Notices

■ Relevant program products

For details about the applicable OS versions, and the service packs and patches required for JP1/Automatic Job Management System 3 - Definition Assistant, see the *Release Notes*.

JP1/Automatic Job Management System 3 - Definition Assistant

P-2A12-3PDL JP1/Automatic Job Management System 3 - Definition Assistant 13-10

The above product includes the following:

P-CC2A12-3PDM [32-bit for Excel] JP1/Automatic Job Management System 3 - Definition Assistant 13-10 (for Windows 10 (x64), Windows 11, Windows Server 2016, Windows Server 2019, Windows Server 2022)

P-CC2912-3PDM [64-bit for Excel] JP1/Automatic Job Management System 3 - Definition Assistant 13-10 (for Windows 10 (x64), Windows 11, Windows Server 2016, Windows Server 2019, Windows Server 2022)

■ Export restrictions

If you export this product, please check all restrictions (for example, Japan's Foreign Exchange and Foreign Trade Law, and USA export control laws and regulations), and carry out all required procedures.

If you require more information or clarification, please contact your Hitachi sales representative.

■ Trademarks

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■ Microsoft product screen shots

Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.

■ Microsoft product name abbreviations

This manual uses the following abbreviations for Microsoft product names.

Abbreviation		Full name or meaning
Excel		Microsoft(R) Excel
		Microsoft(R) Office Excel
Office		Microsoft(R) Office
Windows 10	Windows 10 (x64)	Windows(R) 10 Enterprise 64-bit
		Windows(R) 10 Home 64-bit
		Windows(R) 10 Pro 64-bit
Windows 11		Windows(R) 11 Enterprise
		Windows(R) 11 Pro
Windows Server 2016		Microsoft(R) Windows Server(R) 2016 Datacenter

Abbreviation	Full name or meaning
Windows Server 2016	Microsoft(R) Windows Server(R) 2016 Standard
Windows Server 2019	Microsoft(R) Windows Server(R) 2019 Datacenter
	Microsoft(R) Windows Server(R) 2019 Standard
Windows Server 2022	Microsoft(R) Windows Server(R) 2022 Datacenter
	Microsoft(R) Windows Server(R) 2022 Standard

Windows is sometimes used generically, referring to Windows 10, Windows 11, Windows 2016, Windows 2019, and Windows 2022.

■ Restrictions

■ Issued

■ Copyright

Summary of amendments

The following table lists changes in this manual (3021-3-L52-10(E)) and product changes related to this manual.

Changes	Location
Custom Event Jobs (Service Linkage Objects Monitoring Jobs) are now supported. Along with this, **Definition parameters** was added to the event job definition information section.	*1.7.3*, *2.2.3*, *3.2.2*, *5.1.1(2)*, *5.1.1(14)*, *5.2*, *6.4.1(1)*

In addition to the above changes, minor editorial corrections were made.

Preface

This manual describes JP1/Automatic Job Management System 3 - Definition Assistant (abbreviated hereafter to *JP1/AJS3 - Definition Assistant*).

■ Intended readers

This manual is intended for the following persons:

- Those who have constructed, are using, or wish to use an automated job operation system by using JP1/AJS, or who have sufficient knowledge to construct and operate a JP1/AJS system, and wish to use JP1/AJS.

- Those who wish to use JP1/AJS3 - Definition Assistant to acquire and manage large amounts of unit definition information in a batch, or who wish to define large amounts of units in a batch.

- Those who have a basic knowledge about Excel or have experience in operating it.

■ Organization of this manual

This manual is organized as follows:

1. Overview

>Chapter 1 provides a functional overview of JP1/AJS3 - Definition Assistant, and describes examples and prerequisites for using JP1/AJS3 - Definition Assistant.

2. Functions

>Chapter 2 describes the functions of JP1/AJS3 - Definition Assistant.

3. Installation and Setup

>Chapter 3 describes the installation and setup procedures, and how to set up the environment setting parameters.

4. Operation

>Chapter 4 describes the procedures for operating JP1/AJS3 - Definition Assistant.

5. Definition Items

>Chapter 5 describes the input items displayed in the definition templates.

6. Troubleshooting

>Chapter 6 describes what to do if a failure occurs in JP1/AJS3 - Definition Assistant.

7. Commands

>Chapter 7 describes the commands of JP1/AJS3 - Definition Assistant.

8. Messages

>Chapter 8 describes the messages output by JP1/AJS3 - Definition Assistant.

■ Reading sequence

You can select chapters in this manual to read according to your needs. We recommend you read this manual in the order shown below:

Purpose	See:
To know the overview of JP1/AJS3 - Definition Assistant.	Sections 1.1 and 1.2, and Chapter 2
To know about the necessary settings, including how to install and set up JP1/AJS3 - Definition Assistant.	Sections 1.3, 1.4, 1.5, 1.6, and 1.7, Chapter 3, Chapter 7, and Appendix C
To know the operation procedure.	Chapter 4
To know about the limit values for JP1/AJS3 - Definition Assistant.	Appendix B
To know the contents of the definition items.	Chapter 5
To know what to do if a problem occurs.	Chapter 6
To know the command syntax.	Chapter 7
To know the meaning of the displayed messages.	Chapter 8
To know about the files and folders to be generated.	Appendix A
To know the meaning of the terms used in this manual.	Appendix I

■ Conventions: Version numbers

The version numbers of Hitachi program products are usually written as two sets of two digits each, separated by a hyphen. For example:

- Version 1.00 (or 1.0) is written as 01-00.
- Version 2.05 is written as 02-05.
- Version 2.50 (or 2.5) is written as 02-50.
- Version 12.25 is written as 12-25.

The version number might be shown on the spine of a manual as *Ver. 2.00,* but the same version number would be written in the program as *02-00*.

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1

Overview

JP1/AJS3 - Definition Assistant is a program that can export large amounts of JP1/AJS definition information, as edited with an Excel template, into a manager host, as well as import such information from the manager host back into the Excel template.

This chapter provides an explanation of JP1/AJS3 - Definition Assistant.

1.1 Overview of JP1/AJS3 - Definition Assistant

JP1/AJS3 - Definition Assistant can export large amounts of JP1/AJS definition information, as edited with an Excel template, into a manager host. This definition information, which consists of such things as scheduling information, names of jobnets and job, and executable file names, can also be imported back into the Excel template.

The Excel template provided by JP1/AJS3 - Definition Assistant is called the *definition information management template*. This template enables more efficient input and editing of definition information, by providing a list view that allows you to use such Excel functionality as auto-fill and auto-filtering.

The following figure shows the window for the definition information management template.

Figure 1–1: The definition information management template
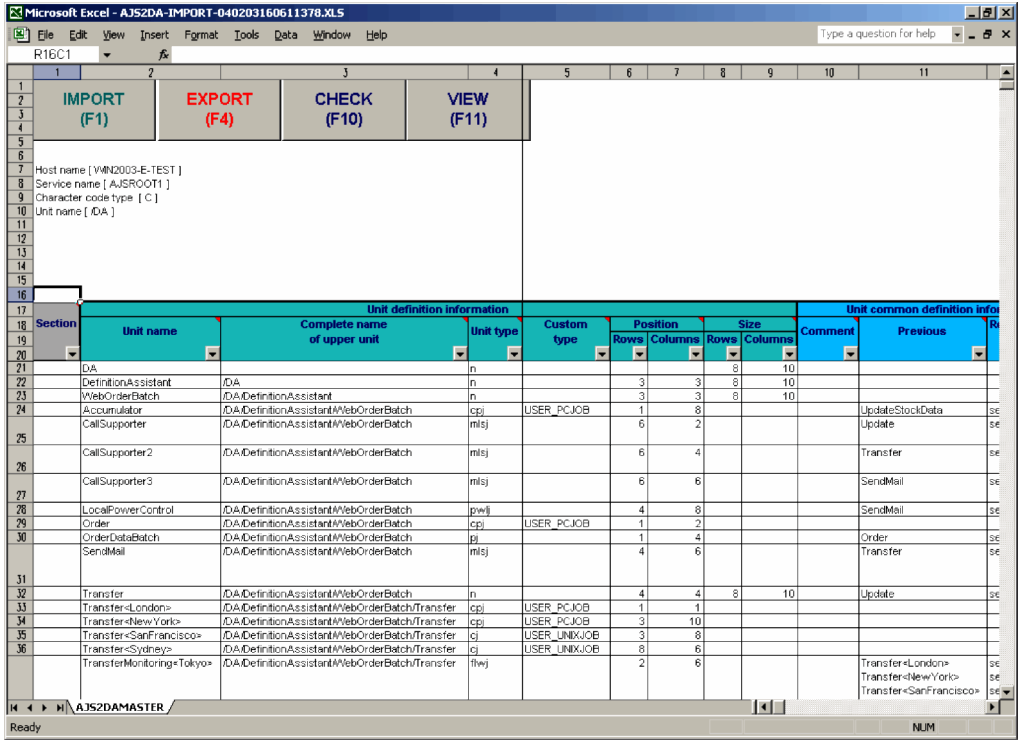
Registering JP1/AJS definition information edited using this template with a manager host database is called *exporting*. Likewise, loading into the template JP1/AJS definition information already registered in a manager host database is called *importing*. After importing JP1/AJS definition information into the template, you can add, modify, or delete the information, and then re-export it.

The following figure shows importing and exporting.

Figure 1–2: Importing and exporting

Definition-information management template
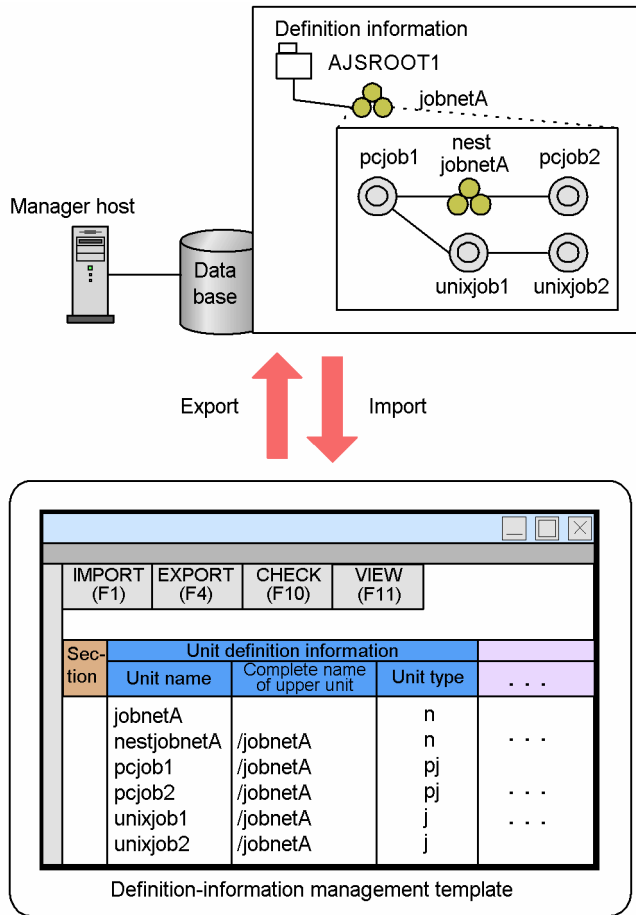
1.2 Features

This section explains the features provided by JP1/AJS3 - Definition Assistant.

1.2.1 Defining large amounts of operations and processes as a batch

JP1/AJS3 - Definition Assistant allows you to batch export definition information, as entered into the management template, to the destination manager host. When you specify definition information in JP1/AJS3 - View, you need to define information for each jobnet and job, on each level. With JP1/AJS3 - Definition Assistant, you can use this Excel template, which provides a list view of definition information to be managed and allows you to batch export multiple jobnets and jobs across multiple levels.

Note that it is often easier to use the definition information management template to edit the information after defining a unit configuration entirely in JP1/AJS3 - View, and then importing the related definition information.

1.2.2 Managing operation definition information from a list view

JP1/AJS3 - Definition Assistant allows you to import definition information defined on the destination manager host, and manage the information in a list view similar to a job definition document.

To check definition information in JP1/AJS3 - View, you have to view it across multiple windows, for each job group and jobnet level, which can take a considerable amount of time. When using commands to check definition information, you can view in the unit definition parameter file the information for all items below the uppermost operation group (scheduler service). However, since the unit definition parameter file is coded in a special format, it can take a considerable amount of time to check what kind of information is defined.

By using the definition information management template for JP1/AJS3 - Definition Assistant, you can view definition information for an entire unit configuration in one screen. This format makes the context of levels and processes easier to understand than the unit definition parameter file. This makes it easier to manage what kind of units are defined by what kind of information on the manager host.

1.2.3 Tracking changes in definition information

When you import or export definition that has been added, changed, or deleted (in a batch or individually), the execution results are automatically saved to a file, called an *execution result file*. The name of this file contains the operations executed and the time when execution was performed, while the file itself (as well as the definition information management template) contains target information, such as the names of the operation target host, service, and unit, at the time the operation was performed.

You can use execution result files to understand at what time what operations were performed for which targets, allowing you to track the changes in definition information.

For details about the default directory and names for these files, see *A. Files and Directories*.

1.2.4 Reducing mistakes in definition information

JP1/AJS definition information contains items for which the specifiable values and ranges are fixed. For these items, the template has drop-down lists from which you can select the appropriate registered value, preventing you from entering an invalid value. This reduces input errors in the definition information.

You can also customize the environment settings file to set up drop-down lists for items for which drop-down lists are not displayed by default. In both cases, since only valid values can be specified, you can reduce the number of mistakes made when entering definition information.

Also, for items for which the number of specifiable characters is restricted, you can change the settings to an optional value within the range of those for JP1/AJS. Since you can specify user-specific restricted values to suit your operating environment, you can easily check whether a definition contains mistakes.

For details about restricted values for JP1/AJS definition information, see the following:

- Explanation of windows and dialog boxes (windows) in the *JP1/Automatic Job Management System 3 Operator's Guide*
- Explanation of the list of limit values in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*

1.3 Example system configuration

This section explains a system configuration using JP1/AJS3 - Definition Assistant.

You can install and use JP1/AJS3 - Definition Assistant on the manager host for which definition information is to be defined, but for load-balancing purposes, we recommend that you install it on another host.

Also, to run JP1/AJS3 - View from the definition information management template, or to open the definition information management template from JP1/AJS3 - View, install JP1/AJS3 - Definition Assistant on the same host as JP1/AJS3 - View.

If you use a host name to specify the connection destination JP1/AJS3 - Manager, JP1/AJS3 - Definition Assistant does not run properly in an environment where the conversion of a host name to an IP address is not possible. You must set up the `hosts` file or the DNS server to enable this conversion.

JP1/AJS3 - Definition Assistant does not reflect the settings of the `jp1hosts` file or the `jp1hosts2` file, so set the host name by using the `hosts` file or the DNS.

If the mode of the communication protocol of the JP1/AJS3 - Manager connection destination is dual stack mode, enabling both IPv4 and IPv6 to be used, IPv6[#] can be used as the JP1/AJS3 - Definition Assistant communication protocol. If you use IPv6 as the communication protocol, specify whether to give higher priority to IPv6 addresses for resolving host names by using the `PREFERIPV6ADDRESSES` environment settings parameter. For details about environment settings parameters, see *3.2 Environment settings parameters*.

Note that if the user authentication function is being used, these settings or settings in the `hosts` file are required. For details about the user authentication function, see *2.8 User authentication function*.

\#

> If you specify a host name with an IPv6 address, it might not be possible to use special IP addresses or notation. For details about the special IP addresses and notation that cannot be used, see the *JP1/Base User's Guide*.

The following figure shows an example of a recommended system configuration.

Figure 1–3: Recommended system configuration when using JP1/AJS3 - Definition Assistant
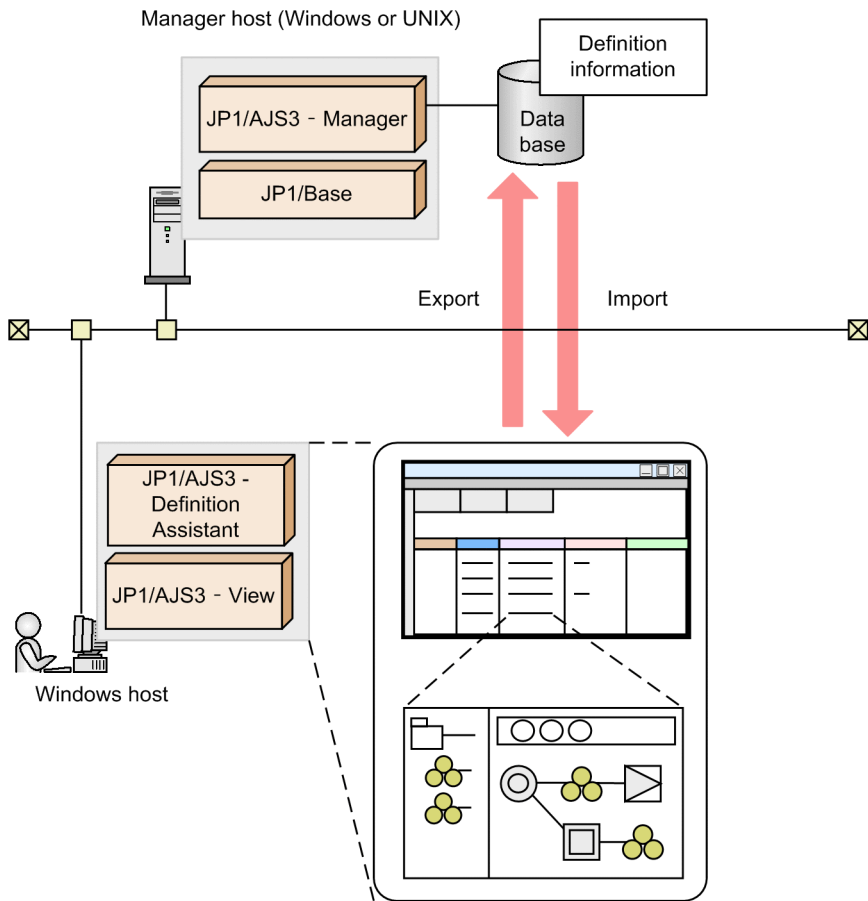
For details about the prerequisite OSs for the manager host, see the manual *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

1.4 Benefits

This section explains the benefits of using JP1/AJS3 - Definition Assistant.

1.4.1 Reduction of development man-hours for operations design and system setup

- Since you can batch export a large amount of jobnets and jobs, you can reduce the amount of time required to define each unit individually.

- The definition information management template itself can be used as a job definition document/parameter sheet, to clarify and facilitate management of unit definition information that is created during operations design. The unit definition information includes the context of levels and execution order for each unit, files to execute, unit names, comments and scheduling information. This document is created by the development/maintenance group, and once approved, is used during system setup by the common operations group to build the unit. This means that you can save the trouble of creating a job definition document/parameter sheet used only for operations design and system setup.

- Since you can export units directly from the definition information management template, you can save the trouble of using JP1/AJS3 - View, and commands to define units while referencing the job definition document/parameter sheet.

- Since you can use the error-checking function to check for errors in the definition contents, you can reduce the number of definition mistakes. Also, since error locations are highlighted, less time is needed to locate errors.

Definition operations during system setup, before and after JP1/AJS3 - Definition Assistant installation

The following figure shows the operations for unit definition, which are representative of those during JP1/AJS system setup.

Figure 1–4: Operations for unit definition, before and after JP1/AJS3 - Definition Assistant installation
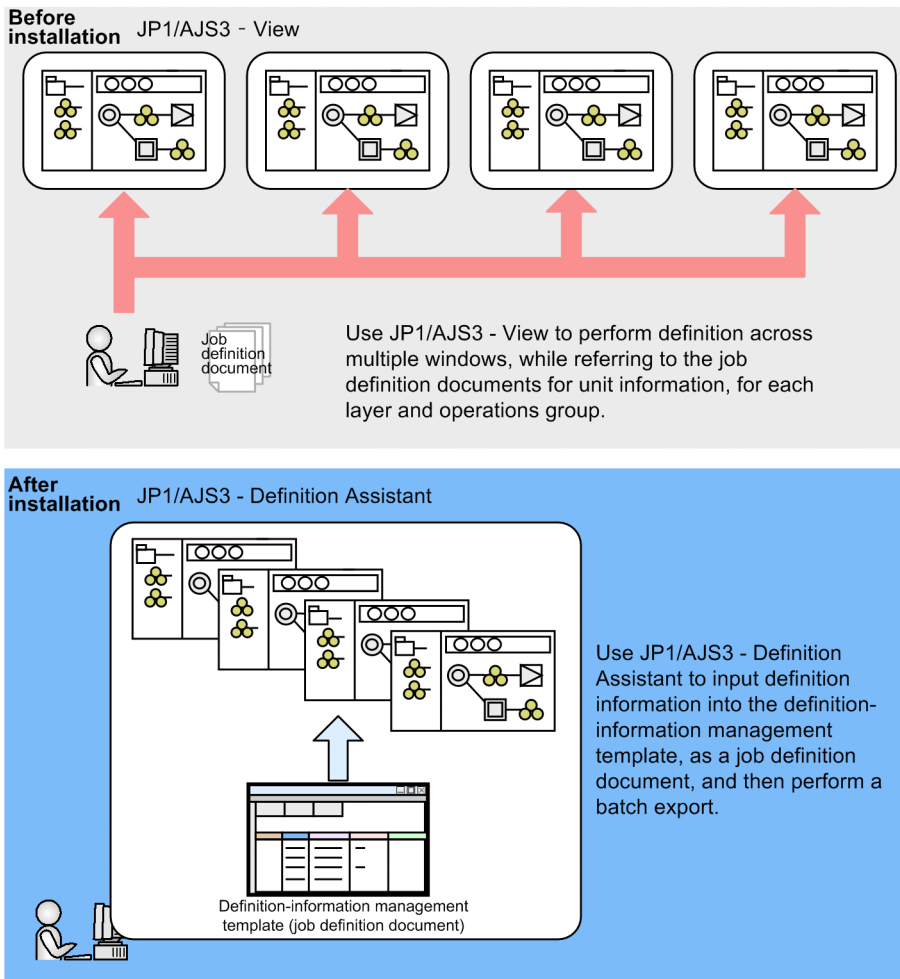
1.4.2 Reduction of development man-hours during operation

- You can manage definition information by importing it into a list view, allowing you to check the definition contents quickly.

- Since you can create, modify, and delete units in a batch, you can reduce the time required to edit each one individually.

- The results from unit creation, modification, and deletion are automatically saved to an execution result file. Instead of having to track changes across different documents, you can track them in the execution result file.

- You can migrate definition information without redefining it, when performing server migration (such as from test machines to production machines).

Operations during system operation, before and after JP1/AJS3 - Definition Assistant installation

The following figures shows the operations for changing definitions and server migration, which are representative of those during JP1/AJS system operation.

Figure 1–5: Operations for changing definitions, before and after JP1/AJS3 - Definition Assistant installation
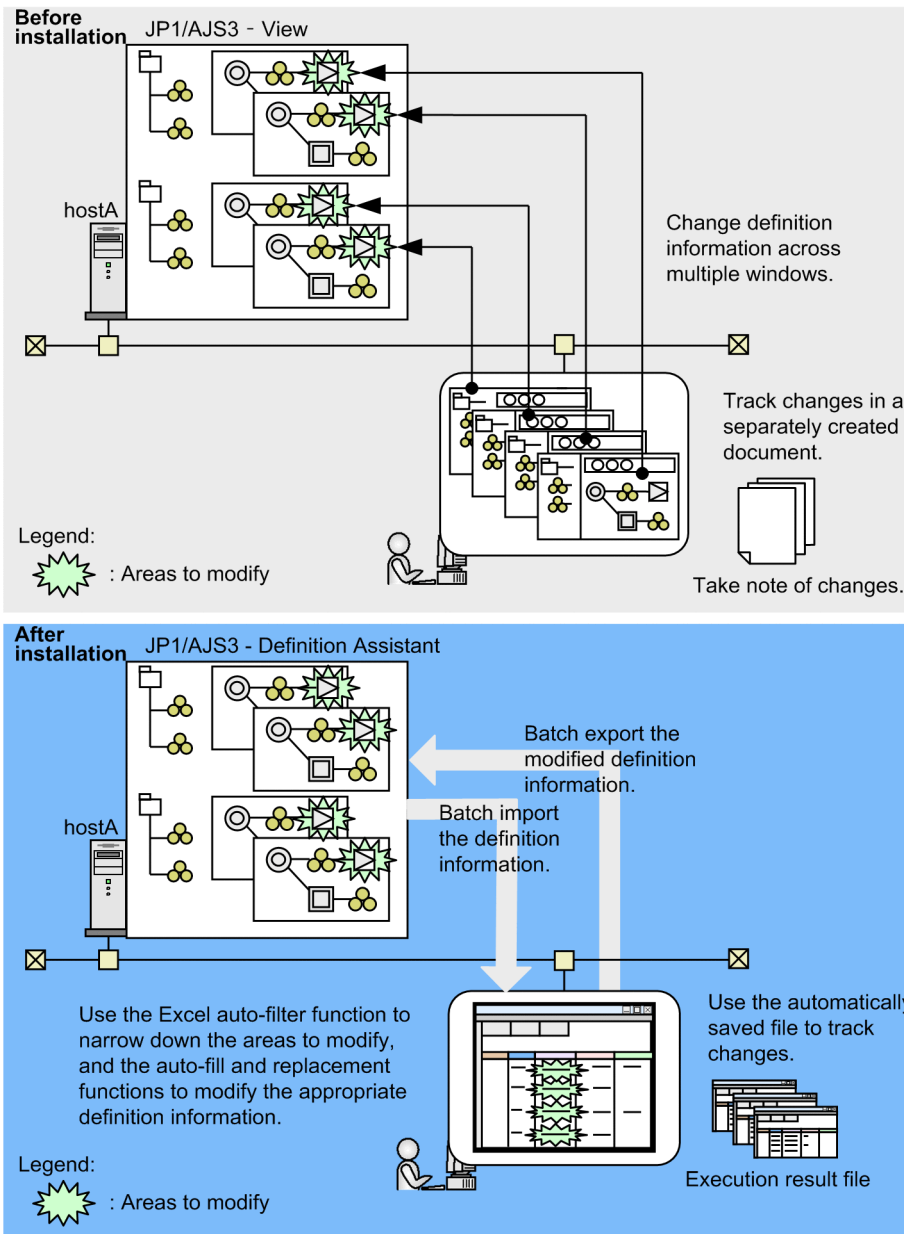
Figure 1–6: Operations for server migration, before and after JP1/AJS3 - Definition Assistant installation
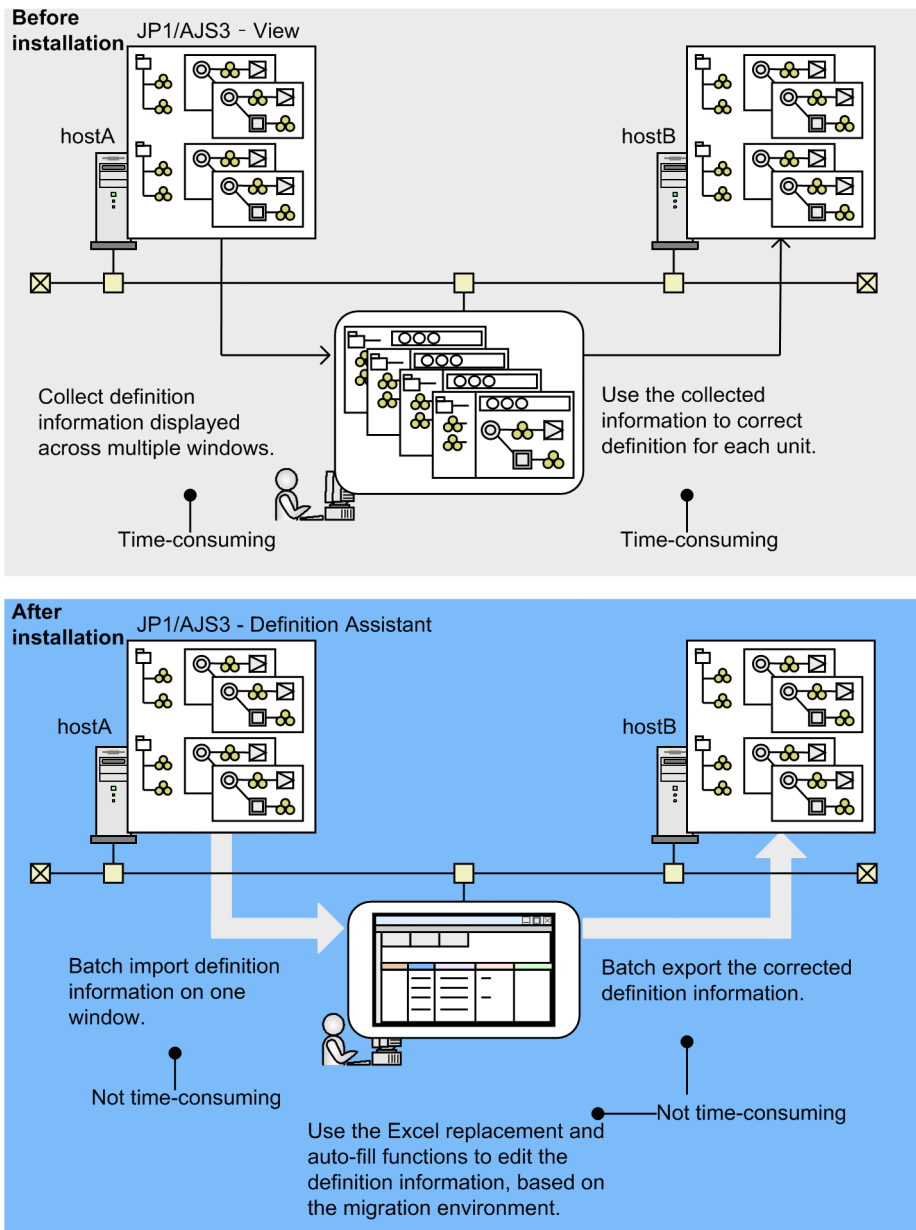
As shown in the figure, JP1/AJS3 - Definition Assistant can help reduce the time required for system configuration and operation management, when compared to using JP1/AJS3 - View alone.

1.5 Example operation methods

This section gives two examples of how to perform operation for JP1/AJS3 - Definition Assistant. The first example uses one definition information management template, while the second example uses multiple definition information management templates.

The following figure shows how to perform operation with one definition information management template:

Figure 1–7: JP1/AJS3 - Definition Assistant: operation example 1 (with one definition information management template)

(1)
The system administrator designs the flow of operations for JP1/AJS automation (unit configuration).

(2)
The system administrator inputs the designed operations flow (unit configuration) into the definition-information management template.

(3)
The system administrator batch exports the definition information.
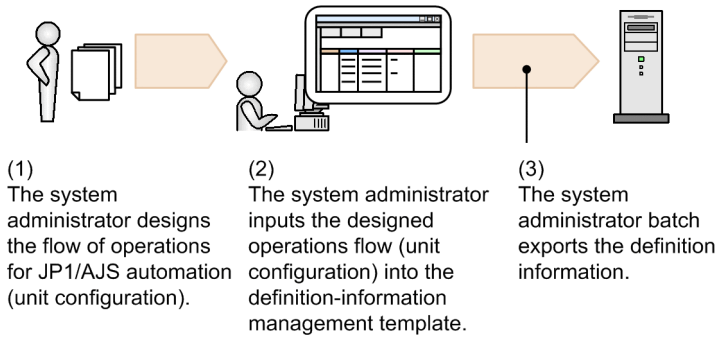
The following figure shows how to perform operation with multiple definition information management templates:

Figure 1–8: JP1/AJS3 - Definition Assistant: operation example 2 (with multiple definition information management templates)

(1)
The system administrator distributes the definition-information management template to each system designer.

(4)
The system administrator copies the definition information sent by the system designers into Excel, and checks the modifications.

(5)
The system administrator batch exports the definition information.

(2)
Each system designer designs the flow of operations for JP1/AJS automation (unit configuration).

(3)
Each system designer inputs the definition information for the designed operations flow into the distributed definition-information management template, and then returns the template to the system administrator.

For details about operation methods, see *4. Operation*.

1.6 Prerequisites

This section explains the prerequisites for using JP1/AJS3 - Definition Assistant. Check this section before using JP1/AJS3 - Definition Assistant.

1.6.1 Required operating system

JP1/AJS3 - Definition Assistant can run on any of the following operating systems:

- Windows 10
- Windows 11
- Windows Server 2016
- Windows Server 2019
- Windows Server 2022

1.6.2 Required programs

The following are programs required for JP1/AJS3 - Definition Assistant:

- The 32-bit version of Excel 2016 (Office 2016), Excel 2019 (Office 2019), Excel 2021 (Office 2021), or the 32-bit Office desktop application (Excel) offered as part of the Office subscription service[1][2]

  These are required for the 32-bit version of JP1/AJS3 - Definition Assistant.

  Install Excel[3] on the same host as the one where JP1/AJS3 - Definition Assistant is to be installed.

- The 64-bit version of Excel 2016 (Office 2016), Excel 2019 (Office 2019) , Excel 2021 (Office 2021), or the 64-bit Office desktop application (Excel) offered as part of the Office subscription service[1][2]

  These are required for the 64-bit version of JP1/AJS3 - Definition Assistant.

  Install Excel[3] on the same host as the one where JP1/AJS3 - Definition Assistant is to be installed.

#1

  For details about which versions of Excel are supported in the version of Windows you use, please consult Microsoft.

#2

  For the latest information such as supported content and verified versions when using with the Office subscription service, see Hitachi's JP1 website for the general public, or the JP1 V13 website.

#3

  If you perform a custom installation of Excel, also install Visual Basic for Applications. Import and export are not possible if Visual Basic for Applications is not installed. If you perform a standard installation of Excel, Visual Basic for Applications is also installed by default, ensuring that import and export are performed normally.

- JP1/AJS3 - View

  - Using the JP1/AJS3 - View startup function in 2037 and beyond

    JP1/AJS3 - View 13-00 or later

  - Using the JP1/AJS3 - View startup function outside of the above period

    JP1/AJS3 - View 10-00 or later

This is required to run JP1/AJS3 - View from the definition information management template, or to open the definition information management template from JP1/AJS3 - View.

If you plan to run JP1/AJS3 - View from the definition information management template, you need to install JP1/AJS3 - View on the same host as JP1/AJS3 - Definition Assistant.

Note:
> JP1/AJS3 - Definition Assistant for Windows can be connected only to JP1/AJS3 - View for Windows. JP1/AJS3 - Definition Assistant for these OSs cannot be connected to JP1/AJS3 - View versions for other OSs.

1.6.3 Required programs for manager hosts

The following programs are required for manager host systems:

- JP1/AJS3 - Manager
  - When using in 2037 and beyond
    JP1/AJS3 - Manager 13-00 or later
  - When using outside of the above period
    JP1/AJS3 - Manager 10-00 or later

When importing or exporting in JP1/AJS3 - Definition Assistant, use the JP1/Base user management. When import or export is performed, authentication will take place via user mapping, and JP1/AJS commands will be executed on the manager host. You therefore need to set user information beforehand. For details about settings for user information, see *3.1.2 Setting up user information*.

1.7 Notes on usage

This section provides notes on using JP1/AJS3 - Definition Assistant.

1.7.1 Notes on the environment

- You cannot switch the display language of JP1/AJS3 - Definition Assistant.

- Since JP1/AJS3 - Definition Assistant executes remote commands internally, it does not run properly when character sets used on the connection destination manager host is different. Make sure these character sets match. The character set of the connection destination is indicated by one of the following:

  - The character code type specified for the `AJSCHARCODE` environment settings parameter of the scheduler service

  - When the JP1/AJS3 service is running, the setting in the OS (if the manager host at the connection destination is UNIX, this is the `LANG` environment variable applied when the JP1/AJS3 service starts)

- If you change the host name or IP address of the host on which JP1/AJS3 - Definition Assistant is running, note the following:

  - If the host name or Exec-agent before the change is set in the `MANAGER-HOST` or `SELECT-EXECHOST` environment setting parameters, change the value of those parameters to the new host name or new Exec-agent.

- When you use IPv6 as the communication protocol, note the following:

  - Specify whether to give higher priority to IPv6 addresses for name resolution of host names by using the `PREFERIPV6ADDRESSES` environment settings parameter. For details about the environment settings parameters, see *3.2 Environment settings parameters*.

  - If you specify a host name with an IPv6 address, it might not be possible to use special IP addresses or notation. For details about the special IP addresses and notation that cannot be used, see the *JP1/Base User's Guide*.

- Even if the receiving bind method of the connection destination JP1/Base settings is the IP bind method when you specify C for **Character code type** in the Import of unit definition or Export of unit definition dialog box, all scheduler services are able to operate whether the destination host is a physical host or a logical host. Also, when JP1/AJS3 - Definition Assistant is started from JP1/AJS3 - View, it can be started by all scheduler services.

- For details about connectivity between JP1/AJS3 - Definition Assistant and JP1/AJS3 - Manager and between JP1/AJS3 - Definition Assistant and JP1/AJS3 - View, see the *Release Notes*.

- JP1/AJS3 - Definition Assistant does not support the 3rd level and 4th level Kanji characters added to JIS 2004 set. Do not use these characters when using JP1/AJS3 - Definition Assistant. If you use these characters, they might become garbled.

- When the upper-level unit-attribute inheritance function based on the unit-attribute profile is enabled in JP1/AJS3 - Manager, the unit attribute (owner and JP1 resource group) of a unit to be exported is defined according to the settings of the unit-attribute profile of JP1/AJS3 - Manager. If you want to apply the settings defined in JP1/AJS3 - Definition Assistant without any changes to them, temporarily disable the upper-level unit-attribute inheritance function.

- When the machines used for import and export are different, install JP1/AJS3 - Definition Assistant of the same version and model name on both machines.

- For details about product-related information (such as product versions), see the *Readme file*, *ProductInfo.txt*, and *Version.txt*.

- If you want to see the version of a definition information management template, open the **Summary** tab on the Properties dialog box of that template file.

- The last updated date and time of the unit displayed in the **Last updated time** section follows the time zone of the manager host (JP1/AJS3 - Manager machine). If the time zone on the manager host and the JP1/AJS3 - Definition Assistant machine is different, set the JP1/AJS3 - Definition Assistant machine to match the time zone of the manager host. For example, if the manager host is set to New York time, adjust the time zone to New York time on the JP1/AJS3 - Definition Assistant machine.

- Specify the same value as the schedule limit for JP1/AJS3 - Manager on the connection destination (environment setting parameter `SCHEDULELIMIT`) as the environment setting parameter `SCHEDULELIMIT` in JP1/AJS3 - Definition Assistant. If a version of JP1/AJS3 - Manager earlier than 13-00 is used at the connection destination, specify `2036`.

- The folders (including subfolders) and files created by JP1/AJS3 - Definition Assistant in the folder "JP1/AJS3 - Definition Assistant-installation-folder" inherit the permissions of the user-specified installation folder.

  Set the following permissions for the installation folder:

  - Administrators group and SYSTEM account: Full Control

  - Users account: Read & Execute

1.7.2 Notes on using the definition information management template

- If a warning is displayed when you open the definition information management template, click the **Enable macros** button.

- Since the definition information management template uses a significant amount of memory, try not to open multiple templates.

- Do not change the format of any cells.

  A format appropriate for the definition item is already set for each cell. If you change this format, the processing results of import and export may become invalid.

- Do not delete any columns.

  If you delete any columns, import and export processing will not function properly. If there are any unnecessary columns, customize them so that they are not displayed. For details about this customization, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

- After copying or cutting cells to be pasted in another area, paste them in the same column. If you paste them in a different column, the input restrictions will not match those set for the rest of the column, and the processing results may become invalid.

- If the value of a cell is longer than 256 characters, it will be displayed as a hash sign (#), but this will not affect import or export.

- If the number of characters in a cell exceeds 1,024, only the first 1,024 characters are displayed in the cell. To edit after 1,024 characters, first select the cell, and then use the formula bar.

- Note that editing a cell containing a long string might take time.

- If the string in a cell exceeds 1,024 characters, JP1/AJS3 - Definition Assistant prints only the first 1,024 characters.

- If multiple lines are defined in a cell which allows inputting values from the drop down list, edit with the arithmetic bar after selecting the cell. If multiple lines are defined in the cell, using the drop down list to select a value results in discarding values in the multiple line.

- You cannot use the macro functions of the current version for the execution result files created by the previous versions. Before using them, you must convert the execution result files to the format of the current version. To convert the execution result files of the previous versions, execute the following commands:

```
ajsdaconvert -i folder-for-execution-result-file-before-conversion
             -o folder-for-execution-result-file-after-conversion
```

For the details about the `ajsdaconvert` command, see `ajsdaconvert` in *7. Commands*.

- Due to the Excel specifications, a single quotation mark (`'`) at the beginning of the value entered in a cell is treated as a prefix and cannot be recognized as a character. Therefore, if definition information beginning with `'` is imported, the beginning `'` will not be recognized in the definition information management template. If you use the execution result file for this import to export definition information to the manager host by using a batch definition, individual definition, or the modification function, note that the `'` that could not be recognized when importing will be lost.

- When processing takes a long time, `No response` might be displayed in the title bar of the window. However, processing is being performed and there is no problem.

- When you specify a host name with an IPv6 address, it might not be possible to use special IP addresses or notation. For details about the special IP addresses and notation that cannot be used, see the *JP1/Base User's Guide*.

- Do not save the definition information management template as a different file format using the save function of Excel. If it is changed to a different one when saved, JP1/AJS3 - Definition Assistant may cause an error during startup, or not work properly.

- Do not change the R1C1 reference style set for the definition information management template.

- If you are using an Excel file whose reference style is set to A1 style (which uses English letters for column headings), opening the definition information management template in the same Excel process causes the reference style of the Excel file you were just using to change to R1C1 style (which uses numeric values for column headings).

- If you are using the definition information management template, opening an Excel file whose reference style is set to A1 style in the same Excel process causes the Excel file to be displayed in R1C1 style.

- If, while using the definition information management template, you want to use an Excel file whose reference style is set to A1 style, you have to open the Excel file in an Excel process[#] that is different from the one in which the definition information management template is being used.

  #

  The method used to start an Excel file in a different Excel process varies with the Excel version. One way to do this is to use the `/x` option. For details about how to start an Excel file in a different Excel process, contact Microsoft Corporation.

  Generally, Excel files open in the same Excel process (same instance).

- When all of the following conditions are satisfied, the reference style of the Excel file that was open in the same Excel process in which the definition information management template was open changes to A1 style.

  - The environment settings parameter `FINISHING-REFERENCESTYLE` is set to the value `IV`.

  - The reference style of the Excel file at the time when the definition information management template was started was A1 style.

  - All the definition information management templates were closed.

- If a definition information management template created with versions earlier than JP1/AJS3 - Definition Assistant 12-10 is open in the same Excel process in which a definition information management template created with JP1/AJS3 - Definition Assistant 12-10 or a later version is open, the setting specified by the environment settings parameter `FINISHING-REFERENCESTYLE` might not become enabled. To enable the setting specified by `FINISHING-REFERENCESTYLE`, first close the definition information management template whose version is earlier than 12-10, and then close the definition information management template whose version is 12-10 or later.

- If you change the following environment configuration parameters from their defaults, make sure to set write permissions for the specified folder for the OS user who uses JP1/AJS3 - Definition Assistant.

  - BACKUP-FOLDER (Name of the folder for execution result files)

- TMP-INPUT-FOLDER (Name of the folder for temporary files for import)
- TMP-OUTPUT-FOLDER (Name of the folder for temporary files for export)
- TMP-ERRLOG-FOLDER (Name of the folder for error information)

1.7.3 Notes on operation

- If both of the following conditions are satisfied, the processing results of import might be invalid. Do not perform import if these conditions are satisfied.

  1. A character string `unit=` or `eun=` is defined in a second or subsequent line in one of the following items:
     - *Command statement* for a UNIX job
     - *List of message texts* for an email reception monitoring job
     - *Explanation* in Windows event-log monitoring job
     - *Message text* for an email sending job
     - *Command statement* for a custom UNIX job

  2. A unit that is not immediately under the root job group and that is on the same level as a unit containing a job that satisfies the above condition is imported.

- If a huge amount of definition information is output to a cell, the color of the record changes and the KAVZ0310-W message might be appended. Note that if the record with the message is exported by selecting either **Batch** or **Individual**, either an error occurs or definition information is lost. When exporting, delete or correct the content of the cell with the problem, and execute export.

- Do not press the **ESC** key while import or export or the `ajsdaconvert` command is being performed, since this may cause the results of inherited or terminated processing to become invalid.

- The default display of the results of importing or exporting may differ between JP1/AJS3 - Definition Assistant and JP1/AJS3 - View.

- Exporting unit definition information that is not supported by the destination manager host causes an error. You must delete the unsupported unit definition information before exporting.

  Before you attempt to export the unit definition information imported from a higher version to a lower version, delete the items that are supported in versions later than that of the destination manager host.

- JP1/AJS3 - Definition Assistant does not run properly if a character set that differs from the character set used in JP1/AJS3 - Definition Assistant is used to define any definition information on the destination manager host.

- JP1/AJS3 - Definition Assistant internally executes JP1/AJS commands for performing importing and exporting. For details about the specification of command operations and about errors, see the appropriate JP1/AJS manuals. The following lists the commands used for importing and exporting:

  Importing

  - `ajsprint, ajsname`#

    #

    If you specify `Y` for the `IMPORT-UNIT-NUM-CHECK` environment settings parameter

  Exporting

  - `ajsprint`
  - Batch: `ajsdefine`
  - Individual: `ajsdefine, ajschgnet`
  - Modification: `ajschange, ajschgnet, ajschgjob, ajscalendar`

- Deletion: `ajsdelete`

- If you import a unit containing a tab character in its unit definition information, the import processing result might be invalid. Do not import a unit containing a tab character in its unit definition information.

  However, if a tab character is used in **Command statement** in the **Basic job definition information** section or in the definition items in the **Other definition information** section of the unit definition information, the result will not be invalid. For details about the display during import when a tab character is used in **Command statement** in the **Basic job definition information** section or in the **Other definition information** section, see *5.1 List of definition items*.

- If you try to change a definition item for which multiple definitions can be specified by using a line feed (**Alt** + **Enter** keys), all the definitions in the cell, including blank lines, will be changed.

