> , < duration> , <version> , < assignment_numbers_for_station_1> , < assignment_numbers_for_station_2>	Package license information and assignment information	Required
Comment line	Lines starting with #		Optional

\*1: Not required for stations not connected to a control bus.

\*2: Not required for an FCS or SCS.

**Table 3.9.1-2 Identifier format values and descriptions**

Specified items	Value	Description
<station_type>	Same as the station types that can be specified when adding a station Example: HIS, FCS, GSGW, SIOS, UGS, UGS2	Station type
<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>	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>	The values specified in the station properties This value is ignored if the station name ends with (Peer).	Station properties
<paid_flag>	By default, Paid P is specified If the paid flag for the imported package list is blank, it is considered paid.	
<expiration>	No expiry date: Blank Expiry date: YYYY/MM/DD YYYY Year MM Month DD Day Example: 2015/12/22	License expiry date
<version>	R<version_number > Example: R6	License version number
<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.

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 display 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 display 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.
2. 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.
3. 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 station type
- Filtering by domain number
- Filtering by station status
- Filtering by license paid/free, expiry date (time-limited/open-ended), and version

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 package licenses from a license project

You can delete licenses for software packages from a license project if the software packages meet both of the following 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.

\*1: 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.

---

**TIP**

After upgrading the licenses, the licenses of software packages that are no longer needed should be deleted from the license project.

---

**SEE  
ALSO**

For more information about importing package lists, refer to:

3.9.1, "Importing and exporting package lists" on page 3-27

---

### ■ Deleting software package licenses

Follow these steps to delete licenses for a software package:

---

**IMPORTANT**

Deleted software package licenses cannot be restored. You must delete software package licenses very carefully.

---

1. 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.
3. From the menu bar, select [License] > [Delete license]. The Delete license dialog box appears.
4. Click [Yes]. The license of 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

License project information is saved in the Project Information section. The following table shows the items that are 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
Back up 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

License package information is saved in the Package List section. The following table shows the items that are 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 type

Continues on the next page

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

Title	Description
InternalPackage	CENTUM VP R5 package model corresponding to the CENTUM VP R6 package model, or ProSafe-RS R3 package model corresponding to the ProSafe-RS R4 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
Qty	Number of licenses
Unused	Number of unused licenses

### ● Station Information, 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)

\*1: 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

Title	Description
No	A consecutive number starting from one is automatically saved for each license
PackageType	Package type
InternalPackage	CENTUM VP R5 package model corresponding to the CENTUM VP R6 package model, or ProSafe-RS R3 package model corresponding to the ProSafe-RS R4 package model
PackageName	Package name
Paid	Shows whether it is paid or free Paid: P Free: F

Continues on the next page

**Table 3.9.6-8 Information in the Station Information-Package section** (Table continued)

Title	Description
Expiry	Validity duration Time-limited: Expiry date and time Non-time-limited: -
Ver.	version
Assign	Number of licenses assigned to the displayed station(*1)

\*1: The number may be different in Editing mode and Monitoring mode.



## **4. Upgrading the Licenses from CENTUM VP R5 to R6, or from ProSafe-RS R3 to R4**

This section describes how to upgrade the licenses from CENTUM VP R5 to R6, or from ProSafe-RS R3 to R4. Before starting upgrading of the licenses, you must install CENTUM VP R6 or ProSafe-RS R4 software packages on the computers to which you want to distribute the upgraded licenses.