- The **Last updated time** section is used for confirming the last date and time that a unit was updated at the time of import. Accordingly, the value in the **Last updated time** section cannot be changed and is not exported.

- If a unit with the same name already exists, the batch definition or individual definition function deletes the unit and then re-creates it. For this reason, if an error occurs during the re-creation processing, the unit might be deleted.

- With JP1/AJS3, characters that you cannot use differ depending on the type of character encoding. For information on characters that cannot be used in JP1/AJS3, see the part that Language type and character encoding of the system in the manual *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

- When the machines used for import and export are different, JP1/AJS3 - Definition Assistant with the same version and the same number of bits must be used on both machines.

- When you want to use the definition information management template created by JP1/AJS3 - Definition Assistant with a different number of bits, use the `ajsdaconvert` command to convert the file format. Note that a file can be converted from xlsm format to xls format only if the number of definitions is 65,000 units or less.

- For units in a suspended state to learn how to recalculate a schedule according to whether the unit was created in a batch or an individual export, see the part describes how to change job and jobnet definitions without unregistering the jobnet in the manual *JP1/Automatic Job Management System 3 Overview*.

- If a jobnet is referenced that is scheduled to be registered for execution, or a jobnet that is registered for execution specifies a future generation number, when an overwrite update by a batch or individual export is performed, the jobnets that reference the following units will change to shutdown status, because the operation schedule was not recalculated. As a result, some of the jobnets scheduled to be executed might not be executed.

  - Job groups that reference calendar information according to Refer to a calendar of another job group

  - Jobnets that reference a schedule according to Exclusive schedule

  For this reason, if you perform an overwrite update on the above units by batch or individual export, after unregistering a jobnet that is scheduled to be registered for execution registration or a jobnet that is registered for execution, export the jobnet or change the unit definition by performing a change export.

- Do not export a root jobnet that has a release entry. If you do so, the release information in the target root jobnet is initialized, and the release entry is removed. If a jobnet has a release entry, cancel the release, perform the export, and then re-execute the release entry.

- Execution file name in the Basic job definition information section of an SAP job is the path to the execution program that is linked to the custom job. It is important to note that if this definition is changed, the custom job might not work.

- The **Execution file name**, **Parameters**, and **Environment variables** in the **Basic job definition information** section of a SAP job cannot be changed and exported.

  If you made changes, perform Batch or Individual export.

- `CP` specified with the environment settings parameter `RESTRICT-CHAR-RANGE` is valid only within the scope of application of the JP1/AJS3 - Definition Assistant functionality. Thus, when you attempt to start JP1/AJS3 - Definition Assistant as a tool from JP1/AJS3 - View, if any unit name contains any of the characters listed below, your attempt to open JP1/AJS3 - Definition Assistant could fail regardless of the setting specified for

RESTRICT-CHAR-RANGE. In this case, you have to perform import after starting the definition information management template.

```
" & ' * < > ? [ \ ] ^ ` { | } ~
```

- If you perform import or export for a unit whose name contains any of the characters listed below, the message `KAVS0183-E Unit name is too long` could be output even when the complete name of the unit is no longer than 930 bytes. In this case, either remove the following characters from the unit name or change the target unit from the unit in question to the upper unit, and then perform import or export.

```
" & ' * < > ? [ \ ] ^ ` { | } ~
```

- The **Definition parameters** in the event job definition information section cannot be Change export.

  If you made changes, perform Batch or Individual export.

1.7.4 Notes on Excel

- Do not enable the **Ignore other applications** Excel option. JP1/AJS3 - Definition Assistant will not run when this option is enabled.

- When you want to use JP1/AJS3 - Definition Assistant, specify the settings so that the Excel macros that JP1/AJS3 - Definition Assistant uses will be enabled. If you do not specify these settings, some JP1/AJS3 - Definition Assistant functions will not be available. For details, see *3.1.3 Enabling Excel macros (checking security level)*.

- For the file in `xls` format, when you open a master file or execution results file in Excel 2016 or later, `Compatibility mode` is displayed in the title bar, indicating that the master file was created in an Excel format belonging to a version earlier than Excel 2007. However, operation is not affected.

  Note that if you are using the 32-bit version of JP1/AJS3 - Definition Assistant in Excel 2016 or later, and you edit and save an execution results file, you need to save the file in `xls` format, which is an older format. If you use the `xlsx` format, which is the format of Excel 2007 or later, to save the file, JP1/AJS3 - Definition Assistant functions will not work properly.

- Before starting JP1/AJS3 - Definition Assistant, close all the other Excel files.

1.7.5 Notes on Installation

- The model name of JP1/AJS3 - Definition Assistant varies depending on the number of bits of your Excel. Install the JP1/AJS3 - Definition Assistant version that corresponds to the number of bits of Excel you use.

- If you install the 64-bit version of JP1/AJS3 - Definition Assistant, uninstall JP1/AJS3 - Definition Assistant 11-00 or earlier, or the 32-bit version of JP1/AJS3 - Definition Assistant, before installing the 64-bit version. Back up your setting information as necessary before uninstalling JP1/AJS3 -Definition Assistant.

- The 32-bit version of Excel cannot be changed to the 64-bit version. Therefore, if you want to use the 64-bit version instead of using the 32-bit version, you need to first uninstall the 32-bit version, and then install the 64-bit version of Excel.

- When upgrading from a version of JP1/AJS3 - Definition Assistant earlier than 13-00, the environment settings parameter SCHEDULELIMIT is not set. If this parameter value is not set, the value `2099` is used. As such, add the environment settings parameter SCHEDULELIMIT manually in the environment settings file, if necessary.

1.8 Notes on executing antivirus software

Due to exclusion control from the use of antivirus software, access to the files and folders that JP1/AJS3 - Definition Assistant uses might be locked. The following are possible effects of exclusion control.

- JP1/AJS3 - Definition Assistant cannot start.

  JP1/AJS3 - Definition Assistant might fail to start because exclusion control has locked the definition file read when JP1/AJS3 - Definition Assistant starts.

- Logs are not output.

  Logs cannot be output because exclusion control has locked the JP1/AJS3 - Definition Assistant log file, making troubleshooting difficult.

- A JP1/AJS3 - Definition Assistant command terminates abnormally.

  A command might terminate abnormally because exclusion control has locked a file that the JP1/AJS3 - Definition Assistant command uses.

- Import or export fails.

  Import or export might fail because exclusion control has locked the JP1/AJS3 - Definition Assistant definition file.

When you run a virus check while JP1/AJS3 - Definition Assistant is running, exclude the following files and folders from the check. When you run a virus check while JP1/AJS3 - Definition Assistant is stopping before it is restarted, make sure that virus checking of the following files and folders has finished:

- All files and folders in the storage folder for execution result files
- All files and folders in the storage folder for execution files
- All files and folders in the storage folder for environment settings files
- All files and folders in the storage folder for temporary files for used to modify import results
- All files and folders in the storage folder for temporary files used during execution of export
- All files and folders in the storage folder for error information files
- All files and folders in the storage folder for history files

If you execute a data collection tool while the virus check is in progress, in addition to the files and folders listed here, exclude the following files and folders as well:

- Files that require collection when a problem occurs
  - OS log information that requires collection when a problem occurs in JP1/AJS3 - Definition Assistant
  - JP1 information that requires collection when a problem occurs in JP1/AJS3 - Definition Assistant

  For details about these files, see *6.2.1 (1) Log information about the operating system* and *6.2.1 (2) JP1 information*.
- Output folder for the data collection tool execution result

2

Functions

This chapter explains each function for JP1/AJS3 - Definition Assistant. For details about the displayed contents for operation methods and definition information, see *4. Operation* or *5. Definition Items*.

2.1 The import function

The import function takes JP1/AJS definition information and loads it into the definition information management template, to enable the list view.

Import is only performed from the master file, or from a replicated master file saved under another name. A *master file* is a definition information management template that contains no execution result information, and can be started from the **Start** menu in Windows.

The following figure shows a definition information management template after import.

Figure 2–1: A definition information management template after import

After import, the definition information management template in which definition information is displayed is automatically saved under a different name as an execution results file. Since the template is saved as-is after import, you can use this file to redefine existing units, by modifying and exporting them.

In addition, when import is performed, the last updated date and time of the unit are displayed in the **Last updated time** section so that you can check when the unit was last updated.

For details about, and output destinations for, master files and execution results files, see *A. Files and Directories*.

Automatic import

By editing the parameters of the environment settings file, you can have import performed automatically when you open the definition information management template. This facilitates repeated import of definition information for the same unit. The following are the parameters necessary for performing import automatically:

- MANAGER-HOST or IMPORT-MANAGER-HOST
- AJS2-SERVICE or IMPORT-AJS2-SERVICE
- IMPORT-UNIT-NAME
- AUTO-IMPORT

Note that you cannot set `AUTO-IMPORT` and `AUTO-EXPORT` at the same time.

For details about environment settings, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

For `IMPORT-UNIT-NAME`, specify the complete name of the import unit.

For example, if you want to automatically import `/GROUP/NET`, specify `IMPORT-UNIT-NAME=/GROUP/NET`.

2.2 The export function

The export function takes definition information created and edited using the definition information management template, and applies any additions, modifications, or deletions to the manager host. If the target unit is registered for execution, you may not be able to export from the reflected contents (addition, modification, and deletion), the definition information to be reflected, or the suspend status of the jobnet. If you are exporting definition information to a unit registered for execution, suspend the target units as necessary.

If you are changing the definition of a jobnet or job without cancelling the jobnet execution registration, see the manual *JP1/Automatic Job Management System 3 Overview* as necessary.

Export can be performed from an import execution results file, an export execution results file, or a replicated master file, but cannot be performed from the master file.

After export, the definition information management template used for export is automatically saved under a different name, as an execution results file. Since the information saved during export is relevant to the time of the export, it can be used to track changes. For details about and output destinations for execution results files, see *A.2 Files created during import and export*.

The export function consists of the following four functions:

- The batch definition function
- The individual definition function
- The modification function
- The deletion function

Each of these functions is described below.

2.2.1 The batch definition function

The batch definition function batch creates manager host definition information, including layer structures. It can be used for inputting, then exporting, definition information to suit the layer structure of the unit to define.

The batch definition function is useful for batch definition of a unit configuration, including position information, that spans multiple layers below a certain unit to be defined, such as when you are setting up a new system or replacing information for an existing one.

The following figure shows export of definition information, using batch definition.

Figure 2–2: Export with batch definition
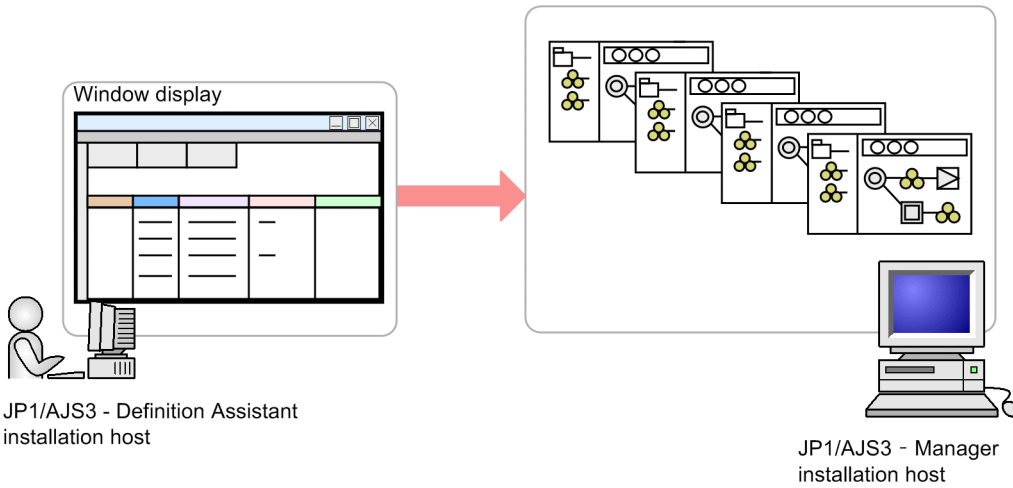
In batch definition, position information and relation lines are enabled. Icons are displayed in JP1/AJS3 - View in the positions for which they are specified in the definition information management template. However, position information and relation lines are disabled if batch definition does not include the upper unit.

If a unit of the same name already exists at the export destination, the unit will be completely overwritten, including definition for any units below. When you perform export for lower units by entering definition information that differs from that before export, you can replace all pre-export information, including position information.

The following figure shows the definition information management template for using the batch definition function.

Figure 2–3: The definition information management template during batch definition

Automatic export

When you edit the parameters of the environment settings file, you can have export performed automatically when you open the definition information management template. You can set up operation to use the edited template, performing export automatically at a conveniently scheduled time. The following are the parameters necessary for performing export automatically.

- MANAGER-HOST or EXPORT-MANAGER-HOST

- AJS2-SERVICE or EXPORT-AJS2-SERVICE

- EXPORT-UNIT-NAME

- AUTO-EXPORT

Note that you cannot set AUTO-EXPORT and AUTO-IMPORT at the same time.

For details about environment settings, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

For EXPORT-UNIT-NAME, specify the complete name of the export unit.

The export destination is determined from the value specified here and Upper unit name of the uppermost unit of the unit that was specified in a batch in the Excel file.

For example, if you specify EXPORT-UNIT-NAME=/GROUP, and if automatic export is executed in the Excel file with JOB specified for the unit name of the unit definition information section and with NET specified for the complete name of the upper unit, the export destination is defined as /GROUP/NET/JOB.

2.2.2 The individual definition function

The individual definition function creates manager host definition information for each individual unit. It can be used to define and export a unit without regard to the unit's layer structure.

The individual definition function is useful for adding or re-creating unit definitions below multiple units to be defined, but unlike the batch definition function, it is not limited to the units below a certain unit to be defined.

The following figure shows export of definition information, using individual definition.

Figure 2–4: Export with individual definition

JP1/AJS3 - Definition Assistant
installation host

JP1/AJS3 - Manager
installation host

Legend:

➡ : Applying definition information

◎ : Defined unit
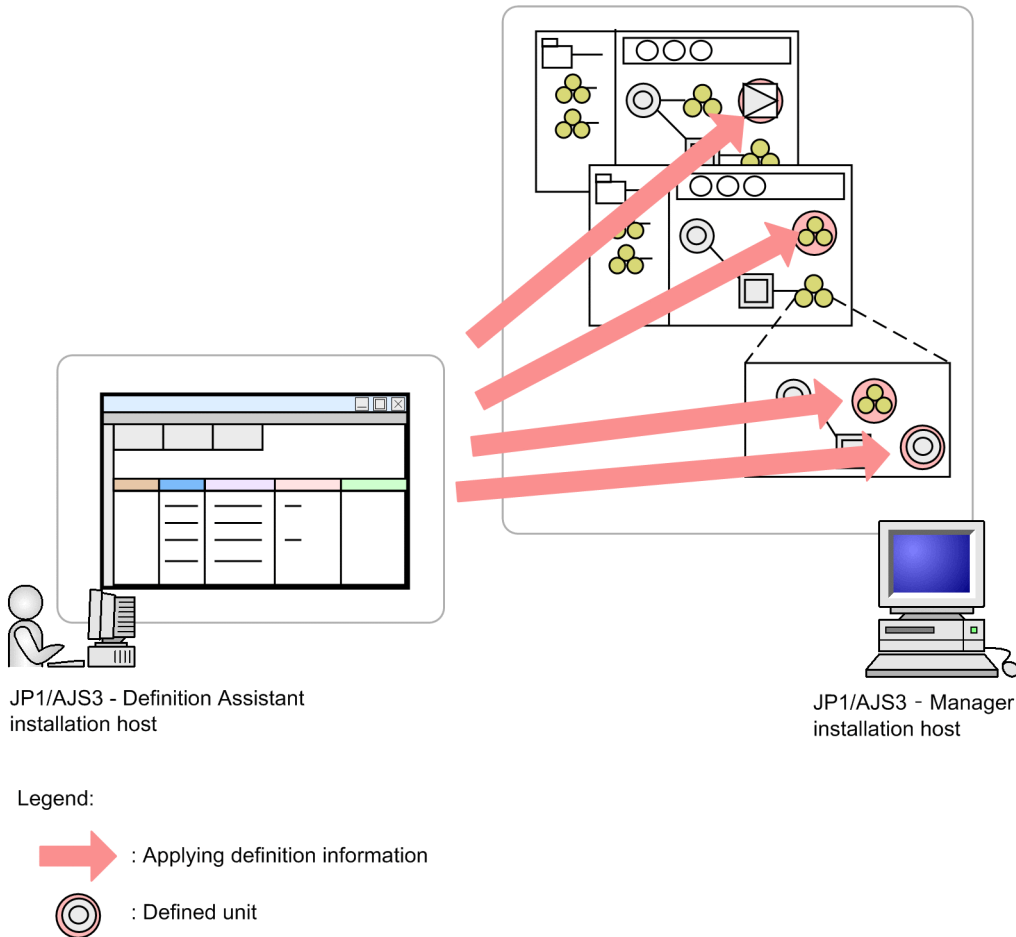
In individual definition, any specified position information will be disregarded. When export is performed, the icons will be displayed in random positions within JP1/AJS3 - View.

If a unit of the same name already exists at the export destination, it will be overwritten. In this case, its display position in JP1/AJS3 - View will not change, but the pre-export definition information for lower units will be deleted. When you are performing individual definition for the first time for lower units, the definition information for those units will be replaced. In this case, position information for the lower units will not be enabled.

The following figure shows the definition information management template for using the individual definition function.

Figure 2–5: The definition information management template during individual definition

If you use the individual export function when the unit specified for **Previous** in the unit common definition information already exists on JP1/AJS, the unit common definition information can be exported with the previous unit specified. If you use the individual export function when the unit specified for **Previous** does not exist on JP1/AJS, an error occurs.

2.2.3 The modification function

The modification function modifies specific manager host definition information for existing units.

With the modification function, you only need to specify the name of the target unit, the complete name of the upper unit, and the unit type as well as the area to be modified. You must mark the area to be modified (cells containing information to be modified) by pressing the **F2** key.

If you use the modification function to export definition information without marking cells, the modifications will not be applied. To clear the marked cells, press the **F3** key. You do not need to specify any other definition information.

The following figure shows the definition information management template when the modification function is executed.

Figure 2–6: The definition information management template during modification
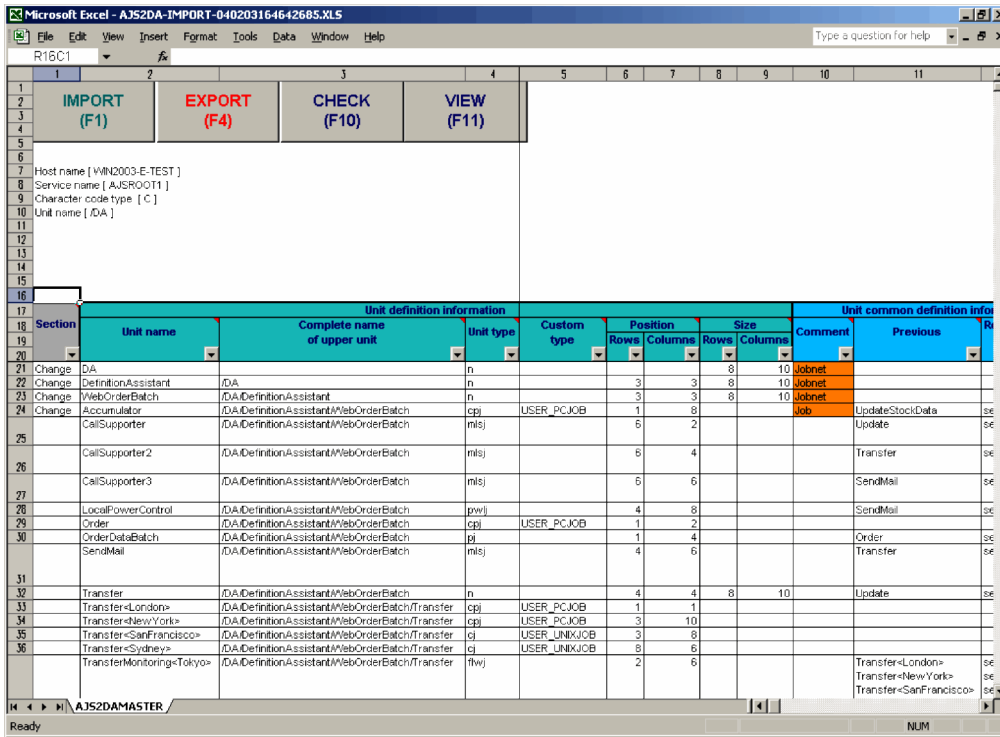
You can execute the modification function even when the unit to be modified is running, except when you modify the **Previous** specification. You must change the target unit to the suspended status.

Note that the modification function cannot be used for the definition items in the **Unit definition information** section, **Type** of **Unit common attribute information**, **Job group type** of **Job group definition information**, **Definition parameters** of **Event job definition information** section, **Passing information** of **Tool unit definition information** section, the definition items in the **Other definition information** section, and the items in the **Last updated time** section.

The modification function also cannot be used for custom jobs or operation jobs. The cells of the definition items in the **Custom job definition information** section cannot be marked by pressing the **F2** key. Instead, use the individual definition function to change custom jobs or operation jobs.

If you use the modification function for relations, you can connect or release relations, but you cannot change the relation type of existing relations. If you want to change the relation type, release the relation and then specify and define the desired relation type.

Do not specify **Host to reference** for a remote jobnet. If you so and then execute the modification function, the specified host is set as **Target manager**.

2.2.4 The deletion function

The deletion function deletes manager host definition information for existing units.

With the deletion function, you only need to specify the name of the unit to be deleted and the complete name of the upper unit. You do not need to specify any other definition information.

When the deletion function is executed, units below the specified unit are also deleted.

The following figure shows the definition information management template for using the deletion function.

Figure 2–7: The definition information management template during deletion

2.2.5 Error check performed upon export

When you perform export, a check is performed to confirm if unit definition information entered into the definition information management template satisfies the input conditions.

For details, see *2.3 The error-checking function* and *2.3.1 Checked items*.

2.3 The error-checking function

The error-checking function checks whether definition information entered into the definition information management template satisfies the input conditions. You can also select check items by using the environment settings parameter `ERROR-CHECK-ITEMS`. Some of the settings for the checked items must be specified by the user.

We recommend that, before performing export, you use the error-checking function to check the definition information entered in the definition information management template.

If you perform export, an error check similar to the one provided by the error-checking function is performed on the check items specified with the environment settings parameter `EXPORT-CHECK-ITEMS`. Upon export, an error check is performed on the rows to be exported (rows for which a value is set for **Section**).

2.3.1 Checked items

The table below describes the check items used by the error-checking function as well as by the error check performed upon export. It also shows whether each check item is enabled by default. You can also select check items by using the environment settings parameters `EXPORT-CHECK-ITEMS` and `ERROR-CHECK-ITEMS`. For details, see *3.2.1(4) Settings for the export function* and *3.2.1(5) Settings for the error-checking function*.

Table 2–1: Checked items and whether each check item is enabled by default

Checked item	Enabled or disabled by default	
	Error-checking function	Error check performed upon export
Are unit types specified?	Enabled	Enabled
For the unit type, are the value specified for **Type** (**Normal** or **Recovery**) correct?		
Are the strings specified for **Unit name** and **Complete name of upper unit** invalid?[#1,]		
Do the complete names of units specified in **Job group name** start with a slash (/)?		Disabled
Are the values set for the specified unit types invalid?[#2][#3]		
Are the required items specified?[#4,]		
Do the specifications conform to the input restrictions?[#5]		
Are the items for R/3 job definition information specified correctly?[#6]		Enabled
Is the definition information of the passing information setting job specified correctly?		Disabled
Is the option correctly specified in the calendar definition information section to be modified?[#7]		Enabled
Is the definition information of the HTTP connection job specified correctly?[#8]		
Is the **Valid term** specified according to the schedule limit?[#9]		Disabled
Are the levels for unit definition information for batch targets correctly specified?		Enabled

#1

The following information is checked:

- Do **Unit name** and **Complete name of upper unit** contain characters that JP1/AJS3 - Definition Assistant does not allow to be used in unit names?

- Does **Unit name** contain a slash (/)?

- Does **Complete name of upper unit** begin with a slash (/)?

- Does **Complete name of upper unit** end with a slash (/)?

- Does **Complete name of upper unit** contain only slashes (/)?

#2

In the import execution results, an invalid **Position** setting may be specified for the unit type. If such an error is detected by the CHECK function, delete the **Position** information.

#3

Although the following definition items are specified for root jobnets, no error is detected:

- Position

- Previous

- Relation type

Similarly, if the following definition items are specified for nested jobnets, no error is detected:

- Concurrent exec.

- No. logs to keep

- Time-out period

- Schedule option

#4

This check item needs to be set by the user.

Required specification items refer to the items that need to be input when export is performed. These are checked based on the values specified in the environment settings parameters. Edit the following environment settings parameters to customize the required specification items:

- Required specification items
  CHECK-ITEM

#5

This check item needs to be set by the user.

Input restrictions refer to restrictions in the candidates and strings that can be input. These are checked based on the values specified in the environment settings parameters. These are checked based on the values specified in the environment settings parameters. Edit the following environment settings parameters to customize the input restrictions:

- Input restrictions
  Parameters for settings related to input restrictions (such as `SELECT-EXECHOST`)

#6

This check item needs to be set by the user.

For details about the checked items, see *2.7.1 R/3 job definition information section*.

#7

An error is detected in the following cases:

- The `:C` option is specified for rows other than the first row.

- The `:D` option is specified for rows other than the first row.

- The `:D` option is specified for both the open day and the closed day.

#8

An error is detected in the following cases:

- **Extended mode** is set to `Use` and a transmission information file is specified.
- **Extended mode** is not set or is set to `Do not use` and **URL parameter** is specified.
- **Extended mode** is not set or is set to `Do not use` and **Message body** is specified.

#9

An error is detected when an invalid date is specified. This is checked based on the schedule limit specified in the `SCHEDULELIMIT` environment settings parameter.

For details about environment settings, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

2.3.2 Displaying check results

When an error is detected as a result of check, a message dialog box notifies the user about the error details, and the cursor is moved to the corresponding area. When errors exist in multiple items, the user is notified of the error detected first. Once this error is corrected, a check is executed again, and the user is notified of the next error. If no errors exist, the following message is displayed:

```
No input errors occurred.
```

2.4 The JP1/AJS3 - View startup function

If JP1/AJS3 - View is installed on the host on which JP1/AJS3 - Definition Assistant is installed, JP1/AJS3 - View can be started from the definition information management template.

JP1/AJS3 - View can only be started from the execution results file created when the import function or the export function is used. The **View** button is not displayed in the master file (including replicated master files) of the definition information management template, and JP1/AJS3 - View cannot be started.

Automatic logon

When you start JP1/AJS3 - View from the definition information management template, the JP1/AJS3 - View login window is displayed, and you will need to enter your logon information (logon name, and password).

Logon is not necessary when the name of a logon information file (a file which contains information necessary for logon, as shown above) is specified for the VIEW-LOGINFILE environment settings parameter.

To specify a logon information file name in the VIEW-LOGINFILE environment settings parameter, you will need to create a logon information file in a folder on the machine on which JP1/AJS3 - View is installed. For details about and how to write this file, see *3.1.7(1) Starting JP1/AJS3 - View from the definition information management template*

Starting the definition information management template from JP1/AJS3 - View

You can start the definition information management template from JP1/AJS3 - View by registering JP1/AJS3 - Definition Assistant as a startup tool in JP1/AJS3 - View.

For details about how to perform this registration, see *3.1.7(2) Opening the definition information management template from JP1/AJS3 - View*.

2.5 Customization function

You can customize the definition items and operation buttons displayed in the definition information management template by editing the environment settings parameters in the environment settings file. For details about environment settings, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

2.5.1 Toggling the display of operation buttons

You can toggle the display of the **IMPORT**, **EXPORT**, **CHECK**, and **VIEW** buttons by editing the `BUTTON-HIDDEN` environment settings parameter. For example, to restrict updates to definition information, set the **EXPORT** button to be hidden.

Note that when you set a button to be hidden, the corresponding function key is also disabled.

2.5.2 Toggling the display of definition items

You can toggle the display of definition items or item types by editing the `COLUMN-HIDDEN` environment settings parameter related to each definition item, or the `TYPE-COMMON-DEF` environment settings parameter related to each definition item type. You can display only the items used in the definition.

You can use these settings to customize the display only for definition items displayed when the template is opened. Hidden definition items can still be imported and exported. You can use Excel functions to temporarily display hidden columns.

2.5.3 Restricting values for definition items

Definition items already have JP1/AJS input restrictions, but some of them can be changed to user-specified values that fall within the range of the JP1/AJS restricted values. For example, the limit for the value of a JP1/AJS **Unit name** is 30 bytes, but a user can change this to 14 bytes.

To change the restricted input values, edit the environment settings parameter related to the input (such as `LIMIT-UNITNAME`). The specified restriction will be checked when entered. These limits can be confirmed by the error check function against import results and the created definition information management templates.

2.5.4 Restricting input candidates

You can set user-specified input candidates for definition information for which no input candidates are already registered in the drop-down list. For example, if you want only the values `groupA`, `groupB`, and `groupC` to be entered for **JP1 resource group**, you can set these values as candidates in the corresponding drop-down list. This can help prevent definition mistakes.

To make a list of input candidates, enter them in the environment settings parameter related to the restricted input (such as `SELECT-EXECHOST`). The restrictions for the specified input candidates will be checked when entered. These limits can be confirmed by the error check function against import results and created definition information management templates.

2.6 Save function for unsupported definition information items

The save function for unsupported definition information items saves the definition items not supported by JP1/AJS3 - Definition Assistant in the **Other definition information** section in the unit definition parameter format on the definition information management template.

The following figure shows an overview of the save function for unsupported definition information.

Figure 2–8: Overview of the save function for unsupported definition information
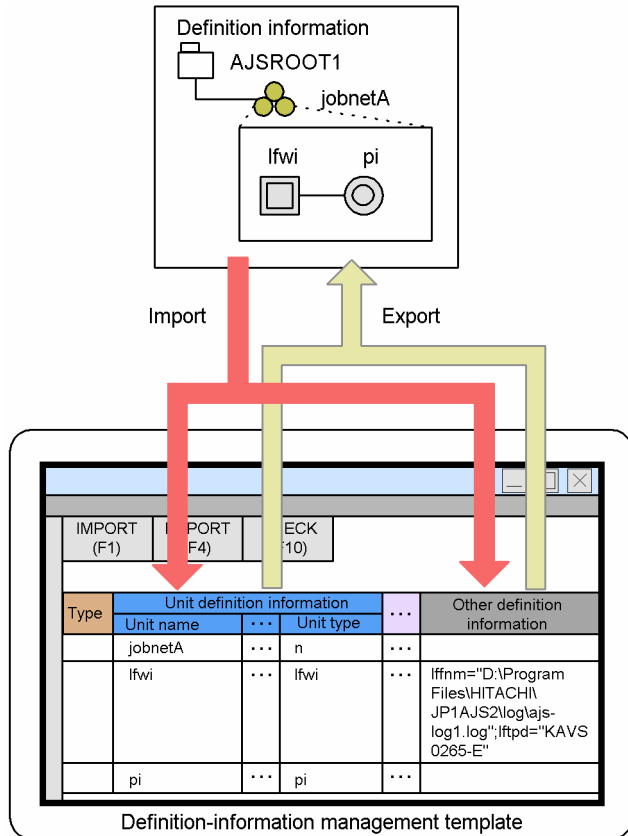
2.6.1 Details of save function for unsupported definition information items

This subsection describes the details of the save function for unsupported definition information items.

(1) Import function

When you import definition information, the definition items that have no corresponding definition items in the definition information management template are set in **Other definition information** in the unit definition parameter format. For the definition items not supported by JP1/AJS3 - Definition Assistant, see *5.2 Support status of the definition items in JP1/AJS3 - View*.

(2) Export function

(a) Batch definition or individual definition function

By defining definition information in the **Other definition information** section in the unit definition parameter format and executing batch or individual export, you can define the definition items that have no corresponding definition items in the definition information management template.

Batch or individual export merges supported definition items in the definition information management template with definition information in **Other definition information**. Therefore, you can also define the supported definition items in **Other definition information**. However, do not define in the Other Definition Information section, but the corresponding define item columns.

Also, you could define definition information as the supported definition items and in the **Other definition information** section. However, if definition information is duplicated after merging, it is an error and the KAVS0650-E message is output in the last record of the definition information management template. To prevent this error, correctly specify the unit definition parameters in the **Other definition information** section.

(b) Update function

You cannot update the contents of **Other definition information**. You cannot also mark cells by pressing the **F2** key.

Therefore, update definition information, and redefine the unit by the batch or individual definition function.

(3) Check function

The following check function is available for the **Other definition information** section.

Table 2–2: Check functions

Check functions	Check
Whether the required specification items are specified	Yes
Whether the specification conforms to the input restriction	NA
Whether the unit full name specified in **Upper unit** or in **Job group** starts with /	NA
Whether a unit type is specified	NA
Whether the unnecessary definition items are set for the specified unit type.	No
Whether invalid characters are specified in **Unit name** or **Upper unit name**.	NA
Whether the value specified in **Type** (`Normal` or `Recovery`) is correct for the unit type	NA
Whether the hierarchy of unit definition information for **Batch** is correctly defined	NA

Legend:

    Yes: Checked

    No: Not checked

    NA: Not applicable

(4) Custom jobs

In Other definition information, R/3 job definition information which is not supported by the definition information management is not included. For details about the **Custom job definition information** section, see *2.7 Display function for the custom job definition information section*.

In the definition information management template, if the custom job definition information section is not displayed, importing SAP job definition information results in setting all definition information in **Environment variables** and in **Parameters**. Therefore, exporting the imported execution result by **Batch** or **Individual** to the original definition information in the manager host dose not result in losing the definition information.

If importing a custom PC job with the following definition information is set, output to Other definition information.

- Working path

- Environment file

- Standard input

- Standard output : Append

- Standard error : Append

- Transfer file 1 to 4 : File to transfer

- Transfer file 1 to 4 : Destination file

- Transfer file 1 to 4 : Auto-del

A custom PC job with the definition information above cannot be exported by specifying **Batch** or **Individual** or **Change** export cannot be executed because of the restriction of the JP1/AJS function. To export, it is required to delete the definition information, before export.

2.7 Display function for the custom job definition information section

JP1/AJS3 - Definition Assistant provides the **Custom job definition information** section that includes the following section for defining the details of custom jobs:

- **R/3 job definition information** section for defining detailed definitions in JP1/AJS3 for Enterprise Applications

Note that the **Custom job definition information** section can only define definition items for custom PC jobs. It is not applicable for custom UNIX jobs.

This section describes the **R/3 job definition information** section for defining detailed information about custom jobs.

2.7.1 R/3 job definition information section

If you want to display the definition items related to detailed definitions in JP1/AJS3 for Enterprise Applications, display the **R/3 job definition information** section in the definition information management template. To display this section, specify JP1AMR3 in the CUSTOM-JOB environment settings parameter.

When JP1AMR3 is specified in the CUSTOM-JOB environment settings parameter, you can use the definition items for the following standard custom jobs: JP1AMR3, JP1AMR3UX that executes background jobs of the SAP system, and JP1AMR3CP, JP1AMR3CPUX that executes the custom job that copies jobs of the SAP system.

If you do not specify JP1AMR3 in the CUSTOM-JOB environment settings parameter (default), you can use the values of the parameters and the environment variables of the standard custom jobs in JP1/AJS3 for Enterprise Applications in the **Parameters** column and the **Environment variables** column in the **Basic job definition information** section.

For details about the environment settings parameters, see *3.2.1 Settings for environment settings parameters*.

(1) Function for specifying multiple job steps

You can define multiple job steps for a single SAP job (JP1AMR3, JP1AMR3UX). The following shows a display example when you import or export an SAP job.

Figure 2–9: Display example for importing or exporting an SAP job (`JP1AMR3`)

When you import an SAP job, the items to be displayed in cells are stored in the order in which they are displayed in JP1/AJS3 - View.

For an item not supported in JP1/AJS3 - View, only a line break is inserted (for example, archiving mode for an external program).

When you export an SAP job, items are displayed in JP1/AJS3 - View in the order specified for the cells.

When you define a new job step or add a new job step to existing job steps, you must set values for all items of the job step. However, if there is no value to be defined, specify only a line break. If you do not specify anything for an item, the definition information will not be aligned correctly. Exporting is not possible unless you set the data for the item because the number of lines in the item differs from that of the program type.

(2) Save function for unsupported definition items for SAP jobs

This function saves the SAP job definition items not supported by JP1/AJS3 - Definition Assistant in **Other R/3 job definition information** and **Other job step information** in the **R/3 job definition information** section in the definition information management template. These items are saved in the command argument format.

(a) Import function

When you import definition information, the definition items that have no corresponding SAP job definition items in the definition information management template are set in **Other R/3 job definition information** or **Other job step information** in the command argument format. Common definition items that do not depend on the program type of the SAP job are set in **Other R/3 job definition information**. Definition items for each program type of the SAP job are set in **Other job step information**.

For details about the SAP job definition items not supported by JP1/AJS3 - Definition Assistant, see *5.2 Support status of the definition items in JP1/AJS3 - View*.

(b) Export function

- Batch definition and individual definition functions

  You can define the definition items that have no corresponding definition items in the definition information management template. To do this, define information in **Other R/3 job definition information** and **Other job step information** in the command argument format and execute either batch export or individual export.

  Either type merges supported definition items in the definition information management template with the definition information in **Other R/3 job definition information** and **Other job step information**. Accordingly, although you can also define the supported definition items in **Other R/3 job definition information** and **Other job step information**, do not do this. Instead, define them in the corresponding definition item columns.

- Modification function

  You cannot modify the contents of the **R/3 job definition information** section. In addition, you cannot mark cells by pressing the **F2** key.

  To modify definition information, therefore, use the batch or individual definition function to redefine the unit.

(3) Error-checking function

When you click the **CHECK** button or press the **F10** key, the following check function is available for the **R/3 job definition information** section.

Table 2–3: Error-checking function supported for the R/3 job definition information section

Checked item	Check made	
	Definition Items of JP1AMR3, JP1AMR3UX	Definition Items of JP1AMR3CP, JP1AMR3CPUX
Whether an invalid definition item is set	Yes	Yes
Whether the required items are specified	Yes	Yes
Whether the specifications conform to the input restrictions[#]	Yes	No
Whether an invalid definition item is set for the specified program type	Yes	No
Whether exclusive items are specified	Yes	Yes
Whether the number of entries for the program type is within the specifiable range of the job step (1 to 99)	Yes	No
Whether any item contains a number of lines that differs from the number of lines in the program type.	Yes	No
Whether in the environment variables, verify that there are no specifications consisting only of a line break.	Yes	Yes
Whether in the environment variables, verify that variable names are not duplicated.	Yes	Yes

Checked item	Check made	
	Definition Items of JP1AMR3, JP1AMR3UX	Definition Items of JP1AMR3CP, JP1AMR3CPUX
Whether verify that the number of specified environment variables does not exceed the upper limit of 10 variables (environment variable: variable and environment variable: value).	Yes	Yes
Whether verify that the number of specifications in the environment variables matches the variable and values.	Yes	Yes

Legend:

Yes: Checked

No; Not checked

\#

Applies to definition items under a job step. Other definition items are checked when they are entered. The following items are not checked:

- Whether the specified value is registered in the list box (however, the value of the program type is checked)

- Contents of **Other job step information**

(4) Which definition items for each standard custom job can be defined

The following table lists which items can be defined for the **R/3 job definition information** section for each standard custom job.

Table 2–4: Which items can be defined for the R/3 job definition information section for each standard custom job

Definition item		Whether it can be defined	
		JP1AMR3, JP1AMR3UX	JP1AMR3CP, JP1AMR3CPUX
Host name		Yes	Yes
System number			
Destination			
Logon by sapnwrfc.ini file			
Client			
SAP user name			
Password			
Extended password			
System management information			
System management extended information			
Language			
Job name			No
Job step	**Program type**		
	Program		

Definition item		Whether it can be defined	
		JP1AMR3, JP1AMR3UX	JP1AMR3CP, JP1AMR3CPUX
Job step	Variant	Yes	No
	Authorized user		
	Target host		
	Archiving mode		
	Output device		
	lines		
	columns		
	Format		
	Number of copies		
	Authorization		
	Spool save period		
	SAP cover sheet		
	Receiver		
	Obj. type		
	Doc. type		
	Information		
	Information text		
	Other job step information		
Name of the source job		No	Yes
Job count of the source job			
Number of the first step to start copying job			
New name of the copied job			
Environment variables	Variable	Yes	
	Value		
Other R/3 job definition information			

Legend:

Yes: Can be defined.

No: Cannot be defined.

(5) Required items and exclusive items for each standard custom job

The following two tables list the required definition items and the exclusive definition items for the **R/3 job definition information** section for each standard custom job.

Table 2–5: The required items for the R/3 job definition information section for each standard custom job

Definition item		Conditions	
		JP1AMR3, JP1AMR3UX	JP1AMR3CP, JP1AMR3CPUX
Host name		**Destination** is not specified.	
Client		**Logon by sapnwrfc.ini file** is not specified or No.	
SAP user name			
Password, **Extended password**, **System management information**, or **System management extended information**			
Job name		None	Not applicable
Job step	**Program**	None	
	Target host	Program type: External program	
	Obj. type	Program type: ABAP program Archiving mode: **A** or **PA**	
	Doc. type	Same as above	
	Information	Same as above	
Name of the source job		Not applicable	None
Job count of the source job			None

Table 2–6: The exclusive items for the R/3 job definition information section for each standard custom job

Definition item	Exclusive item	Conditions	
		JP1AMR3, JP1AMR3UX	JP1AMR3CP, JP1AMR3CPUX
Host name	**Destination**	None	
	Logon by sapnwrfc.ini file	Logon by sapnwrfc.ini file: Yes	
System number	**Destination**	None	
	Logon by sapnwrfc.ini file	Logon by sapnwrfc.ini file: Yes	
Password	**Extended password** **System management information** **System management extended information**	None	
Extended password	**Password** **System management information** **System management extended information**		
System management information	**Password** **Extended password** **System management extended information**		

Definition item		Exclusive item	Conditions	
			JP1AMR3, JP1AMR3UX	JP1AMR3CP, JP1AMR3CPUX
System management extended information		**Password** **Extended password** **System management information**	None	
Logon by sapnwrfc.ini file		**Client** **SAP user name** **Password** **Extended password** **System management information** **System management extended information** **Language**	Logon by sapnwrfc.ini file: Yes	
Job step	**Archiving mode**	**Obj. type** **Doc. type** **Information** **Information text**	Program type: ABAP program Archiving mode: Mode other than **A** or **PA**	Not applicable
	lines	**Format**	Program type: ABAP program	
	columns	**Format**	Program type: ABAP program	

(6) Notes

Note the following when using the **R/3 job definition information** section:

- When you create a new SAP job, initial values for the release of the job and for monitoring of job completion differ between JP1/AJS3 - View and JP1/AJS3 - Definition Assistant. To match the initial values with those of JP1/AJS3 - View, specify the command options `-rs` and `-wait` in **Other R/3 job definition information**.

- In **Other R/3 job definition information**, do not specify command options supported by JP1/AJS3 - Definition Assistant. Also, do not set the same command option more than once.

- For an individual line in a cell in **Other job step information**, do not specify command options supported by JP1/AJS3 - Definition Assistant. Also, do not set the same command option more than once.

- If you specify invalid definition information in **Other R/3 job definition information** or **Other job step information** and then perform export operations, definition information might become invalid in JP1/AJS at the connection destination.

- When exporting, do not specify definition items that are not supported by JP1/AJS3 for Enterprise Applications at the connection destination. If you perform export in this manner, invalid options will be set in the SAP job definition information.

- To add or delete job steps, match the number of lines in a cell in the columns of items for all job steps. If you do not match the number of lines, job step definition information will not be aligned correctly, resulting in an export error or definition information not being applied correctly at the destination.

- If the version of JP1/AJS3 for Enterprise Applications at the connection destination is higher than the version of JP1/AJS3 - Definition Assistant, the import results might be invalid.

- The **System management information** or **System management extended information** of the **R/3 job definition information** section shows the value managed by JP1/AJS3 for Enterprise Applications.

A user-specified value cannot be defined for **System management information** or **System management extended information** in JP1/AJS3 - Definition Assistant. Export the imported value without change.

2.8 User authentication function

JP1/AJS3 - Definition Assistant uses the following two user authentication methods for connecting to the manager host:

- Method in which the user authentication function is not used

  This method creates a JP1 user name that is the same as the OS user name operating JP1/AJS3 - Definition Assistant for connection to the manager host.

- Method in which the user authentication function is used

  This method specifies a JP1 user name when JP1/AJS3 - Definition Assistant is used for connection to the manager host.

The following figure shows an overview of operation when the user authentication function is used and when it is not used.

Figure 2–10: Overview of operation when the user authentication function is not used
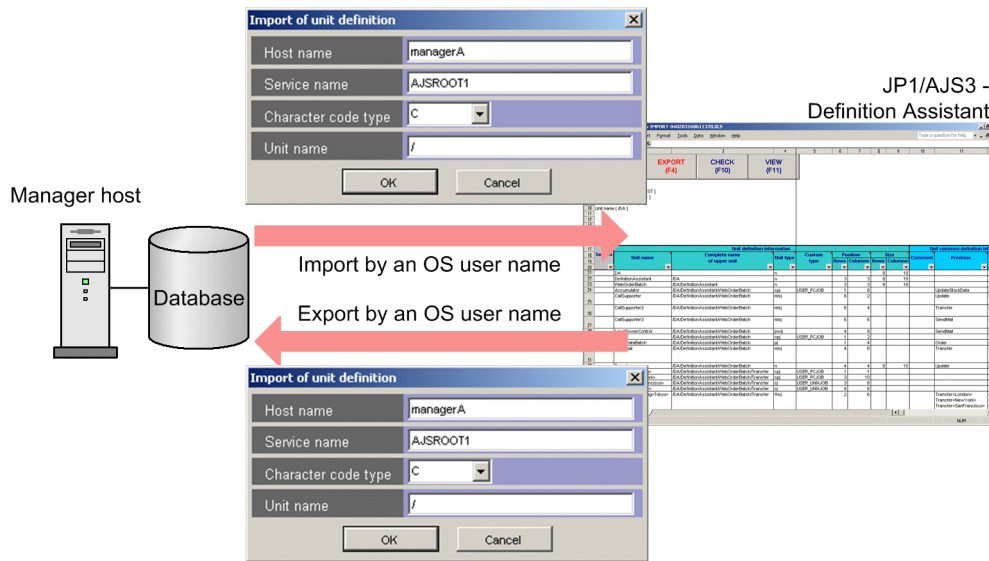
Figure 2–11: Overview of operation when the user authentication function is used
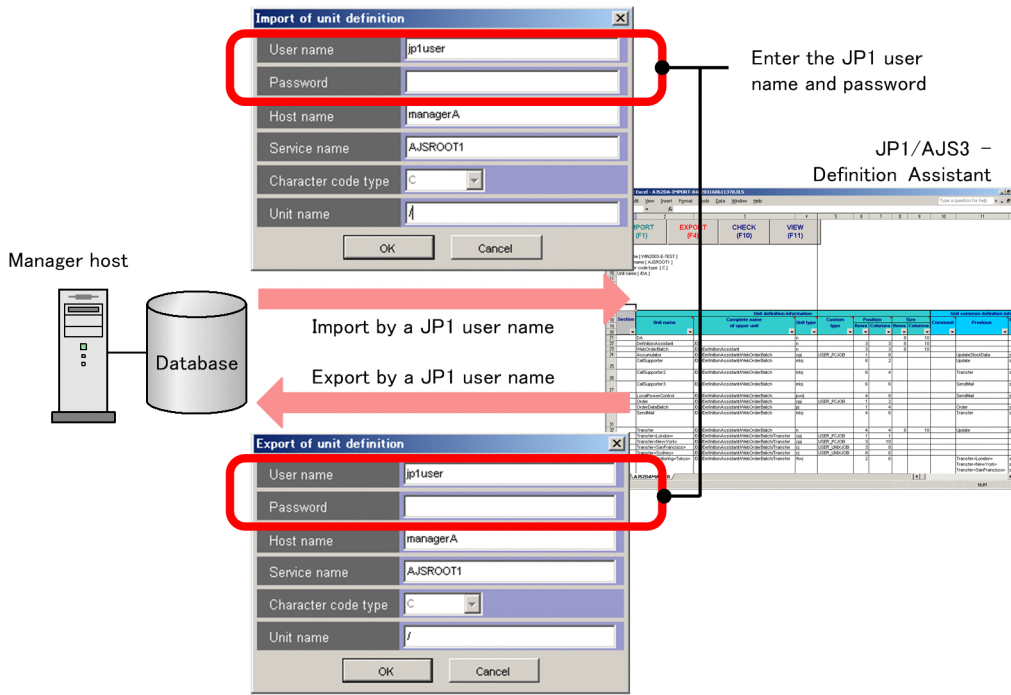
The following table shows the advantages and disadvantages of each method.

Table 2–7: Advantages and disadvantages of using and not using the user authentication function

Whether the user authentication function is used	Advantages	Disadvantages
Not used	• A JP1 user name does not need to be entered for an import or export operation.	• Because a JP1 user and user mapping definition must be created on the manager host for each OS user who operates JP1/AJS3 - Definition Assistant, the number of JP1 users that must be managed increases.
Used	• Because an existing JP1 user name can be used for operation, the number of JP1 users that must be managed can be reduced. • Entry of a JP1 user name for each import and export operation improves security.	• Because a JP1 user name must be entered for each import and export operation, the number of entry items for operation increases.

You can specify whether to use the user authentication function in the USERCHECKLEVEL environment settings parameter. By default, the user authentication function is not used. For details about the environment settings parameters, see *3.2.1 Settings for environment settings parameters*.

Note that when the user authentication function is used, the AJS-SET-SERVERHOST environment settings parameter is enabled, and the same authentication method that is used in JP1/AJS3 - View can be used. In addition, if you start JP1/AJS3 - Definition Assistant from JP1/AJS3 - View, import can be performed by a JP1 user. When you start JP1/AJS3 - Definition Assistant from JP1/AJS3 - View, the JP1 user name used to log on to JP1/AJS3 - View can be inherited to perform import.

The following figure shows operation when the user authentication function is enabled and JP1/AJS3 - Definition Assistant is started from JP1/AJS3 - View.

Figure 2–12: Operation when JP1/AJS3 - Definition Assistant starts from JP1/AJS3 - View

■ When starting JP1/AJS3 - Definition Assistant by specifying a JP1 user name
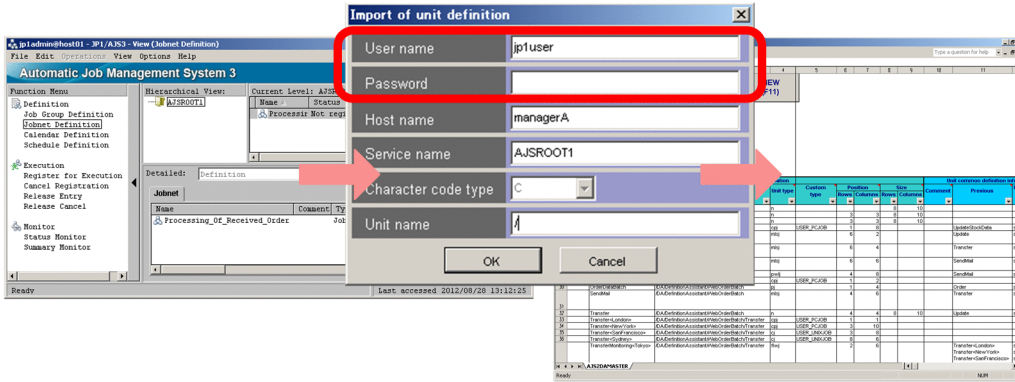
■ When starting JP1/AJS3 - Definition Assistant by inheriting the JP1 user name of a logged-in JP1 user
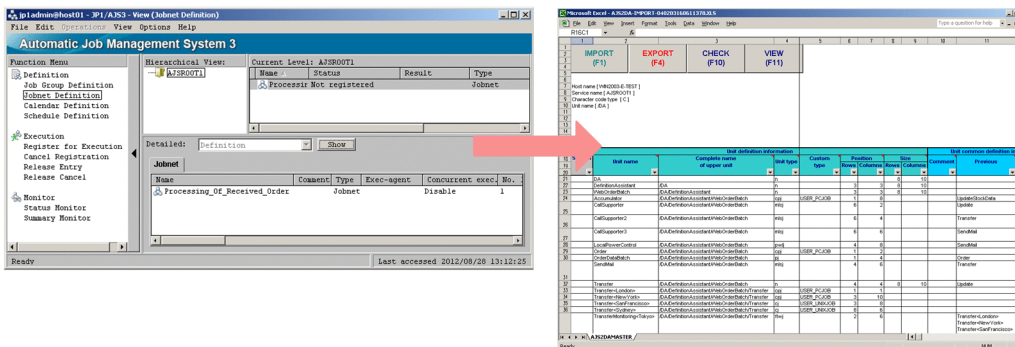
When you want to inherit the JP1 user name used to log on to JP1/AJS3 - View in order to use the user authentication function to perform import, you need to specify the user name for **Command** during registration of JP1/AJS3 - Definition Assistant as a starting tool in JP1/AJS3 - View. For details about the registration method, see *3.1.7(2) Opening the definition information management template from JP1/AJS3 - View*.

If you start JP1/AJS3 - Definition Assistant from JP1/AJS3 - View when the user authentication function is not used, you can use the OS user name to perform import.

The following table shows the JP1 users that can be used to operate JP1/AJS3 - Definition Assistant according to whether the user authentication function is or is not used.

Table 2–8: JP1 users to be used for operating JP1/AJS3 - Definition Assistant

User name specification for Command in the Register Tools dialog box	Value of USERCHECKLEVEL	JP1 user to be used for operating JP1/AJS3 - Definition Assistant
Specified	2	JP1 user name specified in the Import of unit definition dialog box
	1	JP1 user name used to log on to JP1/AJS3 - View
	0 or not specified (User authentication function not used)	Login OS user name
Not specified	1 or 2	JP1 user name specified in the Import of unit definition dialog box
	0 or not specified (User authentication function not used)	Login OS user name

Note that if the user authentication function is used, specify the following settings.

The connected JP1/AJS3 version is earlier than 11-50:

You must register the JP1/AJS3 - Manager host name to the `hosts` file in JP1/AJS3 - Definition Assistant. (The settings for reverse DNS server lookup or settings in the `hosts` file are required.)

The connected JP1/AJS3 version is 11-50 or later:

When the environment settings parameter is disabled (the value of `SERVERHOST-USE-REVERSELOOKUP` is `Y`):

You must register the JP1/AJS3 - Manager host name to the `hosts` file in JP1/AJS3 - Definition Assistant. (The settings for reverse DNS server lookup or settings in the `hosts` file are required.)

When the environment settings parameter is enabled (the value of `SERVERHOST-USE-REVERSELOOKUP` is `N`):

No setting is required.

2.9 32-bit/64-bit version of JP1/AJS3 - Definition Assistant

The 64-bit version of JP1/AJS3 - Definition Assistant, which uses the 64-bit version of Excel, can operate more units at once than the 32-bit version.

This section describes the differences between the 32-bit and 64-bit versions of JP1/AJS3 - Definition Assistant.

2.9.1 Functions of the 32-bit and 64-bit versions

The following describes the functions of the 32-bit and 64-bit versions of JP1/AJS3 - Definition Assistant.

Table 2–9: Functions of JP1/AJS3 - Definition Assistant

Item	32-bit version	64-bit version
Excel version used	32-bit version of Excel	64-bit version of Excel
File format of master file	`xls` format	`xlsm` format
Upper limit of operational units	65,000	1,048,556

The following table shows the advantages and disadvantages of the 32-bit and 64-bit versions.

Table 2–10: Advantages and disadvantages of the 32-bit and 64-bit versions

Type	Advantage	Disadvantage
32-bit version	• It uses the same file format as 11-00 or earlier, and thus there is no need to change the user assets.	• In the 64-bit version of Excel, the import and export functions are not available. (The definition information management template can be edited.) • The upper limit of the number of units is 65,000.
64-bit version	• The upper limit of the number of units is 1,048,556.	• In the 32-bit version of Excel, the import and export functions are not available. (The definition information management template can be edited.) • It uses more memory than the 32-bit version. • Processing takes more time than the 32-bit version. • The size of a file gets larger than that in the 32-bit version.

In version 13-00, there is no functional difference between the 32-bit and 64-bit versions, but their environment setting parameters are different. For details, see *3.2 Environment settings parameters*.

2.9.2 Mixed use of the 32-bit and 64-bit versions

When the machines used for import and export are different, JP1/AJS3 - Definition Assistant with the same version and the same number of bits must be used on both machines. If the number of bits is not the same, the definition information management template requires conversion. For details, see *ajsdaconvert* in *7. Commands*.

The following shows the system configuration when the import or export is performed. The explanation here uses the configuration where one machine for import and another for export are on different networks.
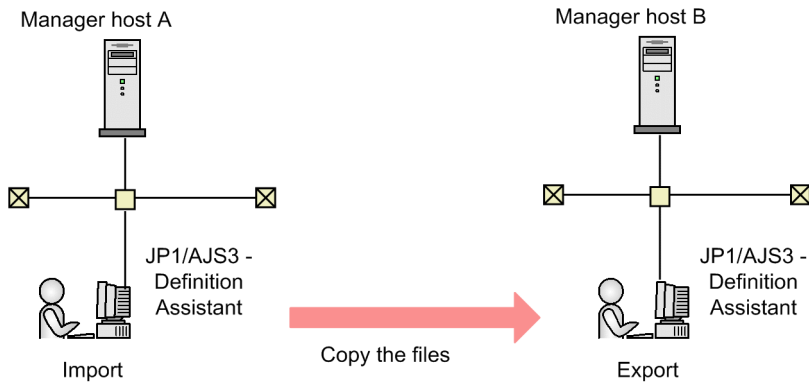
Suppose that the same version of JP1/AJS3 - Definition Assistant is installed in both machines.

When the machines for both import and export use the 32-bit version

No file conversion is required before an imported file is exported.

When the machines for both import and export use the 64-bit version

No file conversion is required before an imported file is exported.

When the machine for import uses the 32-bit version and the one for export uses the 64-bit version

Use the `ajsdaconvert` command to convert an imported file in `xls` format to `xlsm` format, and then perform the export.

When the machine for import uses the 64-bit version and the one for export uses the 32-bit version

If the number of definitions for files in `xlsm` format is 65,000 units or less, use the `ajsdaconvert` command to convert an imported file in `xlsm` format to `xls` format, and then perform the export.

2.9.3 Migration of the definition information management template file

You can migrate the definition information management template file to suit your environment as follows:

- From the 32-bit definition information management template file in `xls` format to the 64-bit template file in `xlsm` format

- From the 64-bit definition information management template file in `xlsm` format with definitions of 65,000 units or less to the 32-bit template file in `xls` format

To migrate the definition information management template file, use the `ajsdaconvert` command. For details about the `ajsdaconvert` command, see *ajsdaconvert* in *7. Commands*.

3

Installation and Setup

This chapter explains the procedures for installing and setting up JP1/AJS3 - Definition Assistant. It also explains the environment settings parameters specified when setting up the environment.

3.1 Procedures for installation and setup

The following figure shows the procedures for setting up JP1/AJS3 - Definition Assistant.

Figure 3–1: Procedures for setting up JP1/AJS3 - Definition Assistant
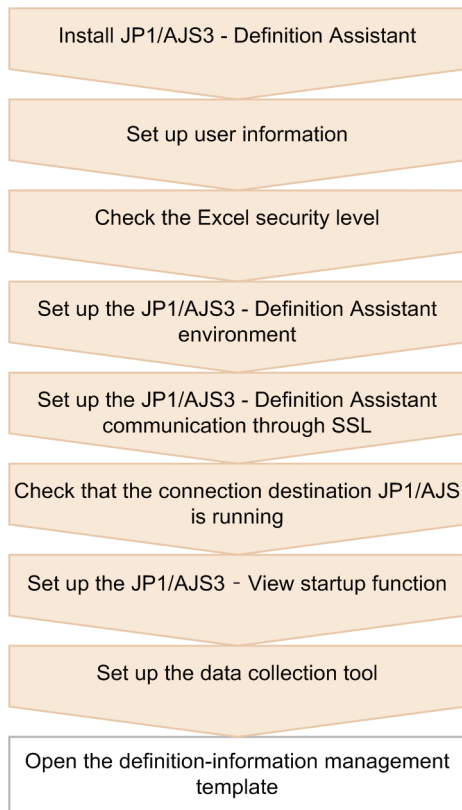
This section explains the procedures for installation and setup, as described in the above figure. For notes on installation, see *1.7.5 Notes on Installation*.

3.1.1 Installation

To perform a new installation of JP1/AJS3 - Definition Assistant:

1. As a user who belongs to the Administrators group, log on to the host on which you wish to install JP1/AJS3 - Definition Assistant.

2. Close all definition information management templates.

3. Insert the JP1/AJS3 - Definition Assistant CD-ROM

   The Hitachi integrated installer window appears.

   If you use the 32-bit version of Excel, then install the 32-bit version of JP1/AJS3 - Definition Assistant, and this is true for the 64-bit version. JP1/AJS3 - Definition Assistant with a different number of bits from Excel is not available.

   If you use the 32-bit version of Excel, install [32-bit for Excel] JP1/Automatic Job Management System 3 - Definition Assistant.

   If you use the 64-bit version of Excel, install [64-bit for Excel] JP1/Automatic Job Management System 3 - Definition Assistant.

4. Perform installation by following the instructions displayed, entering information where necessary.

Specify the following information during installation:

- User information

  Such information as your user name.

- Installation folder

  The folder in which JP1/AJS3 - Definition Assistant is to be installed.

5. When installation is finished, restart the host.

Once the above steps are performed, JP1/AJS3 - Definition Assistant installation is complete.

Distributing the definition information management template

To enter or edit definition information on multiple hosts, you only need to install JP1/AJS3 - Definition Assistant on one of the hosts, and distribute the definition information management template to the other hosts. Note that the following cannot be performed on hosts on which JP1/AJS3 - Definition Assistant is not installed:

- Import

- Export

- Customization of input restriction and error-checking function

- JP1/AJS3 - View startup

As such, perform input and editing on hosts to which only the definition information management template has been distributed, and perform batch import and export on the host on which JP1/AJS3 - Definition Assistant is installed. Check items for the error check function cannot be customized, but the error check function can be used with the default settings.

3.1.2 Setting up user information

Before performing import and export with JP1/AJS3 - Definition Assistant, you need to set up the user information. This subsection explains the necessary settings for user information when performing import and export with JP1/AJS3 - Definition Assistant as well as the permissions for execution that are necessary for the JP1 users to be used with JP1/AJS3 - Definition Assistant.

Note that since JP1/AJS3 - Definition Assistant uses JP1/AJS commands internally, the settings for performing import and export are the same as those for executing commands on the manager host. However, the `JP1_USERNAME` environment variable that can be used with JP1/AJS is not enabled.

(1) When the user authentication function is not used

This subsection describes how to set the user information of a JP1 user for the following types of operations:

- When JP1/AJS3 - Definition Assistant is used as the default setting

- When the automatic import function is used

- When the automatic export function is used

In this subsection, the following user names and host names are used as examples.

Table 3–1: User names and host names used in the explanation

The host on which JP1/AJS3 - Definition Assistant is installed	`HostD`

The OS user that uses JP1/AJS3 - Definition Assistant on `HostD`	`UserD`
The host on which JP1/AJS3 - Manager is installed	`HostM`
The OS user actually executing commands on `HostM`	`UserM`
The authentication server that `HostM` views	`HostA`

The following figure gives an overview of setup for user information.

Figure 3–2: Overview of setup for user information (When the user authentication function is not used)
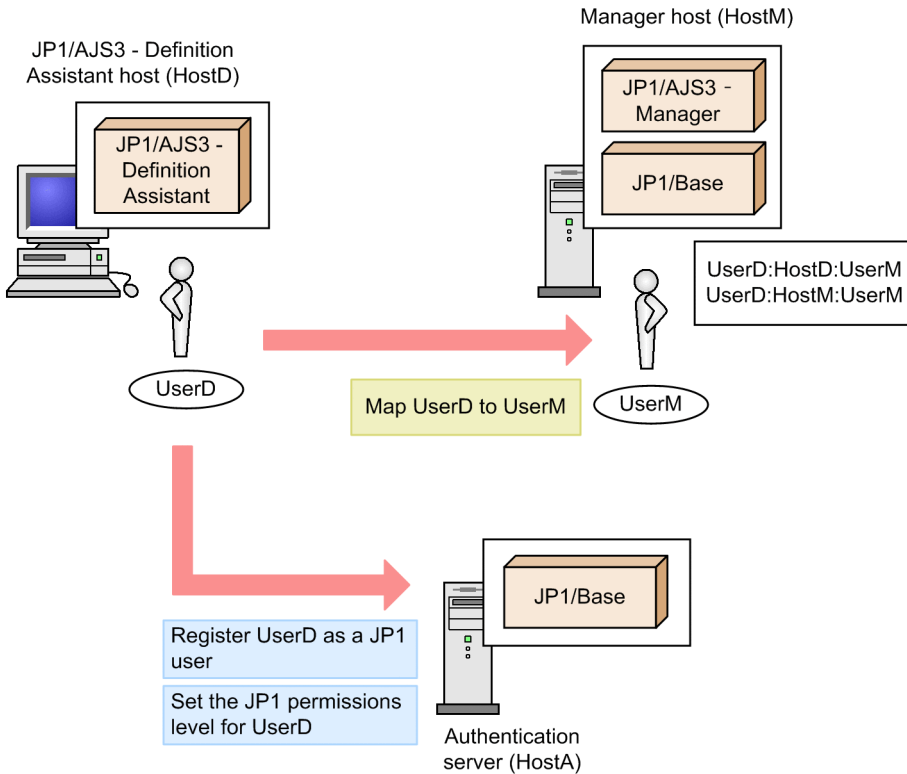
Note that user information is specified on JP1/Base on the authentication server and on the manager host. The following gives an outline of the settings for using JP1/AJS3 - Definition Assistant. For details about how to perform these settings, see the manual *JP1/Base User's Guide*.

(a) Setting up the authentication server

- **JP1 user registration**

  Register a JP1 user with the same name as an OS user of the host on which JP1/AJS3 - Definition Assistant is installed. In this case, `UserD` is registered as a JP1 user.

  Note that only lower-case alphabetic characters can be used in JP1 user names. When the OS user name contains upper-case letters, it can be used as a JP1 user name without problems if it is registered in lower case.

  Example:

  OS user name: `UserD`

  JP1 user name: `userd`

- **Settings for the JP1 permissions level**

  Grant the appropriate permissions so that the OS user of the manager host (`UserM`) can operate the resource groups of units to be imported or exported.

(b) Setting up the manager host

- **User mapping**

  Map the JP1 user connecting to the manager host (`UserD`) to the OS user of the manager host (`UserM`).

  To perform import and export, user mapping needs to be performed to both establish a connection from JP1/AJS3 - Definition Assistant, and to execute commands on the manager host.

  To establish a connection from the JP1/AJS3 - Definition Assistant host, map `UserM` to `UserD` by specifying `HostD` for the connection source server host, and `UserD` for the JP1 user.

  To execute commands on the manager host, map `UserM` by specifying `HostM` for the server host, and `UserD` for the JP1 user.

(2) When the user authentication function is used

This subsection describes how to set the user information of a JP1 user for the following types of operations:

- When JP1/AJS3 - Definition Assistant uses the same JP1 user settings that are used in JP1/AJS3 - View

- When JP1/AJS3 - Definition Assistant is used without changing the JP1 user settings that are already being used in JP1/AJS3 - View

In this subsection, the following user names and host names are used as examples.

Table 3–2: User names and host names used in the explanation

The host on which JP1/AJS3 - Definition Assistant and either JP1/AJS3 - View is installed	`HostD`
The JP1 user that accesses JP1/AJS3 - Manager	`jp1a`
The host on which JP1/AJS3 - Manager is installed	`HostM`
The OS user actually executing commands on `HostM`	`UserM`

The following figure gives an overview of setup for user information.

Figure 3–3: Overview of setup for user information (When the user authentication function is used)
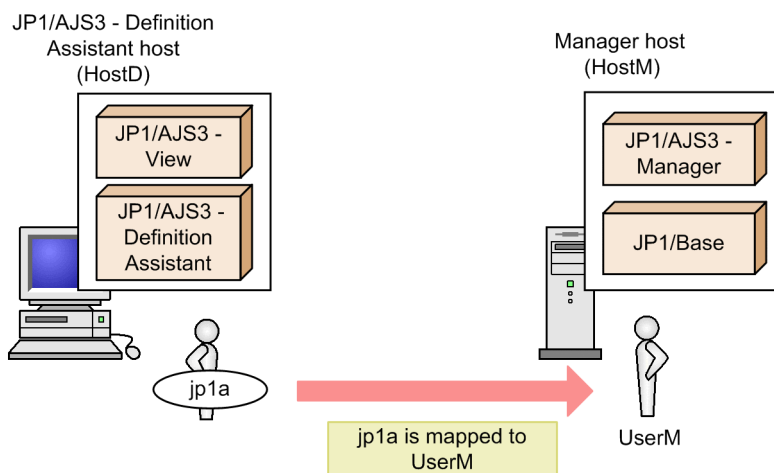
When the JP1 user (jp1a) has been already registered on the authentication server, and the user mapping settings (jp1a:HostM:UserM) for the JP1 user (jp1a) have been specified on the manager host, setup for user information is not needed.

Note that when you upgrade JP1/AJS3 - Definition Assistant and you want to use the user information settings of the JP1 user that were used in JP1/AJS3 - Definition Assistant before upgrade without change, specify N for the `AJS-SET-SERVERHOST` environment settings parameter.

The following table shows how to set user mapping when setting the `AJS-SET-SERVERHOST` environment settings parameter.

Table 3–3: How to set user mapping when setting the AJS-SET-SERVERHOST environment settings parameter

No.	Value of AJS-SET-SERVERHOST	Program	Required user mapping
1	Y	JP1/AJS3 - Definition Assistant	jp1a:HostM:UserM
2		JP1/AJS3 - View	jp1a:HostM:UserM
3	N	JP1/AJS3 - Definition Assistant	jp1a:HostD:UserM
4			jp1a:HostM:UserM
5		JP1/AJS3 - View	jp1a:HostM:UserM

For details about the `AJS-SET-SERVERHOST` environment settings parameter, see *3.2.1 Settings for environment settings parameters*.

(3) Permissions for execution that are necessary for JP1 users

The table below lists the permissions for execution that are necessary for the JP1 users used with JP1/AJS3 - Definition Assistant.

The permissions for execution shown in this table are determined by the JP1 permissions level that is held by the JP1 users (users used with JP1/AJS3 - Definition Assistant) with respect to the JP1 resource group specified as the attribute of the target unit. However, if no JP1 resource group is specified for the target unit, or if the OS user mapped to the JP1 user to be used has either administrator permissions (in the case of Windows) or superuser permissions (in the case of UNIX), the permissions for execution shown in this table are not necessarily necessary.

Table 3–4: Permissions for execution necessary for the JP1 users used with JP1/AJS3 - Definition Assistant

Function		Necessary permissions for execution[1]
The import function		JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor
The export function	The individual definition function	
	The batch definition function	
	The modification function[2]	
	The delete function	

#1

JP1 users having any one of the permissions for execution shown in the table above are entitled to execute each function.

#2

JP1 users changing the following items need either the JP1_AJS_Admin permissions for execution or the unit ownership permissions:

- Owner and JP1 resource group belonging to the unit common attribute information

- Executed by belonging to the job common attribute information

3.1.3 Enabling Excel macros (checking security level)

Excel macros are used for JP1/AJS3 - Definition Assistant functions.

When you use the product with Excel, perform either of the following methods to enable Excel macros.

(1) Setting Excel macros by selecting Enable Content

In Excel, **Trust Center**>**Macro Settings**>**Disable all macros with notification** is selected by default. When you open the definition information management template in this state, the message `Security Warnings Macros have been disabled.` is displayed in the message bar. To proceed, click the **Enable Content** button.

Supplementary notes:

If you select **Trust Center**>**Macro Settings**>**Enable all macros (not recommended; potentially dangerous code can run)**, you can also use all the functions in the definition information management template. Note, however, that this method enables macros for Excel files other than the definition information management template as well.

In addition, if you select **Disable all macros without notification** or **Disable all macros except digitally signed macros**, you will not be able to use some of the functions in the definition information management template.

(2) Setting Excel macros by selecting Trust Center and then Trusted Locations

Use the following procedure to add the file storage folder for the definition information management template used for import or export to **Trust Center**>**Trusted Locations** before starting operation.

1. Start Excel.

2. Select the **File** tab and then click **Options**.
   The **Excel Options** dialog box appears.

3. Select **Trust Center** in the area on the left, and then click the **Trust Center Settings** button in the area on the right.
   The Trust Center dialog box appears.

4. Select **Trusted Locations** in the area on the left, and then click the **Add new location** button in the area on the right.
   The Microsoft Office Trusted Location dialog box appears.

5. Enter the path to the file storage folder for the definition information management template for import or export in **Path**. Alternatively, click the **Browse** button to specify the file storage folder for the definition information management template for import or export.

6. Select **Subfolders of this location are also trusted**, and then click the **OK** button.

7. Make sure that the path to the folder specified in step 5 has been added to **Trusted Locations** in the area on the left of the Trust Center dialog box.
   If there are multiple file storage folders for definition information management templates for import or export, repeat steps 4 to 6 for each folder.

3.1.4 Environment settings

This subsection explains the environment settings for JP1/AJS3 - Definition Assistant. You can specify these settings by editing the following environment settings file in a text editor:

```
JP1/AJS3 - Definition-Assistant-installation-folder\conf\ajs2da.conf
```

Each environment settings parameter in the environment settings file is in the *environment-settings-parameter=value* format. Lines that start with a hash mark (#) are treated as comments.

When you change the environment settings file while the definition information management template is open, the changes will take effect the next time the definition information management template is opened.

> ❗ **Important**
>
> Do not specify the same environment settings parameter more than once in the environment settings file.

The following are the main items that can be set in the environment settings file:

Settings for the general execution environment
These include the name of manager host to be connected, and scheduler service name.

Settings for import and export
These include the name of the unit to be imported or exported, and automatic execution.

Settings for customization of the definition information management template
These include toggling of the displays for buttons and definition information, and input restrictions for definition items.

For details about the environment settings parameters to be set, see *3.2 Environment settings parameters*.

If User Account Control (UAC) is enabled in Windows, edit the environment settings file after starting the editor as an administrator. Administrator permissions are required to change environment settings files in the "x86" and "Files" folders.

3.1.5 Setting up communication through SSL

JP1/AJS3 - Definition Assistant with the encrypted communication function enabled can connect to a JP1/AJS3 - Manager with the same function enabled. This subsection explains the settings for the encrypted communication function.

(1) Steps for setting up SSL communication

When JP1/AJS3 - Definition Assistant enables its encrypted communication function, it can connect to a JP1/AJS3 - Manager that has the encrypted communication function enabled.

To set up SSL communication:

1. Obtain the root certificate (in PEM format) of the certificate authority that issued the server certificate for the destination JP1/AJS3 - Manager.

2. Store the root certificate you now have in the following folder:
   JP1/AJS3-Definition-Assistant-installation-path\conf\ssl\rootcer

3. Set the CACERTIFICATEFILE environment settings parameter to the full-path of the root certificate file you stored.

4. Set the `SSL-ENABLE` environment settings parameter to `1`.

5. Restart JP1/AJS3 - Definition Assistant.

For details about the environment settings parameters, see *3.2 Environment settings parameters*.

Note:

- The encrypted communication function of JP1/AJS3 - Definition Assistant supports TLS version 1.2 and TLS version 1.3 as an encryption protocol. The function does not support any other protocols and versions.

- When using the communication encryption function, to prevent tampering with the root certificate, ensure appropriate access permissions are granted to the root certificate and the folder storing the root certificate.

(2) Unencrypted communication host settings file

If JP1/AJS3 - Definition Assistant with the encrypted communication function enabled connects to a JP1/AJS3 - Manager with the encrypted communication function disabled, create an unencrypted communication host settings file.

To create the file:

1. Copy the file `ajsda_nosslhost.conf.model` to the folder shown below. This is the model file of the unencrypted communication host settings file and located in the same folder.
   JP1/AJS3-Definition-Assistant-installation-path`\conf\ssl`

2. Rename the copied file to `ajsda_nosslhost.conf`.
   The file `ajsda_nosslhost.conf` acts as the unencrypted communication host settings file.

3. Edit the unencrypted communication host settings file in a text editor.
   The unencrypted communication host settings file should have the following format:

   ```
   #Δ[NOT_ENCRYPTION_HOST_LIST]Δ#
   host-name-or-IP-address-of-JP1/AJS3-Manager-that-is-not-accessed-over-SSL
   host-name-or-IP-address-of-JP1/AJS3-Manager-that-is-not-accessed-over-SSL
   ...
   ```

   Legend:
   Δ: Indicates a space character.

   JP1/AJS3 - Managers that are listed in the unencrypted communication host settings file are accessed by using clear text.

   If the unencrypted communication host settings file is not created, JP1/AJS3 - Definition Assistant with the encrypted communication function enabled always communicates with JP1/AJS3 - Managers in a secure way.

Notes:

- The host name of JP1/AJS3 - Manager is case-insensitive.

- An IP address is also available as a host name of JP1/AJS3 - Manager.

- No verification is performed to check whether the specified host name or IP address of JP1/AJS3 - Manager is valid.

- Regular expressions are not available in the JP1/AJS3 - Manager host name. For example, you cannot specify the host name as `a*`, which indicates the "host name that starts with the letter a".

- A line that starts with `#` is handled as a comment line.

- The file can have a maximum of 1,024 lines, including comment lines and blank lines.

- The specified host name or IP address of JP1/AJS3 - Manager can have a maximum length of 255 bytes.

- The special host name * is not available, although it is available in the unencrypted communication host settings file for JP1/AJS3 - View. If all the destination JP1/AJS3 - Managers do not communicate over SSL, disable the encrypted communication function in JP1/AJS3 - Definition Assistant by using the environment settings parameter.

3.1.6 Checking the connection destination JP1/AJS service

When you use JP1/AJS3 - Definition Assistant to perform import or export, confirm that the following service has started.

For JP1/AJS3 - Manager:
    JP1/AJS3 service of the connection destination JP1/AJS3 - Manager

3.1.7 Setting up JP1/AJS3 - View startup

This subsection explains the setup necessary to start JP1/AJS3 - View from the definition information management template, and to open the definition information management template from JP1/AJS3 - View.

(1) Starting JP1/AJS3 - View from the definition information management template

No particular setup is necessary to start JP1/AJS3 - View from the definition information management template. However, you need to set up as follows to perform logon automatically without displaying the Login window.

To automatically log on:

1. Create a JP1/AJS3 - View logon information file.
   A logon information file contains the user name and password of the logon user, in the following format:

   ```
   username=user-name
   password=password
   ```

   Place the logon information file in the following folder:

   ```
   JP1/AJS3 - View-installation-folder\conf
   ```

   You do not need to set the name of the connection destination host in the logon information file. For details about name and format conventions of the logon information file, see the section on the -a option of the ajs command, in the manual *JP1/Automatic Job Management System 3 Command Reference*.

2. In the environment settings file, specify the name of the logon information file.
   Specify the name of the logon information file, in the VIEW-LOGINFILE parameter of the environment settings file.

(2) Opening the definition information management template from JP1/ AJS3 - View

The following setup is necessary to open the definition information management template from JP1/AJS3 - View:

- From the JP1/AJS3 - View menu, choose **Options**, and then **Set Tools**, and register JP1/AJS3 - Definition Assistant as a tool.

For details about the procedures for registering tools to start from JP1/AJS3 - View, see the Tool Entry dialog box in the *JP1/Automatic Job Management System 3 Operator's Guide*.

Settings for tool registration are as follows:

Registration name

Any name, within 50 bytes.

Start command (When the user authentication function is not used)

`wscript`Δ*JP1/AJS3-Definition-Assistant-installation-folder*`\bin\ajsdastart.vbs`Δ`(HOST_NAME)`Δ`(SERVICE_NAME)`Δ`(UNIT_NAME)`Δ`(CHAR_CODE)`

Legend:

Δ: Indicates a space character.

Start command (When the user authentication function is used)

`wscript`Δ*JP1/AJS3-Definition-Assistant-installation-folder*`\bin\ajsdastart.vbs`Δ`(HOST_NAME)`Δ`(SERVICE_NAME)`Δ`(UNIT_NAME)`Δ`(CHAR_CODE)`Δ`(USER_NAME)`

Legend:

Δ: Indicates a space character.

3.1.8 Setting up the data collection tool

(1) Procedure for setup

Set up the data collection tool for collecting log information when problems occur. JP1/AJS3 - Definition Assistant provides the data collection tool.

There are the following two types of data collection tools:

- `jajs_log.bat`
  Used if you have not changed the output destination for the log file or the like from the default, or if you do not need to collect other information.
  You cannot customize this tool.

- `_04.bat`
  Used if you have changed the output destination for the log file or the like, or if you want to collect other information.
  When using this tool, you can customize the output destination for log files or the like and where to store other collected information.

After JP1/AJS3 - Definition Assistant installation is completed, use this data collection tool (`_04.bat`) once you have copied it to another folder.

To set up the data collection tool (`_04.bat`):

1. Use Explorer to copy the following data collection tool (`_04.bat`) to another folder:

   JP1/AJS3 - Definition-Assistant-installation-folder`\tools\_04.bat`

2. Use a text editor to edit the copied data collection tool (`_04.bat`), and save it under another name.

The following are default values used in the data collection tool (`_04.bat`). Edit these values as necessary to match your environment.

- `@set DIR_BACKLOG=%TEMP%\jp1ajs2\backlog`

  Specifies the backup destination of information collected by the data collection tool.

If any problems occur, you may need a memory dump or crash dump. These are files to which debugging information is written when problems occur.

Because the data collection tool cannot obtain crash dumps and memory dumps automatically, you need to collect the information corresponding to them separately. For details about how to collect the information, see *6.3.1(3) Collecting user dumps* and *6.3.1(4) Collecting problem reports*.

Notes on collecting data in a 64-bit version of Windows

The sample batch file (_04.bat) of 09-10 or later do not require the following modification:

When you use a 64-bit version of Windows and use the JP1/AJS data collection tool in a Windows-on-Windows 64 environment to collect data, you need to modify the sample batch file (_04.bat). Use the following procedure to modify the file:

1. Copy the sample batch file to any folder.

2. Use a text editor to edit the copied batch file as follows, and then save it with the desired file name.

   Before change:
```
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1BASE\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2\PathName
@regedit /e "%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2V\PathName
@regedit /e "%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2V
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2C\PathName
@regedit /e "%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2C
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2CM\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2WOA\PathName
@regedit /e "%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2WOA
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2DA\PathName
@regedit /e "%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2DA
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2CFM\PathName
@regedit /e "%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2CFM
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1AJS2RP\PathName
@set REG_NAME=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1
```

```
@set REG_NAME_BASE=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1BASE
@set REG_NAME_MANAGER=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2
@set REG_NAME_VIEW=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2V
@set REG_NAME_CLIENT=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2C
@set REG_NAME_AJS2CONSOLE=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2CM
@set REG_NAME_WOA=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2WOA
@set REG_NAME_DA=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2DA
@set REG_NAME_CFM=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2CFM
@set REG_NAME_REPLI=HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi\JP1AJS2RP
```

After change:

```
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1BASE\PathName
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2V\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2V
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2C\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2C
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2CM\PathName
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2\PathName
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2WOA\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2WOA
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2DA\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2DA
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2CFM\PathName
@regedit /e
"%reg_temp%" HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2CFM
@regedit /e "%reg_temp%"
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1AJS2RP\PathName
@set REG_NAME=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1
@set
REG_NAME_BASE=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1BASE
@set
REG_NAME_MANAGER=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2
```

```
@set
REG_NAME_VIEW=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2V
@set
REG_NAME_CLIENT=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2C
@set
REG_NAME_AJS2CONSOLE=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1A
JS2CM
@set
REG_NAME_WOA=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2WOA
@set
REG_NAME_DA=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2DA
@set
REG_NAME_CFM=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2CFM
@set
REG_NAME_REPLI=HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hitachi\JP1AJS2RP
```

3.1.9 Uninstallation

To uninstall JP1/AJS3 - Definition Assistant:

Note that uninstalling JP1/AJS3 - Definition Assistant also uninstalls the environment settings files and data collection tool. If necessary, back up these files before uninstallation.

The following describes the uninstallation procedure:

1. As a user who belongs to the Administrators group, log on to the host from which you wish to uninstall JP1/AJS3 - Definition Assistant.

2. Close the definition information management template if it is open.

3. Select **Control Panel**, **Programs**, and then **Programs and Features**.
   A list of programs appears.

4. From the list of programs, select **JP1/Automatic Job Management System 3 - Definition Assistant**, and click **Uninstall**.
   The Programs and Features dialog box appears.

5. Click the **Yes** button.
   The User Account Control dialog box appears.

6. Click **Continue**.
   JP1/AJS3 - Definition Assistant is uninstalled.

7. Delete the user files created by JP1/AJS3 - Definition Assistant, as well as the JP1/AJS3 - Definition Assistant installation directory, as necessary.

3.2 Environment settings parameters

This section explains the environment settings parameters that can be set in the `ajs2da.conf` environment settings file.

3.2.1 Settings for environment settings parameters

The following table lists the environment settings parameters.

Table 3–5: List of environment settings parameters.

Type	Description	Environment settings parameter
Settings for the general execution environment	User authentication level	USERCHECKLEVEL
	JP1 user name	AJS-USERNAME
	Server host used for user mapping	AJS-SET-SERVERHOST
	Name of the manager host to be connected	MANAGER-HOST
	Scheduler service name	AJS2-SERVICE
	Name of the folder for execution result files	BACKUP-FOLDER
	Name of the folder for temporary files for import	TMP-INPUT-FOLDER
	Name of the folder for temporary files for export	TMP-OUTPUT-FOLDER
	Name of the folder for error information	TMP-ERRLOG-FOLDER
	Specification of whether to give higher priority to IPv6 addresses for the resolution of host names	PREFERIPV6ADDRESSES
	Specification of whether to activate the user name in the dialog box.	DIALOG-AJS-USERNAME-ABLE
	Specification of whether to activate the host name in the dialog box.	DIALOG-MANAGER-HOST-ABLE
	Specification of whether to activate the service name in the dialog box.	DIALOG-AJS2-SERVICE-ABLE
	Specification of whether to activate the character code in the dialog box.	DIALOG-MANAGER-CHARCODE-ABLE
	Specification of whether to activate the unit name in the dialog box.	DIALOG-UNIT-NAME-ABLE
	Specification of whether to use the encrypted communication function	SSL-ENABLE
	Root certificate file name	CACERTIFICATEFILE
	Specification of the SSL/TLS version in use	SSLPROTOCOL
	Specification of whether to resolve the server host name used for user mapping of the JP1 user by reverse lookup on a client machine when the user authentication function is used	SERVERHOST-USE-REVERSELOOKUP

Type	Description	Environment settings parameter
Settings for the general execution environment	Specification of the reference style applied to Excel files after the use of JP1/AJS3 - Definition Assistant	`FINISHING-REFERENCESTYLE`
Settings for limitations	Maximum number of units that can be imported using a file in `xls` format	`MAX-IMPORT-UNIT`
	Maximum number of units that can be exported using a file in `xls` format	`MAX-EXPORT-UNIT`
	Maximum number of units that can be imported using a file in `xlsm` format	`XLSM-MAX-IMPORT-UNIT`
	Maximum number of units that can be exported to a file in `xlsm` format	`XLSM-MAX-EXPORT-UNIT`
	Maximum number of execution result files	`MAX-BACKUP-FILENUM`
	Maximum number of error information files	`MAX-ERRLOG-FILENUM`
	Schedule limit of JP1/AJS3	`SCHEDULELIMIT`
Settings for the import function	Complete name of the import unit	`IMPORT-UNIT-NAME`
	Automatic import	`AUTO-IMPORT`
	Name of the manager host connected to during an import	`IMPORT-MANAGER-HOST`
	Name of the scheduler service connected to during an import	`IMPORT-AJS2-SERVICE`
	Specification of whether to output the output order of **Previous** for the unit common definition information during an import in ascending order of the unit name's character code.	`IMPORT-PD-SORTUNITINF`
	Specification of whether to preliminarily check the number of units to be imported during import	`IMPORT-UNIT-NUM-CHECK`
	Specification of whether to use the memory for outputting the values of the definition columns to cells when importing definition information	`IMPORT-USEMEMORY`
	Specification of whether to use the functionality that reduces the number of internal commands that are executed when definition information is imported, thereby improving the processing time	`IMPORT-TIME-IMPROVE`
	Specification of whether to display newer dates on the cells when, during import of definition information, the maximum number of days that can be defined in calendar information (open days and closed days specified on a per-day basis) is exceeded	`IMPORT-OPCL-LATEST`
Settings for the export function	Complete name of the export unit	`EXPORT-UNIT-NAME`
	Export automatic execution	`AUTO-EXPORT`
	Name of the manager host connected to during an export	`EXPORT-MANAGER-HOST`

Type	Description	Environment settings parameter
Settings for the export function	Name of the scheduler service connected to during an export	`EXPORT-AJS2-SERVICE`
	Memory loading level	`BATCHEXPORT-USEMEMORY`
	Specification of the items to be checked during an error check performed upon export	`EXPORT-CHECK-ITEMS`
Settings for the error-checking function	Required settings items to be checked	`CHECK-ITEM`
	Specification of the items to be checked by using the error-checking function provided by the definition information management template	`ERROR-CHECK-ITEMS`
Settings for the JP1/AJS3 - View startup function	Name of the logon information file for JP1/AJS3 - View	`VIEW-LOGINFILE`
	Specification of whether to activate the user name in the dialog box when the definition information management template is started from JP1/AJS - View.	`VIEW-DIALOG-AJS-USERNAME-ABLE`
Settings for display customization function	Output for execution status	`SCREEN-UPDATE`
	Operation button to hide display	`BUTTON-HIDDEN`
	Output suppression of the dialog box indicating normal termination of automatic processing	`AUTO-DIALOG-HIDDEN`
	Setting to hide the definition information column	`COLUMN-HIDDEN`
	Display of common definition information section	`TYPE-COMMON-DEF`
	Display of common attribute information section	`TYPE-COMMON-ATR`
	Display of manager unit definition information section	`TYPE-MANAGER-UNIT`
	Display of job group definition information section	`TYPE-JOBGROUP`
	Display of calendar definition information section	`TYPE-CALENDAR`
	Display of jobnet definition information section	`TYPE-JOBNET`
	Display of jobnet connector definition information section	`TYPE-NETCONNECT`
	Display of start condition definition information section	`TYPE-CONDITION`
	Display of schedule definition information section	`TYPE-SCHEDULE`
	Display of basic jobs definition information section	`TYPE-STANDARD-JOB`
	Display of judgment job definition information section	`TYPE-JUDGMENT-JOB`
	Display of event job definition information section	`TYPE-EVENT-JOB`

Type	Description	Environment settings parameter
Settings for display customization function	Display of action job definition information section	TYPE-ACTION-JOB
	Display of job common attribute information section	TYPE-JOB-COMMON
	Display of preceding wait condition definition information section	TYPE-PREWAITCONDITION
	Display of tool unit definition information section	TYPE-TOOL-UNIT
	Display of flexible job definition information section	TYPE-FLEXIBLE-JOB
	Display of http connection job definition information section	TYPE-HTTP-CONNECTION-JOB
	Display of other definition information section	TYPE-OTHERS
	Display of custom job definition information section	CUSTOM-JOB
	Display of last updated time information section	TYPE-LASTUPDATE
	Display of the message cell after importing or exporting is performed	CURSOR-MOVE-MSGCELL
Settings for input restriction	List of input candidates for Exec-agent	SELECT-EXECHOST
	List of input candidates for owners	SELECT-OWNER
	List of input candidates for JP1 resource group names	SELECT-JP1GROUP
	List of input candidates for execution user names	SELECT-EXECUSER
	List of input candidates for job group names	SELECT-JOBNETCALENDAR
	List of input candidates for environment variable file names	SELECT-ENVFILE
	List of input candidates for priority	SELECT-NICE
	Maximum length of unit names	LIMIT-UNITNAME
	Maximum length of comments	LIMIT-COMMENT
	Maximum number of logs to keep	LIMIT-SAVEGEN
	Maximum threshold for abnormal termination	LIMIT-ABCODE
	Maximum threshold for warning termination	LIMIT-WACODE
	Usage of **Passing information** in the **Tool unit definition information** section	USESET-PASSINGINFO
	Specification of the range of characters that cannot be used in unit names specified with JP1/AJS3 - Definition Assistant	RESTRICT-CHAR-RANGE
Settings for remote execution of commands	Retry interval for remote execution of commands	RETRYINTERVAL
	Retry count for remote execution of commands	RETRYCOUNT

3. Installation and Setup

(1) Settings for the general execution environment

USERCHECKLEVEL=*User-authentication-level*

> Specifies the user authentication level of a JP1 user name and password in decimal notation.
>
> Specifiable values are 0, 1, and 2.
>
> 0
>
>> User authentication entry items (user name and password) are not displayed in the Import of unit definition and Export of unit definition dialog boxes.
>
> 1
>
>> User authentication entry items (user name and password) are displayed in the Import of unit definition and Export of unit definition dialog boxes.
>>
>> When you start the definition information management template from JP1/AJS3 - View, the definition information management template is started by the inherited JP1 JP1/AJS3 - View user.
>
> 2
>
>> User authentication entry items (user name and password) are displayed in the Import of unit definition and Export of unit definition dialog boxes.
>>
>> When you start the definition information management template from JP1/AJS3 - View, the Import of unit definition dialog box appears. You will need to enter a JP1 user name and password.
>
> The default is 0.
>
> Note that when the definition information management template is automatically imported or exported, this parameter value is invalid.