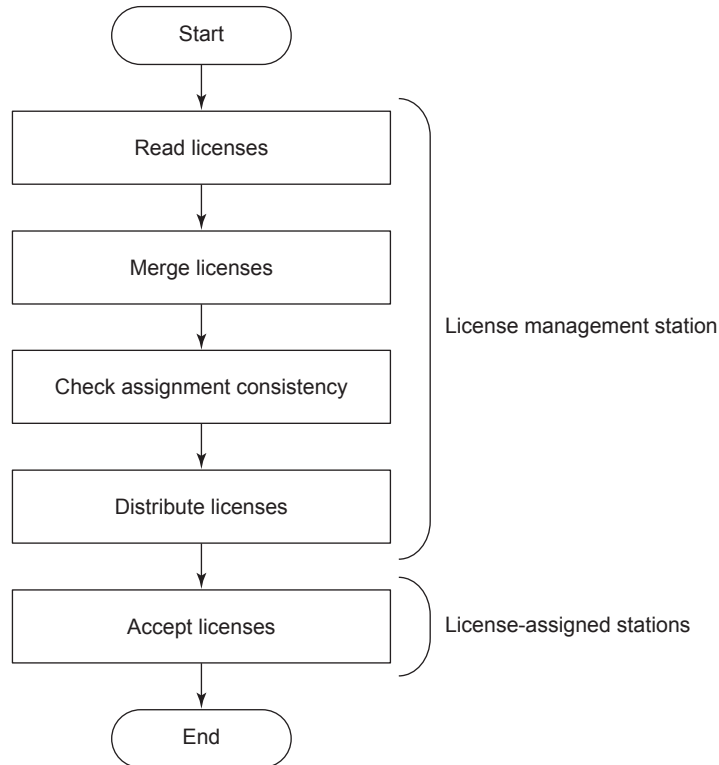
CENTUM VP is not affected by the ProSafe-RS license upgrading, and vice versa.

## 4.1 Process for License Upgrading

This section describes the basic procedures about how to upgrade licenses that are assigned in all stations within a license project.

As for how to upgrade the licenses for some HISs, it is described in the other section.

The following figure shows the procedures of upgrading licenses.



**Figure 4.1-1 Procedures for Upgrading Licenses**

**SEE  
ALSO**

For more information about Upgrading the Licenses for Some HISs, refer to:

4.2, “Upgrading the Licenses for Some HISs” on page 4-5

### ■ Reading Licenses

Read the license key file to upgrade the license in the license management station that is upgraded to CENTUM VP R6 or ProSafe-RS R4.

The procedure to read the license key file into the license management station is same as the procedure to read the new license.

The following line is added to the package type in the license management. In the following explanation, we call the added line as a version upgrade license.

<old package type> => <new package type>

example: LHS1100-V10/N0099 => VP6H1100-V10N09

**IMPORTANT**

Retain the following license media after you upgrade licenses because you need it when you restore the licenses.

- The license medium that contains the old license key file.
- The license medium that contains the license key file to upgrade the old licenses

**SEE  
ALSO**

For more information about reading licenses, refer to:

■ “Reading a license” on page 2-6

**■ Merging Licenses**

You need to merge licenses because version upgrade licenses cannot be distributed independently.

**IMPORTANT**

Licenses cannot be divided after they have been merged. Perform merging licenses very carefully.

To merge licenses, perform following procedures.

1. Run the license manager on the license management station as editing mode.
2. Assign the version upgrade licenses to the all stations that have been assigned with old licenses. The procedures to assign a version upgrade license is same as the procedures to assign a license.
3. From the menu bar, select [License] > [Merge version upgrade licenses].  
A dialog box to confirm packages appears.
4. Click [Yes].  
The old license and the version upgrade license is merged. You can confirm the merged license by package type.

A sample image of the license manager

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHS1100-V10/N0099	R5	3	1	1	1
LHS1100-V10/N0099 => VP6H1100-V10N09	R6	3			

The image of the license manager  
that appears after assigning the license

↓  
Assigning the license

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHS1100-V10/N0099	R5	3	1	1	1
LHS1100-V10/N0099 => VP6H1100-V10N09	R6	3	1	1	1

The image of the license manager  
that appears after merging the license

↓  
Merging the license

Package type	Ver.	Qty	HIS1	HIS2	HIS3
VP6H1100-V10N09	R6	3	1	1	1

**Figure 4.1-2 Merging operation to upgrade licenses**

---

**TIP** If there are more than one licenses that is available to merge, you can merge only one group by one merging operation.

---

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

- “■ Assigning licenses” on page 2-11

---

## ■ Assignment Consistency Check

Check the assignment consistency on the licenses that are upgraded.

The procedures to check the assignment consistency on the upgraded license is same as the checking on the license assignment.