AJS-USERNAME=*JP1-user-name*

> Specifies the JP1 user name used importing or exporting the definition information with a string of 31 or fewer bytes.
>
> If you specify a value other than 0 for USERCHECKLEVEL and then specify this parameter, the JP1 user name specified for this parameter is displayed in **User name** of the Import of unit definition and Export of unit definition dialog boxes. However, when you start the definition information management template from JP1/AJS3 - View, the JP1 user name inherited from JP1/AJS3 - View is displayed rather than the JP1 user name specified for this parameter.
>
> If this parameter is omitted, **User name** of the Import of unit definition and Export of unit definition dialog boxes are blank.

AJS-SET-SERVERHOST={Y|N}

> Specifies whether to set the manager host name as the server host name to be used for user mapping.
>
> Y
>
>> The manager host name is used as the server host name. Specify this option when using the same authentication method that is used in JP1/AJS3 - View.
>
> N
>
>> The local host name (the name of the host on which JP1/AJS3 - Definition Assistant has been installed) is used as the server host name.
>>
>> If you specify N for SERVERHOST-USE-REVERSELOOKUP, this parameter becomes invalid.
>
> The default is Y.
>
> This parameter is enabled only when a value other than 0 is specified for USERCHECKLEVEL.

MANAGER-HOST=*manager-host-name*

> Specifies the name of the manager host to which connection is to take place, within 255 bytes. You can also specify an IP address.
>
> By default, no manager host name is specified.

`AJS2-SERVICE=`*scheduler-service-name*

Specifies the scheduler service name of the JP1/AJS3 - Manager that contains the unit to be imported or exported, within 30 bytes.

By default, this is `AJSROOT1`.

`BACKUP-FOLDER=`*name-of-the-folder-for-execution-results-files*

Specifies the name of the folder in which execution result files are to be saved when definition information is imported or exported, within 184 bytes.

The default settings are as follows:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\backup`

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

When specifying a folder other than the default, make sure that the folder has been created.

`TMP-INPUT-FOLDER=`*name-of-the-folder-for-temporary-files-for-import*

Specifies the name of the folder for saving temporary files for import, within 223 bytes. These temporary files are text files that contain definition information extracted from the manager host when definition information was imported, and are used to edit displayed information.

The default settings are as follows:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\input`

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

When specifying a folder other than the default, first make sure that the folder has been created.

`TMP-OUTPUT-FOLDER=`*name-of-the-folder-for-temporary-files-for-export*

Specifies the name of the folder for saving temporary files for import, within 223 bytes. This folder contains files such as unit definition files created when definition information is exported.

The default settings are as follows:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\output`

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

When specifying a folder other than the default, first make sure that the folder has been created.

`TMP-ERRLOG-FOLDER=`*name-of-the-folder-for-error-information*

Specifies the name of the folder for error information, within 220 bytes.

The default settings are as follows:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\errlog`

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

When specifying a folder other than the default, first make sure that the folder has been created.

`PREFERIPV6ADDRESSES={FALSE|TRUE}`

Specifies whether to give higher priority to IPv6 addresses for the resolution of host names when importing or exporting the definition information.

`FALSE`

IPv4 addresses are specified for name resolution.

If only an IPv6 address can be obtained when this option is specified, the IPv6 address is used.

`TRUE`

IPv6 addresses are specified for name resolution.

If only an IPv4 address can be obtained when this option is specified, the IPv4 address is used.

The default is `FALSE`.

`DIALOG-AJS-USERNAME-ABLE={Y|N}`

Specifies whether to activate the user name on the Import of unit definition dialog box and Export of unit definition dialog box.

`Y`

Activates the user name.

`N`

Deactivates the user name.

The default is `Y`.

`DIALOG-MANAGER-HOST-ABLE={Y|N}`

Specifies whether to activate the host name on the Import of unit definition dialog box and Export of unit definition dialog box.

`Y`

Activates the host name.

`N`

Deactivates the host name.

The default is `Y`.

`DIALOG-AJS2-SERVICE-ABLE={Y|N}`

Specifies whether to activate the service name on the Import of unit definition dialog box and Export of unit definition dialog box.

`Y`

Activates the service name.

`N`

Deactivates the service name.

The default is `Y`.

`DIALOG-MANAGER-CHARCODE-ABLE={Y|N}`

Specifies whether to activate the character code on the Import of unit definition dialog box and Export of unit definition dialog box.

`Y`

Activates the character code.

`N`

Deactivates the character code.

The default is `Y`.

`DIALOG-UNIT-NAME-ABLE={Y|N}`

Specifies whether to activate the unit name on the Import of unit definition dialog box and Export of unit definition dialog box.

`Y`

Activates the unit name.

`N`

Deactivates the unit name.

The default is `Y`.

`SSL-ENABLE={1|0}`

Specifies whether to use the encrypted communication function.

`1`

Enables the use of the encrypted communication function. When you specify this option, specify a value for the `CACERTIFICATEFILE` parameter.

`0`

Disables the use of the encrypted communication function.

The default is `0`.

`CACERTIFICATEFILE=`*root-certificate-file-path*

This parameter specifies the path to the root certificate file, within 255 bytes, when the encrypted communication function is used. If the `SSL-ENABLE` parameter is set to `1`, be sure to specify this parameter.

By default, the path to the root certificate file is not specified.

Note that the file path for the specified root certificate must not be enclosed in double quotation marks (this also applies to file paths that include spaces).

For example, to specify `"c:\Program files (x86)\..."` as the file path for storing a root certificate, specify `"CACERTIFICATEFILE=c:\Program files (x86)\..."`.

`SERVERHOST-USE-REVERSELOOKUP={Y|N}`

Specifies whether to resolve the server host name used for user mapping of the JP1 user by reverse lookup (converting an IP address to a host name) on a client machine when the user authentication function is used.

`Y`

The server host name is resolved by reverse lookup on a client machine.

To enable reverse lookup (converting an IP address to a host name) of the manager machine, the settings for reverse DNS server lookup or the settings in the `hosts` file are required.

`N`

When the connected JP1/AJS3 - Manager version is 11-50 or later, the server host name is not resolved by reverse lookup on a client machine. It is resolved on the manager machine.

When the connected JP1/AJS3 - Manager version is earlier than 11-50, the server host name is resolved by reverse lookup on a client machine.

The default is `Y`.

This parameter is enabled only when a value other than `0` is specified for `USERCHECKLEVEL`.

`FINISHING-REFERENCESTYLE={IV|A1|R1C1}`

Specifies the reference style applied to Excel files after the use of JP1/AJS3 - Definition Assistant.

`IV`

Specify this option when you want to keep the reference style applied to Excel files prior to the use of JP1/AJS3 - Definition Assistant.

`A1`

Specify this option when you want to set the reference style to A1 style.

`R1C1`

Specify this option when you want to set the reference style to R1C1 style.

The default is `IV`.

If you set this parameter, the reference style of Excel files is set to the specified style when you close all definition information management templates.

If, however, definition information management templates are running in a different Excel process[#], the setting of this parameter might not be applied because the reference style of Excel files is determined according to Excel specifications.

The method used to start an Excel file in a different Excel process varies with the Excel version. One way to do this is to use the `/x` option. For details about how to start an Excel file in a different Excel process, contact Microsoft Corporation.

Generally, Excel files open in the same Excel process (same instance) when Excel 2016 or later versions are used.

SSLPROTOCOL=_SSL-(TLS)-versions_

Specifies the SSL/TLS version in use. The version can be specified with the following values. When specifying multiple versions, separate each one with a comma (`,`).

`TLSv1.2`

The encrypted communication function communicates using TLSv1.2.

`TLSv1.3`

The encrypted communication function communicates using TLSv1.3.

The default is `TLSv1.2`.

This parameter is enabled when `SSL-ENABLE` is set to `1`.

When multiple versions are specified, communication protocols are enabled in the range from the oldest version to the latest version of the specified values. Communications are transmitted using the most recent protocol of the protocols within the specified range, and the protocols supported by JP1/AJS3 - Manager at the connection destination.

(2) Settings for limitations

`MAX-IMPORT-UNIT=`_maximum-number-of-units-that-can-be-imported_

Specifies the maximum number of units (rows) displayed in the definition information management template `xls` format when definition information is imported, in decimal notation.

Specify a value in the range 1-65,000.

The default is `5000`.

`MAX-EXPORT-UNIT=`_maximum-number-of-units-that-can-be-exported_

Specifies the maximum number of units (rows) displayed in the definition information management template in `xls` format when definition information is exported, in decimal notation.

Specify a value in the range 1-65,000.

The default is `5000`.

`XLSM-MAX-IMPORT-UNIT=`_maximum-number-of-units-that-can-be-imported_

Specifies the maximum number of units (rows) displayed in the definition information management template in `xlsm` format when definition information is imported, in decimal notation.

Specify a value in the range 1-1,048,556.

The default is `130000`.

`XLSM-MAX-EXPORT-UNIT=`_maximum-number-of-units-that-can-be-exported_

Specifies the maximum number of units (rows) displayed in the definition information management template in `xlsm` format when definition information is exported at the same time, in decimal notation.

Specify a value in the range 1-1,048,556.

The default is `130000`.

`MAX-BACKUP-FILENUM=`*maximum-number-of-execution-result-files*

> Specifies the maximum number of execution result files to be saved in the folder for execution result files as specified in the `BACKUP-FOLDER` parameter, in decimal notation.
>
> Specify a value in the range 1-1,000.
>
> The default is `100`.
>
> This value is the total of the values for the files with `xls` and `xlsm` format.
>
> When the maximum number of execution result files has been reached, import and export can no longer be performed. In this case, either move the execution result files to another folder, or erase them.

`MAX-ERRLOG-FILENUM=`*maximum-number-of-error-information-files*

> Specifies the maximum number of error information files to be saved in the folder for error information files as specified in the `TMP-ERRLOG-FOLDER` parameter, in decimal notation.
>
> Specify a value in the range 1-1,000.
>
> The default is `100`.
>
> When the maximum number of error information files is reached, the oldest file is deleted to make room for a new one.
>
> If you specify a value smaller than the number of existing error information files, error information files exceeding the maximum number are not deleted. When you specify this option, either specify a value larger than the number of existing error information files, or delete error information files.

SCHEDULELIMIT=*schedule-limit-of-JP1/AJS3*

> Specifies the schedule limit of JP1/AJS3, in decimal notation.
>
> Specify a value in the range 2036-2099.
>
> The default is `2099`.
>
> When performing a new installation of JP1/AJS3 - Definition Assistant, the default is `2043`.
>
> This parameter is the upper limit for the calendar year specified by the following definition items:
>
> - Open day and Close day
>
>   When the `:D` option is specified, the check item *Is the option correctly specified in the calendar definition information section to be modified?* is checked using the value specified for this parameter.
>
> - Valid Term
>
>   Performs a check with the specified value when entering values into cells. In addition, the check item *Is the Valid term specified according to the schedule limit?* is checked using the value specified for this parameter.
>
> For notes on this parameter, see *1.7.1 Notes on the environment* and *1.7.5 Notes on Installation*.

(3) Settings for the import function

`IMPORT-UNIT-NAME={N|`*complete-name-of-import-unit*`}`

> Specifies the complete name of the import unit for importing definition information, within 930 bytes. Wildcards such as `*` and `?` can be used for a unit name at the lowest level, but they cannot be used for the complete name of an upper unit. When this parameter is specified, you do not need to enter a unit name in the dialog box displayed when the **IMPORT** button is clicked. This is useful for specifying the same unit name each time.
>
> To leave the complete name of the import unit blank, specify `N`.
>
> The default is `N`.
>
> If you specify `CP` for the parameter `RESTRICT-CHAR-RANGE`, observe the following precautions:
>
> - If you include any of the following characters in the complete name of an import unit, you have to cast it with a backslash (\).
>
>   `" & ' * < > ? [ \ ] ^ ` { | } ~`

Note that an asterisk (*) or a question mark (?) used as a wildcard does not need to be cast.

AUTO-IMPORT={Y|N}

Specifies whether or not to automatically import definition information.

Y

Definition information is imported automatically when the definition information management template (master file) is opened. When you specify Y, you must also specify the complete name of the unit to be imported, in the IMPORT-UNIT-NAME parameter. If this name is not specified, automatic import will not be performed.

This parameter cannot be set to Y at the same time with AUTO-EXPORT=Y.

N

Definition information is not imported automatically when the definition information management template is opened.

The default is N.

If Y is specified for this parameter when the definition information management template is opened from JP1/AJS3 - View, automatic import is performed. When import is completed, the definition information management template is closed.

IMPORT-MANAGER-HOST=*manager-host-name*

Specifies the name of the manager host to connect to within 255 bytes if importing definition information. You can also specify an IP address.

The manager host name is not specified by default.

IMPORT-AJS2-SERVICE=*scheduler-service-name*

Specifies the scheduler service name, within 30 bytes, of the JP1/AJS3 - Manager that has a unit to be imported.

The scheduler service name is not specified by default.

IMPORT-PD-SORTUNITINF={Y|N}

Specifies whether to output, in ascending order of the unit name character code, the output order of **Previous** for the unit common definition information, when you import definition information.

Y

Outputs the output order of **Previous** in ascending order of the unit name character code.

N

Outputs the output order of **Previous** in unit creation order.

If JP1/AJS3 at the connection destination is version 10-50 or later, the unit names are output in accordance with the environment setting parameter AJSPRINTSORTUNITINF.

The default is N.

Also, if JP1/AJS3 at the connection destination is a version earlier than 10-50, do not specify Y for this parameter.

IMPORT-UNIT-NUM-CHECK={Y|N}

Specifies whether to preliminarily check the number of units to be imported during import of the definition information.

The preliminary check verifies that the number of units to be imported does not exceed the MAX-IMPORT-UNIT value[#] or XLSM-MAX-IMPORT-UNIT[#]. If the number of units exceeds that value, an error message is output, causing the processing to stop.

#

- For the definition information management template in xls format : MAX-IMPORT-UNIT

- For the definition information management template in xlsm format : XLSM-MAX-IMPORT-UNIT

Y

Specifies to perform the preliminary check.

N

Specifies not to perform the preliminary check.

The default is `N`.

`IMPORT-USEMEMORY=`*memory-usage-level*

Specifies whether to use the memory for outputting the values of the definition columns to cells when importing definition information, in decimal notation.

0

The memory is not used.

1

The memory is used.

Although more memory is used and the size of the execution results file will increase, the processing time is expected to be reduced.

The default is `0`.

If you change the value of the environment settings parameter, determine the value by using the amount of the memory on the machine and the formula to estimate the memory requirements in the document.

`IMPORT-TIME-IMPROVE={Y|N}`

Specify whether to use the functionality that reduces the number of internal commands that are executed when definition information is imported, thereby improving the processing time.

Y

The functionality is used.

If the version of JP1/AJS3 - Manager at the connection destination is 10-00 or later, this functionality reduces the number of times commands are executed.

Although more memory is used, the processing time is expected to be reduced.

If the version of JP1/AJS3 - Manager at the connection destination is earlier than 10-00, this functionality does not reduce the number of times commands are executed. Because of this, the processing time cannot be expected to decrease.

N

The functionality is not used.

The default is `Y`.

This environment settings parameter affects the import processing time and memory requirements. If you want to change the value of this parameter, refer to the formula for estimating the import processing time and memory requirements.

`IMPORT-OPCL-LATEST={Y|N}`

Specifies whether to display newer dates on the cells when, during import of definition information, the maximum number of days that can be defined in calendar information (open days and closed days specified on a per-day basis) is exceeded.

Y

Displays newer dates.

N

Displays older dates.

The default is `Y`.

(4) Settings for the export function

EXPORT-UNIT-NAME={N|*complete-name-of-the-export-unit*}

Specifies the complete name of the export unit for exporting definition information (batch definition), within 930 bytes. You cannot use wildcards such as * and ?. When this parameter is specified, you do not need to enter a unit name for the export destination in the dialog box displayed when the **EXPORT** button is clicked. This is useful for specifying the same unit name each time.

To leave the complete name of the export unit blank, specify N.

The default is N.

If you specify CP for the parameter RESTRICT-CHAR-RANGE, observe the following precautions:

- If you include any of the following characters in the complete name of an export unit, you have to cast it with a backslash (\).

  " & ' * < > ? [\ ] ^ ` { | } ~

  Note that an asterisk (*) or a question mark (?) used as a wildcard does not need to be cast.

AUTO-EXPORT={Y|N}

Specifies whether or not to automatically export definition information.

Y

Definition information is exported automatically when the definition information management template is opened. When you specify Y, you must also specify the complete name of the unit to be exported, in the EXPORT-UNIT-NAME parameter. If this name is not specified, automatic export will not be performed.

This parameter cannot be set to Y at the same time with AUTO-IMPORT=Y.

N

Definition information is not exported automatically when the definition information management template is opened.

The default is N.

Note that export is still performed when this parameter is set to Y and an attempt is made to view an execution result file. When opening these files to check their contents and perform modifications, set this parameter to N.

Also, do not set this parameter to Y when opening the definition information management template from JP1/AJS3 - View, since the priority for automatic export will cause an error to occur.

EXPORT-MANAGER-HOST=*manager-host-name*

Specifies the name of the manager host to connect to within 255 bytes if exporting definition information. You can also specify an IP address.

The manager host name is not specified by default.

EXPORT-AJS2-SERVICE=*scheduler-service-name*

Specifies the scheduler service name, within 30 bytes, of the JP1/AJS3 - Manager that has a unit to be exported.

The scheduler service name is not specified by default.

BATCHEXPORT-USEMEMORY=*Memory loading level*

Specifies at what level the values of the definition columns should be loaded into memory when exporting definition information (using the batch definition function), in decimal notation.

0

The values of the definition columns are not loaded into memory.

1

The values of **Section**, **Unit name** in the unit definition information section, and **Upper unit name** in the **Unit definition information** section are loaded into memory, exporting definition information (batch definition).

Although more memory is used, the processing time is expected to be reduced.

By default, the value is set to `0` for the `xls` format file and `1` for the `xlsm` format file.

If you use this environment setting parameter, use the memory amount on the machine and the formula to estimate the memory requirements for documents, to determine the value. For details about estimating the memory requirements, see *C.2(1) Estimating memory usage*.

`EXPORT-CHECK-ITEMS={N|BASE|ALL|`*keyword-representing-check-item*`}`

Specifies a keyword representing the item to be checked during an error check performed upon export. For details about keywords representing check items, see *3.2.3 Keywords representing check items*. When multiple items are to be checked, separate the specified keywords with colons (`:`).

When no item is to be checked, specify `N`.

When the following items are to be checked, specify `BASE`.

- Are unit types specified?

- For the unit type, are the value specified for **Type** (**Normal** or **Recovery**) correct?

- Are the strings specified for **Unit name** and **Complete name of upper unit** invalid?

- Are the items for R/3 job definition information specified correctly?

- Are the levels for unit definition information for batch targets correctly specified?

- Are options correctly specified in the calendar definition information section to be modified?

- Is the definition information of the HTTP connection job specified correctly?

When all items are to be checked, specify `ALL`.

The default is `BASE`.

(5) Settings for the error-checking function

`CHECK-ITEM={N|`*definition-item-keyword*`}`

Specifies definition item keywords for required input items, to check whether or not the items have been entered in definition information created using the definition information management template. For details about definition item keywords, see *3.2.2 List of definition item keywords*. When checking multiple items, separate each definition item keyword with a colon (`:`). Specify `N` to have no check performed.

Note that the only items that can be checked are those that can be specified for the unit type. Check cannot be performed for items that cannot be specified for the unit type.

The default is `N`.

`ERROR-CHECK-ITEMS={N|ALL|`*keyword-representing-check-item*`}`

Specifies a keyword representing the item to be checked by the error-checking function provided by the definition information management template. For details about keywords representing check items, see *3.2.3 Keywords representing check items*. When multiple items are to be checked, separate the specified keywords with colons (`:`).

When no item is to be checked, specify `N`.

When all items are to be checked, specify `ALL`.

The default is `ALL`.

(6) Settings for the JP1/AJS3 - View startup function

`VIEW-LOGINFILE=`*name-of-the-JP1/AJS3 - View-logon-information-file*

Specifies the name of the JP1/AJS3 - View logon information file within 255 bytes, to prevent the logon window from being displayed when JP1/AJS3 - Definition Assistant is started from JP1/AJS3 - View. The logon information file

contains the user name and password used for logon. For details about the logon information file, such as its format, see *3.1.7(1) Starting JP1/AJS3 - View from the definition information management template*.

When this parameter is omitted, the logon window will be displayed when an attempt is made to start JP1/AJS3 - View.

JP1/AJS3 - View cannot be started from JP1/AJS3 - Definition Assistant in the following cases:

- The file whose name is specified in this parameter does not exist.

- JP1/AJS3 - View is not installed on the same machine.

`VIEW-DIALOG-AJS-USERNAME-ABLE={Y|N}`

Specifies whether to activate the user name on the Import of unit definition dialog box when you started the definition information management template from JP1/AJS - View.

Y

Activates the user name.

N

Deactivates the user name.

The default is `Y`.

This parameter is valid when `2` is specified for the user authentication level of `USERCHECKLEVEL`.

(7) Settings for display customization function

`SCREEN-UPDATE={Y|N}`

Specifies whether or not to display the processing status when import or export is performed in the definition information management template.

Y

Displays the processing status when import or export is performed. When `Y` is specified, processing can take as much as 2 or 3 times as long as when `N` is specified. Specify `Y` when the ability to monitor the processing status is more important than the processing performance itself.

N

Does not display the processing status when import or export is performed. Specify `N` when processing performance is more important.

The default is `N`.

`BUTTON-HIDDEN={N|IMPORT:EXPORT:CHECK:VIEW}`

Specifies the name of the operation buttons to be hidden on the definition information management template. When specifying multiple buttons, separate each one with a colon (`:`). To display all of the buttons, specify `N`.

Note that the corresponding function keys for any hidden operation buttons are also disabled.

N

Displays all of the operation buttons: **IMPORT**, **EXPORT**, **CHECK**, and **VIEW**.

IMPORT

Hides the **IMPORT** button.

EXPORT

Hides the **EXPORT** button.

CHECK

Hides the **CHECK** button.

```
VIEW
```

> Hides the **VIEW** button.

The default is `N`.

```
AUTO-DIALOG-HIDDEN={Y|N}
```

Specifies whether or not the following dialog boxes are to be hidden when automatic import or automatic export is performed for the definition information management template.

- The export deletion confirmation dialog box (KAVZ0407-Q)
- The execution results report dialog boxes (KAVZ0302-I or KAVZ0402-I)

```
Y
```

> The dialog boxes listed above are not displayed when automatic import or automatic export is performed for the definition information management template.

```
N
```

> The dialog boxes listed above are displayed when automatic import or automatic export is performed for the definition information management template.

The default is `Y`.

```
COLUMN-HIDDEN={N|definition-item-keyword}
```

Specifies whether or not to hide definition items in the definition information management template. Specify the keywords of the definition items you wish to hide. The columns of the specified definition item keywords will not be displayed when the definition information management template is opened. When hiding multiple definition items, separate each definition item keyword with a colon (`:`). For details about definition item keywords, see *3.2.2 List of definition item keywords*.

To specify no definition item keywords, specify `N`.

Sections, unit names, complete names of upper unit and unit types cannot be hidden.

Note that Excel functionality can be used to re-display items specified to be hidden.

The default is `N`.

```
TYPE-COMMON-DEF={Y|N}
```

Specifies whether or not to display the unit common definition information section in the definition information management template.

```
Y
```

> Displays the unit common definition information section.

```
N
```

> Does not display the unit common definition information section.

The default is `Y`.

```
TYPE-COMMON-ATR={Y|N}
```

Specifies whether or not to display the unit common attribute information section in the definition information management template.

```
Y
```

> Displays the unit common attribute information section.

```
N
```

> Does not display the unit common attribute information section.

The default is `Y`.

```
TYPE-MANAGER-UNIT={Y|N}
```

Specifies whether or not to display the manager unit definition information section in the definition information management template.

```
Y
```

Displays the manager unit definition information section.

```
N
```

Does not display the manager unit definition information section.

The default is `N`.

```
TYPE-JOBGROUP={Y|N}
```

Specifies whether or not to display the job group definition information section in the definition information management template.

```
Y
```

Displays the job group definition information section.

```
N
```

Does not display the job group definition information section.

The default is `Y`.

```
TYPE-CALENDAR={Y|N}
```

Specifies whether or not to display the calendar definition information section in the definition information management template.

```
Y
```

Displays the calendar definition information section.

```
N
```

Does not display the calendar definition information section.

The default is `Y`.

```
TYPE-JOBNET={Y|N}
```

Specifies whether or not to display the jobnet definition information section in the definition information management template.

```
Y
```

Displays the jobnet definition information section.

```
N
```

Does not display the jobnet definition information section.

The default is `Y`.

```
TYPE-NETCONNECT={Y|N}
```

Specifies whether or not to display the jobnet connector definition information section in the definition information management template.

```
Y
```

Displays the jobnet connector definition information section.

```
N
```

Does not display the jobnet connector definition information section.

The default is `Y`.

TYPE-CONDITION={Y|N}

Specifies whether or not to display the start condition definition information section in the definition information management template.

Y

Displays the start condition definition information section.

N

Does not display the start condition definition information section.

The default is Y.

TYPE-SCHEDULE={Y|N}

Specifies whether or not to display the schedule definition information section in the definition information management template.

Y

Displays the schedule definition information section.

N

Does not display the schedule definition information section.

The default is Y.

TYPE-STANDARD-JOB={Y|N}

Specifies whether or not to display the basic job (PC jobs, UNIX jobs, and QUEUE jobs) definition information section in the definition information management template.

Y

Displays the basic job definition information section.

N

Does not display the basic job definition information section.

The default is Y.

TYPE-JUDGMENT-JOB={Y|N}

Specifies whether or not to display the judgment job definition information section in the definition information management template.

Y

Displays the judgment job definition information section.

N

Does not display the judgment job definition information section.

The default is Y.

TYPE-EVENT-JOB={Y|N}

Specifies whether or not to display the event job definition information section in the definition information management template.

Y

Displays the event job definition information section.

N

Does not display the event job definition information section.

The default is Y.

```
TYPE-ACTION-JOB={Y|N}
```

Specifies whether or not to display the action job definition information section in the definition information management template.

```
Y
```

Displays the action job definition information section.

```
N
```

Does not display the action job definition information section.

The default is `Y`.

```
TYPE-JOB-COMMON={Y|N}
```

Specifies whether or not to display the job common attribute information section in the definition information management template.

```
Y
```

Displays the job common attribute information section.

```
N
```

Does not display the job common attribute information section.

The default is `Y`.

```
TYPE-PREWAITCONDITION={Y|N}
```

Specifies whether or not to display the preceding wait condition definition information section in the definition information management template.

```
Y
```

Displays the preceding wait condition definition information section.

```
N
```

Does not display the preceding wait condition definition information section.

The default is `Y`.

```
TYPE-TOOL-UNIT={Y|N}
```

Specifies whether or not to display the tool unit definition information section in the definition information management template.

```
Y
```

Displays the tool unit definition information section.

```
N
```

Does not display the tool unit definition information section.

The default is `Y`.

```
TYPE-FLEXIBLE-JOB={Y|N}
```

Specifies whether or not to display the **Flexible job definition information** section in the definition information management template.

```
Y
```

Displays the **Flexible job definition information** section.

```
N
```

Does not display the **Flexible job definition information** section.

The default is `Y`.

`TYPE-HTTP-CONNECTION-JOB={Y|N}`

Specifies whether or not to display the **Http connection job definition information** section in the definition information management template.

`Y`

Displays the **Http connection job definition information** section.

`N`

Does not display the **Http connection job definition information** section.

The default is `Y`.

`TYPE-OTHERS={Y|N}`

Specifies whether or not to display the other definition information section in the definition information management template.

`Y`

Displays the other definition information section.

`N`

Does not display the other definition information section.

Default is `Y`.

`CUSTOM-JOB={N|JP1AMR3}`

Specifies whether or not to display the custom job definition information section in the definition information management template. The displayed items apply only to custom PC jobs, and do not apply to custom UNIX jobs. The custom job type that can be specified for display is `JP1AMR3`. To hide custom job definition information, specify `N`.

When you specify a custom job type, custom job-specific headers are created automatically, making definition information easier to read during import, and easier to input during export.

This parameter is valid only for when the master file of the definition information management template is opened, and is disregarded for opening execution result files and definition information management templates copied under another name. Since title item is fixed when the definition information management template is saved, when you open an execution result file, or a definition information management template copied under another name, the title item from the time the file was saved is displayed.

The default is `N`.

`TYPE-LASTUPDATE={Y|N}`

Specifies whether or not to display the last updated time information section in the definition information management template.

`Y`

Displays the last updated time information section.

`N`

Does not display the last updated time information section.

The default is `Y`.

`CURSOR-MOVE-MSGCELL={N|ERROR|ALL}`

Specifies whether to move the cursor to the message output cell and display the message if a message is output to the last column of the definition information management template when importing or exporting is performed.

`N`

Does not move the cursor to the message output cell when importing or exporting is performed even if a message has been output to the last column of the definition information management template.

ERROR

> Moves the cursor to the message output cell if a message was output to the last column of the definition information management template when importing or exporting is executed.

> When exporting is performed, the system moves the cursor only when the processing count does not match the number specified in the KAVZ0402-I message dialog box.

ALL

> Moves the cursor to the message output cell if a message was output to the last column of the definition information management template when importing or exporting is executed.

> When exporting is performed, the system moves the cursor regardless of whether the processing count matches the number specified in the KAVZ0402-I message dialog box.

The default is ERROR.

(8) Settings for input restriction

SELECT-EXECHOST={N|*Exec-agent*}

> Specifies the candidates for restricting the values than can be specified for **Exec-agent**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (,). For example, to limit the values that can be specified for the Exec-agent to hostA, hostB, and hostC, specify SELECT-EXECHOST=hostA,hostB,hostC. When this parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify N. Note that it is impossible to specify only the Exec-agent N.

> If you want to specify the Exec-agent N, specify it together with another Exec-agent.

> The default is N.

> When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter ERROR-CHECK-ITEMS or the parameter EXPORT-CHECK-ITEMS, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

SELECT-OWNER={N|*owner-name*}

> Specifies the candidates for restricting the values than can be specified for **Owner**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (,). For example, to limit the values that can be specified for the owner name to ownerA, ownerB, and ownerC, specify SELECT-OWNER=ownerA,ownerB,ownerC. When this parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify N. Note that it is impossible to specify only the owner name N.

> If you want to specify the owner name N, specify it together with another owner name.

> The default is N.

> When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter ERROR-CHECK-ITEMS or the parameter EXPORT-CHECK-ITEMS, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

SELECT-JP1GROUP={N|*JP1-resource-group-name*}

> Specifies the candidates for restricting the values than can be specified for **JP1 resource group**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (,). For example, to limit the values that can be specified for the group name to groupA, groupB, and groupC, specify SELECT-JP1GROUP=groupA,groupB,groupC. When this

parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify `N`. Note that it is impossible to specify only the JP1 resource group name `N`.

If you want to specify the JP1 resource group name `N`, specify it together with another JP1 resource group name.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`SELECT-EXECUSER={N|`*user-name*`}`

Specifies the candidates for restricting the values than can be specified for **User name**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (`,`). For example, to limit the values that can be specified for the user name to `userA`, `userB`, and `userC`, specify `SELECT-EXECUSER=userA,userB,userC`. When this parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify `N`. Note that it is impossible to specify only the user name `N`.

If you want to specify the user name `N`, specify it together with another user name.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`SELECT-JOBNETCALENDAR={N|`*job-group-name*`}`

Specifies the candidates for restricting the values than can be specified for **Job group name**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (`,`). For example, to limit the values that can be specified for the group name to `/groupA/X`, `/groupB/Y`, and `/groupC/Z`, specify `SELECT-JOBNETCALENDAR=/groupA/X,/groupB/Y,/groupC/Z`. When this parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify `N`.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`SELECT-ENVFILE={N|`*environment-file*`}`

Specifies the candidates for restricting the values than can be specified for **Environment file**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (`,`). For example, to limit the values that can be specified for the file name to `/tmp/env1`, `/tmp/env2`, and `/tmp/env3`, specify `SELECT-ENVFILE=/tmp/env1,/tmp/env2,/tmp/env3`. When this parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify `N`.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or

the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`SELECT-NICE={N|`*priority*`}`

Specifies the candidates for restricting the values than can be specified for **Priority**, in the definition information management template. When specifying multiple candidates, you can use a maximum of 255 bytes. Separate each one with a comma (`,`). For example, to limit the values that can be specified for the priority to `1`, `3`, and `5`, specify `SELECT-NICE=1,3,5`. When this parameter is specified, the input candidates are displayed in a list box, and values other than those displayed cannot be entered. To leave the input unrestricted, specify `N`.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`LIMIT-UNITNAME={N|`*limitation*`}`

Specifies the maximum length for **Unit name** when definition information is exported, in decimal notation. This value can be from 1 to 30, in bytes. To specify the same maximum length as that for JP1/AJS, specify `N`. Any specified value greater than that for JP1/AJS (30) will be treated as 30.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`LIMIT-COMMENT={N|`*limitation*`}`

Specifies the maximum length for **Comment** when definition information is exported, in decimal notation. This value can be from 1 to 80, in bytes. To specify the same maximum length as that for JP1/AJS, specify `N`. Any specified value greater than that for JP1/AJS (80) will be treated as 80.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`LIMIT-SAVEGEN={N|`*maximum-number-of-logs-to-keep*`}`

Specifies the maximum for **No. logs to keep** when definition information is exported, in decimal notation. This value can be from 1 to 999. To specify the same maximum number as that for JP1/AJS, specify `N`. Any specified value greater than that for JP1/AJS (999) will be treated as 999.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`LIMIT-ABCODE={N|`*maximum-threshold-for-abnormal-termination*`}`

Specifies the maximum for **Abnormal** when definition information is exported, in decimal notation. This value can be from 1 to 2,147,483,647. To specify the same maximum number as that for JP1/AJS, specify `N`. Any specified value greater than that for JP1/AJS (2,147,483,647) will be treated as 2,147,483,647.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`LIMIT-WACODE={N|`*maximum-threshold-for-warning-termination*`}`

Specifies the maximum for **Warning** when definition information is exported, in decimal notation. This value can be from 1 to 2,147,483,647. To specify the same maximum number as that for JP1/AJS, specify `N`. Any specified value greater than that for JP1/AJS (2,147,483,647) will be treated as 2,147,483,647.

The default is `N`.

When a value is entered in the target cell, a check is performed to verify if the entered value corresponds to one of the specified candidates. If you specify candidates, and then for either the parameter `ERROR-CHECK-ITEMS` or the parameter `EXPORT-CHECK-ITEMS`, enable the function that performs a check based on the input restriction settings, the input restriction settings become one of the items to be checked either by the error-checking function or during an error check performed upon export.

`USESET-PASSINGINFO={VIEW|COM}`

Specifies the usage of **Passing information** in the **Tool unit definition information** section.

`VIEW`

Specifies the usage of **Passing information** in the **Tool unit definition information** section.

When you specify this option, you do not need to specify the fixed value needed for the execution file name and environment variable when you define a passing information setting job in the unit definition file.

`COM`

Specify this option to set the same definition for the passing information of a passing information setting job as that in the unit definition file.

When you specify this option, you need to specify the fixed value needed for the execution file name and environment variable when you define a passing information setting job in the unit definition file.

The default is `VIEW`.

For details about how to define a passing information setting job for each case, see *4.3.1(5) Defining passing information setting jobs*.

RESTRICT-CHAR-RANGE={ST│CP}

Specifies the range of characters that cannot be used in unit names specified with JP1/AJS3 - Definition Assistant.

`ST`

If you use any of the following characters in unit names, an error occurs (except when these characters are used as wildcards):

`" & ' * < > ? [ \ ] ^ ` { | } ~ ( )`

`CP`

If you use any of the following characters in unit names, an error occurs:

`( )`

The default is `ST`.

If you specify `CP` for this parameter, observe the following precaution:

- If you specify any of the following characters in the **Unit name** field in either the Import of unit definition or Export of unit definition dialog box, you have to cast it with a backslash (\):

  `" & ' * < > ? [ \ ] ^ ` { | } ~`

  Note that an asterisk (`*`) or a question mark (`?`) used as a wildcard does not need to be cast.

(9) Settings for remote execution of commands

RETRYINTERVAL=*retry-interval*

Specifies, in decimal notation, the interval (seconds) at which retries are performed when an attempt to acquire connection destination information fails during remote execution of a command. This value can be from 0 to 10, in seconds.

The default is `1`.

RETRYCOUNT=*retry-count*

Specifies, in decimal notation, the number of retries that are performed when an attempt to acquire connection destination information fails during remote execution of a command. This value can be from 0 to 100.

The default is `3`.

3.2.2 List of definition item keywords

The table below lists the definition item keywords used for specifying definition items for the following environment settings parameters:

- `COLUMN-HIDDEN`

- `CHECK-ITEM`

Table 3–6: List of definition item keywords

Type	Definition item	Keyword
Unit definition information	Custom type	CTY
	Position: Rows[#1]	VL
	Position: Columns[#1]	HL
	Size: Rows	VS
	Size: Columns	HS
Unit common definition information	Comment	CM
	Previous	PD
	Relation type[#1]	PDT
	Target host	RH
	Control execution order[#2]	NL
	Jobnet connector name[#2]	NN
	Control method of execution order[#2]	NM
	Connection range	CE
	Connection host	CH

Type	Definition item	Keyword
Unit common definition information	Connection service	CS
Unit common attribute information	Hold	HA
	Type	UT
	Owner	OW
	JP1 resource group	GR
Manager unit definition information	Host to reference	MH
	Unit to reference	MU
Job group definition information	Base day	SD
	Treat as	MD
	Base time	ST
	Job group type	GTY
Calendar definition information	Standard week: Sun	W0
	Standard week: Mon	W1
	Standard week: Tue	W2
	Standard week: Wed	W3
	Standard week: Thu	W4
	Standard week: Fri	W5
	Standard week: Sat	W6
	Open day	OP
	Closed day	CL
Jobnet definition information	Concurrent exec.[#2]	MP
	No. logs to keep[#2]	RG
	Target manager	EM
	Priority	NI
	Time-out period[#2]	CD
	Schedule option[#2]	MS
	Required exec. time	FD
Jobnet connector definition information	Jobnet name of the connection destination	NR
Start Condition	Start condition	CO
Schedule definition information	Depends on upper-level jobnet	DE
	Valid term	ED
	Job group name	JC
	Exclusive jobnet	EJ
	Rule number to link	LN
	Start day: Type	STP

Type	Definition item	Keyword
Schedule definition information	Start day: Year/Month	`SYM`
	Start day: Day	`STD`
	Start time	`EXT`
	Processing cycle	`CYC`
	Substitute schedule of closed day job	`SH`
	Max. shiftable days	`HD`
	Schedule by days from start	`CF1`
	Max. shiftable days	`CF2`
	Monitor delay: Start delay	`SY`
	Monitor delay: End delay	`EY`
	Start condition: Times	`WC`
	Start condition: Period	`WT`
Basic job definition information	Command statement	`TE`
	Execution file name	`SC`
	Parameters	`PM`
	Environment variables	`ENV`
	Environment file	`EV`
	Working path	`WKP`
	Standard input	`SI`
	Standard output: File name	`SO`
	Standard output: Append	`SOA`
	Standard error: File name	`SE`
	Standard error: Append	`SEA`
	Host name	`QM`
	Queue name	`QU`
	Job name	`REQ`
	Priority	`PR`
	End judgment: Rule	`JD`
	End judgment: Warning	`WTH`
	End judgment: Abnormal	`TH`
	End judgment: File name	`JDF`
	Abnormally ended retry	`AB`
	Return code: Lower limit (< or = Value)	`RS`
	Return code: Upper limit (> or = Value)	`RE`
	Maximum retry times	`RC`

Type	Definition item	Keyword
Basic job definition information	Retry interval	RI
	User name	UN
Judgment job definition information	Condition	JGJ
	Judgment value: Retrun code	JGC
	Judgment value: Return code (Lower limit)	EL
	Judgment value: Variable (number) (Lower limit)	JS
	Judgment value: Judgement Condition (Lower limit)	LP
	Judgment value: Return code (Upper limit)	EH
	Judgment value: Variable (number) (Upper limit)	JG
	Judgment value: Judgement Condition (Upper limit)	UP
	Judgment value: Variable (char.)	JT
	Judgment value: Variable (number)	JL
	Variable	JV
	File name	JGF
Event job definition information	Waiting time	TW
	Expire right after starting	ETN
	Monitoring file	FF
	Monitoring options: Options	FC
	Monitoring options: Details (Create)	FO
	Monitoring interval	FI
	Reception event ID	EIW
	Event issue source host	EHW
	Reception event message	EMW
	Status after close	ETS
	Definition parameters	CPRM
Action job definition information	Send event ID	EIS
	Event destination host	EHS
	Send event message	EMS
	Send event level	ESS
	Check event arrivals	SRT
	Check interval	SPL
	Check count	SRC
	Platform	PF
Job common attribute information	Executed by	EU

Type	Definition item		Keyword
Job common attribute information	Time period		ET
	Required exec. time		FJ
	Exec. service		JTY
	Transfer file1: File to transfer		TS1
	Transfer file1: Destination file name		TD1
	Transfer file1: Auto-del		TOP1
	Transfer file2: File to transfer		TS2
	Transfer file2: Destination file name		TD2
	Transfer file2: Auto-del		TOP2
	Transfer file3: File to transfer		TS3
	Transfer file3: Destination file name		TD3
	Transfer file3: Auto-del		TOP3
	Transfer file4: File to transfer		TS4
	Transfer file4: Destination file name		TD4
	Transfer file4: Auto-del		TOP4
Preceding wait condition definition information	Preceding wait target unit		EN
	Preceding wait method		MM
	Preceding wait method nosch action		NMG
	When Unmonitored + Ended		UM
	Abnormal end for an execution generation		GA
Tool Unit definition information	Passing information	Input regular expression	DA_PIIN
		Output macro variable	DA_PIOUT
Flexible job definition information	Destination / Broadcast Agent		DA
	Broadcast Execution		FG
	Relay agent		EX
Http connection job definition information	Conn. configuration file name		HTCFL
	Request type		HTKND
	Extended mode		HTEXM
	Trans. info. file name		HTRQF
	URL parameter		HTRQU
	Message body		HTRQM
	Status file name		HTSTF
	How to store received data		HTSPT
	Received header file name		HTRHF
	Received body file name		HTRBF

Type	Definition item	Keyword
Http connection job definition information	Return code specification	HTCDM
Other definition information	Other definition information	OTHERS

#1
>When you specify CHECK-ITEM, root jobnets are also checked.

#2
>When you specify CHECK-ITEM, nested jobnets are also checked.

3.2.3 Keywords representing check items

The table below describes keywords representing check items. Use these keywords to specify check items for the following environment settings parameters:

- EXPORT-CHECK-ITEMS

- ERROR-CHECK-ITEMS

Table 3–7: Keywords representing check items

Checked items	Keyword
Are unit types specified?	TY
For the unit type, are the value specified for **Type** (**Normal** or **Recovery**) correct?	UT
Are the strings specified for **Unit name** and **Complete name of upper unit** invalid?	ICU
Do the complete names of units specified in **Job group name** start with a slash (/)?	JC
Are the values set for the specified unit types invalid?	ITY
Are the required items specified?	RI
Do the specifications conform to the input restrictions?	IR
Are the items for R/3 job definition information specified correctly?	R3
Is the definition information of the passing information setting job specified correctly?	VAR
Is the option correctly specified in the calendar definition information section to be modified?	CC
Are the levels for unit definition information for batch targets correctly specified?	LB
Is the definition information of the HTTP connection job specified correctly?	HTTP
Is the **Valid term** specified according to the schedule limit?	ED

3.3 Changing the settings of the host running JP1/AJS3 - Definition Assistant

3.3.1 Notes on changing the host name or IP address

(1) Notes on changing the host name of the host running JP1/AJS3 - Definition Assistant

- Check the server host name mapped to the JP1 user for using JP1/AJS3 - Definition Assistant specified on JP1/Base on the manager host at the connection destination, and change the server host name as necessary.

  For details about setting the server host name, see *3.1.2 Setting up user information*.

(2) Notes on changing the IP address of the host running JP1/AJS3 - Definition Assistant

- If the manager host at the connection destination is using a function that restricts connections, check the connection permission configuration file, and change the values as necessary.

  For details about setting the connection permission configuration file, see the section describing settings to restrict connections to JP1/AJS3 in the manual *JP1/Automatic Job Management System 3 Configuration Guide*.

(3) Notes on changing the host name or IP address of the manager host at the JP1/AJS3 - Definition Assistant connection destination

- Check the `hosts` file for the host running JP1/AJS3 - Definition Assistant to verify whether a manager host is set for the connection destination, and change the value as necessary.

- When changing the host name of the manager host at the connection destination, check the server host name mapped to the JP1 user for using JP1/AJS3 - Definition Assistant specified on JP1/Base on the manager host at the connection destination, and change the server host name as necessary.

  For details about setting the server host name, see *3.1.2 Setting up user information*.

- Check the following environment settings parameters in the JP1/AJS3 - Definition Assistant environment settings file (`ajs2da.conf`), and change the values as necessary:

  - `MANAGER-HOST=`*manager-host-name*

  - `IMPORT-MANAGER-HOST=`*manager-host-name*

  - `EXPORT-MANAGER-HOST=`*manager-host-name*

- When changing the host name of the manager host at the connection destination, check the following environment settings parameters in the JP1/AJS3 - Definition Assistant environment settings file (`ajs2da.conf`), and change the values as necessary:

  - `SELECT-EXECHOST=`*Exec-agent*

- If the encrypted communication function is enabled in JP1/AJS3 - Definition Assistant, check the contents of the unencrypted communication host settings file, and change the values as necessary.

  For details about the unencrypted communication host settings file, see *3.1.5(2) Unencrypted communication host settings file*.

(4) Notes on changing the host name of the agent host

- Check the following environment settings parameters in the JP1/AJS3 - Definition Assistant environment settings file (`ajs2da.conf`), and change the values as necessary:

  - `SELECT-EXECHOST=`*Exec-agent*

3.3.2 Changing the host name of the host running JP1/AJS3 - Definition Assistant

To change the JP1/AJS3 - Definition Assistant host name:

1. Exit out of the JP1/AJS3 - Definition Assistant in use (close the Excel file).

2. Change the host name.

3. Perform the following if necessary:
   Check the server host name mapped to the JP1 user for using JP1/AJS3 - Definition Assistant specified on JP1/Base on the manager host at the connection destination, and change the server host name as necessary.

4. Start JP1/AJS3 - Definition Assistant (open the Excel file).

3.3.3 Changing the IP address of the host running JP1/AJS3 - Definition Assistant

There is no required procedure for changing the IP address.

3.4 Communicating on a WAN environment

When using JP1/AJS3 - Definition Assistant on a WAN environment, use a stable and secure communications environment.

A secure communications environment refers to the use of a VPN, for example.

An unstable connection may cause communications errors to occur. Use a communication line with stable line speeds.

The use of a network that charges based on the duration or volume of communications is not recommended.

4

Operation

This chapter explains how to operate JP1/AJS3 - Definition Assistant. You can use JP1/AJS3 - Definition Assistant to import and export definition information, as well as start JP1/AJS3 - View.

4.1 Using the definition information management template

This section explains how to use the definition information management template for importing and exporting definition information.

The definition information management template is an Excel file, allowing you to use Excel function to improve the efficiency of input and editing. For example, you can use the auto-fill function to enter data at once, and use the auto-filter function to narrow down the units displayed when you are editing them.

4.1.1 The window

The following is a sample screenshot of the definition information management template.

Figure 4–1: Sample screenshot of the definition information management template
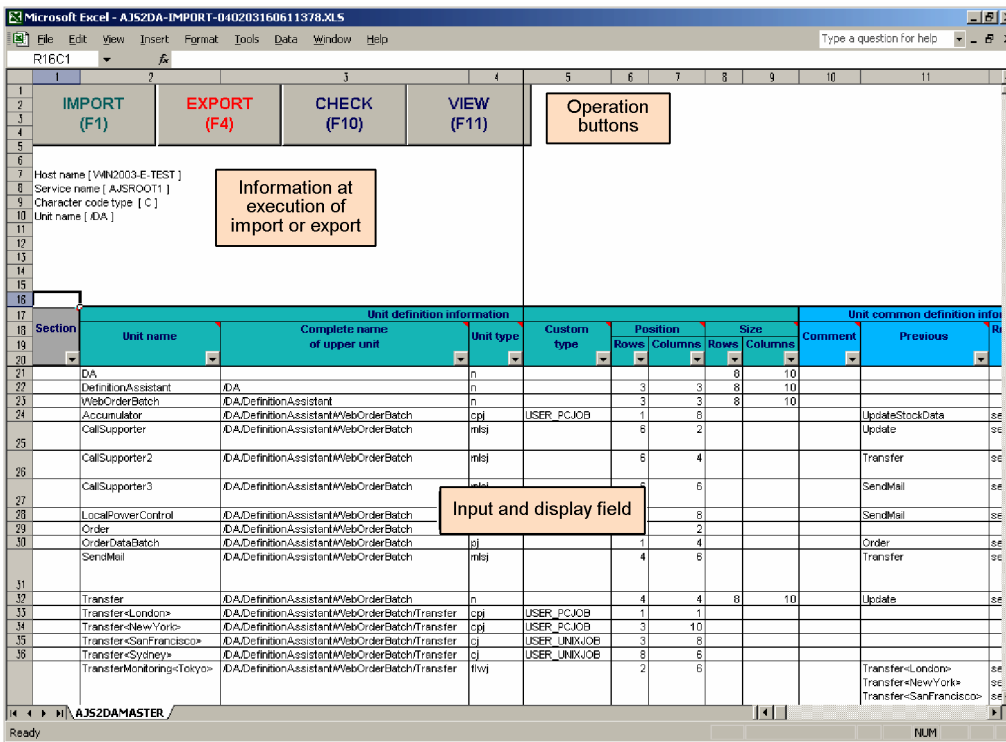
The operation buttons are displayed at the top of the window, with the definition information input and display fields below. For imported or exported execution result files, the host name, service name, character code type and unit name are displayed immediately below the operation buttons. Note that any messages output in the definition information management template are displayed above the input and display fields.

Notes

- Since the cell view method in the definition information management template uses the R1C1 format, column numbers are displayed in numbers, not letters.

- The default zoom in the definition information management template is 75%. You can zoom in further if the characters are too small to be easily seen or the characters in the line are not displayed properly.

- The default page setup for the definition information management template is 1 page wide by 50 pages tall. Adjust this setup as necessary when printing the definition information management template.

(1) Operation buttons

The following 4 types of operation buttons exist. Note that the **VIEW** button is only displayed for execution result files.

The **IMPORT** button

Click this button to load definition information on the manager host into the definition information management template. This can also be accomplished by pressing **F1**.

The **EXPORT** button

Click this button to apply definition information, as input into the definition information management template, to the manager host. This can also be accomplished by pressing **F4**.

The **CHECK** button

Click this button to check the contents entered into the definition information management template. This can also be accomplished by pressing **F10**. For details about the items checked when the **CHECK** button is clicked, see *2.3 The error-checking function*.

The **VIEW** button

Click this button to display JP1/AJS3 - View. Either the JP1/AJS3 - View window or the Jobnet Editor window will be displayed, depending on the type of unit selected. This can also be accomplished by pressing **F11**.

(2) The input and display field for definition information

The field for input and display is displayed in the lower part of the window. When import is performed, definition information is output into these fields. Enter definition information into these fields to perform export. The input rule that conforms to the corresponding item is already set for each cell.

When you mouse over the cell of an item title, an explanation of that item is displayed. Use these explanations as a reference when inputting or checking definition information. Note that these explanations will not appear for custom jobs. For details about each definition item, see *5. Definition Items*.

The Excel auto-filter function is set for the item titles, allowing you to narrow down the display to only those units for which a certain value is specified.

When you perform import or export, a message might be output in the last column (**Error message** information section) of the definition information. If a message is output, the color of the **Section** cell changes.

- Red : The type of the output message is an error (E).

- Pink : The type of the output message is a warning (W).

- Yellow : The type of the output message is information (I).

(3) Function keys

When the definition information management template is opened, each function key, from **F1** to **F12**, is allocated to each function for JP1/AJS3 - Definition Assistant. As a result, you cannot use the original Excel function key allocations. The following table lists the functions allocated to each function key in JP1/AJS3 - Definition Assistant.

Table 4–1: Function key allocation

Function key	Function
F1	Performs import.
F2	Marks the selected cell for modification of the definition information.[#]

Function key	Function
F3	Clears the marking of the selected cell.#
F4	Performs export.
F5	Enters **Batch** for the **Section** of all rows input.#
F6	Enters **Individual** for the **Section** of all rows input.#
F7	Enters **Change** for the **Section** of all rows input.#
F8	Enters **Delete** for the **Section** of all rows input.#
F9	Clears the contents defined for the **Section** of all rows input.#
F10	Checks the input definition information.
F11	Opens the JP1/AJS3- View window.
F12	No functions

\#

When the displayed unit definition information is narrowed down using the auto-filter function, processing will be performed for the displayed rows.

4.2 Importing definition information

This section explains the procedures for taking unit information defined on the manager host and loading into the definition information management template for JP1/AJS3 - Definition Assistant.

To perform import:

1. From the **Start** menu of Windows, select **All Programs**, **JP1_Automatic Job Management System 3 - Definition Assistant**, and then **Import definition information**.[#1]
   The master file for the definition information management template opens.

   Import is performed from either the master file of the definition information management template[#2], or a copy of the master file saved under another name. Import cannot be performed from the execution result file.

   #1
   You can also open the definition information management template directly by double-clicking the master file, or from JP1/AJS3 - View.

   #2
   -In the 32-bit version of JP1/AJS3 - Definition Assistant:
   installation-folder-of-JP1/AJS3 - Definition-Assistant\bin\AJS2DAMASTER.XLS
   -In the 64-bit version of JP1/AJS3 - Definition Assistant:
   installation-folder-of-JP1/AJS3 - Definition-Assistant\bin\AJS2DAMASTER.XLSM

2. Click the **IMPORT** button.
   The Import of unit definition dialog box is displayed. If the JP1 user name, the name of the manager host to be connected, the name of the scheduler service, and the unit name to be imported have been set in the environment settings file, the values set will be displayed as the defaults.

   Note that according to the specifications of the machine that you are using, it might take a long time for the Import dialog box to appear, because the machine environment is checked after the IMPORT button is clicked.

   Figure 4–2: The Import of unit definition dialog box (When the user authentication function is not used)
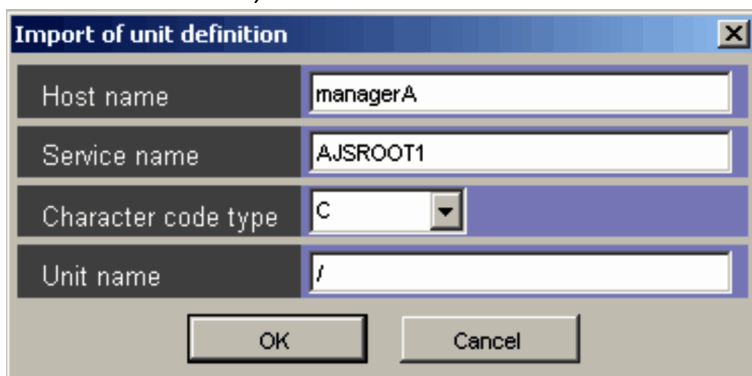
Figure 4–3: The Import of unit definition dialog box (When the user authentication function is used)

3. Enter the information for the import target.

Enter the following items:

- **User name** (Only when the user authentication function is used)

  Specify the JP1 user name that will be used for import.

- **Password** (Only when the user authentication function is used)

  Specify the password of the JP1 user that will be used for import.

- **Host name**

  Enter the name of the manager host from which to perform import.

- **Service name**

  Enter the name of the scheduler service from which to import.

- **Character code type**

  This field displays a grayed out drop-down list with C selected, which indicates that the character code type of the connection target is assumed to be C.

- **Unit name**

  Enter the complete name of the unit not exceeding 930 bytes. Wildcards such as * and ? can be used for a unit name at the lowest level, but cannot be used for the complete name of an upper unit.

  The following are example unit names.

  /

   Imports the definition information of all units under the root job group.

  /GROUP

   Imports the definition information of all units under /GROUP.

  /GROUP/NET/*

   Imports all definition information for units under /GROUP/NET.

  /GROUP/NET/A*

   Imports definition information for units with unit names starting with A, under /GROUP/NET.

The input items in the Import of unit definition dialog box cannot be omitted.

4. Click the **OK** button.

Import processing starts.

5. Check the import results.

If import terminates normally, the KAVZ0302-I message dialog box is displayed. Click the **OK** button, and check the execution results, which are output to an execution result file. For details about the name of these files and the folder to which the files are output, see *A.2 Files created during import and export*. The information for any messages output to the definition information management template is displayed above the input and display fields. Act accordingly based on the displayed message ID.

Note that you can perform automatic import when the template is opened, by specifying the environment settings parameters ahead of time. For details about the environment settings parameters, see *3.2 Environment settings parameters*.

4.3 Exporting definition information

Enter information for jobnets and jobs into the definition information management template, and send it to the manager host for registration. There are four kinds of export operations: batch export, individual export, modification and deletion.

To perform export, first enter jobnet and job information in the definition information management template.

If defined units already exist, you can facilitate definition by importing the units' definition information, and adding any changes to the execution result file. If an import or export execution result file already exists, you can open it to add changes.

In addition to using existing execution result files, you can also enter unit definition information into a new definition information management template. In this case, copy the master file of the definition information management template[#], save it under another name, and open it to enter unit definition information. For details about how to create definition information, see *4.3.1 Creating unit definitions*. Note that export cannot be performed from the master file of the definition information management template. Always copy the file and save it under another name.

[#]

- In the 32-bit version of JP1/AJS3 - Definition Assistant:

  JP1/AJS3 - Definition-Assistant-installation-folder\bin\AJS2DAMASTER.XLS

- In the 64-bit version of JP1/AJS3 - Definition Assistant:

  JP1/AJS3 - Definition-Assistant-installation-folder\bin\AJS2DAMASTER.XLSM

When you finished entering and editing definition information, click the **EXPORT** button to send the definition information to the manager host.

When export is performed with multiple functions specified, processing is performed in the following order: batch, individual, change, and delete. When you use the batch definition function for export, the export is not completed even if just one error occurs. When you use the individual definition function, modification function, and deletion function for export, the operation continues even if an error occurs. Note that when both batch definition and individual definition are used, the operation of the individual definition function continues even if an error occurs in the batch definition function.

When export is performed with multiple functions, the unit name specified in the Export of unit definition dialog box is valid for all units whose section is specified as **Batch**. The export destination of units whose section is specified as **Individual**, **Change**, **Delete** is determined by **Unit name** and **Complete name of upper unit** in the **Unit definition information** section.

Once export has been performed, you can facilitate management of the updated information by importing the latest definition information and saving it to an execution result file.

4.3.1 Creating unit definitions

This subsection explains how to create units for jobnets and jobs when performing export by entering unit definition information into the management template.

Define unit (job groups, jobnets, and jobs) information in the definition information management template, with one unit per line, starting with the upper unit. When you define the units below first, an error may occur during export.

When defining multiple units, make sure there are no empty lines between them.

The items to be input when defining units in the definition information management template are as follows:

1. Unit name

   Enter the name of the unit to be defined. You must specify a name because processing will not be performed for the lines that follow this one if it is omitted.

2. Complete name of upper unit

   Enter the complete name of the unit above that to be defined. The unit name and the complete name of the upper unit are necessary to identify the unit to be exported, so specify the complete name of the upper unit. You may leave this blank if the upper unit is a root jobnet.

3. Unit type

   Specify a string indicating the unit type, in 1 to 4 characters. For details about the strings to be specified, see the comments for the definition information management template, or *5.1 List of definition items*.

4. Other information

   Here you can define information corresponding with the unit type specified above. For details about definition items, see *5.1 List of definition items*. Depending on the unit type, there may be items that cannot be defined in JP1/AJS3 - Definition Assistant. For details about the items that cannot be defined, see *5.2 Support status of the definition items in JP1/AJS3 - View*.

(1) Defining relations

To define a relation, enter the name of the previous unit in the **Previous** field. In the **Relation type** field, enter `seq` for a normal relation or `con` for a conditional relation.

For units at the start of a jobnet, leave the **Previous** field blank. For jobs with multiple previous units, such as job `E` in the following example, specify multiple units in the **Previous** field, separating each with a line break (**Alt**+**Enter**).

Figure 4–4: Example 1: Relations
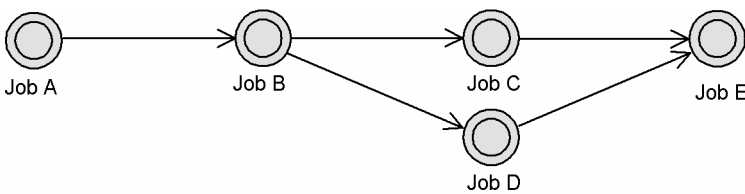
Table 4–2: Example 1: Relation definition

Section	Unit name	Complete name of upper unit	Unit type	Previous	Relation type
Batch	Jobnet		n		
Batch	Job A	/Jobnet	pj		
Batch	Job B	/Jobnet	pj	Job A	seq
Batch	Job C	/Jobnet	pj	Job B	seq
Batch	Job D	/Jobnet	pj	Job B	seq
Batch	Job E	/Jobnet	pj	Job C Job D	seq seq

(2) Specifying levels

You can also define together units that span multiple levels, such as nested jobnets.

The following is an example of a nested jobnet definition. When defining a nested jobnet, first define the jobnet, and then define the jobs inside the nested jobnet.

Figure 4–5: Example 2: A nested jobnet
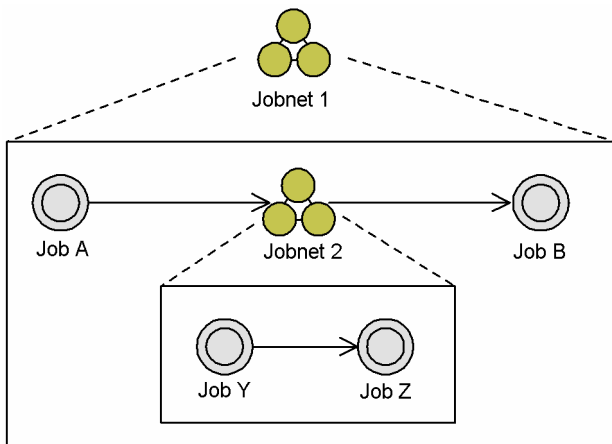
Table 4–3: Example 2: Nested jobnet definition

Section	Unit name	Complete name of upper unit	Unit type	Previous	Relation type
Batch	Jobnet 1		n		
Batch	Job A	/Jobnet 1	pj		
Batch	Job B	/Jobnet 1	pj	Jobnet 2	seq
Batch	Jobnet 2	/Jobnet 1	n	Job A	seq
Batch	Job Y	/Jobnet 1/Jobnet 2	pj		
Batch	Job Z	/Jobnet 1/Jobnet 2	pj	Job Y	seq

(3) Defining icon positions

With batch definitions, you can define the position information for the units, specifying in the template where to place each icon on the map.

Icons positions are displayed in units of unit icon numbers. The upper left corner of the map is set as row 1, column 1, and each icon is displayed at its position. The following figure is an example of such a grid, in which the job A icon is displayed in row 3, column 5.

With individual definitions, icons positions will be invalid even if defined. JP1/AJS3 is designed to automatically place icons in empty positions from the top left to the bottom right of the Jobnet Editor window in JP1/AJS3 - View.

Figure 4–6: Example 3: Icon positions
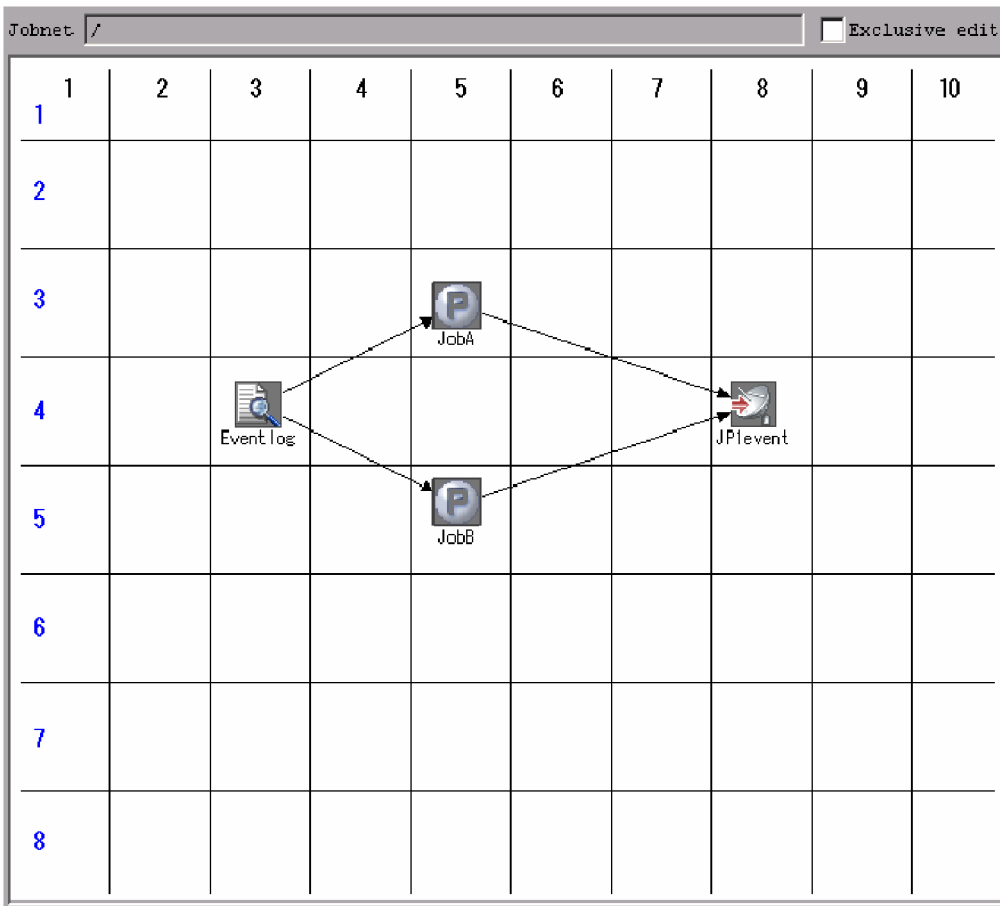
Table 4–4: Example 3: Definition of icon position information

Section	Unit name	Complete name of upper unit	Unit type	Position information		Size	
				Row	Column	Rows	Columns
Batch	Jobnet		n			8	10
Batch	JP1event	/Jobnet	evsj	4	8		
Batch	Eventlog	/Jobnet	ntwj	4	3		
Batch	JobA	/Jobnet	pj	3	5		
Batch	JobB	/Jobnet	pj	5	5		

(4) Defining schedule rules

To specify multiple jobnet schedule rules, use a line break (**Alt**+**Enter**) to separate each one within the cell. The rule on the first line of each cell becomes rule #1, and the rule on the second line becomes rule #2.

To remove the schedule definition information defined, make the line in the cell corresponding to the rule number consist of only alt + Enter. To remove all the schedule information,, the lines which consist of only alt + Enter are required as many as the rule numbers

Example 4: Multiple schedule rules

> Rule #1: Execution start day = 2009/7/15 (absolute day) Start time = 09:00
>
> Rule #2: Execution start day = 2009/7 Last open day Start time = 18:00

Table 4–5: Example 4: Definition of multiple schedule rules

| Section | Unit name | Unit type | Start day | | | Start time |
			Type	Start year/ month	Start day	
Batch	Jobnet 1	n	Absolute day	2009/7	15	09:00
			Open day	2009/7	Last	18:00

For details about how to define the schedule rule, see *4.5 Schedule rule in JP1/AJS3 - Definition Assistant*.

(5) Defining passing information setting jobs

When you define a passing information setting job, enter `cpj` for **Unit type** in the **Unit definition information** section, and `AJSVAR` for **Custom type**.

In addition, how to define passing information differs depending on the value of the `USESET-PASSINGINFO` environment settings parameter. The following describes the definition method.

(a) When the value of the USESET-PASSINGINFO environment settings parameter is VIEW

In this case, specify passing information for **Passing information** in the **Tool unit definition information** section.

In the **Input regular expression** cell, specify with a regular expression the condition for cutting out the value in the standard output file of the previous job to be set as the output macro variable.

In the **Output macro variable** cell, specify the macro variable name in the `?AJS2xxxxx?` format.

Table 4–6: Example 5: Defining passing information (When USESET-PASSINGINFO is VIEW)

Tool Unit definition information	
Passing information	
Input regular expression	Output macro variable
`DATE1(.*)` `DATE2(.*)`	`?AJS2FILEDATE1?` `?AJS2FILEDATE2?`

Supplement:

When the output macro variable includes a single-byte space, the space is removed for export and the definition created. Note that the output macro variable in the export execution results file still includes a single-byte space (the specified value has not changed). If you want to identify an output macro variable that uses a single-byte space, use the error-checking function.

The following are examples of the export result and error-checking result when the output macro variable includes a space.

Examples of definition in JP1/AJS3 - Definition Assistant

Example 1: Regular expression = `DATE1(.*)` Output macro variable = `?AJS2FILEDATE1?`

Example 2: Regular expression = Δ`DATE2(.*)` Output macro variable = Δ`?AJS2FILEDATE2?`

Example 3: Regular expression = Δ Output macro variable = `?AJS2FILEDATE3?`Δ

Example 4: Regular expression = (No value) Output macro variable = `?AJS2FILE`Δ`DATE4?`

Example 5: Regular expression = `DATE5(.*)` Output macro variable = `?AJS2`Δ`?`

Legend: Δ: Single-byte space

The following table shows the export result and error-checking result for each of the examples.

Table 4–7: Examples of the export result and error-checking result

#	Export result (Output result of the ajsprint command in JP1/AJS3)		Error-checking result
	Parameter (prm)	Environment variable (env)	
Example 1	Δ-oΔFILEDATE1	env="AJS2SO_RE_FILEDATE1= DATE1(.*)";	No input errors occur. (KAVZ0250-I)
Example 2	Δ-oΔFILEDATE2	env="AJS2SO_RE_FILEDATE2= ΔDATE2(.*)";	Output macro variable error (KAVZ0259-E) Error cause: Invalid character string
Example 3	Δ-oΔFILEDATE3	env="AJS2SO_RE_FILEDATE3= Δ";	Output macro variable error (KAVZ0259-E) Error cause: Invalid character string
Example 4	Δ-oΔFILEDATE4	env="AJS2SO_RE_FILEDATE4= ";	Regular expression error (KAVZ0259-E) Error cause: Invalid value used Output macro variable error (KAVZ0259-E) Error cause: Invalid character string
Example 5	Not applicable	Not applicable	Output macro variable error (KAVZ0259-E) Error cause: Invalid character string

Legend: Δ: Single-byte space

Although a space in the output macro variable is removed, the regular expression is defined without any change because a space can be specified for it.

(b) When the value of the USESET-PASSINGINFO environment settings parameter is COM

In this case, specify passing information in **Execution file name**, **Parameters**, and **Environment variables** in the **Basic job definition information** section.

In the **Execution file name** cell, specify the fixed value `$JP1AJS2_JPOEXEPATH$/jpqpinfoset`.

In the **Parameters** cell, specify the output variable in the format −o∆*output-variable1*∆...∆−o∆*output-variablen* (∆ is a single-byte space).

In the **Environment variables** cell, specify the fixed values `AJS2SO_GLOBMACFILE=?AJS2SO_GLOBMACFILE?` and `AJS2SO_STDOUTFILE=?AJS2SO_STDOUTFILE?` on the first and second lines. Also specify the regular expression and output variable in the format `AJS2SO_RE_`*output-variable=regular-expression* format on the third and subsequent lines.

Table 4–8: Example 6: Defining passing information (When USESET-PASSINGINFO is COM)

Basic job definition information		
Execution file name	Parameters	Environment variables
`$JP1AJS2_JPOEXEPATH$/ jpqpinfoset`	`-o FILEDATE1 -o FILEDATE2`	`AJS2SO_GLOBMACFILE=? AJS2SO_GLOBMACFILE? AJS2SO_STDOUTFILE=? AJS2SO_STDOUTFILE? AJS2SO_RE_FILEDATE1=DATE1(.*) AJS2SO_RE_FILEDATE2=DATE2(.*)`

(c) Notes

- Do not specify the following definition items because they are invalid in passing information setting jobs. If you specify these definition items, an error is detected when the error-checking function is executed.

  - **Exec-agent** in the **Unit common definition information** section

  - **Rule** in the **Basic job definition information** section

- We recommend that you run a check with the error-checking function before exporting the definition of passing information setting jobs.

- A change export cannot be performed for **Passing information** (**Regular expression** and **Output macro variable**) in the **Tool unit definition information** section.

- If, on the same line, the number of lines in the **Regular expression** cell and in the **Output macro variable** cell in the **Tool unit definition information** section is different, the information for the number of lines in the **Output macro variable** cell is processed.

(6) Definitions causing errors

Note that definitions such as those listed below will cause errors.

(a) When the Section column is specified as Batch or Individual:

- The upper unit is not defined in the row above in the batch definition.

- The units are not defined in order from the upper unit to the lower unit in the batch definition.

- A higher level is specified than the unit specified in the first row of a batch definition.

- The unit specified for **Previous** does not exist for unit definition with **Individual** specified.

- The specification contains an invalid combination of items.

- Definition information that must be specified concurrently is incomplete.

- The maximum unit level has been exceeded.

- The maximum number of definition units has been reached.

- An attempt is made to create a job group, planning group, or manager unit, within a jobnet.

- An attempt is made to create a unit within a job, manager unit, Hostlink jobnet, or start condition unit.

- Definition information includes information that cannot be specified for a root jobnet.

- An attempt is made to create more than 32 event jobs within a start condition.

- An invalid combination of related definitions is specified.

- An attempt is made to create a recovery attribute unit, or unit other than an event job, within a start condition.

- A remote jobnet is specified in the upper path of a Hostlink jobnet.

- When **Waiting-target units** in the **Waiting condition definition information** section is not specified, the other definition items in the **Waiting condition definition information** section are set.

- An attempt is made to create a flexible job, without specifying **Destination / Broadcast Agent** in the **Flexible job definition information** section.

- An attempt is made to create a flexible job, without specifying **Execution file name** in the **Basic job definition information** section.

- An attempt is made to create a flexible job when either of `mdf` or `exf` is specified for **End judgment - Rule** in the **Basic job definition information** section and any value is not specified for **End judgment - File name**.

- An attempt is made to create an HTTP connection job, without specifying any of the following items in the **Http connection job definition information** section:
  - **Conn. configuration file name**
  - **Status file name**
  - **Received header file name**
- An attempt is made to create an HTTP connection job when **Output header/body to another file** is specified or nothing is specified for **How to store received data** in the **Http connection job definition information** section, and **Received body file name** is not specified.
- An attempt was made to create the flexible job with a value greater than 10,240 byte set to the **Environment variables** of the Basic job definition information section.
- An attempt was made to create an SAP job in which the total number of characters configured in **Environment variables** of the SAP job definition information section is greater than 20,479 bytes.

(b) When the Section column is specified as Change:

- An attempt is made to specify `Yes` as **Retry on abnormal end** in the **Basic job definition information** section for a unit for which a value other than **Judgment by threshold** is specified as **End judgment** to mark the unit for change (marking is performed).
- None of the settings when there is no **Waiting-target units**, **Wait method**, or **No generations to wait for** are marked for change (marking is not performed) for a unit for which a waiting condition is not set.
- When **Waiting-target units** in the **Waiting condition definition information** section is set as `:X` so that it is deleted, the settings of the other definition items in the **Waiting condition definition information** section are not changed.

(c) When the Section column is specified as Delete:

- The units below the unit to delete are defined in the rows below.

(7) Definitions consisting of multiple items

A single definition may consist of multiple items during export. Keep this in mind when defining the following definition items.

(a) When the Section column is specified as Batch or Individual:

- Unit definition information: **Rows** and **Columns** for **Position**[#1]
- Unit definition information: **Rows** and **Columns** for **Size**[#1]
- Unit common definition information: **Previous**[#2] and **Relation type**
- Schedule definition information: **Type**[#2], **Year/Month**, and **Start day**
- Schedule definition information: **Schedule by days from start**[#2] and **Max. shiftable days**

  #1

  These are processed when all items are set.

  #2

  These are standard definition items for the number of definitions.

  The lines on which these items are defined are processed.

(b) When the Section column is specified as Change:

- When you change one part of the following pairs, the other part is also changed:

  - Unit common definition information: **Previous**[#] and **Relation type**

  - Schedule definition information: **Type**[#], **Year/Month**, and **Start day**

  - Schedule definition information: **Times** and **Period** for **Start condition**

  #

    These are standard definition items for the number of definitions.

    The lines on which these items are defined are processed.

- If you specify `ri`, `ro`, `vri`, or `vro` for **Condition** in the **Judgment job definition information** section and the definition items in the **Judgment job definition information** section are subject to change, the following definition items also become subject to change (even when they are not marked for change).

  - When `ri` or `ro` is specified for **Condition**:

    The contents of **Return code (Lower limit)**, **Judgment Condition (Lower limit)**, **Return code (Upper limit)**, and **Judgment Condition (Upper limit)** also become subject to change.

  - When `vri` or `vro` is specified for **Condition**:

    The contents of **Variable (number) (Lower limit)**, **Judgment Condition (Lower limit)**, **Variable (number) (Upper limit)**, and **Judgment Condition (Upper limit)** also become subject to change.

- When either of `mdf` or `exf` is specified for **End judgment** - **Rule** in the **Basic job definition information** section of the flexible job, the contents of **End judgment** - **File name** also become subject to change (even when it is not marked for change).

- When **Output header/body to another file** is specified or nothing is specified for **How to store received data** in the **Http connection job definition information** section, the contents of **Received body file name** also become subject to change (even when it is not marked for change).

4.3.2 Performing batch definition of definition information

This subsection explains how to batch export definition information, as set in the definition information management template, to the manager host.

To perform batch definition:

1. Open the definition information management template.

   Open the execution result file, or the master file copied under another name.

2. Enter the definition information.

   Enter and edit the necessary definition information.

   Click the **CHECK** button to check whether the input definition information satisfies the input conditions set by the user.

3. For **Section**, specify **Batch**.

   Select **Batch** from the list box, or input it directly. Press **F5** to specify `batch` for all of the rows defined.

   Input **Batch** for all rows to be exported.

4. Click the **EXPORT** button.

The Export of unit definition dialog box appears. If the JP1 user name, the name of the manager host to connect, the name of the scheduler service, and the name of the unit to be exported are specified in the environment settings file, the information set will appear as the defaults.

Note that for large numbers of units or depending on the specifications of the machine that you are using, it might take time for the Export dialog box to appear, because the machine environment or the definition is checked after the EXPORT button is clicked.

Figure 4–7: The Export of unit definition dialog box (When the user authentication function is not used)
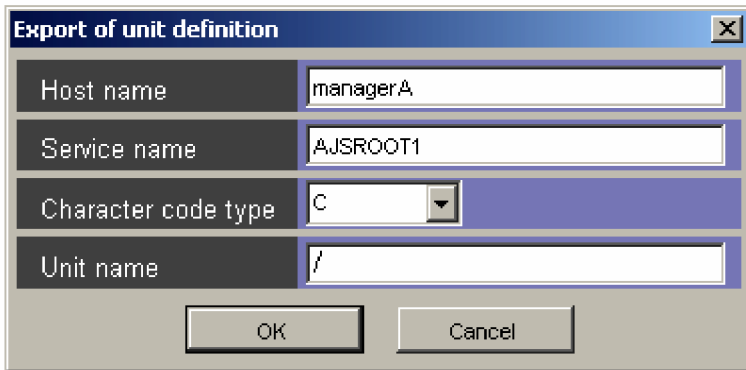
Figure 4–8: The Export of unit definition dialog box (When the user authentication function is used)

5. Enter information for the export destination.

Enter the following items:

- **User name** (Only when the user authentication function is used)

  Specify the JP1 user name that will be used for export.

- **Password** (Only when the user authentication function is used)

  Specify the password of the JP1 user that will be used for export.

- **Host name**

  Enter the name of the manager host for the export destination.

- **Service name**

  Enter the name of the scheduler service for the export destination.

- **Character code type**

  This field displays a grayed out drop-down list with C selected, which indicates that the character code type of the connection target is assumed to be C.

- **Unit name**

Enter the complete name of the existing upper unit whose definition information you want to export. The entered name must not exceed 930 bytes. Wildcards (such as `*` and `?`) cannot be used.

The following are example values for **Unit name**:

`/`

Exports definition information immediately below the root job group. For example, if you specify `JOB` as the **Unit name** cell in the **Unit definition information** section and specify `NET` as the **Complete name of upper unit** cell, `/NET/JOB` is defined.

`/GROUP`

Exports definition information immediately below `/GROUP`. For example, if you specify `JOB` as the **Unit name** cell of the **Unit definition information** section and specify `NET` as the **Complete name of upper unit** cell, `/GROUP/NET/JOB` is defined.

The export destination is determined from the value specified for the unit name and the complete name of the upper unit of the uppermost unit of the unit that was specified in a batch in the Excel file.

For example, if the following is defined in the Excel file and `JOBGROUP` has been entered for the unit name, the export destination will be `/JOBGROUP/GROUP/NET`.

sections	unit names	complete names of upper unit
Batch	`NET`	`/GROUP`
Batch	`JOBA`	`/GROUP/NET`

The input items for the Export of unit definition dialog box cannot be omitted.

6. Click the **OK** button.

   Export processing starts.

7. Check the export results.

   When export is completed, the KAVZ0402-I message dialog box will be displayed. Click the **OK** button, and check the execution results, which are output to an execution result file. For details about the name and output folder of this file, see *A.2 Files created during import and export*.

   If the definition information contains an error, the color of the cell of **Section** in the row containing the error changes color, and an error message is output at the end of that row (**Error message** information section). Act accordingly based on this error message. For details of actions taken against the JP1/AJS messages output, see *6.4.1 Export does not terminate normally*.

Note that you can perform automatic export when the template is opened, by specifying the environment settings parameters ahead of time. For details about the environment settings parameters, see *3.2 Environment settings parameters*.

As Unit name in the Export of unit definition dialog becomes the destination of the definition in the batch definition case, we recommend re-import the unit definition created by the export and them manage the definition information. If **Individual**, **Change**, or **Delete** is performed on the unit definition created by batch definition, use the import execution result file.

4.3.3 Performing individual definition of definition information

This subsection explains how to export information for only one particular unit within the information input in the definition information management template.

To perform individual definition:

1. Open the definition information management template.

   Open the execution result file, or the master file copied under another name.

2. Enter the definition information.

   Enter and edit the necessary definition information.

   Click the **CHECK** button to check whether the input definition information satisfies the input conditions.

3. For the **Section** column of the row on which the information is input, specify **Individual**.

   Select **Individual** from the list box, or input it directly. Press **F6** to specify **Individual** for all of the rows defined.

   Specify **Individual** for all rows of units for which you wish to apply definition information.

4. Click the **EXPORT** button.

   The Export of unit definition dialog box appears. If the JP1 user name, the name of the manager host to connect, and the name of the scheduler service are specified in the environment settings file, the information set will appear as the defaults.

   Note that for large numbers of units or depending on the specifications of the machine that you are using, it might take time for the Export dialog box to appear, because the machine environment or the definition is checked after the **EXPORT** button is clicked.

5. Enter information for the export destination.

   Enter the following items:

   - **User name** (Only when the user authentication function is used)

     Specify the JP1 user name that will be used for export.

   - **Password** (Only when the user authentication function is used)

     Specify the password of the JP1 user that will be used for export.

   - **Host name**

     Enter the name of the manager host for the export destination.

   - **Service name**

     Enter the name of the scheduler service for the export destination.

   - **Character code type**

     This field displays a grayed out drop-down list with C selected, which indicates that the character code type of the connection target is assumed to be C.

   - **Unit name**

     You do not need to input this item.

   The **Host name** and **Service name** input items for the Export of unit definition dialog box cannot be omitted.

6. Click the **OK** button.

   Export processing starts.

7. Check the export results.

   When export is completed, the KAVZ0402-I message dialog box will be displayed. Click the **OK** button, and check the execution results, which are output to an execution result file. For details about the name and output folder of this file, see *A.2 Files created during import and export*.

   If the definition information contains an error, the color of the cell of **Section** in the row containing the error changes color, and an error message is output at the end of that row (**Error message** information section). Act accordingly

based on this error message. For details of actions taken against the JP1/AJS messages output, see *6.4.1 Export does not terminate normally*.

4.3.4 Changing definition information

You can change particular items within the definition information for a unit.

To change definition items:

1. Open the definition information management template.

   Open the execution result file, or the master file copied under another name.

2. Enter the definition information you wish to change.

   Specify the unit name and the complete name of the upper unit for the unit you wish to change, and enter information for the items you wish to change. You can omit information for those items you do not wish to change. When you omit the unit name, the row for that unit is treated as blank, and any rows below it are not processed.

   Note that you cannot change the unit definition information section, the type in the unit common attributes information section, the job group type in the job group definition information section, the other definition information section, the custom job definition information section, and the last updated time section.

   Click the **CHECK** button to check whether the input definition information satisfies the input conditions set by the user.

3. Mark the cells of the items to be changed.

   Select the cells containing the information to be changed, and press **F2**. The color of these cells will change, and only the information for the cells marked will be updated. To return the cells to their original color, press **F3**.

4. For the **Section** column of the row on which the information is input, specify **Change**.

   Select **Change** from the list box, or input it directly. Press **F7** to specify **Change** for all of the rows defined.

   Specify **Change** for all rows of units for which you wish to change.

5. Click the **EXPORT** button.

   The Export of unit definition dialog box appears. If the JP1 user name, the name of the manager host to be connected, and the name of the scheduler service are specified in the environment settings file, the information set will appear as the defaults.

   Note that for large numbers of units or depending on the specifications of the machine that you are using, it might take time for the Export dialog box to appear, because the machine environment or the definition is checked after the **EXPORT** button is clicked.

6. Enter information for the export destination.

   Enter the following item:

   - **User name** (Only when the user authentication function is used)

     Specify the JP1 user name that will be used for export.

   - **Password** (Only when the user authentication function is used)

     Specify the password of the JP1 user that will be used for export.

   - **Host name**

     Enter the name of the manager host for the export destination.

   - **Service name**

     Enter the name of the scheduler service for the export destination.

- **Character code type**

  This field displays a grayed out drop-down list with C selected, which indicates that the character code type of the connection target is assumed to be C.

- **Unit name**

  You do not need to input this item.

The **Host name** and **Service name** input items for the Export of unit definition dialog box cannot be omitted.

7. Click the **OK** button.

   Export processing starts.

8. Check the export results.

   When export is completed, the KAVZ0402-I message dialog box will be displayed. Click the **OK** button, and check the execution results, which are output to an execution result file. For details about the name and output folder of this file, see *A.2 Files created during import and export*.

   If the definition information contains an error, the color of the cell of **Section** in the row containing the error changes color, and an error message is output at the end of that row (**Error message** information section). Act accordingly based on this error message. For details of actions taken against the JP1/AJS messages output, see *6.4.1 Export does not terminate normally*.

4.3.5 Deleting units

To delete a unit:

1. Open an execution result file from import or export.

2. For the **Section** column of the row you wish to delete, specify **Delete**.

   Select **Delete** from the list box, or input it directly. Press **F8** to specify **Delete** for all of the rows defined.

   You will need to specify the unit name and complete name of the upper unit for the row you wish to delete. You do not need to specify any other items.

   Specify **Delete** for all rows of units for which you wish to export.

3. Click the **EXPORT** button.

   A confirmation message dialog box appears. If you click the **OK** button, the Export of unit definition dialog box appears. If the JP1 user name, the name of the manager host to be connected, and the name of the scheduler service are specified in the environment settings file, the information set will appear as the defaults.

   Note that for large numbers of units or depending on the specifications of the machine that you are using, it might take time for the Export dialog box to appear, because the machine environment or the definition is checked after the **EXPORT** button is clicked.

4. Enter information for the export destination.

   Enter the following items:

   - **User name** (Only when the user authentication function is used)

     Specify the JP1 user name that will be used for export.

   - **Password** (Only when the user authentication function is used)

     Specify the password of the JP1 user that will be used for export.

   - **Host name**

     Enter the name of the manager host for the export destination.

- **Service name**

  Enter the name of the scheduler service for the export destination.

- **Character code type**

  This field displays a grayed out drop-down list with C selected, which indicates that the character code type of the connection target is assumed to be C.

- **Unit name**

  You do not need to input this item.

  The **Host name** and **Service name** input items for the Export of unit definition dialog box cannot be omitted.

5. Click the **OK** button.

   Export processing starts.

6. Check the export results.

   When export is completed, the KAVZ0402-I message dialog box will be displayed. Click the **OK** button, and check the execution results, which are output to an execution result file. For details about the name and output folder of this file, see *A.2 Files created during import and export*.

   If the definition information contains an error, the color of the cell of **Section** in the row containing the error changes color, and an error message is output at the end of that row (**Error message** information section). Act accordingly based on this error message. For details of actions taken against the JP1/AJS messages output, see *6.4.1 Export does not terminate normally*.

4.4 Starting JP1/AJS3 - View

With JP1/AJS3 - Definition Assistant, you can start JP1/AJS3 - View from execution result files from import or export. You can also open the definition information management template from JP1/AJS3 - View.

This section explains how to perform these operations.

4.4.1 Starting JP1/AJS3 - View from an execution result file

You can start JP1/AJS3 - View from execution result files from import or export.

To start JP1/AJS3 - View:

1. Open the execution result file.

2. Select the unit that you would like to display in JP1/AJS3 - View.
   Select the row or cell for the corresponding unit.

3. Click the **VIEW** button.

   When the logon information file is used:
   > The JP1/AJS3 - View window appears, with the specified unit selected.

   When the logon information file is not used:
   > The Login dialog box of JP1/AJS3 - View appears. When you log on to JP1/AJS3 - View from the Login dialog box, the JP1/AJS3 - View window appears, with the specified unit selected.