---

### IMPORTANT

Do not assign the different version of licenses on the same licenses-assigned station. If you assign a different version of license and check the consistency of assignment, an error message appears in the message display area on the license manager. Modify the assignment of licenses if an error message appears.

---

**SEE ALSO** For more information about license assignment consistency check, refer to:

- 2.6, “Checking license assignment consistency” on page 2-12

---

## ■ Distributing Licenses

Distribute the upgraded licenses to the license-assigned stations.

The procedures to distribute the upgraded license is same as the procedures to distribute new licenses.

**SEE ALSO** 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 2-13

For more information about distributing license by using external storage media, refer to:

- “■ Distributing licenses by using external storage media” on page 2-16

---

## ■ Accepting Licenses

Accept upgraded licenses on the license-assigned stations.

The procedures to accept the upgraded license is same as the procedures to accept new licenses.

**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 2-15

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

- “■ Activating a software package using external storage media” on page 2-17

---

## 4.2 Upgrading the Licenses for Some HISs

This section describes how to upgrade the licenses for some HISs.

For example, if you want to mix HISs with CENTUM VP R5 and R6 in a license project, upgrade the license to R6 for the number of the stations that have been upgraded to CENTUM VP V6. And distribute the upgraded licenses to HISs that are upgraded to CENTUM VP R6.

### IMPORTANT

With CENTUM VP, one license project cannot have mixed non-HIS stations to which R5 and R6 licenses are assigned. With ProSafe-RS, one license project cannot have mixed SENGs to which R3 and R4 licenses are assigned.

### ■ Upgrading the Licenses for Some HISs

The procedures to upgrade license for some HISs is same as the procedure to upgrade whole licenses. However, note that the version upgrade license must be assigned to the station whose license is to be upgraded.

The following figure shows an example of upgrading the licenses for some HISs.

A sample image of the license manager

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHS1100-V10/N0099	R5	3	1	1	1
LHS1100-V10/N0099 => VP6H1100-V10N09	R6	2			

The image of the license manager  
that appears after assigning the license

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHS1100-V10/N0099	R5	3	1	1	1
LHS1100-V10/N0099 => VP6H1100-V10N09	R6	2	1	1	

The image of the license manager  
that appears after merging the license

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHS1100-V10/N0099	R5	1			1
VP6H1100-V10N09	R6	2	1	1	

**Figure 4.2-1 Upgrading partial licenses**

If you upgrade the licenses for some HISs, the available license number to be upgraded is up to the quantity of the version upgrade licenses.

After upgrading the licenses for some HISs, continue working on the procedure from "Assignment Consistency Check" according to the procedure of upgrading the license.

#### SEE ALSO

For more information about the process for license upgrading, refer to:

4.1, "Process for License Upgrading" on page 4-2

For more information about the version upgrade license, refer to:

■ "Reading Licenses" on page 4-2



## 5. Working with upgrade licenses

An upgrade license is required to upgrade a product. You can install the issued product medium before the expiry date of upgrade licenses.

The following operations differs from the software license operations:

- Addition
- Distribution and acceptance
- Deletion
- Moving

You cannot move upgrade licenses across license projects.

### ■ Adding upgrade licenses

You should add an upgrade license when reading a new upgrade license or when extending the expiry date of an upgrade license.

#### TIP

When installing a software that was issued after the upgrade license is expired, first make sure to add an upgrade license with a new expiry date. Expiry date is extended.

#### SEE ALSO

For more information about adding upgrade licenses, refer to:

“■ Reading a license” on page 2-6

### ■ Distributing and accepting upgrade licenses

When you upgrade the following products, distribute and accept the upgrade licenses before you install the new revision of the software:

- CENTUM VP R6.04 or later
- ProSafe-RS R4.03 or later

#### TIP

- When you distribute only the upgrade licenses through a network, the licenses are accepted automatically.
- Upgrade licenses can be distributed even after the expiry date.

#### SEE ALSO

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

2.7, “Distributing and accepting licenses through a network” on page 2-13

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

2.8, “Distributing and accepting licenses using external storage media” on page 2-16

### ■ Deleting upgrade licenses from a license project

You can delete upgrade licenses from the license project if they are not assigned to any stations.