The window displayed when JP1/AJS3 - View is started depends on the type of unit selected, and is as follows:

Table 4–9: Window displayed for each unit type

Selected unit	Displayed window	Area selected for the unit
Job group	JP1/AJS3 - View	Tree area
Jobnet	Jobnet Editor	Tree area
Job	Jobnet Editor	Map area
Manager job group[#]	JP1/AJS3 - View	List area
Manager jobnet[#]	JP1/AJS3 - View	List area
Start condition	Jobnet Editor	Tree area
Hostlink jobnet	Jobnet Editor	Map area
Jobnet Connector	Jobnet Editor	Map area

Note
> The Jobnet Editor window cannot be run in exclusive-edit mode.

\#
> Refers to not the unit to be viewed for the manager job group or manager jobnet, but the corresponding unit itself.

JP1/AJS3 - View cannot be started in the following cases:

- When an attempt is made to run JP1/AJS3 - View from the master file of the definition information management template (including those files copied under another name)

• When multiple units are selected, or no units are selected.

4.4.2 Opening the definition information management template from JP1/AJS3 - View

To open the definition information management template from JP1/AJS3 - View, you need to register JP1/AJS3 - Definition Assistant as a startup tool in JP1/AJS3 - View. For details about how to perform this registration, see *3.1.7(2) Opening the definition information management template from JP1/AJS3 - View*, and the manual *JP1/Automatic Job Management System 3 Operator's Guide*.

To open the definition information management template from JP1/AJS3 - View:

1. In the JP1/AJS3 - View window or the Jobnet Editor window, select a unit.

2. Choose **Options**, and then **Set Tools**.
   The Set Tools dialog box appears.

3. Select JP1/AJS3 - Definition Assistant from **Tools list**, and click the **Start** button.

   • If you specify 0 or 1 for the USERCHECKLEVEL environment settings parameter:
     The selected unit is imported, and the definition information management template is opened.

   • If you specify 2 for the USERCHECKLEVEL environment settings parameter:
     The Import of unit definition dialog box appears. When you enter the user name and password and then click **OK**, the selected unit is imported, and the definition information management template is opened.

Note

If automatic import is set in the JP1/AJS3 - Definition Assistant environment settings file (ajs2da.conf), the definition information management template is closed after automatic import is performed. Also, when the definition information management template is opened from JP1/AJS3 - View, an error occurs if automatic export is set.

4.5 Schedule rule in JP1/AJS3 - Definition Assistant

This section describes how JP1/AJS3 - Definition Assistant deals with the schedule rules in JP1/AJS3.

4.5.1 Overview of the schedule rule

This subsection describes an overview of the schedule rule function in JP1/AJS3 and how to define a schedule rule in JP1/AJS3 - Definition Assistant.
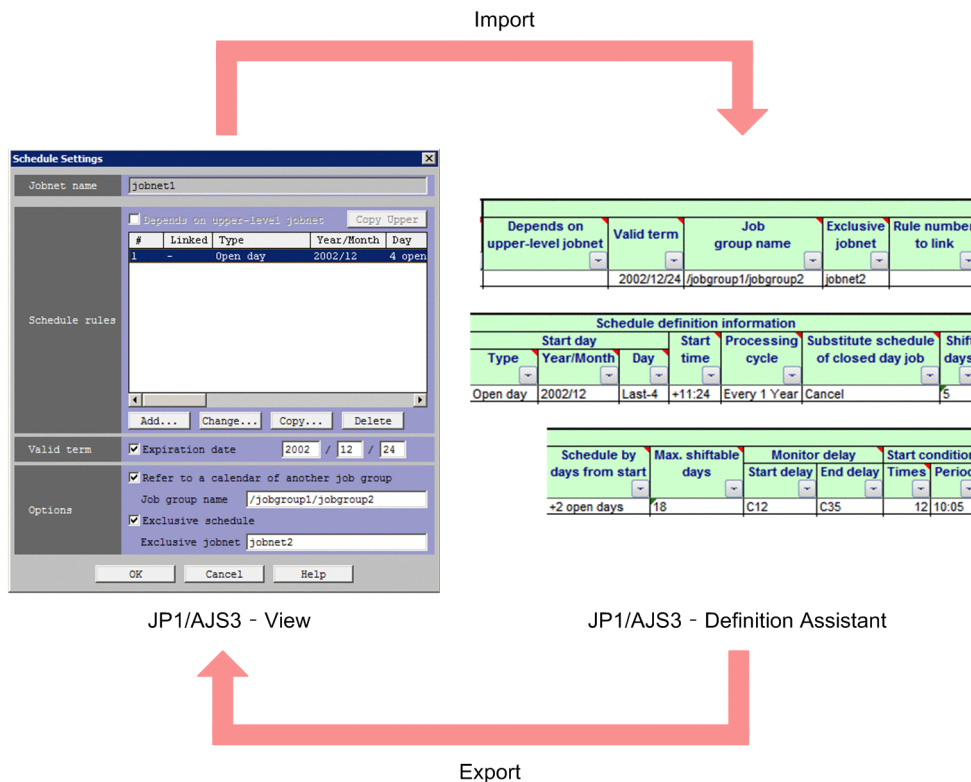
(1) Schedule information

In JP1/AJS3, you can define schedule information, such as execution start dates and times, execution intervals (processing cycles), and how to substitute the schedule, to calculate when a jobnet is scheduled to be executed.

You can configure schedule information in the Schedule Settings dialog box of JP1/AJS3 - View or in the **Schedule definition information** section of JP1/AJS3 - Definition Assistant, in the definition information management template. For details, see *5.1.1(11) Schedule definition information section*.

With JP1/AJS3 - Definition Assistant, you can import schedule information by using the import function and export it by using the export function.

Figure 4–9: Importing and exporting schedule information in JP1/AJS3 - Definition Assistant
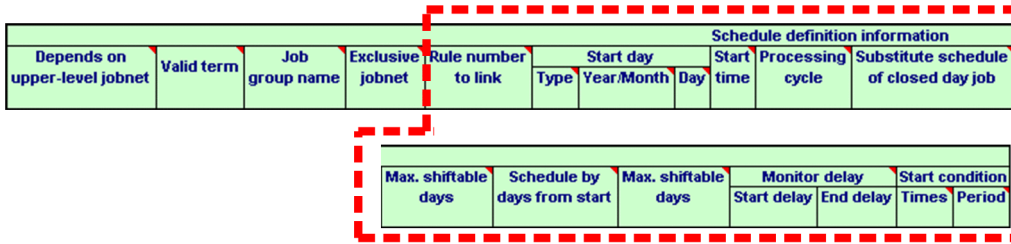

(2) Schedule rule

In JP1/AJS3, a rule is defined to calculate execution schedules, such as execution start dates and times, execution intervals (processing cycles), and how to substitute the schedule, and it is called a *schedule rule*.

To define a schedule rule in JP1/AJS3 - Definition Assistant, use the items from **Rule number to link** to **Start condition: Period** in the **Schedule definition information** section. When a schedule rule is defined in JP1/AJS3 - Definition Assistant, be sure to enter the items related to **Start day** in the **Schedule definition information** section because they are used as a basis. For the rest of the items, enter values as needed.

Figure 4–10: JP1/AJS3 - Definition Assistant items used in defining the schedule rule

Legend:

: Items used in the schedule rule

(3) Settings in the schedule rule

In JP1/AJS3 - Definition Assistant, **Start day** in the **Schedule definition information** section consists of **Type**, **Year/Month**, and **Day**.

Any schedule rule defined in JP1/AJS3 - Definition Assistant must have a set of values listed in the table below for **Start day** in the **Schedule definition information** section.

Note that for **Start day: Day** in the **Schedule definition information** section, its possible values vary depending on the value in **Start day: Type**.

When the schedule rule is defined by JP1/AJS3 - Definition Assistant, **Start day** in the **Schedule definition information** section will act as a basis. The following table shows the differences between **Start day** in JP1/AJS3 - View and JP1/AJS3 - Definition Assistant.

Table 4–10: Differences between the schedule rule (Type, Year/Month, and Day) in JP1/AJS3 - View and JP1/AJS3 - Definition Assistant

No.	Items in JP1/AJS3 - View			Items in JP1/AJS3 - Definition Assistant			Remarks
	Type	Year/Month[#]	Day	Type	Year/Month[#]	Day	
1	Registered day	--	--	Registered day	--	--	**Year/Month** and **Day** are not specified.
2	Absolute day	*yyyy*/*mm*	Specified by a date	Absolute day	*yyyy*/*mm*	*n*	The value *n* can be: (1) If the year and month are omitted • 1 to 31 (day of a month) (2) If only the year is omitted • February: 1 to 29 (day of the month) • The other months: Possible day of each month

No.	Items in JP1/AJS3 - View			Items in JP1/AJS3 - Definition Assistant			Remarks
	Type	Year/Month#	Day	Type	Year/Month#	Day	
2	Absolute day	*yyyy*/*mm*	Specified by a date	Absolute day	*yyyy*/*mm*	*n*	(3) If the year and month are specified • Possible day of the month for the specified year and month
3			Specified by the end of the month			Last	The last day
4						Last-*n*	Possible values for *n*: 0 to 30 (day of a month)
5			Specified by a day of the week			*X*	Possible values for *X*: Mon, Tue, Wed, Thu, Fri, Sat, or Sun
6						*n*th *X*	Possible values for *n*: Any one of 1 to 5 Possible values for *X*: Mon, Tue, Wed, Thu, Fri, Sat, or Sun
7						Last *X*	Possible values for *X*: Mon, Tue, Wed, Thu, Fri, Sat, or Sun
8	Relative day	*yyyy*/*mm*	Specified by a date	Relative day	*yyyy*/*mm*	*n*	Possible values for *n*: 1 to 35 (unit: day)
9			Specified by the end of the month			Last	The last day
10						Last-*n*	Possible values for *n*: 0 to 30 (unit: day)
11			Specified by a day of the week			*X*	Possible values for *X*: Mon, Tue, Wed, Thu, Fri, Sat, or Sun
12						*n*th *X*	Possible values for *n*: Any one of 1 to 5 Possible values for *X*: Mon, Tue, Wed, Thu, Fri, Sat, or Sun
13						Last *X*	Possible values for *X*: Mon, Tue, Wed, Thu, Fri, Sat, or Sun
14	Open day	*yyyy*/*mm*	Specified by a date	Open day	*yyyy*/*mm*	*n*th	Possible values for *n*: 1 to 35 (unit: day)
15			Specified by the end of the month			Last	The last open day
16						Last-*n*	Possible values for *n*: 0 to 34 (unit: day)
17	Closed day	*yyyy*/*mm*	Specified by a date	Closed day	*yyyy*/*mm*	*n*th	Possible values for *n*: 1 to 35 (unit: day)
18			Specified by the end			Last	The last closed day

No.	Items in JP1/AJS3 - View			Items in JP1/AJS3 - Definition Assistant			Remarks
	Type	Year/Month#	Day	Type	Year/Month#	Day	
19	Closed day	*yyyy/mm*	of the month	Closed day	*yyyy/mm*	Last-*n*	Possible values for *n*: 0 to 34 (unit: day)
20	--	--	--	Unspecified	--	--	Indicates that the schedule rule is not defined.

Legend:

-- : Indicates that a value cannot be specified.

\#

Define the execution start year and month of a jobnet in *yyyy/mm* format:

yyyy

Specify the calendar year containing the date when the jobnet is executed.

Possible values: 1994 to 2099

Default: The year containing the date when the jobnet was registered for execution

mm

Specify the month when the jobnet is executed.

Possible values: 1 to 12 (For example, 1 indicates January.)

Default: The month containing the day when the jobnet was registered for execution

yyyy is optional. If *yyyy* is omitted, *mm* is also optional. If both *yyyy* and *mm* are omitted, the year and month containing the day when the jobnet was registered for execution is assumed.

(4) When no schedule rule is defined

In JP1/AJS3, a situation where a schedule rule is not defined at all is referred to as that the schedule rule is *undefined*. In JP1/AJS3 - Definition Assistant, when the schedule rule is undefined, **Start day: Type** in the **Schedule definition information** section is set to Unspecified.

When a unit with no schedule rule defined in JP1/AJS3 - View is imported into JP1/AJS3 - Definition Assistant, its **Start day: Type** is set to Unspecified.

In addition, you can define a unit with no schedule rule specified by using JP1/AJS3 - Definition Assistant to set **Start day: Type** to Unspecified and exporting the unit.

Figure 4–11: When the schedule rule is undefined

(5) When multiple schedule rules are defined

To define multiple schedule rules in JP1/AJS3 - Definition Assistant, enter values within the cells from **Rule number to link** to **Start condition: Period** in the **Schedule definition information** section, separated by line breaks (**Alt**+**Enter**).

In this case, the first line in the cell defines the rule with rule number 1, and the second line, the rule with rule number 2.

A single jobnet can contain a maximum of 144 schedule rules.

Figure 4–12: When multiple schedule rules are defined

4.5.2 Method for defining the schedule rule

When you define a schedule rule in JP1/AJS3 - Definition Assistant, use the export function. For details about the export function, see *2.2 The export function*.

This subsection describes how to define the schedule rule.

(1) Defining the schedule rule

You can define schedule rules by using the batch definition function or individual definition function.

(a) Defining consecutive schedule rules

To define schedule rules in consecutive rule number order, enter the rules in the cells, without being separated by any blank line.

For example, to define schedule rules with rule number 1 through 3, enter values from the first line through the third line within the cells, as shown in the following figure.

Figure 4–13: Defining consecutive schedule rules

(1) Enter values in the first through the third lines of the cells.

(2) Use the batch or individual definition function to export the values.

(3) Schedule rules with rule number 1 through 3 are defined.

(b) Defining non-consecutive schedule rules

To define schedule rules in non-consecutive rule number order, clear the lines within the cells, so that the lines for schedule rules with rule numbers that are not defined are left blank.

For example, to define schedule rules with rule number 1 and 4, enter the values in the first and fourth lines within the cells and leave the second and third lines blank, as shown in the following figure.

Figure 4–14: Defining non-consecutive schedule rules

(1) Clear the second and third lines in the cells to leave the lines blank.

(2) Use the batch or individual definition function to export the values.

(3) Schedule rules with only rule number 1 and 4 are defined.

(c) Defining a schedule rule with default values

To define a schedule rule with default values, clear all the cells used for defining the schedule rule and leave them blank.

By doing so and then exporting the cells with the batch definition or individual definition function, the same definition as a new jobnet created by JP1/AJS3 - View can be created. In this case, a schedule rule with rule number 1 is defined.

Figure 4–15: Schedule rule with default values

(1) Clear all the cells used for the schedule rule to leave them blank.

(2) Use the batch or individual definition function to export the values.

(3) A schedule rule with rule number 1 is defined.

(d) Setting a schedule rule as undefined

To set a schedule rule as undefined, set **Type** under **Start day** in the **Schedule definition information** section to `Unspecified`, and leave the values in the cells for **Year/Month** and **Day** blank.

Figure 4–16: Schedule rule set as undefined

(1) Set the value for **Type** to `Unspecified` and leave the cells for **Year/Month** and **Day** blank.

(2) Use the batch or individual definition function to export the values.

(3) No schedule rule is defined.

(2) Modifying the schedule rule

This subsection describes how to modify the schedule rule by using **Change** export.

(a) When the export destination does not have a schedule rule

Using **Change** export to export a schedule rule into a jobnet with no schedule rule can add the schedule rule to the jobnet. To do this, mark **Type**, **Year/Month**, and **Day** under **Start day** in the **Schedule definition information** section for change and then perform **Change** export.

When the schedule rule is added:

Marking **Type**, **Year/Month**, and **Day** under **Start day** in the **Schedule definition information** section for change and performing **Change** export will add the schedule rule.

Figure 4–17: Change export in which the schedule rule is added

Use **Change** export with **Type**, **Year/Month**, and **Day** marked for change.

The schedule rule is added.
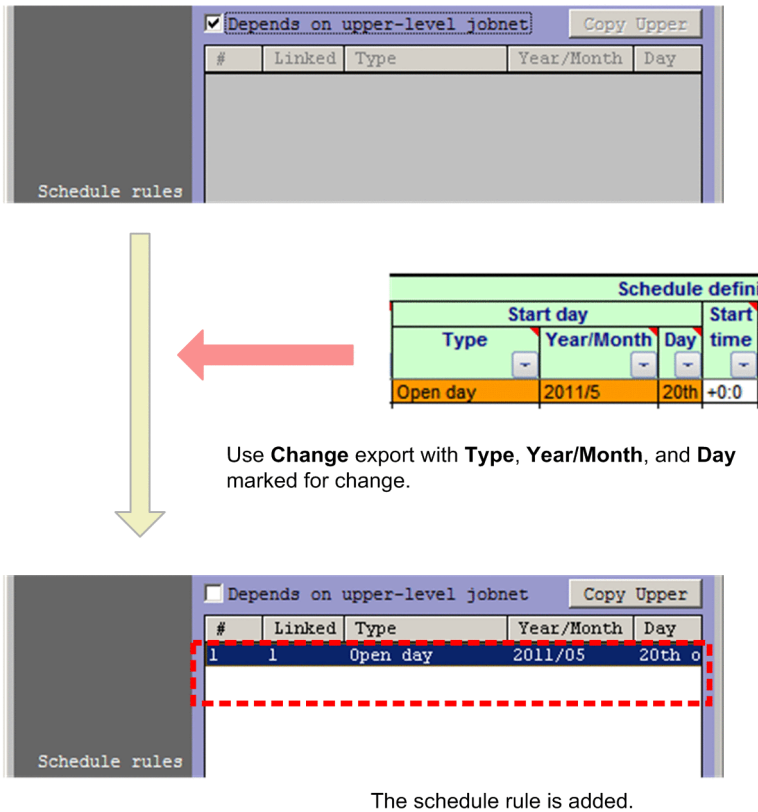
When the schedule rule is not added:

Performing **Change** export without marking **Type**, **Year/Month**, and **Day** under **Start day** in the **Schedule definition information** section for change will not add the schedule rule.

The following figure shows an example of performing **Change** export with only **Start time** marked for change.

Figure 4–18: Change export in which the schedule rule is not added (when Start time is marked for change)

Use **Change** export with **Start time** marked for change.

The schedule rule is not added.
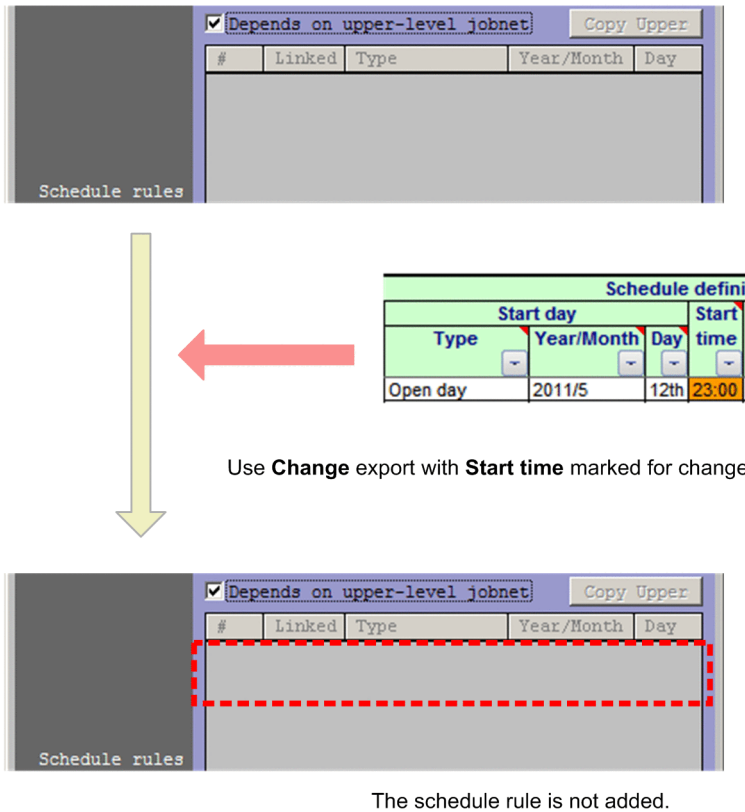
(b) When the export destination has a schedule rule

If **Change** export is used to export the schedule rule into a jobnet with a schedule rule, it is performed as described in the subsequent paragraphs, depending on the number of rules in each schedule rule.

When both schedule rules have the same number of rules:

If the number of schedule rules in the export destination is equal to the number of rules (the number of lines in the cells) in JP1/AJS3 - Definition Assistant, performing **Change** export will result in the change in the schedule rules stored in the export destination, applying the values in the cells.

In the example shown in the following figure, the value of the first line in each cell is applied to rule number 1, and the value of the second line, rule number 2.

Figure 4–19: Change export when the export destination has the same number of rules

The schedule rules have been modified.
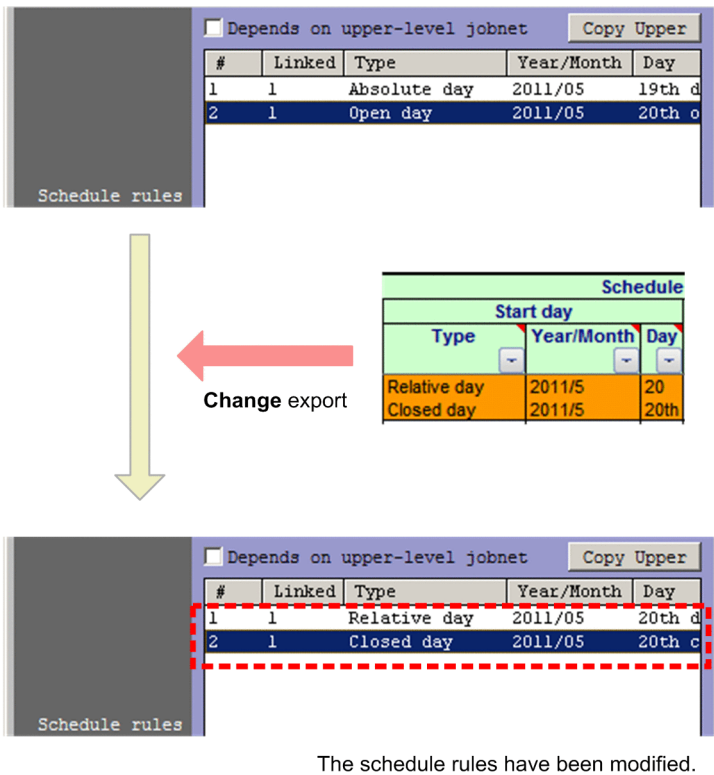
When the export destination has more rules:

If the number of schedule rules in the export destination is more than that in JP1/AJS3 - Definition Assistant, performing **Change** export will result in a change in the schedule rules stored in the export destination (the application of the values in the cells), and the rest of the rules that are not in the cells will not be modified.

In the example shown in the following figure, the jobnet in the export destination has two schedule rules, and JP1/AJS3 - Definition Assistant has one schedule rule line. In this case, the values of the first line are applied to rule number 1.

The values in rule number 2 are not modified because there is no value in the second line of JP1/AJS3 - Definition Assistant.

Figure 4–20: Change export when the export destination has more rules
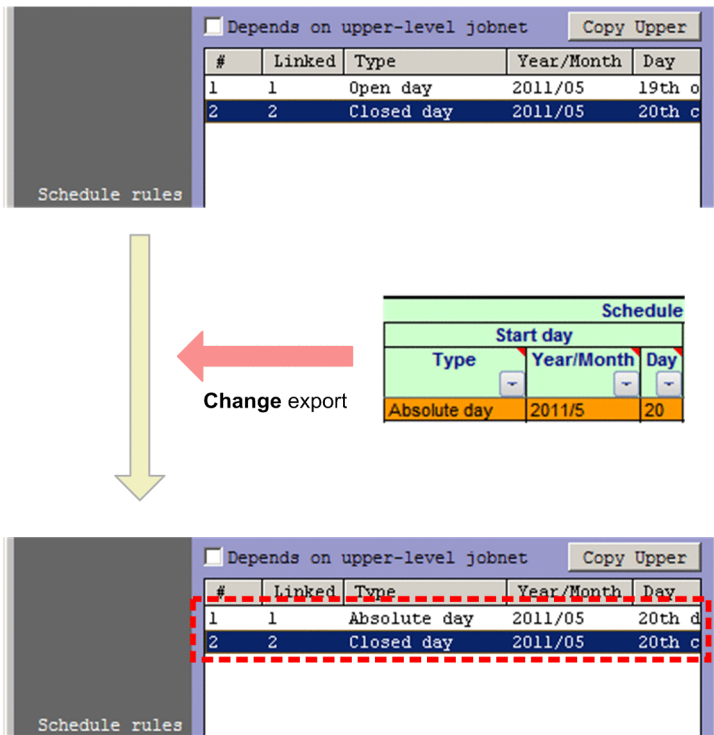
The schedule rule with rule number 1 has been modified.
The schedule rule with rule number 2 has not been modified.

When JP1/AJS3 - Definition Assistant has more rules:

If the number of schedule rules in the export destination is less than that in JP1/AJS3 - Definition Assistant, performing **Change** export will result in the addition of, and the change in the schedule rules in the export destination (the application of the values in the cells).

In the example shown in the following figure, the export destination has one schedule rule, and JP1/AJS3 - Definition Assistant has two schedule rule lines. In this case, the values of the first lines are applied to rule number 1, and those of the second lines are added as rule number 2.

The schedule rule is added only when **Type**, **Year/Month**, and **Day** under **Start day** in the **Schedule definition information** section are marked for change.

Figure 4–21: Change export when JP1/AJS3 - Definition Assistant has more rules
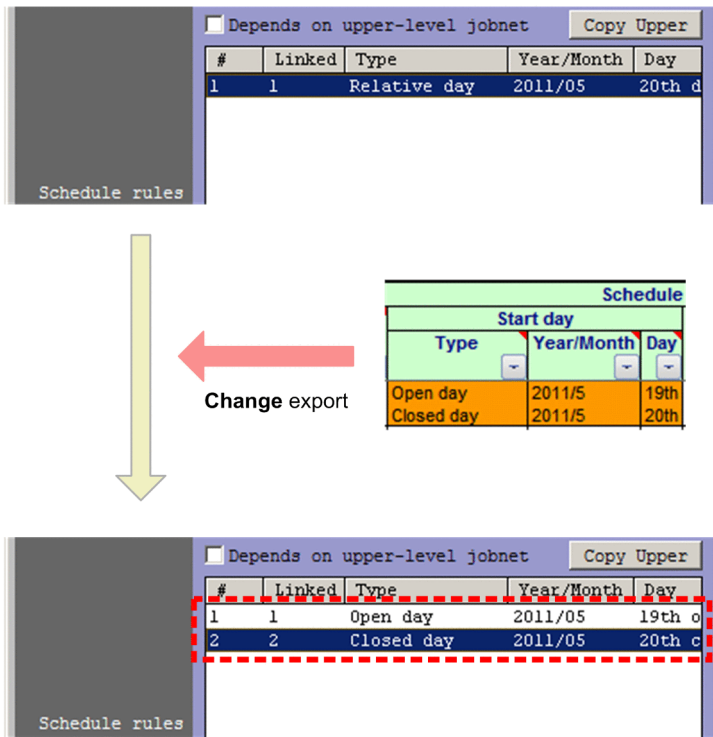
The schedule rule with rule number 1 has been modified.
The schedule rule with rule number 2 has been added.

(3) Removing the schedule rule

The following describes how to remove the schedule rule.

(a) Removing part of the schedule rules

To use **Change** export to remove part of the schedule rules, under **Start day** in the **Schedule definition information** section, delete the values in the cells of the line that corresponds to the rule number to be removed and leave the line blank.

Removing the schedule rule with the rule number in the middle of the list:

For example, as shown in the following figure, the jobnet in the export destination defines the schedule rules with rule number 1 through 3. In this case, to use **Change** export to remove the schedule rule with rule number 2, delete the values for **Type**, **Year/Month**, and **Day** in the second line and leave it blank, then perform **Change** export.

Figure 4–22: Removing the schedule rule with the rule number in the middle of the list

(1) The export destination has three schedule rule definitions.

Change export

(2) Clear the second line in each cell to make it blank.

(3) The schedule rule with rule number 2 has been removed.

Removing the schedule rule with the last rule number:

For example, as shown in the following figure, the jobnet in the export destination defines the schedule rules with rule number 1 through 3. In this case, to use **Change** export to remove the schedule rule with rule number 3, delete the values for **Type**, **Year/Month**, and **Day** in the third line and leave it blank, then perform **Change** export.

Figure 4–23: Removing the schedule rule with the last rule number

(1) The export destination has three schedule rule definitions.

Change export

(2) Clear the third line in each cell to make it blank.

(3) The schedule rule with rule number 3 has been removed.

(b) Removing all schedule rules

To remove all schedule rules, use either of the following ways:

- In **Type**, **Year/Month**, and **Day** under **Start day** in the **Schedule definition information** section, create the same number of blank lines as the total number of rules in the export destination, and then perform **Change** export.

  For example, as shown in the following figure, the jobnet in the export destination defines the schedule rules with rule number 1 through 3. In the cells under the **Type**, **Year/Month**, and **Day** columns, deleting the values from the first through third lines, leaving them blank, and then performing **Change** export will remove all the schedule rules.

  Figure 4–24: Removing all schedule rules (by leaving lines in the Start day cells blank)

  (1) The export destination has three schedule rule definitions.

  Change export
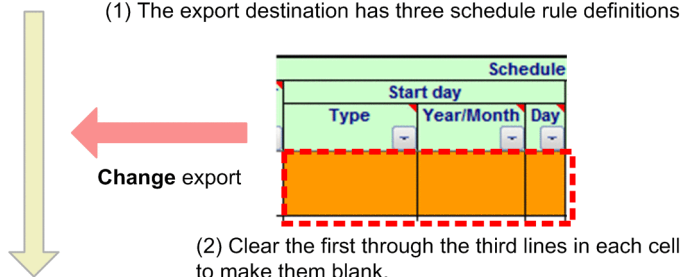
  (2) Clear the first through the third lines in each cell to make them blank.

  (3) All the schedule rules have been removed.

- Set **Type** under **Start day** in the **Schedule definition information** section to `Unspecified`, delete the values in **Year/Month** and **Day** and leave the cells blank, and then perform **Change** export.

  For example, as shown in the following figure, the jobnet in the export destination defines the schedule rules with rule number 1 through 5. Setting **Type** to `Unspecified`, deleting the values in **Year/Month** and **Day** and leaving the cells blank, and then performing **Change** export will remove all the schedule rules.

Figure 4–25: Removing all schedule rules (by setting Type to Unspecified)

(1) The export destination has five schedule rule definitions.

Change export

(2) Set the value for **Type** to `Unspecified` and leave the cells for **Year/Month** and **Day** blank.

(3) All the schedule rules have been removed.

(4) Schedule rule with Depends on upper-level jobnet enabled

For nested jobnets and nested remote jobnets, the **Depends on upper-level jobnet** option can be enabled. The following explains how to enable the **Depends on upper-level jobnet** option in JP1/AJS3 - Definition Assistant.

(a) Enabling the option with the batch or individual definition function

To enable the **Depends on upper-level jobnet** option by using the batch definition function or individual definition function, set **Depends on upper-level jobnet** in the **Schedule definition information** section to `y`, empty the cells from **Rule number to link** to **Start condition: Period**, and then perform the export.

If the cells from **Rule number to link** to **Start condition: Period** columns contain values, the **Depends on upper-level jobnet** option is enabled.

Figure 4–26: Enabling Depends on upper-level jobnet (for export through the batch or individual definition function)

Schedule definition information																		
Depends on upper-level jobnet	Valid term	Job group name	Exclusive jobnet	Rule number to link	Start day			Start time	Processing cycle	Substitute schedule of closed day job	Shift days	Schedule by days from start	Max. shiftable days	Monitor delay		Start condition	
					Type	Year/Month	Day							Start delay	End delay	Times	Period
y	2015/03/01	/jobgroup	jobnet2														

(1) Set **Depends on upper-level jobnet** to `y`.

(2) Clear the cells from **Rule number to link** to **Start condition: Period** to leave them blank.

(3) Use the batch or individual definition function to export the values.

(4) The **Depends on upper-level jobnet** check box has been selected.

(b) Enabling the option with the modification function

To use the modification function to enable the **Depends on upper-level jobnet** option for the unit in the export destination, set **Depends on upper-level jobnet** in the **Schedule definition information** section to `y`, and then perform the export.

When the **Depends on upper-level jobnet** option is enabled with **Change** export, all the defined schedule rules are removed from the unit in the export destination.

Figure 4–27: Enabling Depends on upper-level jobnet (by Change export)
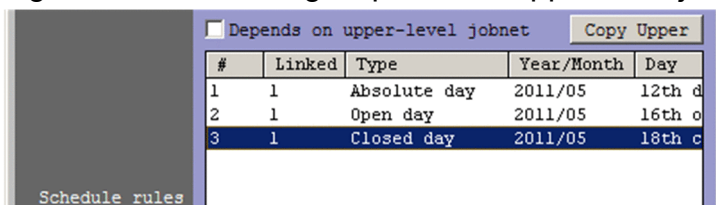
(1) The schedule rules have been defined.
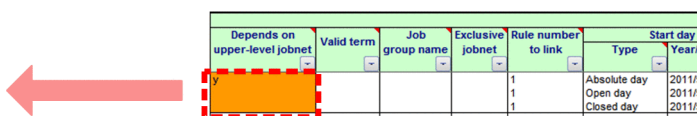
Change export

(2) Set **Depends on upper-level jobnet** to `y`.
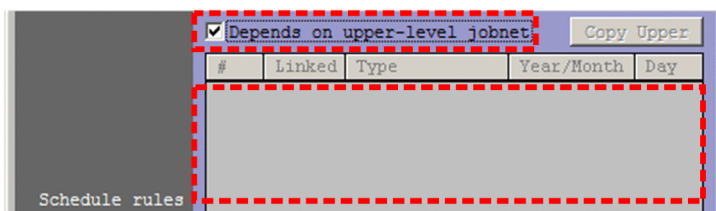
(3) The **Depends on upper-level jobnet** check box has been selected and all the schedule rules have been removed.

4.6 Modifying calendar information in JP1/AJS3 - Definition Assistant

This section describes how to modify JP1/AJS3 calendar information in JP1/AJS3 - Definition Assistant.

4.6.1 Overview of calendar information

This subsection provides an overview of JP1/AJS3 calendar information and describes the options available in JP1/AJS3 - Definition Assistant to modify calendar information.

(1) Calendar information

In JP1/AJS3, open days and closed days can be defined as part of the jobnet execution schedule to create a calendar for JP1/AJS3 operation.

You can set calendar information by using the Edit Monthly Calendar window or Edit Annual Calendar window in JP1/AJS3 - View and by editing the calendar definition information section of the definition information management template in JP1/AJS3 - Definition Assistant. For details, see *5.1.1(7) Calendar definition information section*.

In JP1/AJS3 - Definition Assistant, you can load calendar information by using the import function and apply the information by using the export function.

Figure 4–28: Importing and exporting calendar information in JP1/AJS3 - Definition Assistant
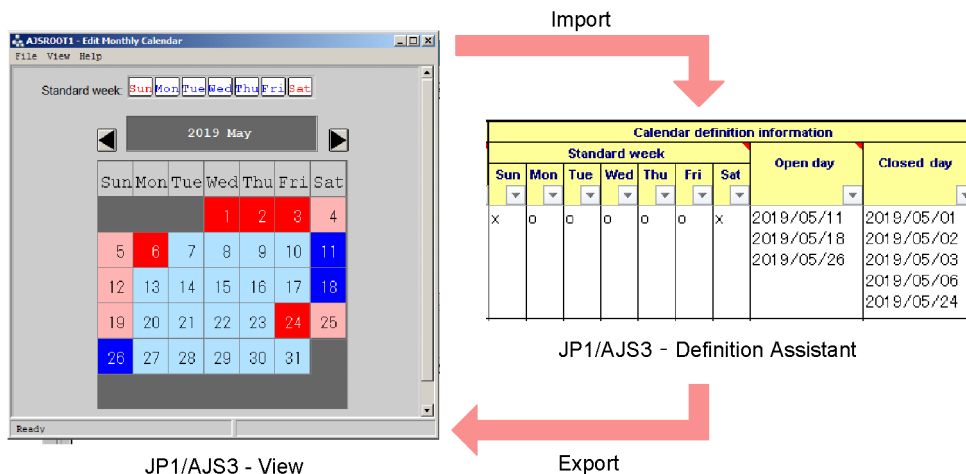
(2) Options available to modify calendar information

The calendar definition information section of the definition information management template allows you to modify calendar information in JP1/AJS3 - Definition Assistant. Specifically, either enter the option corresponding to the modification you want to make in the first row of the applicable cell or append the option to the applicable date under the **Open day** or **Closed day** heading, and then use the **F2** key to mark the cell you have just edited. The information inside the marked cell is applied when **Change** export is performed to export modified definition information.

The following table describes the options available to modify the calendar definition information section (cells under the **Open day** and **Closed day** headings).

Table 4–11: Options available to modify the calendar definition information section (cells under the Open day and Closed day headings)

No.	Description of modification	Information to be set in the applicable cell(s)		Details of how to use the option
		Date	Option	
1	Add a date corresponding to either an open day or a closed day.	Date to be added	Not specified	*4.6.2(1)*
2	Delete a date corresponding to either an open day or a closed day.	Date to be deleted	`:X` (Appended to the date in question)	*4.6.2(2)*
3	Delete all calendar information corresponding to the specified date (date to be deleted) and all days preceding it.[#1]	Date to be deleted	`:D` (Appended to the date in question)	*4.6.2(3)*
4	Delete all calendar information.[#2]	Not specified	`:C` (First row)	*4.6.2(4)*

#1

Information defined in the unmarked calendar information cell (cell under the **Open day** or **Closed day** heading) is also deleted (that is, the unmarked cell is affected by the update performed by **Change** export). If there is definition information you want to retain, you have to mark the cell containing the values you want to retain.

#2

Information defined in the unmarked calendar information cells (cells under the **Standard week**, **Open day**, and/or **Closed day** headings) is also deleted (that is, these cells are affected by the update performed by **Change** export). If there is definition information you want to retain, you have to mark the cells containing the values you want to retain.

4.6.2 Modifying calendar information

You can modify calendar information in JP1/AJS3 - Definition Assistant by using the export function. For details about the export function, see *2.2 The export function*.

This subsection describes how to modify calendar information by performing **Change** export.

(1) Adding a date corresponding to either an open day or a closed day

To add a date corresponding to either an open day or a closed day, enter a date you want to add in the cell under the **Open day** or **Closed day** heading, and then mark the cell with the **F2** key. Afterwards, perform **Change** export. The date you have just entered is added as either an open day or a closed day.

The following figure shows an example of how to add a date corresponding to an open day.

Figure 4–29: Example of how to add a date corresponding to an open day

Enter a date you want to add, and then mark the cell with the **F2** key.

The entered date is added as an open day.
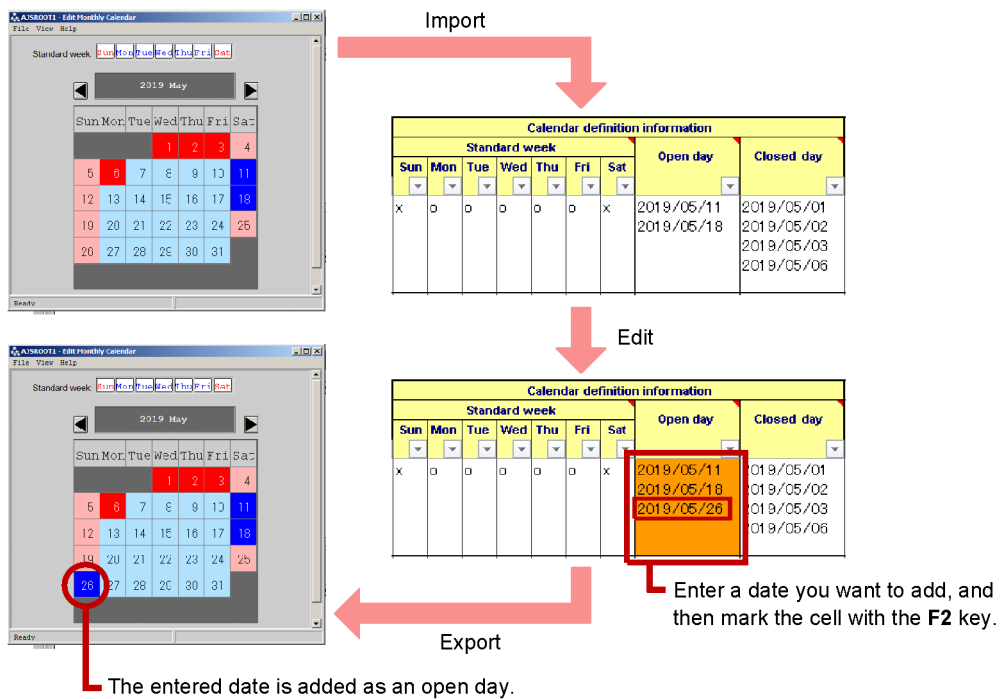
You can also add a date corresponding to an open day by first deleting all the dates that were set in the cell under the **Open day** heading upon import, and then entering in the cell only the date you want to add, as shown in the following figure.

Figure 4–30: Example of how to add a date corresponding to an open day (by entering only the date to be added)

Enter only the date to be added, and then mark the cell with the **F2** key.
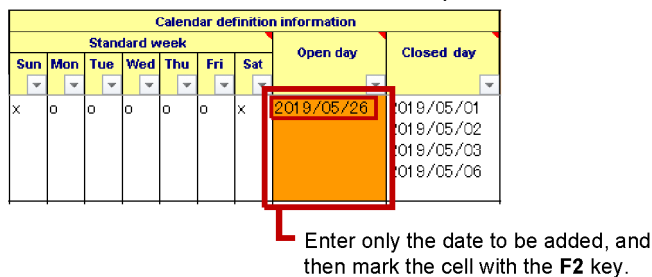
(2) Deleting a date corresponding to an open day or a closed day

To delete a date corresponding to an open day or a closed day, append : X as a suffix to the date you want to delete, and then mark the cell with the **F2** key. Afterwards, perform **Change** export. The date with the suffix appended to it is deleted.

> **❶ Important**
>
> If, in the cell under either the **Open day** or **Closed day** heading in the calendar definition information section, the same date is set as the date to be added (without an option) and the date to be deleted (with the : X option), the deletion takes precedence.

The following figure shows an example of how to delete a date corresponding to a closed day.

Figure 4–31: Example of how to delete a date corresponding to a closed day

Append :X to the date you want to delete, and then mark the cell with the **F2** key.

The date corresponding to a closed day is deleted.
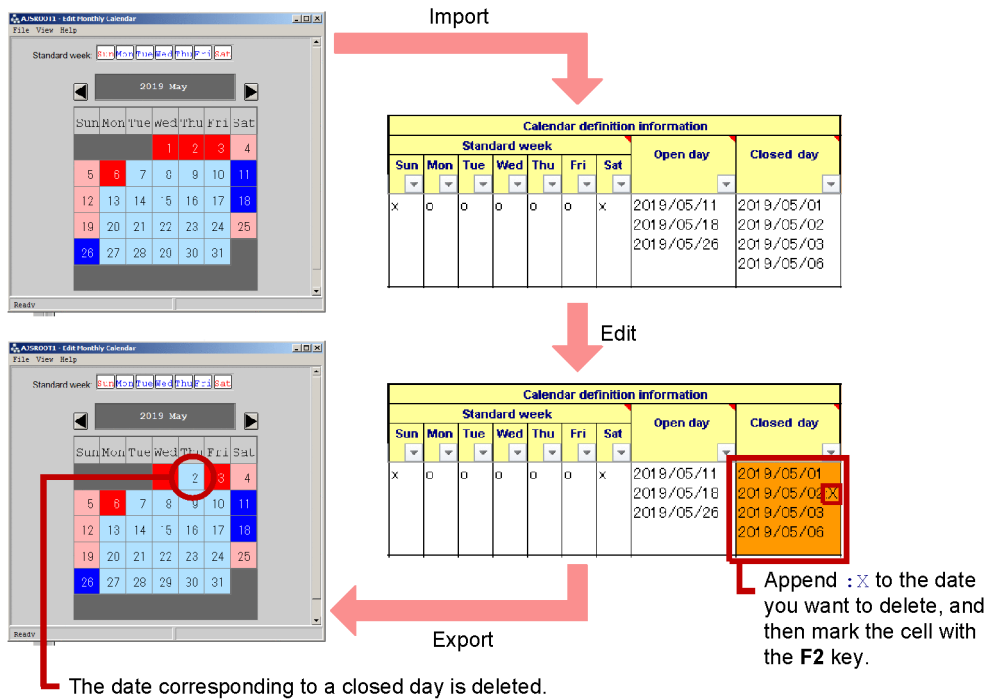
You can also delete a date corresponding to a closed day by first deleting all the dates in the cell under the **Closed days** heading that were set upon import, and then entering in the cell only the date you want to delete with :X appended to it, as shown in the following figure.

Figure 4–32: Example of how to delete a date corresponding to a closed day (by entering only the date to be deleted)

Enter in the cell only the date you want to delete with :X appended to it, and then mark the cell with the **F2** key.
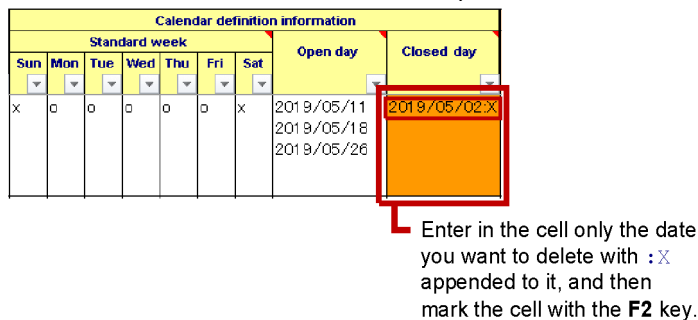
(3) Deleting calendar information corresponding to the specified date and all days preceding it

(a) Deleting past calendar information

To delete calendar information (open days or closed days) corresponding to the specified date (date to be deleted) and all days preceding it, enter the date to be deleted with the :D option appended to it in the cell under the **Open day** or **Closed day** heading, and then mark the cell with the **F2** key. Afterwards, perform **Change** export. The specified date and all days preceding it are deleted.

The :D option applies also to definition information in the unmarked cell of calendar information (cell under the **Open day** or **Closed day** heading).

The following figure shows an example of how to delete past calendar information.

- To delete calendar information corresponding to March 31, 2019 and all days preceding it:

Figure 4–33: Example of how to delete past calendar information

The open days and closed days falling on March 31 and all days preceding it are deleted.

(b) Deleting past calendar information and adding future calendar information

To simultaneously delete calendar information corresponding to the specified date (date to be deleted) and all days preceding it and add future calendar information, enter the date to be deleted with the **:** D option appended to it in the first row of the cell under either the **Open day** or **Closed day** heading, enter the dates you want to add in the appropriate cells, and then mark the cells containing the dates you have just entered with the **F2** key. Afterwards, perform **Change** export. The deletion of the specified date and all dates preceding it and the addition of new dates are simultaneously executed.

The following figure shows an example of how to delete past calendar information and add future calendar information.

- To delete calendar information corresponding to March 2019 and earlier dates and simultaneously add calendar information corresponding to May 2019 and later dates:

Figure 4–34: Example of how to delete past calendar information and add future calendar information

\# If you enter a date earlier than the date to which : D is appended in the cell under the **Open day** or **Closed day** heading, that date is set again instead of being deleted.

(4) Deleting all calendar information

(a) Resetting calendar information

To delete all calendar information (standard weeks, open days, and closed days), enter the : C option in the first row of the cell under either the **Open day** or **Closed day** heading, and then mark the cell with the **F2** key. Afterwards, perform **Change** export. All calendar information is deleted.

The : C option applies also to definition information in the unmarked cells of calendar information (cells under the **Standard week**, **Open day**, and/or **Closed day** headings).

The following figure shows an example of how to delete all calendar information

Figure 4–35: Example of how to delete all calendar information
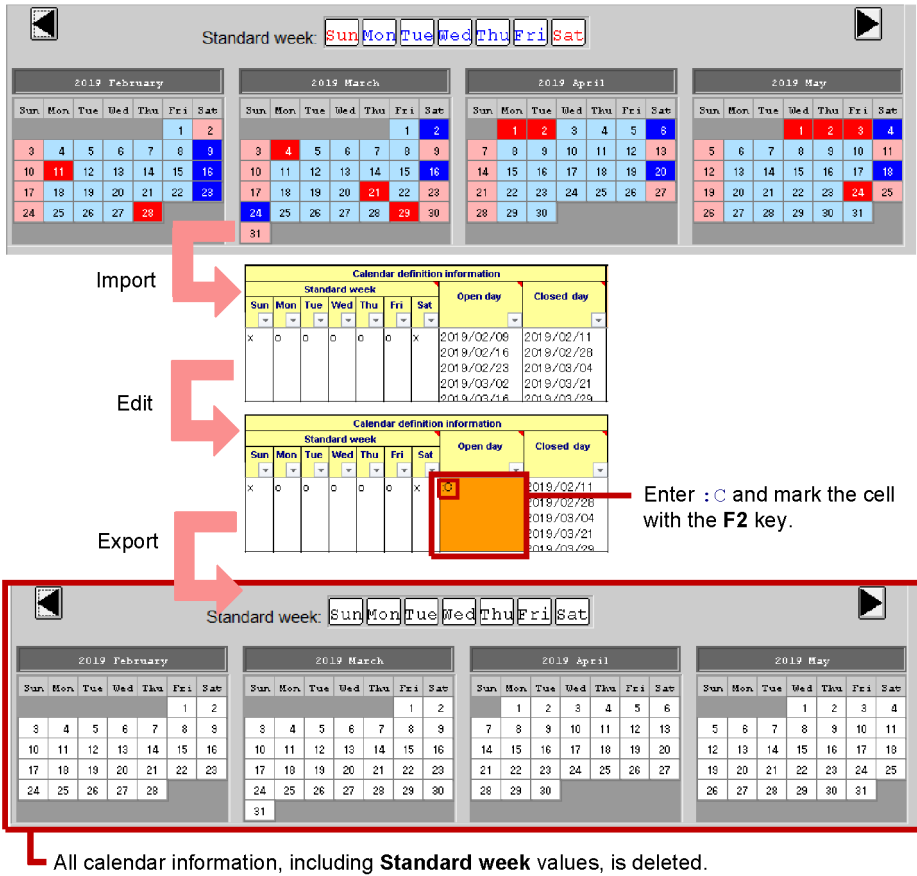
All calendar information, including **Standard week** values, is deleted.

(b) Deleting all calendar information and replacing it with new values

To delete all calendar information (the values set under the **Standard week**, **Open day**, and **Closed day** headings) and replace it with new values, enter the `:C` option in the first row of the cell under either the **Open day** or **Closed day** heading, enter new values in the cells under the **Standard week**, **Open day**, and **Closed day** headings, and then mark these cells with the **F2** key. Afterwards, perform **Change** export. Calendar information is replaced with new values.

If you replace the values inside the marked cells with those set upon import, and then perform **Change** export, you can reset calendar information to its state before the changes.

The following figure shows an example of how to delete all calendar information and replace it with new values.

Figure 4–36: Example of how to delete all calendar information and replace it with new values

Import

Edit

Enter new values in the cells under the **Standard week** heading, and then mark the cells with the **F2** key.

Export

Enter `:c` in the first row.
Enter new dates in the cells under the **Open day** and **Closed day** headings, and then mark the cells with the **F2** key.

All open days and closed days are replaced with new dates.

The **Standard week** values are replaced with new ones.

5

Definition Items

This chapter describes the details of the definition items of the definition information management template, and shows the support status of the definition items in JP1/AJS3 - View. This chapter also shows whether the items are displayed in the initial status.

5.1 List of definition items

This section describes the list of definition items.

5.1.1 Details of definition items

The definition information management template defines 15 items. These definition items are described in tables shown below for each section in the template.

Each table has the following columns:

Item name

    This column indicates the name of the definition item.

Description

    This column describes what the item defines and how to specify the item. For an item to be specified with one of the predefined constants, this column shows them. For an item to be specified with an arbitrary string, this column shows the conventions to specify the string. This column also shows the default, if any.

    Note that, unless the item is a multi-value item, line breaks included in the value are deleted and the value is handled as one-line data.

    You can use environment setting parameters to add user-specific entry conventions. For details about environment setting parameters, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

Display

    With the initial settings, the definition information management template displays only the items that may frequently be used. This column indicates whether the item is displayed in the template with the initial settings. When the item is displayed, Y is indicated; when not displayed, N is indicated.

    You can use environment setting parameters to change the items to be displayed with the initial settings. For details about environment setting parameters, see *3.1.4 Environment settings* and *3.2 Environment settings parameters*.

(1) Processing-type specification section for EXPORT

Table 5–1: Items of the Processing-type specification section for EXPORT

Item name	Description	Display

Section	Select one of the following processing types when executing **EXPORT**:
	
	Batch
	    Creates units in one batch, including the hierarchical structure.
	
	Individual
	    Creates the unit specified in **Unit name** under the unit specified in **Complete name of upper unit**.
	
	Change
	    Changes the definition information of the unit specified by **Complete name of upper unit** + **Unit name**.
		Y

Item name	Description	Display
Section	`Delete` Deletes the unit specified by **Complete name of upper unit** + **Unit name**. When an upper unit is deleted, the units within it are also deleted.	Y

(2) Unit definition information section

Table 5–2: Items of the Unit definition information section

Item name	Description	Display
Unit name	Specify a unit name. If you leave this item blank, the unit information becomes invalid. You cannot specify the root job group (/) as a unit name. Possible length of the value: 1 to 30 bytes	Y
Complete name of upper unit	Specify the complete name of the upper unit of the unit specified in **Unit name**. This item must begin with a slash (/). When you specify the root job group, do not specify this item. Possible length of the value: 1 to 930 bytes	Y
Unit type	Specify one of the following unit types: `g`: Defines a job group. `mg`: Defines a manager job group. `n`: Defines a jobnet. `rm`: Defines a remote jobnet. `rc`: Defines start conditions for a root jobnet. `mn`: Defines a manager jobnet. `j`: Defines a UNIX job. `pj`: Defines a PC job. `qj`: Defines a QUEUE job. `jdj`: Defines a judgment job. `orj`: Defines an OR job. `fxj`: Defines a flexible job. `htpj`: Defines an HTTP connection job. `evwj`: Defines a JP1 event reception monitoring job. `flwj`: Defines a file monitoring job. `mlwj`: Defines an email reception monitoring job. `mqwj`: Defines a message queue reception monitoring job. `mswj`: Defines an MSMQ reception monitoring job. `lfwj`: Defines a log file monitoring job. `ntwj`: Defines a Windows event-log monitoring job. `tmwj`: Defines an execution interval control job. `evsj`: Defines a JP1 event sending job. `mlsj`: Defines an email sending job. `mqsj`: Defines a message queue sending job. `mssj`: Defines an MSMQ sending job. `cmsj`: Defines an HP OpenView status report job. `pwlj`: Defines a local power control job.	Y

Item name	Description	Display
Unit type	`pwrj`: Defines a remote power control job. `cj`: Defines a custom UNIX job. `cpj`: Defines a custom PC job. `nc`: Defines a Jobnet connector. `cewj`: Defines a custom event job.	Y
Custom type	Specify the class names of custom jobs or custom event job for each program to be linked with. You must specify this item when using custom jobs or custom event job. The custom job that can be defined directly using JP1/AJS3 - Definition Assistant and the class name to be specified are as follows: • JP1/AJS3 for Enterprise Applications (when executing background jobs of the SAP system): `JP1AMR3` • JP1/AJS3 for Enterprise Applications (when executing background jobs of the SAP system): `JP1AMR3UX` • JP1/AJS3 for Enterprise Applications (when executing the custom job that copies the jobs of the SAP system): `JP1AMR3CP` • JP1/AJS3 for Enterprise Applications (when executing the custom job that copies the jobs of the SAP system): `JP1AMR3CPUX` Note that if imported definition information includes other custom jobs or custom event job, they are displayed as shown below. For custom jobs or custom event job provided as standard: JP1/FTP: `JP1FTP` JP1/AJS3 for Enterprise Applications (when executing an InfoPackage of the BW system): `JP1AMR3BW` JP1/AJS3 for Enterprise Applications (when executing an InfoPackage of the BW system): `JP1AMR3BWUX` JP1/AJS2 for Oracle E-Business Suite: `JP1AMOAP` JP1/Advanced Shell: `ADSHPC` JP1/Advanced Shell: `ADSHUX` JP1/Data Highway - Automatic Job Executor: `DHAJEW` Passing information settings job: `AJSVAR` JP1/AJS3 for Cloud Service Applications: `CSA`*custom-job-name* JP1/AJS3 for Cloud Service Applications: `CE_COBM_`*custom-event-job-name* For user-created custom jobs: The names specified in the `USER_`*arbitrary-name* format during custom job registration are displayed.	Y
Position	Specify the display position of a jobnet or job in JP1/AJS3 - View. The display position is specified with the vertical and horizontal coordinates represented by the row and column counts. If you do not specify this item, jobnet and job icons are placed at random in JP1/AJS3 - View. Specifiable values: **Rows**: 1 to 100; **Columns**: 1 to 100 Note that you cannot specify a value greater than the value specified in the item **Size**.	Y
Size	Specify the maximum number of icons displayed in the JP1/AJS3 - View window. Specifiable values: **Rows**: 1 to 100; **Columns**: 1 to 100 Defaults: **Rows**: 8; **Columns**: 10	Y

(3) Unit common definition information section

Table 5–3: Items of the Unit common definition information section

Item name	Description	Display
Comment	Write a comment. Displayable length of the value: 1 to 80 bytes	Y
Previous	Specify the unit followed by the one specified in **Unit name**. The previous unit must exist within the same upper unit. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 30 bytes To release the existing connection, input `:X` after the unit name (like `sample:X`).	Y

Relation type	Specify how to connect the unit with the one specified in **Previous**.
	`seq`
	    Connects the unit with the previous unit sequentially.
	`con`
	    Connects the unit with the previous unit as a subordinate unit to be conditionally executed according to the execution result of the previous unit. This can be specified only when the previous unit is a judgment job.
	Default: `seq`
		Y

Exec-agent	Define the name of the execution agent or execution agent group that is used to execute jobs. Length of the value: 1 to 255 bytes	Y

Exec. order control	Specify whether to connect to the jobnet connector. You can specify planning groups or root jobnets.
	`Yes`
	    The root jobnet is executed synchronously with the jobnet connector.
	`No`
	    The root jobnet is executed asynchronously with the jobnet connector.
	Default: `No`
		Y

Jobnet connector[#]	Specify the complete unit name of the jobnet connector that is being connected to. Length of the value: 1 to 930 bytes You can specify planning groups or root jobnets. An error occurs if `Yes` is not specified for **Exec. order control**.	Y

Exec. order method	Define the execution order control method of the jobnet connector. You can specify planning groups or root jobnets.
	`Synchro`
	    Perform execution synchronously with the jobnet connector.
	    An error occurs if `Yes` is not specified for **Exec. order control**.
	`Asynchro`
	    Perform execution asynchronously with the jobnet connector.
	Default: `Asynchro`
		Y

Connection range	Define whether linkage occurs between scheduler services with execution order control. The default is `Same service`. You can specify root jobnets, planning groups, or jobnet connectors. In a root jobnet or a planning group, an error occurs if `Yes` is not set for **Exec. order control**.	Y

Item name	Description	Display

Connection range	`Same service`
	    Linkage between scheduler services does not occur. Linkage occurs only with root jobnets, planning groups, or jobnet connectors defined within the same scheduler service.
	`Other service`
	    Linkage between scheduler services occurs. Linkage occurs with root jobnets, planning groups, or jobnet connectors defined in different hosts or scheduler services.
	Default: `Same service`
		Y

Connection host	Specify a host name with a root jobnet, planning group, or jobnet connector defined as the connection target. You can specify root jobnets, planning groups, or jobnet connectors. Length of the value: 1 to 255 bytes Default: No characters are assumed.	Y
Connection service	Specify a scheduler service name with a root jobnet, planning group, or jobnet connector defined as the connection target. You can specify root jobnets, planning groups, or jobnet connectors. In a root jobnet or a planning group, an error occurs if `Other service` is not set for **Connection range**. Length of the value: 1 to 30 bytes	Y

\#

The definition information is updated without error even if you specify a non-existent unit or a unit other than the jobnet connector as the jobnet connector name, and use a batch definition, an individual definition, or the modification function to perform export.

(4) Unit common attributes information section

Table 5–4: Items of the unit common attributes information section

Item name	Description	Display

Hold	Define whether to suspend jobnet or job execution.
	`y`
	    Suspends jobnet execution.
	`w`
	    Suspends jobnet execution only when the last jobnet end status is *Ended with warning* or *Ended abnormally*.
	`a`
	    Suspends jobnet execution only when the last jobnet end status is *Ended abnormally*.
	`n`
	    Does not suspend jobnet execution.
	You can specify `w` or `a` for the root jobnet only.
	If you specify `w` or `a` for a nested jobnet, `n` is assumed.
	Default: `n`
		Y

Type	Use either of the following keywords to specify whether to make the unit a recovery job: `Normal`: Does not make the unit a recovery job. `Recovery`: Makes the unit a recovery job.	Y

Item name	Description	Display
Type	You cannot specify `Recovery` when **Unit type** is `g`, `mg`, `rc`, `mn`, or `nc`. Default: `Normal`	Y
Owner	Specify the name of the JP1 user who owns the unit. Length of the value: 1 to 31 bytes Default: The JP1 user name of the user who created the unit	Y
JP1 resource group	Specify a JP1 resource group name. Specifiable characters: Alphanumeric characters and an underscore (_) Length of the value: 1 to 63 bytes Default: Blank	Y

(5) Manager unit definition information section

Table 5–5: Items of the manager unit definition information section

Item name	Description	Display
Host to reference	Specify the name of JP1/AJS3 - Manager host. Default: The manager host name specified in the `MANAGER-HOST` environment setting parameter Length of the value: 1 to 255 bytes	N
Unit to reference	Specify the complete name of a unit on the manager host. Length of the value: 1 to 961 bytes	N

(6) Job group definition information section

Table 5–6: Items of the Job group definition information section

Item name	Description	Display
Base day	Specify the base date as calendar information. *dd* 　　Specify the base date as a calendar day. 　　Specifiable value: 1 to 31 (day number) *week*`:`*n* 　　Specify which day of which week is to be used as the base date. 　　In *week*, specify one of the following keywords: 　　`su`: Sets Sunday as the base date. 　　`mo`: Sets Monday as the base date. 　　`tu`: Sets Tuesday as the base date. 　　`we`: Sets Wednesday as the base date.	Y

Item name	Description	Display

Base day	th: Sets Thursday as the base date.
	fr: Sets Friday as the base date.
	sa: Sets Saturday as the base date.
	In *n*, specify a value in the range 1-5. For example, 1 indicates the first week.
	Default:
	    The base date for the closest upper job group that has this item specified.
	    If this item is not defined for any upper job group, 1 is assumed.
		Y

Treat as	Specify the base month as calendar information.
	th
	    Considers the days following the base date as belonging to the month containing the base date (current month).
	ne
	    Considers the days following the base date as belonging to the next month.
	Default:
	    The base month for the closest upper job group that has this item specified.
	    If this item is not defined for any upper-level job group, th is assumed.
		Y

Base time	Specify the base time in the *hh*:*mm* format as calendar information.
	hh
	    Specify hours of the base time.
	    Specifiable value: 0 to 23
	mm
	    Specify minutes of the base time.
	    Specifiable value: 0 to 59
	Default:
	    The base time for the closest upper job group that has this item specified.
	    If this item is not defined for any upper-level job group, 00:00 is assumed.
		Y

Job group type	Use one of the following keywords to specify the type of the job group: p: Planning group n: Job group Default: n	Y

(7) Calendar definition information section

Table 5–7: Items of the Calendar definition information section

Item name	Description	Display

Standard week	Specify an open day or closed day as a day of the week for calendar information.
	o (lower-case)
	    Sets the specified day of the week to an open day.
	x (lower-case)
	    Sets the specified day of the week to a closed day.
	Default:
	    The open day or closed day of the closest upper job group that has this item specified.
		Y

Item name	Description	Display
Standard week	If no upper job groups have this item specified, all the days of the week will be set to open days. Note that if this setting conflicts with the **Open day** and **Closed day** settings, the **Open day** and **Closed day** settings prevail.	Y
Open day	Specify an open day on a per-day basis for calendar information, in the *YYYY*/*MM*/*DD* format. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). *YYYY* 　　Specify the calendar year containing an open day. 　　Specifiable value: 1994 to 2099 *MM* 　　Specify the month containing an open day. 　　Specifiable value: 1 to 12 (For example, 1 indicates January.) *DD* 　　Specify an open day. 　　Specifiable value: 1 to 31 Default: 　　The open days of the closest upper job group that have this item specified. If no upper job groups have this item specified, all days will be set to open days. To remove an existing open day, input :X after the open day (in the *YYYY*/*MM*/*DD*:X format). To delete existing calendar information corresponding to the specified date (date to be deleted) and all days preceding it, enter the date to be deleted with :D appended to it in the first row of the cell (in the *YYYY*/*MM*/*DD*:D format). To delete all existing calendar information, enter :C in the first row of the cell. Note that, if the same date is set as the date to be added (without an option) and the date to be deleted (with the :X option), the deletion takes precedence. If you specify :D or :C in a place other than the first row of the cell, an error occurs when **Change** export is performed.	Y
Closed day	Specify a closed day on a per-day basis for calendar information, in the *YYYY*/*MM*/*DD* format. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). *YYYY* 　　Specify the calendar year containing a closed day. 　　Specifiable value: 1994 to 2099 *MM* 　　Specify the month containing a closed day. 　　Specifiable value: 1 to 12 (For example, 1 indicates January.) *DD* 　　Specify a closed day. Default: 　　The closed days of the closest upper job group that have this item specified. If no upper job groups have this item specified, all days will be set to open days. To remove an existing closed day, input :X after the closed day (in the *YYYY*/*MM*/*DD*:X format). To delete existing calendar information corresponding to the specified date (date to be deleted) and all days preceding it, enter the date to be deleted with :D appended to it in the first row of the cell (in the *YYYY*/*MM*/*DD*:D format). To delete all existing calendar information, enter :C in the first row of the cell.	Y

Item name	Description	Display
Closed day	Note that, if the same date is set as the date to be added (without an option) and the date to be deleted (with the `:X` option), the deletion takes precedence. If you specify `:D` or `:C` in a place other than the first row of the cell, an error occurs when **Change** export is performed.	Y

(8) Jobnet definition information section

Table 5–8: Items of the Jobnet definition information section

Item name	Description	Display

Concurrent exec.	Specify whether to enable concurrent jobnet execution.
	
	`y`
	
	    Enables concurrent execution.
	    This cannot be specified while either `w` or `a` is specified in **Hold**.
	
	`n`
	
	    Disables concurrent execution.
	
	Default: `n`
		Y

No. logs to keep	Specify the number of jobnet generations to be kept. You can specify this parameter only for the root jobnet. All the nested jobnets inherit the value specified for the root jobnet. Specifiable value: 1 to 99 (generations) Default: 1	Y
Target manager	Specify the name of the JP1/AJS3 - Manager host in which a remote jobnet will be executed. Default: The manager host name specified in the `MANAGER-HOST` environment setting parameter. Length of the value: 1 to 255 bytes	Y
Priority	Specify the default for the priority of jobnet job execution. Specifiable value: 1 to 5 The lowest priority of execution is 1, while the highest priority is 5. Default: Depends on the definition of upper-level jobnets.	Y

Time-out period	Define the number of days until standby status is terminated for jobnets in any of the following statuses: "holding", "condition-wait", and "time-wait" when the scheduled execution startup time has been passed because the execution of the jobnet has been prevented.
	You can specify one of the following values:
	
	`1` or `2`
	
	    The jobnet stops the wait one or two days after the base date for the job group to which the jobnet belongs.
	
	`no`
	
	    Does not set the time-out period. When this value is specified, the value specified with the scheduler option of the manager host's environment settings is used.
	
	`un`
	
	    Waits without setting a timeout.
	
	Default: `no`
		Y

Schedule option	Specify a schedule option for jobnet execution.	Y

Item name	Description	Display

Schedule option	`sch`
	    Uses a schedule skip option.
	`mlt`
	    Uses a multi-schedule option.
	Default: `sch`
		Y

Required exec. time	Specify the time required for executing the jobnet or remote jobnet for which the termination delay is monitored. Specifiable value: 1 to 2879 (minutes)	Y

(9) Jobnet connector definition information section
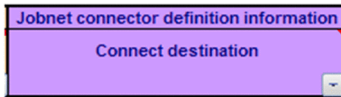
Table 5–9: Items of the Jobnet connector definition information section

Item name	Description	Display
Connect destination[#]	Specify the complete unit name of the root jobnet or the planning group of the connection destination. Length of the value: 1 to 930 bytes	Y

\#

The definition information is updated without error even if you specify a non-existent unit or a unit other than the planning group and root jobnet as the connection destination jobnet name, and use a batch definition, an individual definition, or the modification function to perform export.

(10) Start-condition definition information section

Table 5–10: Items of the Start-condition definition information section

Item name	Description	Display

Start Condition	Use either of the following keywords to specify how to handle the start conditions:
	`and`
	    Starts the job when all the start conditions are satisfied.
	`or`
	    Starts the job when any of the start conditions is satisfied.
	Default: `and`
		Y

(11) Schedule definition information section

Max. shiftable days	Schedule by days from start	Max. shiftable days	Monitor delay		Start condition	
			Start delay	End delay	Times	Period

Table 5–11: Items of the Schedule definition information section

Item name		Description	Display

Depends on upper-level jobnet		Specify dependence on the schedule for the upper-level jobnet.
		You cannot specify this item for the root jobnet.
		Use either of the following keywords to specify this item:
		y
		    The jobnet depends on the schedule for the upper-level jobnet.
		n
		    The jobnet does not depend on the schedule for the upper-level jobnet.
		Default: y
			Y

Valid term		Specify the effective dates of the defined schedule in *yyyy* / *mm* / *dd* format.
		yyyy
		    Specify the year of the effective date by the calendar year.
		    Specifiable value : 1994 - 2099
		mm
		    Specify the month of the effective date.
		    Specifiable value : 1 - 12
		dd
		    Specify the day of the effective date.
		    Specifiable value : 1 to 31
			Y

Job group name		Specify the name of another job group that contains the definition of the calendar information you want to reference. Length of the value: 1 to 930 bytes	Y
Exclusive jobnet		Specify the name of a jobnet you do not want to execute while executing this jobnet (a jobnet in the same level). Length of the value: 1 to 30 bytes	Y
Rule number to link		Define the rule number of the start day of the corresponding upper level jobnet. Specifiable value : 1-144 By default, the rule number and the link number become same. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**).	Y

Start day	**Type**	Specify the type of the jobnet execution start day.
		This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
		Use one of the following keywords to specify this item:
		Registered day
		    Sets the day jobnet execution was registered as the execution start day.
		Absolute day
		    Specifies the jobnet execution start day using an absolute day.
		Relative day
		    Specifies the jobnet execution start day using a relative day.
		Open day
		    Specifies the jobnet execution start day using an open day.
			Y

Item name		Description	Display

Start day	**Type**	`Closed day`
		    Specifies the jobnet execution start day using a closed day.
		`Unspecified`
		    Does not specify a particular start day for the jobnet.
			Y

	Year/Month	Specify the start year and month for jobnet execution in the *yyyy*/*mm* format.
		
		This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
		
		yyyy
		    Specify the calendar year containing the date when the jobnet is executed.
		    Specifiable value: 1994 to 2099
		    Default: The year containing the date when the jobnet was registered for execution
		
		mm
		    Specify the month when the jobnet is executed.
		    Specifiable value: 1 to 12 (For example, 1 indicates January.)
		    Default: The month containing the day when the jobnet was registered for execution
			Y

	Day	Specify the day for jobnet execution.
		
		This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
		
		n
		    When `Absolute day` or `Relative day` is specified, specify the value in the following range:
		    When `Absolute day` is specified: 1 to 31 (day number)
		    When `Relative day` is specified: 1 to 35 (number of days)
		
		*n*th
		    Specify the sequence number in *n* when `Open day` or `Closed day` is specified. For example, if you want to execute the jobnet on the fifth open day, specify `5th`.
		    Specifiable value: 1 to 35
		
		`Last`
		    Specify this to execute the jobnet on the last day, last open day, or last closed day.
		
		`Last`-*n*
		    Specify whether to perform execution *n* days before the last day, last open day, or last closed day.
		    Specify a value in *n* in the following range:
		    When `Absolute day` is specified: 0 to 30
		    When `Relative day`, `Open day`, or `Closed day` is specified: 0 to 34
		
		*n*th *X*
		    n: Specify a value in the range 1-5.
		    X: Specify `Mon`, `Tue`, `Wed`, `Thu`, `Fri`, `Sat`, or `Sun`.
		    For example, `4th Wed` indicates the fourth Wednesday.
		
		`Last` *X*
		    X: Specify `Mon`, `Tue`, `Wed`, `Thu`, `Fri`, `Sat`, or `Sun`.
		    For example, `Last Fri` indicates the last Friday.
			Y

Start time		Specify the time when the jobnet is executed in the `[+]`*hh*:*mm* format. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). + When this symbol is added, the time specified in the *hh*:*mm* format is handled as a relative time. When this symbol is omitted, the specified time is handled as an absolute time.	Y

Item name	Description	Display

Start time	*hh*
	    Specify the hours of the time when the jobnet is executed.
	    Specifiable value: 0 to 47 (hours)
	    Default: 0
	
	mm
	    Specify the minutes of the time when the jobnet is executed.
	    Specifiable value: 0 to 59 (minutes)
	    Default: 0
	
	Default: `+00:00` (0 hours 00 minutes as the relative time)
		Y

Processing cycle	Specify a processing cycle for a jobnet. By default, no processing cycle is set.
	This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
	Use one of the following keywords to specify this item:
	`Unspecified`
	    Specify this when a regular execution cycle cannot be applied.
	`Every n Day`
	    Executes the jobnet every *n* days. In *n*, specify a value in the range 1-31.
	`Every n Open day`
	    Executes the jobnet every *n* open days. In *n*, specify a value in the range 1-31.
	`Every n Closed day`
	    Executes the jobnet every *n* closed days. In *n*, specify a value in the range 1-31.
	`Every n Week`
	    Executes the jobnet every *n* weeks. In *n*, specify a value in the range 1-5.
	`Every n Month`
	    Executes the jobnet every *n* months. In *n*, specify a value in the range 1-12.
	`Every n Year`
	    Executes the jobnet every *n* years. In *n*, specify a value in the range 1-9.
	Default: `Unspecified`
		Y

Substitute schedule of closed day job	If the jobnet is scheduled to be executed on a closed day on the JP1/AJS calendar, specify how to substitute the schedule of the closed day job.
	This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
	Use one of the following keywords to specify this item:
	`Before`
	    Applies the previous day of the execution schedule day if it is closed.
	`After`
	    Applies the next day of the execution schedule day if it is closed.
	`Cancel`
	    Does not execute the jobnet if the execution schedule day is closed.
	`Execute`
	    Forcibly executes the jobnet on the closed day set as the execution schedule day only when the JP1/AJS service is active.
	Default: `Cancel`
		Y

Shift days	Specify the maximum number of shift days for jobnet execution. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). Specifiable value: 1 to 31 Default: 2	Y

Item name	Description	Display

Schedule by days from start	Specify the schedule of the jobnet according to the days from the start time.
	This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
	
	`-`*n* `open days`
	　Replaces the date of jobnet execution by an open day preceding the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution).
	
	`+`*n* `open days`
	　Replaces the date of jobnet execution by an open day following the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution).
	
	`-`*n* `days`
	　Replaces the date of jobnet execution with a day preceding the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution).
	　In this case, "Closed day" is also a target for the substitute schedule.
	
	`+`*n* `days`
	　Replaces the date of jobnet execution with a day following the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution).
	　In this case, "Closed day" is also a target for the substitute schedule.
	
	If this setting is omitted, the shifted schedule will not be used.
		Y

Max. shiftable days	Specify the maximum number of shift days. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). Specifiable value: 1 to 31 Default: 10	Y

Monitor delay	Specify the delay time for the start or stop of the jobnet, in one of the following formats:
	hh`:`*mm*
	M*mmmm*
	U*mmmm*
	C*mmmm*
	This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
	
	hh
	　Specify the hours of the delay time for the start or stop of the jobnet.
	　Specifiable value: 0 to 47 (hours)
	
	mm
	　Specify the minutes of the delay time for the start or stop of the jobnet.
	　Specifiable value: 0 to 59 (minutes)
	
	mmmm
	　The number of minutes for which the start or stop delay time is offset from the execution start or stop time of the root jobnet, upper jobnet, or local jobnet.
	　Specifiable value: 1 to 2879 (minutes)
	
	`M`
	　The time will be offset from the execution start or stop time of the root jobnet by the number of minutes specified in *mmmm*.
	
	`U`
	　The time will be offset from the execution start or stop time of the upper jobnet by the number of minutes specified in *mmmm*.
		Y

Item name		Description	Display
Monitor delay		`C` The time will be offset from the execution start or stop time of the local jobnet by the number of minutes specified in *mmmm*.	Y

Start condition	**Times**	Specify the number of times the jobnet waits for an event that causes the jobnet to execute after the jobnet is executed by the event for the first time.
		This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
		`no`
		    Does not wait for an event.
		n
		
		    Specify the number of times the jobnet waits for an event.
		    Specifiable value: 1 to 999
		    Default: 1
		`un`
		    Waits without any limit for an event.
		Default: `no`
			Y

	Period	Specify the time when the status of the jobnet waiting for an event is released. Use one of the following values to specify this item:
		`no`
		hh`:`*mm*
		mmmm
		`un`
		This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**).
		`no`
		    Does not use an event wait.
		hh
		    Specify the hours of the time when an event wait is cleared.
		    Specifiable value: 0 to 47 (hours)
		mm
		    Specify the minutes of the time when an event wait is cleared.
		    Specifiable value: 0 to 59 (minutes)
		mmmm
		    Specify the time when the event wait is released by the relative minutes from the time when the jobnet is executed.
		    Specifiable value: 1 to 2879 (minutes)
		`un`
		    Waits without any limit for an event.
		Default: `no`
			Y

(12) Basic job definition information section

Command statement	Execution file name	Parameters	Environment variables	Environment file	Working path	Standard input	Standard output		Standard error		Host name	Queue name	Job name
							File name	Append	File name	Append			

Basic job definition information							
Priority	End judgment				Retry on abnormal end	Return code	
	Rule	Warning	Abnormal	File name		Lower limit(Greater than or equal to)	Upper limit(Less than or equal to)
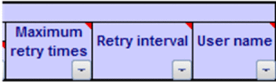
Table 5–12: Items of the Basic job definition information section

Item name		Description	Display
Command statement		Specify the command text of the UNIX job. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). Number of characters that can be specified in a cell: 1 to 1,023 bytes Note about display during import: If a command statement defined in the manager host includes a tab character, the tab character is replaced with a space.	Y
Execution file name		For a UNIX job, specify a script file name on the agent host where the job is executed. For a PC job or QUEUE job, specify an executable file name on the agent host. Length of the value: 1 to 511 bytes	Y
Parameters		Define parameters for the target file. Length of the value: 1 to 1,023 bytes	Y
Environment variables		Specify an environment variable in the *variable-name=value* format. This is a multi-value item. To specify multiple values, specify them in the same cell, separating each value with a line break (**Alt+Enter**). Length of the value: 1 to 20,479 bytes	Y
Environment file		Specify the environmental variable file name existing on the agent host. Length of the value: 1 to 511 bytes	Y
Working path		Specify the working path in the full path name. Length of the value: 1 to 511 bytes	Y
Standard input		Specify the name of the standard input file existing on the agent host where the job is executed. Length of the value: 1 to 511 bytes	Y
Standard output	**File name**	Specify the name of the standard output file existing on the agent host where the job is executed. Length of the value: 1 to 511 bytes	Y
	Append	Specify the append option for the standard output file. This item is ignored if the name of the standard output file is not specified. new: Creates a new file. add: Adds information to the existing file. The default is new.	Y
Standard error	**File name**	Specify the name of the standard error output file existing on the agent host where the job is executed. Length of the value: 1 to 511 bytes	Y
	Append	Specify the append option for the standard error output file. This item is ignored if the name of the standard error output file is not specified. new: Creates a new file. add: Adds information to the existing file. The default is new.	Y
Host name		Specify the name of the host to which a QUEUE job is submitted. Length of the value: 1 to 255 bytes	Y

Item name		Description	Display
Queue name		Specify the name of the queue to which a QUEUE job is submitted. Length of the value: 1 to 63 bytes	Y
Job name		Specify the name of the job to which a QUEUE job is submitted. Length of the value: 1 to 63 bytes	Y
Priority		Specify the priority of job execution. Specifiable value: 1 to 5 (The lowest priority of execution is 1, while the highest priority is 5.) Default: Depends on the definition of the upper-level jobnets.	Y

End judgment	**Rule**	Specify the type of end judgment.
		`nm`
		    Always assumes a normal end.
		`ab`
		    Always assumes an abnormal end.
		`cod`
		    Assumes a normal end if the end code is below a set value.
		`mdf`
		    Assumes a normal end if the file is updated during the period between the start and the end of job execution. This value cannot be specified for a QUEUE job.
		`exf`
		    Assumes a normal end if a file is created at the end of job execution. This value cannot be specified for a QUEUE job.
		Default: `cod`
			Y

	Warning	Specify the threshold for the end with warning. Specifiable value: 0 to 2,147,483,647	Y
	Abnormal	Specify the threshold for the abnormal end. Specifiable value: 0 to 2,147,483,647 Default: 0	Y
	File name	Specify the name of the end judgment file existing on the agent host where the job is executed. You can specify an absolute path name or a relative path name from the working path for job execution. This item cannot be specified for a QUEUE job. Length of the value: 1 to 511 bytes	Y

Retry on abnormal end		Define whether retrying on an abnormal end is enabled.
		`No`
		    Automatic retries are not performed if an abnormal end occurs.
		`Yes`
		    Automatic retries are performed if an abnormal end occurs. This can be specified only when the "**Rule**" in "**End judgment**" is "`cod`".
		Default: `No`
			Y

Return code	**Lower limit (Greater than or equal to)**	Define the lower limit of the return codes to be retried automatically when automatic retrying is performed for an abnormal end. Specify a value lower than "**Upper limit**", and higher than "**Abnormal**". This can be specified only when "**Retry on abnormal end**" is set to "`Yes`". Specifiable value: 1 to 4,294,967,295 Default: The default end judgment of "abnormal-threshold + 1" is assumed when execution is performed.	Y

Item name		Description	Display
Return code	**Upper limit (Less than or equal to)**	Define the upper limit of the return codes to be retried automatically if automatic retrying is performed for an abnormal end. Specify a value lower than "**Lower limit**", and lower than "**Abnormal**". This can be specified only when "**Retry on abnormal end**" is set to "Yes". Specifiable value: 1 to 4,294,967,295 Default: 4,294,967,295	Y
Maximum retry times		Define the maximum number of retry executions. This can be specified only when "**Retry on abnormal end**" is set to "Yes". Specifiable value: 1 to 12 (Unit: times) Default: 1	Y
Retry interval		Define the retry interval. This can be specified only when "**Retry on abnormal end**" is set to "Yes". Specifiable value: 1 to 10 (Unit: minutes) Default: 1	Y
User name		Specify the name of the OS user who executes a job on the agent host. You cannot use a space in the user name. Length of the value: 1 to 63 bytes	Y

(13) Judgment job definition information section
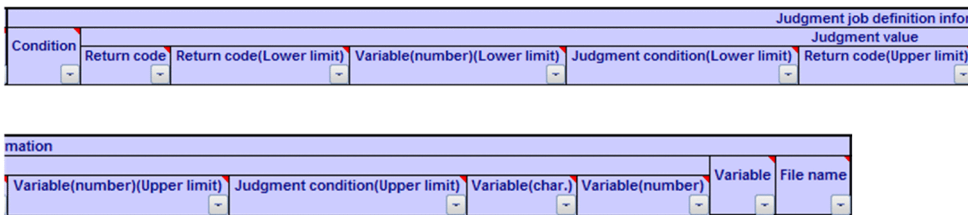
Table 5–13: Items of the Judgment job definition information section

Item name	Description	Display
Condition	Define judgment conditions for comparing the end code of the preceding job with the reference value. gt 　The end code of the preceding job is greater than the reference value. ge 　The end code of the preceding job is equal to or greater than the reference value. lt 　The end code of the preceding job is smaller than the reference value. le 　The end code of the preceding job is equal to or smaller than the reference value. eq 　The end code of the preceding job is equal to the reference value. ne 　The end code of the preceding job is not equal to the reference value. ri 　The return code of the preceding job is within the judgment value range.	Y

Item name		Description	Dis play

Condition		`ro`
		    The return code of the preceding job is outside the judgment value range.
		`ef`
		    A file is created.
		`nf`
		    No file is created.
		`vgt`
		    The value of the specified variable (number) is greater than the judgment value.
		`vge`
		    The value of the specified variable (number) is equal to or greater than the judgment value.
		`vlt`
		    The value of the specified variable (number) is smaller than the judgment value.
		`vle`
		    The value of the specified variable (number) is equal to or smaller than the judgment value.
		`veq`
		    The value of the specified variable (number) is equal to the judgment value.
		`vne`
		    The value of the specified variable (number) is not equal to the judgment value.
		`vri`
		    The specified variable value is within the judgment value (number) range.
		`vro`
		    The specified variable value is outside the judgment value (number) range.
		`sce`
		    The value of the specified variable (char.) is equal to the judgment value.
		`spe`
		    The value of the specified variable (char.) contains the judgment value.
		`sne`
		    The value of the specified variable (char.) is not equal to the judgment value.
		`snn`
		    There is a value for the specified variable (char.).
		`snl`
		    There is no value for the specified variable (char.).
		`spn`
		    The value of the specified variable (char.) does not contain the judgment value.
		Default: `gt`
			Y

Judg ment value	**Retru n code**	Define the judgment end code for judgment. Specifiable value: 0 to 4,294,967,295 This cannot be specified while either `"ri"`,`"ro"`,`"ef"`,`"nf"`,`"vgt"`,`"vge"`,`"vlt"`,`"vle"`,`"veq"`,`"vne"`,`"vri"`,`"vro"`,`"sce"`,`"spe"`,`"sne"`,`"snn"`,`"snl"`, or `"spn"` is specified for **"Condition"**.	Y
	Retur n code (Lowe r limit)	Define the lower limit judgment return code used in making a judgment. This must be specified if `"ri"` or `"ro"` is specified for **"Condition"**. Specifiable value: 0 to 4,294,967,295 This parameter cannot be specified if `"ri"` or `"ro"` is not specified for **"Condition"**.	Y
	Varia ble (numb	Define the lower limit judgment value used in making a variable (numeric) judgment.	Y

Item name		Description	Dis play
Judg ment value	**er) (Lowe r limit)**	This must be specified if "`vri`" or "`vro`" is specified for "**Condition**". Specifiable value: 0 to 2,147,483,647 This parameter cannot be specified if "`vri`" or "`vro`" is not specified for "**Condition**".	Y

	Judg ment Condi tion (Lowe r limit)	Define the boundary conditions used to define the lower limit judgment return code or the lower limit judgment value for variables (numeric).
		`Greater than or equal to`
		    Indicates that the return code of the preceding job or the variable judgment numeric value is equal to or greater than the judgment value.
		`Greater than`
		    Indicates that the return code of the preceding job or the variable judgment numeric value is greater than the judgment value.
		Specifiable value: `Greater than or equal to`
		This parameter cannot be specified if "`ri`","`ro`","`vri`", or "`vro`" is not specified for "**Condition**".
			Y

	Retur n code (Uppe r limit)	Define the upper limit judgment return code used in making a judgment. This must be specified if "`ri`" or "`ro`" is specified for "**Condition**". Specifiable value: 0 to 4,294,967,295 This parameter cannot be specified if "`ri`" or "`ro`" is not specified for "**Condition**".	Y
	Varia ble (numb er) (Uppe r limit)	Define the upper limit judgment value used in making a variable (numeric) judgment. This must be specified if "`vri`" or "`vro`" is specified for "**Condition**". Specifiable value: 0 to 2,147,483,647 This parameter cannot be specified if "`vri`" or "`vro`" is not specified for "**Condition**".	Y

	Judg ment Condi tion (Uppe r limit)	Define the boundary conditions used to define the upper limit judgment return code or the upper limit judgment value for variables (numeric).
		`Less than or equal to`
		    Indicates that the return code of the preceding job or the variable judgment numeric value is equal to or smaller than the judgment value.
		`Less than`
		    Indicates that the return code of the preceding job or the variable judgment numeric value is smaller than the judgment value.
		Default: `Less than or equal to`
		This parameter cannot be specified if "`ri`","`ro`","`vri`", or "`vro`" is not specified for "**Condition**".
			Y

	Varia ble (char.)	Define the judgment value (character) to be used as the judgment criterion. Length of the value: 1 to 511 bytes This parameter cannot be specified if "`gt`","`ge`","`lt`","`le`","`eq`","`ne`","`ri`","`ro`","`ef`","`nf`","`vgt`","`vge`","`vlt`","`vle`","`veq`","`vne`","`vri`","`vr o`","`snn`", or "`snl`" is not specified for "**Condition**".	Y
	Varia ble (numb er)	Define the judgment value (number) to be used as the judgment criterion. Specifiable value: 0 to 2,147,483,647 Default: 0 This parameter cannot be specified if "`gt`","`ge`","`lt`","`le`","`eq`","`ne`","`ri`","`ro`","`ef`","`nf`","`vri`","`vro`","`sce`","`spe`","`sne`","`snn`","`snl`" or "`spn`" is not specified for "**Condition**".	Y
Variable		Specify the macro variable name specified in the preceding job. Make the specification in the "`?AJS2xxxxx?`" format. You can specify only upper-case alphabetic characters, numeric characters, and periods (.) for *xxxxx*.	Y

Item name	Description	Dis play
Variable	Length of the value: 1 to 64 bytes This parameter cannot be specified if `"gt"`,`"ge"`,`"lt"`,`"le"`,`"eq"`,`"ne"`,`"ri"`,`"ro"`,`"ef"`, or `"nf"` is not specified for "**Condition**".	Y
File name	Define the file name of a file subject to end judgment. Length of the value: 1 to 260 bytes This parameter cannot be specified if `"gt"`,`"ge"`,`"lt"`,`"le"`,`"eq"`,`"ne"`,`"ri"`,`"ro"`,`"vgt"`,`"vge"`,`"vlt"`,`"vle"`,`"veq"`,`"vne"`,`"vri"`,`"vro"`,`"sce"`,`"spe"`,`"sne"`,`"snn"`,`"snl"`, or `"spn"` is not specified for "**Condition**".	Y

(14) Event job definition information section

Table 5–14: Items of the Event job definition information section

Item name		Description	Display
Waiting time		Specify the number of minutes to wait for the execution interval control job. Specifiable value: 1 to 1,440 minutes Default: 10	Y
Expire right after starting		Define whether the event job expires immediately after starting. This can be defined if a unit is under start conditions. `No`: The job is not completed immediately after it is started. `Yes`: Completes the job immediately after it is started. Default: `No` Note that when you import a unit that does not expire, the value of the cell is empty.	Y
Monitoring file		Specify the name of the monitoring file for the file monitoring job. You can specify a full-path file name or a generic file name using the wildcard (`*`). Length of the value: 1 to 255 bytes	Y
Monitoring options	**Options**	Specify the monitoring conditions for the file monitoring job You can specify multiple values. However, you cannot specify `s` together with `m`. The values you can specify are as follows: `c`: Monitors file creation. `d`: Monitors file deletion. `s`: Monitors file resizing. `m`: Monitors for a change in the writing time of the last file. `c:d`: Specifies `c` and `d` at the same time. `c:s`: Specifies `c` and `s` at the same time. `c:m`: Specifies `c` and `m` at the same time. `d:s`: Specifies `d` and `s` at the same time. `d:m`: Specifies `d` and `m` at the same time. `c:d:s`: Specifies `c`, `d`, and `s` at the same time. `c:d:m`: Specifies `c`, `d`, and `m` at the same time. Default: `c`	Y
	Details (Create)	Specify the way of executing the file creation monitoring when there is a monitoring-target file.	Y

Item name		Description	Display

Monitoring options	**Details (Create)**	You can specify either of the following values:
		
		`y`
		    The monitoring job terminates normally, assuming that the monitor conditions have been met.
		