The procedure is the same as that for deleting software package licenses.

#### SEE ALSO

For more information about deleting software package licenses, refer to:

3.9.5, “Deleting software package licenses from a license project” on page 3-34





# 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.
PJTCOM definition	Checks whether PJTCOM has been defined if a Project I/O License is assigned.
Quantity of assigned Project I/O License	Checks whether the quantity of the Project I/O License that is assigned to PJTCOM matches the quantity of the Project I/O License that is provided.

**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.
Merge license	Checks that any upgrade installation license, version upgrade license, or replacement license has 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.
Version number identification	Checks that no license that has inconsistent version number has been assigned in a station

**SEE  
ALSO**

For more information about PJTCOM, refer to:

“■ Station name and computer name default values” on page 2-9

For more information about upgrade installation license, refer to:

3.5, “Increasing the software package capacity” on page 3-17

For more information about version upgrade license, refer to:

“■ Reading Licenses” on page 4-2

For more information about replacement licenses, refer to:

Appendix 4., “Upgrading licenses of CENTUM VP R5 software packages” on page App.4-1

## 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:

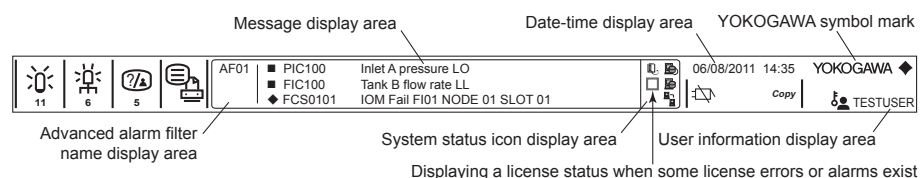
**Table Appendix 2-2 Icons and responses**

Icon	Description	Response
	Licenses have been assigned successfully (The status in Monitoring mode is OK).	—
	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.
	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.
	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.
	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.
	Licenses have been distributed and are waiting to be accepted. Licenses have currently been assigned successfully.	Accept the distributed licenses.
	Licenses have been distributed and are waiting to be accepted. There is currently an error in the license.	Accept the distributed licenses.
	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 Cannot Restart. License Expired (VP6H1100, VP6H1120)	The license expired. If you restart the station, the correspondent package will not work.	Renew the license or remove the station assignment.
STNddss Cannot Restart from 2015/12/22. License will Expire (VP6H1100, VP6H1120)	If you restart the station on 2015/12/22 or after, the correspondent package will not work. 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 ProjectID2(STNxxxx) are detected)	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.

\*1: This refers to all computer-based stations that are defined in System View as well as in license projects.



# Appendix 4. Upgrading licenses of CENTUM VP R5 software packages

This section describes how to upgrade licenses of CENTUM VP R5 software packages. For example, if you want to replace LHM1101 Standard Operation and Monitoring Functions (for CENTUM VP Small) to LHS1100 Standard Operation and Monitoring Functions, you need to upgrade the license LHM1101 to LHS1100. The basic workflow to upgrade the license is same as the workflow to upgrade the license. However, after having accepted the license on the license-assigned station, restart the station.

On the license management station of CENTUM VP R6, read the license key file from the license medium to upgrade the licenses. The following line is added to the package type in the license management. In the following explanation, we call the added line as a replacement license.

<old package type> => <new package type>

Example: LHM1101-V10/N0064 => LHS1100-V10/N0099

Merge the old license and replacement license to upgrade the license. Distribute the upgraded licenses to the license-assigned stations.

---

## IMPORTANT

Retain the following license media after you upgrade licenses because you need it when you restore the licenses.

- The license medium that contains the old license key file.
- The license medium that contains the license key file to upgrade the old licenses

---

### SEE ALSO

For more information about basic workflow for license upgrading, refer to:

4.1, "Process for License Upgrading" on page 4-2

---

## ■ Upgrading licenses

When you upgrade licenses by merging old licenses and replacement licenses, perform following procedures.

---

## IMPORTANT

Licenses cannot be divided after they have been merged. Perform merging licenses very carefully.

---

1. On the license management station of CENTUM VP R6, read the license key file from the license medium to upgrade the licenses. The procedure to read the license key file into the license management station is same as the procedure to read the new license.
2. Run the license manager on the license management station as editing mode.

3. Assign a replacement license to the station in which the license needs to be upgraded. The procedures to assign a replacement license is same as the procedures to assign a license.
4. From the menu bar, select [License] > [Merge version upgrade licenses]. A dialog box to confirm packages appears.
5. Click [Yes].  
The old license and the replacement license are merged. You can confirm the merged license by package type.

A sample image of the license manager

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHM1101-V10/N0064	R5	3	1	1	1
LHM1101-V10/N0064 => LHS1100-V10/N0099	R5	2			

The image of the license manager  
that appears after assigning the license



Assigning the license to HIS1 and HIS2

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHM1101-V10/N0064	R5	3	1	1	1
LHM1101-V10/N0064 => LHS1100-V10/N0099	R5	2	1	1	

The image of the license manager  
that appears after merging the license



Merging the license

Package type	Ver.	Qty	HIS1	HIS2	HIS3
LHM1101-V10/N0064	R5	1			1
LHS1100-V10/N0099	R5	2	1	1	

**Figure Appendix 4-1 Upgrading licenses**

6. Check the assignment consistency on the licenses that are upgraded. The procedures to check the assignment consistency on the upgraded license is same as the checking on the license assignment.
7. Distribute the upgraded licenses to the license-assigned stations.

#### 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 2-11

For more information about license assignment consistency check, refer to:

2.6, “Checking license assignment consistency” on page 2-12

For more information about distributing modified licenses, refer to:

3.2.2, “Distributing modified licenses” on page 3-7

For more information about accepting modified licenses, refer to:

3.2.3, “Accepting modified licenses” on page 3-9



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# Revision Information

Title : License Management

Manual No. : IM 33J01C20-01EN

## Aug. 2019/8th Edition/R6.07 or later

- 1.1.2 Added UACS station.
- 2.4 Added UACS station.

## Aug. 2018/7th Edition/R6.06

- 1.1.1 Added information on PRM in "■ Products managed in license management."
- 5. Added information about additional methods of upgrade licenses.

## Nov. 2017/6th Edition/R6.05

- Entire manual Updated expressions of the products managed in license management.
- 1.1 Updated descriptions in "■ About license management."
- Updated descriptions in "■ Products managed in license management."
- 1.2.4 Updated the figure in "■ Main window."
- Updated descriptions in "● Package information area."
- 3.9.5 Updated descriptions.
- 5. Updated descriptions.

## Apr. 2017/5th Edition/R6.04

- 1.1 Added information about upgrade licenses.
- 1.2 Added information about upgrade licenses.
- 3. Added information about software licenses.
- 4. Added information about version upgrade licenses.
- 5. Added information about application of upgrade licenses.
- Appendix3 Added error messages.

## Sep. 2016/4th Edition/R6.03.10

- 2.4 Updated descriptions about UGS2.
- 2.11 Updated descriptions about UGS2.

## Jun. 2016/3rd Edition/R6.03

- 2.4 Added information about UGS2.
- 2.11 Newly added.
- 2.12 Changed the section number from 2.11. Changed "redundant station" to "network switch-over type redundant UGS."
- 3.9.1 Added information about UGS2.
- Appendix3 Corrected an error.

## Dec. 2015/2nd Edition/R6.02

- All chapters "PC" has been changed to "computer" and "license key" to "license key file."
- 2.5 Description about license assignment has been added.

2.7 Description about license assignment has been added.

3.7 Description about license restoration has been added.

**Mar. 2015/1st Edition/R6.01**

Newly published

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■ For Questions and More Information

Online Query: A query form is available from the following URL.

<http://www.yokogawa.com/dcs/>

■ Written by Yokogawa Electric Corporation

■ Published by Yokogawa Electric Corporation  
2-9-32 Nakacho, Musashino-shi, Tokyo 180-8750, JAPAN

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