		`n`
		    The monitoring job continues to monitor the target file.
		
		Default: `n`
			Y

Monitoring interval		Specify the interval at which the file monitoring job monitors the target file. Specifiable value: 1 to 600 (seconds) Note that you cannot specify a value of 1 to 9 as the monitoring interval when using the wildcard (*) to generically specify multiple target files. Default: 60	Y
Reception event ID		Specify the ID of the target event of the JP1 event reception monitoring job. Specifiable value: 00000000:00000000 to FFFFFFFF:FFFFFFFF (in hexadecimal)	Y
Event issue source host		Specify the name of the host from which JP1 event reception monitoring job events are issued. Length of the value: 1 to 255 bytes	Y
Reception event message		Specify a string to be compared to the message portion of the target JP1 events of the JP1 event reception monitoring job. Length of the value: 1 to 1,024 bytes	Y
Status after close		Specify the state of the event job after the execution time-out period elapses. This parameter is invalid for a job within the start condition. Use one of the following keywords to specify this item: `kl`: Killed `nr`: Ended normally `wr`: Ended with warning `an`: Ended abnormally Default: `kl`	Y
Definition parameters		Specify the unit definition parameters for the custom event job in the "specified item name=value" format. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (Alt + Enter). Length of the value: 1 to 20,479 bytes For details about the specified item name, see the manual JP1/Automatic Job Management System 3 for Cloud Service Applications.	Y

(15) Action job definition information section

Table 5–15: Items of the Action job definition information section

Item name	Description	Display
Send event ID	Specify the ID of the event transmitted by the JP1 event transmission job. Specifiable value: 00000000 to 00001FFF or 7FFF8000 to 7FFFFFFF (in hexadecimal)	Y

Item name	Description	Display
Event destination host	Specify the name of the host to which the JP1 event transmission job sends events. Length of the value: 1 to 255 bytes	Y
Send event message	Specify the message to be attached to events transmitted by the JP1 event transmission job. Length of the value: 1 to 1,023 bytes	Y
Send event level	Specify the event level to be attached to events transmitted by the JP1 event transmission job. Use one of the following keywords to specify this item: `em`: Sets Emergency. `al`: Sets Alert. `cr`: Sets Critical. `er`: Sets Error. `wr`: Sets Warning. `no`: Sets Notice. `in`: Sets Information. `db`: Sets Debug. Default: `no`	Y
Check event arrivals	Specify whether to check the arrival of the event. `y`: Checks the arrival of the event. `n`: Does not check the arrival of the event. Default: `n`	Y
Check interval	Specify the interval at which to check for arrival of a JP1 event. Specifiable value: 3 to 600 (seconds)	Y
Check count	Specify how many times to check for arrival of a JP1 event. Specifiable value: 0 to 999	Y
Platform	Specify the type of the platform for executing the JP1 event transmission job. `p`: Windows `u`: UNIX Default: `p`	Y

(16) Job common attribute information section

Table 5–16: Items of the Job common attribute information section

Item name	Description	Display
Executed by	Specify the JP1 user who executes the job. This item is invalid for event jobs.	Y

Item name		Description	Display

Executed by		Use either of the following keywords to specify this item:
		`ent`
		    Assumes the JP1 user who registered the jobnet.
		`def`
		    Assumes the JP1 user who owns the jobnet.
		Default: `ent`
			Y

Time period		Specify the timeout period for job execution in minutes from the execution start time. This parameter is invalid for jobs within the start conditions. Specifiable value: 1 to 1,440 (minutes)	Y
Time-required-for-execution		Define the time required for execute a job for which the termination delay is monitored. Specifiable value: 1 to 1,440 (minutes)	Y
Exec. service		Specify whether the job has the queuing attribute. `q`: Has the queuing attribute. `n`: Does not have the queuing attribute. Default: `q`	Y
Transfer file 1	**File to transfer**	Define the file to transfer by the full path name. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Destination file	Define the distiname file in the agent host. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Auto-del	Defines the automatic deletion of the destination file. This could be defined for a UNIX job, a PC job, or their recovery jobs. This cannot be specified for a QUEUE job. `sav`: Save the file. `del`: Delete the file.	Y
Transfer file 2	**File to transfer**	Define the file to transfer by the full path name. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Destination file	Define the distiname file in the agent host. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Auto-del	Defines the automatic deletion of the destination file. This could be defined for a UNIX job, a PC job, or their recovery jobs. This cannot be specified for a QUEUE job. `sav`: Save the file. `del`: Delete the file.	Y
Transfer file 3	**File to transfer**	Define the file to transfer by the full path name. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Destination file	Define the distiname file in the agent host.	Y

Item name		Description	Display
Transfer file 3	**Destination file**	This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Auto-del	Defines the automatic deletion of the destination file. This could be defined for a UNIX job, a PC job, or their recovery jobs. This cannot be specified for a QUEUE job. `sav`: Save the file. `del`: Delete the file.	Y
Transfer file 4	**File to transfer**	Define the file to transfer by the full path name. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Destination file	Define the distiname file in the agent host. This could be specified in a UNIX job, in a PC job, in a QUEUE job, and their recovery job. Length of the value: 1 to 511 bytes	Y
	Auto-del	Defines the automatic deletion of the destination file. This could be defined for a UNIX job, a PC job, or their recovery jobs. This cannot be specified for a QUEUE job. `sav`: Save the file. `del`: Delete the file.	Y

(17) Waiting condition definition information section
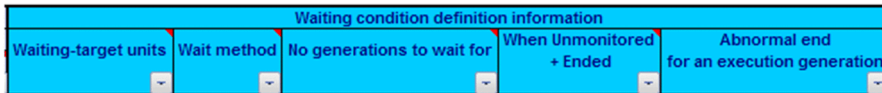
Table 5–17: Items of the Waiting condition definition information section

Item name	Description	Display
Waiting-target units	Specify the full path name of a unit whose end is being waited for. When you set the preceding wait condition, make sure that you specify this item. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Length of the value: 1 to 930 bytes To release the existing connection, input `:X` after the unit name (like `sample:X`). To delete all of the existing preceding wait target units, omit this value.	Y

Wait method	Specify the wait method of the specified units whose ends are being waited for.
	`and`
	　Start executing at completion of all units whose ends are being waited for.
	`or`
	　Start executing at completion of one of the units whose ends are being waited for.
	Default: `and`
		Y

No generations to wait for	Specify the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for. `Execute` 　Start executing.	Y

Item name	Description	Display
No generations to wait for	`Do not execute` Do not start executing. Default: `Do not execute`	Y

When Unmonitored + Ended	Define how the system behaves if the monitoring of a monitoring generation could not be started.
	`Do not execute`
	    Do not start executing.
	`Execute`
	    Start executing.
	Default: `Do not execute`
		Y

Abnormal end for an execution generation	Specify how the system behaves if the execution generation terminates abnormally.
	`Do not execute`
	    Do not start executing.
	`Start when skipped so not exe.`
	    If the execution generation is not executed because it is skipped, start executing.
	`Execute`
	    Start executing.
	Default: `Do not execute`
		Y

(18) Tool unit definition information section
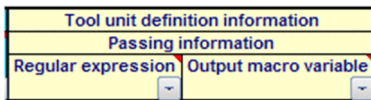
Table 5–18: Items of the Tool unit definition information section

Item name		Description	Display
Passing information	**Regular expression**	Specify the conditions for extracting the value set in the output macro variable as a regular expression. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Length of the value: 1 to 64 bytes	Y
	Output macro variable[#]	Specify the output macro variable. Make the specification in the "`?AJS2`*xxxxx*`?`" format. You can specify only upper-case alphabetic characters, numeric characters, and periods (.) for *xxxxx*. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Length of the value: 1 to 64 bytes	Y

#

    When the output macro variable includes a single-byte space, the space is removed for export and the information is defined. Note that the output macro variable in the export execution result file still includes a single-byte space (the specified value does not change). If you want to identify the output macro variable that uses a single-byte space, use the error-checking function.

(19) Flexible job definition information section

Table 5–19: Flexible job definition information section

Item name	Description	Display
Destination / Broadcast Agent	Specify the destination or broadcast agent. Length of the value: 1 to 255 bytes	Y
Broadcast Execution	Specify the Broadcast Execution. `Synchro`: Perform execution in synchronous mode. `Asynchro`: Perform execution in asynchronous mode. If you do not use the broadcast execution, omit this value.	Y
Relay agent	Define the name of the execution agent or execution agent group that serves as a relay agent. You cannot specify `@SYSTEM`. Length of the value: 1 to 255 bytes If the relay agent is not required, omit this value.	Y

(20) Http connection job definition information section

Table 5–20: Http connection job definition information section

Item name	Description	Display
Conn. configuration file name	Define the full path name of the connection configuration file on the agent host that executes jobs. Length of the value: 1 to 511 bytes	Y
Request type	Define the request type. If it is omitted, `GET` is assumed. `GET`: GET request `POST`: POST request `PUT`: PUT request `DELETE`: DELETE request Default: `GET`	Y

Extended mode	Define whether to use extended mode. If this value is omitted, `"Do not use"` is assumed.
	`Use`:
	    Extended mode will be used. The URL parameters and the message body will be sent as an HTTP request.
	`Do not use`:
	    Extended mode is not used. The contents of the transmission information file name will be sent as an HTTP request.
		Y

Item name	Description	Display
Trans. info. file name	Define the full path name of the transmission information file on the agent host that executes jobs. Length of the value: 1 to 511 bytes	Y
URL parameter	Define the full path name of the transmission information file on the agent host that defines the information to be transmitted as the URL parameter. Length of the value: 1 to 511 bytes	Y
Message body	Define the full path name of the transmission information file on the agent host that defines the information to be transmitted as the message body. Length of the value: 1 to 511 bytes	Y
Status file name	Define the full path name of the status file created on the agent host that executes jobs. Length of the value: 1 to 511 bytes	Y

How to store received data	Defines how to store received data. If it is omitted, `Output header/body to another file` is assumed.
	`Output header/body to another file:`
	　The header and body of an HTTP response are stored separately.
	`Output header/body to the same file:`
	　The header and body of an HTTP response are stored together.
	Default: `Output header/body to another file`
		Y

Received header file name	Define the full path name of the received header file created on the agent host that executes jobs. Length of the value: 1 to 511 bytes	Y
Received body file name	Define the full path name of the received body file created on the agent host that executes jobs. Specify this item when **How to store received data** is set to `Output header/body to another file`. Length of the value: 1 to 511 bytes	Y
Return code specification	Define a job exit code for each HTTP status code in the form of "*exit-code-1*: *HTTP-status-code-1*[, *HTTP-status-code-2*...]". To specify multiple entries, specify them in the same cell, separating each entry with a line break (**Alt+Enter**). Length of each line: 1 to 511 bytes	Y

(21) Other definition information section

Table 5–21: Items of the Other definition information section

Item name	Description	Display
Other definition information	Define definition information not display in the list in the unit definition parameter format. Display during import 　If a tab character is included in definition information output to the cell of Other definition information, the tab character is not displayed in the cell of Other definition information. Display during export 　If a special character is to be treated as a normal character in the cell of Other definition information, the cast character might be specified.	Y

Item name	Description	Display
Other definition information	For details about the unit definition parameter format, see the part that describes the definition information format and parameter in the manual *JP1/Automatic Job Management System 3 Command Reference*. In definition information acquired by importing, the double quotation (") and the sharp (#) are cast already. Therefore, casting is not required.	Y

(22) Custom job definition information section

The custom job definition information section includes the R/3 job definition information section, which defines the details of JP1/AJS3 for Enterprise Applications. This subsection shows only the information to be specified. For details about how to specify each definition item, see the manual *JP1/Automatic Job Management System 3 for Enterprise Applications Description, User's Guide and Reference*.

(a) R/3 job definition information section

Table 5–22: Items of the R/3 job definition information section

Item name		Description	Display
Host name		Specify the host name to be specified in the -h command argument of JP1/AJS3 for Enterprise Applications. Length of the value: 1 to 100 bytes	N
System number		Specify the system number to be specified in the -s command argument of JP1/AJS3 for Enterprise Applications. Specifiable value: 0 to 99	N
Destination		Specify the destination to be specified in the -d command argument of JP1/AJS3 for Enterprise Applications. Length of the value: 1 to 64 bytes	N
Logon by sapnwrfc.ini file		Specify whether logon is to be performed by using the sapnwrfc.ini file specified in the -dl command argument of JP1/AJS3 for Enterprise Applications. The default value is No. No: Logon is not performed by using the sapnwrfc.ini file Yes: Logon is performed by using the sapnwrfc.ini file	N
Client		Specify the client to be specified in the -c command argument of JP1/AJS3 for Enterprise Applications. Specifiable value: 0 to 999	N
SAP user name		Specify the user name to be specified in the -u command argument of JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for a user name. Length of the value: 1 to 12 bytes	N
Password[#1]		Specify the password to be specified in the -p command argument of JP1/AJS3 for Enterprise Applications. Length of the value: 1 to 10 bytes	N
Extended password[#1]		Specify the extension password to be specified in the -p2 command argument of JP1/AJS3 for Enterprise Applications. Length of the value: 1 to 40 bytes	N
System management information		This displays information managed by JP1/AJS3 for Enterprise Applications. Do not change the value for this item.	N
System management extended information		This displays extended information managed by JP1/AJS3 for Enterprise Applications. Do not change the value for this item.	N
Language		Specify the language to be specified in the -l command argument of JP1/AJS3 for Enterprise Applications. You can specify no more than one single-byte character. Select one of the following as the language to be used by the SAP system: J: Japanese E: English	N
Job name		Specify the job name to be specified in the -jn argument of the jr3bjsub command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for a job name. Length of the value: 1 to 32 bytes	N
Job step	**Program type**	Specify the program type in the job steps in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). pa: ABAP program px: External program	N

Item name		Description	Display
Job step	**Program**	In the `jr3bjsub` command of JP1/AJS3 for Enterprise Applications, use the `-pa` argument to specify an ABAP program, or use the `-px` argument to specify an external program. For an ABAP program, you cannot use lower-case alphabetic characters. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 　　For an ABAP program: 1 to 40 (bytes) 　　For an external program: 1 to 128 (bytes)	N
	Variant	In the `jr3bjsub` command of JP1/AJS3 for Enterprise Applications, use either the `-var` argument or `-arg` argument to specify a variant. For an ABAP program, you cannot use lower-case alphabetic characters. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 　　For an ABAP program: 1 to 14 (bytes) 　　For an external program: 1 to 255 (bytes)	N
	Authorized user	Specify the authorized user to be specified in the `-auth` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters to specify the authorized user. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 12 bytes	N
	Target host	Specify the host name to be specified in the `-xpgtgh` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 32 bytes	N
	Archiving mode	Specify the archiving mode to be specified in the `-armode` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Use one of the following keywords to specify this item: `P`: Printing only `A`: Archiving only `PA`: Printing and archiving Default: `P`	N
	Output device	Specify the output device to be specified in the `-out` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the output device. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 4 bytes	N
	lines	Specify the number of output lines to be specified in the `-ln` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Specifiable value: 1 to 255 (lines)	N
	columns	Specify the number of output columns to be specified in the `-col` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications.	N

Item name		Description	Display
Job step	**columns**	When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Specifiable value: 1 to 255 (columns)	N
	Format	Specify the format to be specified in the `-fmt` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the format. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Specifiable value: 1 to 16 bytes	N
	Number of copies	Specify the number of copies to be specified in the `-cc` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Specifiable value: 1 to 255 (copies) Default: 1	N
	Authorization	Specify the authorization to be specified in the `-shwpwd` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the authorization. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 12 bytes	N
	Spool save period	Specify the spool save period to be specified in the `-rpd` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Use a value (*n*) or keyword to specify this item. *n*: Specify the number of days during which print requests are to be saved. The value that can be specified in *n*: 1 to 8 (days) `unlimited`: Specify this keyword to save print requests without any limit. Default: 8	N
	SAP cover sheet	Specify the print option for the SAP cover sheet to be specified in the `-sapcvr` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Use one of the following keywords to specify this item: `Y`: Prints the SAP cover sheet. `N`: Does not print the SAP cover sheet. `D`: Depends on the printer setting. Default: `D`	N
	Receiver	Specify the receiver to be specified in the `-receiver` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the receiver. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 12 bytes	N
	Obj. type	Specify the object type to be specified in the `-objtyp` argument of the `jr3bjsub` command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the object type. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**).	N

Item name		Description	Display
Job step	**Obj. type**	Number of characters that can be specified on one line: 1 to 10 bytes	N
	Doc. type	Specify the document type to be specified in the -doctyp argument of the jr3bjsub command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the document type. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 10 bytes	N
	Information	Specify the information ID to be specified in the -info argument of the jr3bjsub command in JP1/AJS3 for Enterprise Applications. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 3 bytes	N
	Information text	Specify the information text to be specified in the -text argument of the jr3bjsub command in JP1/AJS3 for Enterprise Applications. You cannot use lower-case alphabetic characters for the information text. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**). Number of characters that can be specified on one line: 1 to 40 bytes	N
	Other job step information	Specify the job step information, which is not displayed in the list, of the jr3bjsub command of JP1/AJS3 for Enterprise Applications. Specify the parameter by using the command argument format. When specifying multiple entries, be sure to do so in the same cell, separating each entry with a line break (**Alt+Enter**).	N
Name of the source job		Specify the name of the source job to be specified in the -jn argument of the jr3bjcpy command in JP1/AJS3 for Enterprise Applications. You can specify a character string between 1 and 32 bytes long.	N
Job count of the source job		Specify the job count of the source job to be specified in the -jc argument of the jr3bjcpy command in JP1/AJS3 for Enterprise Applications. You can specify a character string between 1 and 8 bytes long.	N
Number of the first step to start copying job		Specify the number of the first step to start copying job to be specified in the -js argument of the jr3bjcpy command in JP1/AJS3 for Enterprise Applications. You can specify 0 to 99. If 0 or 1 is specified, all job steps are copied.	N
New name of the copied job		Specify the new name of the copied job to be specified in the -djn argument of the jr3bjcpy command in JP1/AJS3 for Enterprise Applications. You can specify a character string between 1 and 32 bytes long. If the new name of the copied job is omitted, the job is copied with the same name as the source job.	N
Environment variables	**Variable**	Specify the name of an environment variable. You can specify a character string between 1 and 259 bytes long. You cannot specify double quotation marks (") or equal signs (=). To specify multiple entries, specify all entries in the same cell and delimit them by using line breaks (**Alt+Enter**).	N
	Value	Specify the value of the environment variable. You can specify a character string between 1 and 2,047 bytes long. To specify multiple entries, specify all entries in the same cell and delimit them by using line breaks (**Alt+Enter**).	N

Item name	Description	Display
Other R/3 job definition information[#2]	Specify the arguments, which are not displayed in the list, of the `jr3bjsub` command of JP1/AJS3 for Enterprise Applications. Specify the arguments by using the command argument format. Do not specify the job step information.	N

#1

    The password is not scrambled and is displayed as is.

#2

    Line breaks included in the value are deleted, and the value is handled as one-line data.

(23) Last updated time information section

Table 5–23: Items of the Last updated time section

Item name	Description	Display
Last updated time	Displays the last updated time of the unit. This item is not a target for export. Also, the value cannot be changed.	Y

(24) Error message information section

Table 5–24: Items of the Error message section

Item name	Description	Display
Error message	An error message is displayed. This item is not a target for Import and Export.	Y

5.2 Support status of the definition items in JP1/AJS3 - View

The following table describes whether the icon display in JP1/AJS3 - View supports the items of the definition information management template.

Note that this table does not describe the support status of the sections **Unit definition information**, **Unit common definition information**, **Unit common attributes information**, and **Job common attribute information**. JP1/AJS3 - View supports all the definition items of these sections in the definition information management template.

Table 5–25: Support status of the definition items in JP1/AJS3 - View

Unit type	Definition item	Support status
Job group	Base day (specified by a date)	Y
	Base day (specified by a day of the week)	Y
	Treat as	Y
	Base time	Y
	Job group type	Y
	Standard week	Y
	Open day	Y
	Closed day	Y
	Exec. order control[1]	Y
	Connection range[1]	Y
	Connection host[1]	Y
	Connection service[1]	Y
	Jobnet connector[1]	Y
	Exec. order method[1]	Y
Manager job group	Host to reference	Y
	Unit to reference	Y
Manager jobnet	Host to reference	Y
	Unit to reference	Y
Jobnet	Concurrent exec.[2]	Y
	No. logs to keep[2]	Y
	Priority	Y
	Time-out period[2]	Y
	Schedule option[2]	Y
	Required exec. time (for jobnet monitoring)	Y
	Rule number to link	Y
	Depends on upper-level jobnet	Y
	Valid term	Y

Unit type	Definition item		Support status
Jobnet	Job group name (name of the job group for which to reference calendar information)		Y
	Exclusive jobnet		Y
	Type (of the execution start day)		Y
	Start year and month		Y
	Start day		Y
	Start time		Y
	Processing cycle		Y
	Substitute schedule of closed day job		Y
	Max. shiftable days		Y
	Schedule by days from start		Y
	Max. shiftable days		Y
	Start delay		Y
	End delay		Y
	Start condition	Times	Y
		Period	Y
	Exec. order control[#2]		Y
	Connection range[#2]		Y
	Connection host[#2]		Y
	Connection service[#2]		Y
	Jobnet connector[#2]		Y
	Exec. order method[#2]		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Remote jobnet	Concurrent exec.[#3]		Y
	No. logs to keep[#3]		Y
	Target manager		Y
	Priority		Y
	Time-out period[#3]		Y
	Schedule option[#3]		Y
	Required exec. time (for jobnet monitoring)		Y

Unit type	Definition item		Support status
Remote jobnet	Depends on upper-level jobnet		Y
	Job group name (name of the job group for which to reference calendar information)		Y
	Valid term		Y
	Exclusive jobnet		Y
	Rule number to link		Y
	Type (of the execution start day)		Y
	Start year and month		Y
	Start day		Y
	Start time		Y
	Processing cycle		Y
	Substitute schedule of closed day job		Y
	Max. shiftable days		Y
	Schedule by days from start		Y
	Max. shiftable days		Y
	Start delay		Y
	End delay		Y
	Start condition	Times	Y
		Period	Y
Start condition	Start Condition		Y
	Concurrent exec. of monitoring gen.		S
	Pause exec. gen. for start cond.		S
	Task after abend		S
Judgment job	Judgment type: Return code	Condition	Y
		Judgment value	Y
	Judgment type: File	Condition	Y
		File name	Y
	Judgment type: Variable (char.)	Variable	Y
		Condition	Y
		Judgment value	Y
	Judgment type: Variable (number)	Variable	Y
		Condition	Y
		Judgment value	Y
UNIX job	Command statement		Y
	Script file name		Y
	Parameters		Y

Unit type	Definition item		Support status
UNIX job	Environment variables		Y
	Environment file		Y
	Working path		Y
	Priority		Y
	Standard input		Y
	Standard output		Y
	Standard error		Y
	End judgment		Y
	Retry on abnormal end		Y
	Return code		Y
	Maximum retry times		Y
	Retry interval		Y
	User name		Y
	Transfer file		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
PC job	Execution file name		Y
	Parameters		Y
	Environment variables		Y
	Environment file		Y
	Working path		Y
	Priority		Y
	Standard input		Y
	Standard output		Y
	Standard error		Y
	End judgment		Y
	Retry on abnormal end		Y
	Return code		Y
	Maximum retry times		Y
	Retry interval		Y
	User name		Y
	Transfer file		Y

Unit type	Definition item		Support status
PC job	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
QUEUE job	Host name		Y
	Queue name		Y
	Job name		Y
	Execution file name		Y
	Parameters		Y
	Priority		Y
	End judgment		Y
	Retry on abnormal end		Y
	Return code		Y
	Maximum retry times		Y
	Retry interval		Y
	Transfer file		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
JP1 event reception monitoring job	Event ID		Y
	User name		S
	Group name		S
	Host name		Y
	IP address		S
	Message		Y
	Event details		S
	Extended attribute		S
	End judgment		S
	Other specification in basic information		S
	Find events prior to exec.		S
	Status after termination		Y

Unit type	Definition item		Support status
JP1 event reception monitoring job	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
File monitoring job	Monitoring file		Y
	Monitoring options	Options	Y
		Details (Create)	Y
	Monitoring interval		Y
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Email reception monitoring job	List of senders		S
	List of subjects		S
	List of message texts		S
	Option after receive		S
	Save mail		S
	List of received mails		S
	Message text file		S
	Folder for saving attached file		S
	List file		S
	Platform		S
	Profile name		S
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y

Unit type	Definition item		Support status
Email reception monitoring job	Wait conditions	Abnormal end for an execution generation	Y
Message queue reception monitoring job	Correlation ID		S
	Message ID		S
	Message input queue		S
	Model queue		S
	Message storage file		S
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
MSMQ reception monitoring job	Path name		S
	Correlation ID		S
	Relationship		S
	Message label		S
	Application information		S
	Message storage file		S
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Log file monitoring job	File to be monitored		S
	Data to be trapped		S
	Data lines except log		S
	Log file behavior		S
	Output format		S
	Record format		S
	Header		S

Unit type	Definition item		Support status
Log file monitoring job	Monitoring options		S
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Windows event-log monitoring job	Log type		S
	Event type		S
	Source		S
	Category		S
	Event ID		S
	Explanation		S
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Execution interval control job	Waiting time		Y
	Expire right after starting		Y
	Status after termination		Y
	Pass Info		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
JP1 event sending job	Event destination host		Y
	Event ID		Y
	Message		Y

Unit type	Definition item		Support status
JP1 event sending job	Event level		Y
	Check event arrivals		Y
	Check interval		Y
	Check count		Y
	Extended attribute		S
	Platform		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Email sending job	Recipients		S
	Subject		S
	Message text		S
	Platform		Y
	Profile name		S
	Attached file		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Message queue sending job	Queue		S
	Queue manager		S
	Model queue		S
	Connection queue manager		S
	Correlation ID		S
	Message ID		S
	Retain		S
	Detailed setting		S
	Format		S
	Message data file		S
	Retention time		S
	Priority		S

Unit type	Definition item		Support status
Message queue sending job	Dead-letter queue		S
	Platform		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
MSMQ sending job	Path name		S
	Queue label		S
	Correlation ID		S
	Message label		S
	Application information		S
	Time to reach queue		S
	Time to be received		S
	Priority		S
	Delivery		S
	Logging		S
	Message body		S
	Message body file		S
	Message body type		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
HP OpenView status report job	Status		S
	Additional information		S
	Platform		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y

Unit type	Definition item		Support status
Local power control job	Platform		Y
	Execution type		S
	Termination request type		S
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Remote power control job	Remote host		S
	Request type		S
	Set next power-on time		S
	Restart		S
	Power-off completion		S
	Platform		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Jobnet connector	Connection range		Y
	Connection host		Y
	Connection service		Y
	Connect destination		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Passing information settings job	Passing Information	Regular Expression	Y
		Output Macro Variable	Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y

Unit type	Definition item		Support status
Passing information settings job	Wait conditions	When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Flexible job	Execution file name		Y
	Parameter		Y
	Environment variables		Y
	End judgment		Y
	Retry on abnormal end		Y
	Return code		Y
	Maximum retry times		Y
	Retry interval		Y
	Destination / Broadcast Agent		Y
	Broadcast Execution		Y
	Relay agent		Y
	Execution file name		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmonitored + Ended	Y
		Abnormal end for an execution generation	Y
HTTP connection job	Priority		Y
	Standard output		Y
	Standard error		Y
	Return code specification		Y
	End judgment		Y
	Retry on abnormal end		Y
	Return code		Y
	Maximum retry times		Y
	Retry interval		Y
	User name		Y
	Conn. configuration file name		Y
	Request type		Y
	Extended mode		Y
	Trans. info. file name		Y
	URL parameter		Y

Unit type	Definition item		Support status
HTTP connection job	Message body		Y
	Status file name		Y
	How to store received data		Y
	Received header file name		Y
	Received body file name		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmonitored + Ended	Y
		Abnormal end for an execution generation	Y
Standard custom job (JP1AMR3, JP1AMR3UX)	Host name		Y
	System number		Y
	Destination		Y
	Logon by sapnwrfc.ini file		Y
	Client		Y
	SAP user name		Y
	Password		S$^{\#5}$
	Extention password		S$^{\#5}$
	Language		Y
	Job name		Y
	Job class		S
	Program		Y
	Variant		Y
	Temporary Variant		S
	Authorized user		Y
	Language (ABAP program)		S
	Archiving mode		Y
	Output device		Y
	line		Y
	columns		Y
	Format name		Y
	Number of copies		Y
	Authorization		Y
	Print Immediately		S

Unit type	Definition item		Support status
Standard custom job (JP1AMR3, JP1AMR3UX)	Delete after printing		S
	Spool save period		Y
	Spool request title		S
	SAP cover sheet		Y
	Selection cover sheet		S
	Receiver		Y
	Group name		S
	Obj. type		Y
	Doc. type		Y
	Information		Y
	Text		Y
	Target host system		Y
	Define target host system		S
	Define target application server		S
	Release[#4]		S
	Monitoring completion of job		S
	Monitoring time		S
	Cancel job		S
	Query interval		S
	Standard output message		S
	Standard error output message		S
	R/3 job log		S
	Monitoring completion of parent or child job		S
	Environment variables		Y
	Wait conditions	Waiting-target units	Y
		Wait method	Y
		No generations to wait for	Y
		When Unmoitored + Ended	Y
		Abnormal end for an execution generation	Y
Standard custom job (JP1AMR3CP, JP1AMR3CPUX)	Host name		Y
	System number		Y
	Destination		Y
	Logon by sapnwrfc.ini file		Y
	Client		Y
	SAP user name		Y

Unit type	Definition item			Support status
Standard custom job (JP1AMR3CP, JP1AMR3CPUX)	Password			S[#5]
	Extention password			S[#5]
	Language			Y
	Name of the source job			Y
	Job count of the source job			Y
	Number of the first step to start copying job			Y
	New name of the copied job			Y
	Target host system			Y
	Define target host system			S
	Define target application server			S
	Release[#4]			S
	Monitoring completion of job			S
	Monitoring time			S
	Cancel job			S
	Query interval			S
	Standard output message			S
	Standard error output message			S
	R/3 job log			S
	Monitoring completion of parent or child job			S
	Environment variables			Y
	Wait conditions	Waiting-target units		Y
		Wait method		Y
		No generations to wait for		Y
		When Unmonitored + Ended		Y
		Abnormal end for an execution generation		Y
Custom event job (Service linkage objects monitoring job)	Define Details	Authentication definition name		D
		Name of the object to be monitored		D
		Monitoring options	Options	D
			Details (Create)	D
			Details (Delete)	D
		Monitoring interval		D
		Custom input items		D
	Passing information			S
	Wait conditions	Waiting-target units		Y

Unit type	Definition item		Support status
Custom event job (Service linkage objects monitoring job)	Wait conditions	Wait method	Y
		No generations to wait for	Y
		When Unmonitored + Ended	Y
		Abnormal end for an execution generation	Y

Legend:

Y: The definition item of JP1/AJS3 - Definition Assistant is supported.

S: The item is supported by the save function for unsupported definition items.

D: Handled by the **Definition parameters** column in the event job definition information section

#1

This item can be specified only for a planning group (the job group type is p). This item cannot be specified for a job group (the job group type is n).

#2

This item can be specified for only the root jobnet, and cannot be specified for nested jobnets.

#3

This item can be specified for only the root remote jobnet, and cannot be specified for nested remote jobnets.

#4

Integrates the **Do not release job**, **Release job as soon as possible**, and **Release job immediately** options.

#5

Passwords specified in the -p command argument and extended passwords specified in the -p2 command argument are supported.

6

Troubleshooting

This chapter describes the actions to be taken when a problem occurs, and information that must be collected.

6.1 Steps for troubleshooting

If a problem occurs in JP1/AJS3 - Definition Assistant, you should take actions according to the following procedure:

1. Checking events

   Check for what events occur if a problem is encountered. If a message has been displayed, check the contents of the message. For details about the cause of the message and the action to take, see *8. Messages*.

2. Collecting the information

   You need to collect information to determine the cause of the problem. See *6.2 Information that must be collected in the event of a problem* and *6.3 Method for collecting information* to collect necessary information.

3. Investigating the problem

   Determine the cause of the problem based on the collected information and isolate the problem or all the areas affected by the problem.

6.2 Information that must be collected in the event of a problem

This section describes the information you need to collect if a problem occurs in JP1/AJS3 - Definition Assistant.

JP1 provides the *data collection tool* that collects necessary information in a batch. The information that the data collection tool with the initial settings can collect is indicated in the following table.

6.2.1 Information that must be collected

(1) Log information about the operating system

You must collect the following log information about the operating system:

Table 6–1: Log information about the operating system that must be collected if a problem occurs

Type of information	Default file name	Collection by the tool
Windows event log	Event log file	Y
Windows registry information	N/A	Y
`hosts` file `services` file	• *system-folder*`\system32\drivers\etc\hosts` • *system-folder*`\system32\drivers\etc\services`	Y
Machine configuration[#2]	N/A	Y
PP list in service[#2]	N/A	Y
Network configuration[#2]	N/A	Y
Memory dump[#1]	N/A	N
Crash dump[#1]	N/A	N

Legend:

　　Y: Can be collected by the data collection tool.

　　N: Cannot be collected by the data collection tool.

#1

　　The data collection tool cannot be used to obtain memory dumps or crash dumps in Windows. Collect information corresponding to these logs or dumps manually if a problem occurs. For details about how to collect the information, see *6.3.1(3) Collecting user dumps* and *6.3.1(4) Collecting problem reports*.

#2

　　You can obtain various kinds of information about the computer, including information such as information about the hardware environment, software environment, and Internet settings.

　　Note that it might take a few minutes for information to be collected. Make sure you wait until the System Information dialog box closes.

(2) JP1 information

You must collect information about JP1 shown in the following table. You must also collect the files from the connected JP1/AJS3 - Manager host.

Table 6–2: JP1 information that must be collected if a problem occurs

Type of information	Default folder name	Collection by the tool
Log file Master file Work file Definition file	• *JP1/AJS3 - Definition-Assistant-installation-folder*\bin • *JP1/AJS3 - Definition-Assistant-installation-folder*\conf • `%ALLUSERSPROFILE%`[#1]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp` • `%ALLUSERSPROFILE%`[#1]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log`	Y
Copy of the master file used for execution	N/A	N
Execution result file used for execution	• `%ALLUSERSPROFILE%`[#1]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\backup`	
Connection destination information (collected by the data collection tool on the connected JP1/AJS3 - Manager[#2])	• `%TEMP%\jp1ajs2\backlog` of the host on which the connection destination JP1/AJS3 - Manager is installed (in Windows) • Information in `/tmp/jp1ajs2/` on the host on which the connection destination JP1/AJS3 - Manager is installed (in UNIX)	C

Legend:

    Y: Can be collected by the data collection tool.

    N: Cannot be collected by the data collection tool.

    C: Can be collected by the data collection tool on the connected JP1/AJS3 - Manager.

#1

    The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

#2

    For details about the data collection tool on the connected JP1/AJS3 - Manager, see the description of the method for collecting information in the manual *JP1/Automatic Job Management System 3 Troubleshooting*.

(3) List of processes

In the Windows Task Manager window, click the **Processes** tab. Then, check the operation status of the processes of the connected JP1/AJS3 - Manager.

For details about the JP1/AJS3 - Manager processes, see the list of JP1/AJS3 - Manager processes in the manual *JP1/Automatic Job Management System 3 Troubleshooting*.

(4) Details about the operation

You need to check the following information about the operation that caused the problem.

- Details about the operation
- Time the problem occurred
- Machine configuration (each OS version, host name, configuration of JP1/AJS3 - Definition Assistant and JP1/AJS3 - Manager or JP1/AJS3 - View, and so on)
- Whether or not the problem is repeatable
- Name of the user who has logged on to the Windows host that is using JP1/AJS3 - Definition Assistant

(5) Hardcopy of error information displayed on the screen

Make a hardcopy of the following information:

- Hardcopy of the operation window for an application error
- Hardcopy of the error message dialog box (Also make a hardcopy of information displayed by clicking a button for showing details, if available.)

(6) Other information

Collect any necessary information other than (1) to (5) above.

- Contents of **System Log** and **Application Log** in the Window's Event Viewer window

6.3 Method for collecting information

Collecting information about a problem helps you investigate its cause. If you find the cause of the problem, you can take appropriate action for it.

This section describes how to collect information.

6.3.1 Detailed method for collecting information

The following describes the method for collecting information in the event of a problem.

(1) Executing the data collection tool

JP1/AJS3 - Definition Assistant provides the data collection tools shown in the table below. Execute either data collection tool depending on your operation.

Table 6–3: Data collection tools provided by JP1/AJS3 - Definition Assistant

Data collection tool	Usage
jajs_log.bat	Used if you have not changed the output destination for the log file or the like from the default, or if you do not need to collect other information.
_04.bat	Used and customized if you have changed the output destination for the log file or the like, or if you want to collect other information.

For details about how to set up the data collection tool (_04.bat), see *3.1.8 Setting up the data collection tool*.

The following shows an example of executing the data collection tool:

If you are using jajs_log.bat

```
c:\>"c:\Program Files\HITACHI\JP1AJS2\tools\jajs_log.bat"
```

If you are using _04.bat

```
c:\>c:\usertools\_04.bat
```

The files of the result of the data collection tool is by default placed in the following folders under the %TEMP% \jp1ajs2\backlog folder. Backup the files.

- JP1_DEFAULT\JP1_DEFAULT_1st
  Data for the first report is output.
- JP1_DEFAULT\JP1_DEFAULT_2nd
  Another data is output.

(2) Checking the Windows event log

In Windows' Event Viewer window, check the Windows event log. Additionally, write the log to a file.

(3) Collecting user dumps

You cannot use the data collection tool to obtain a dump file. Therefore, if a JP1/AJS process stops because of an application error, perform the following operation while the error dialog box is still open.

Note:

If you close the error dialog box, dumps cannot be obtained correctly and user dumps cannot be collected. If you close the error dialog box before collecting dumps by mistake (by clicking the **OK** button, for example), replicate the events causing the error and then perform the following operation while the error dialog box is open.

1. Start the Task Manager.

   You can start Task Manager with either of the following methods:

   - Right-click in an empty area on the taskbar and then select **Task Manager**.

   - Press the **Ctrl** + **Shift** + **ESC** keys to start Task Manager.

2. In the Windows Task Manager dialog box, click the **Processes** tab.

3. Right-click the name of the JP1/AJS process that stopped because of the application error, and then select **Create Dump File**.

4. A dialog box indicating the output destination path of the user dump appears. Get the dump from the displayed location.

(4) Collecting problem reports

You can find solutions to the problems you detect on a machine. If a JP1/AJS process stops because of an application error, use the following procedure to get a problem report:

1. In the text box in the Windows **Run** dialog box, type `wercon` and then click the **OK** button.

   The Problem Reports and Solutions dialog box appears.

2. In the area on the left, click **View problem history**.

   The problem history is displayed.

3. Double-click the applicable problem.

   The details of the problem report are displayed.

4. Click **Copy to clipboard**.

5. Paste the information into a text editor or similar program, and save it.

   Use the problem report you saved as a text file as data for investigating the problem.

(5) Checking the status of processes

In the Windows Task Manager window, click the **Processes** tab. Then, check the operation status of the processes of the connected JP1/AJS3 - Manager.

For details about the JP1/AJS3 - Manager processes, see the list of JP1/AJS3 - Manager processes in the manual *JP1/Automatic Job Management System 3 Troubleshooting*.

(6) Checking the details about the operation

Obtain the details about the operation that was underway when the problem occurred. You need to check the following information:

- Details about the operation
- Time the problem occurred
- Machine configuration (each OS version, host name, configuration of JP1/AJS3 - Definition Assistant and JP1/AJS3 - Manager, and JP1/AJS3 - View, and so on)
  You can check the machine configuration by clicking **System Information**.
- Whether or not the problem is repeatable
- Name of the user who has logged on to the Windows host that is using JP1/AJS3 - Definition Assistant

(7) Making a hardcopy of error information displayed on the screen

Make a hardcopy of the following information:

- Hardcopy of the operation window for an application error
- Hardcopy of the error message dialog box (and also the detailed information if a button for displaying it is available)

(8) Collecting other information

Collect any other necessary information.

- Contents of **System Log** and **Application Log** in the Window's Event Viewer window

6.4 Troubleshooting

This section describes the troubleshooting you can take if a problem occurs in using JP1/AJS3 - Definition Assistant.

6.4.1 Export does not terminate normally

(1) An error in the ajsdefine command

Cause

Exporting the definition information causes an error, the following message may be output to the last column of the definition information management template: `KAVS0650-E Invalid specification in the Unit definition parameter file` (*file-name*). (sentence: *sentence-number*). If this message is output, the probable causes of the error are as follows:

- An error may have occurred in the unit definition parameter file due to an input error in the definition information management template.

- Definition information not supported by the version of the destination manager host is specified.

- The length of the unit definition parameter generated from the value specified in a definition item in the **Custom job definition information** section exceeds the limit.

- A value greater than 10,240 byte is set to the **Environment variables** of the Basic job definition information section in the flexible job.

- In Custom Event Job, **Definition parameters** in the event job definition information section does not contain an equal sign (=), or the left side (specified item) of the equal sign (=) is an empty string.

- In Custom Event Job, the value in the **Custom type** column does not start with `CE_`.

Action

The unit definition parameter that caused the error is automatically saved in the file for error analysis. This file, called an *error information file*, is stored in the following folder by default:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\errlog`

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

By using the error information file, check the unit definition parameter that caused the error in the definition information management template to identify the portion of the error. Then, correct the error in the definition information management template. You also need to delete unsupported definition information.

(2) The color of the cell changed in red in the definition information management template

Cause

An error may have occurred in a JP1/AJS command[#].

A command that is executed according to the specification in **Section** in the definition information management template.

Batch: `ajsdefine`

Individual: `ajsdefine` or `ajschgnet`

Change: `ajschange`, `ajschgnet`, `ajschgjob`, or `ajscalendar`

Delete: `ajsdelete`

Action

A JP1/AJS message is output to the last column of the definition information management template. To take the appropriate action, see the following information:

- The description of the messages beginning with KAVS (messages related to the scheduler) in the manual *JP1/Automatic Job Management System 3 Messages*

- The description of the commands corresponding to **Section** in the manual *JP1/Automatic Job Management System 3 Command Reference*

If there is a column number displayed in front of the message text, the messages is on the definition item corresponding to the column number. If an error is due to the definition that consists of multiple items, the column number before the error message is not necessary the column where an invalid value is specified. For the details of the definition that consists of multiple items, see *4.3.1(7) Definitions consisting of multiple items*.

(3) KAVS0658-E error occurred

Cause

If exporting definition information causes an error, the following message may be output to the last column of the definition information management template:

KAVS0658-E Cannot define Unit (*unit-name*).

In this case, the probable cause of the error is one of the following:

- The number of units that can be defined exceeds the limit (map size).

- The number of event jobs that can be defined in the startup condition (.CONDITION) exceeds the limit (32 jobs).

Action

Correct the cause of the error, and then re-execute the export.

6.4.2 JP1/AJS3 - View cannot start

Cause

The probable causes are as follows:

- The specified user name, password, or host name is invalid.

- The login information file does not exist in the predefined location. Alternatively, the login information file contains an error.

- JP1/AJS3 - View 10-00 or later is not installed in the host that contains JP1/AJS3 - Definition Assistant.

Action

Make sure that JP1/AJS3 - View 10-00 or later is installed.

For the applicable OSs of JP1/AJS3 - View, check the Release Notes of JP1/AJS3 - View.

For details about other error messages, see the description of the messages beginning with KAVV (messages about JP1/AJS3 - View) in the manual *JP1/Automatic Job Management System 3 Messages*, and then take appropriate action.

A login information file contains information (user name, password, and connection destination host) necessary for logging on to the manager host by skipping the login operation. For details about the login information file, see *3.1.7(1) Starting JP1/AJS3 - View from the definition information management template*.

6.5 Backup and recovery

This section describes how to back up and recover setting information of JP1/AJS3 - Definition Assistant.

The setting information of JP1/AJS3 - Definition Assistant should be backed up, in case of a system breakdown due to failure. Backing it up is required especially when a system setting is changed, including when setting up JP1/AJS3 - Definition Assistant.

6.5.1 Backing up JP1/AJS3 - Definition Assistant setting information

The following describes what needs to be done in backing up the setting information of JP1/AJS3 - Definition Assistant.

For details about files and directories related to JP1/AJS3 - Definition Assistant, see *A. Files and Directories*.

(1) Backing up JP1/AJS3 - Definition Assistant environment settings files

Back up the environment settings files and folders of JP1/AJS3 - Definition Assistant listed in the following table.

Table 6–4: What should be backed up (the environment settings files and folders)

File and folder names	Description
installation-folder\conf\ajs2da.conf	Environment settings file
installation-folder\conf\ssl\rootcer	Root certificate storage folder
installation-folder\conf\ssl\ajsda_nosslhost.conf	Unencrypted communication host settings file[#]

\#
    The file cannot be found unless SSL communication is set up.

(2) Backing up the storage folder for execution result files

Back up the storage folder for execution result files of JP1/AJS3 - Definition Assistant listed in the following table.

The folder for execution result files stores execution result files created from importing or exporting.

Table 6–5: What should be backed up (the storage folder for execution result files)

File and folder names	Description
%ALLUSERSPROFILE%[#1]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\backup	Folder for execution result files[#2]

\#1
    The default value of %ALLUSERSPROFILE% is *system-drive*\ProgramData.
\#2
    For where the files are stored, see the value of the environment setting parameter BACKUP-FOLDER in the environment settings file.

(3) Backing up log files

Back up the files and folders listed in the following table, if necessary.

Table 6–6: What should be backed up (log files)

File and folder names	Description
%ALLUSERSPROFILE%[#1]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log	Folder for log files and history files
%ALLUSERSPROFILE%[#1]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\errlog	Folder for error information files[#2]

#1
   The default value of %ALLUSERSPROFILE% is *system-drive*\ProgramData.

#2
   For where the files are stored, see the value of the environment setting parameter TMP-ERRLOG-FOLDER in the environment settings file.

6.5.2 Recovering JP1/AJS3 - Definition Assistant setting information

The following describes what needs to be done in recovering the setting information of JP1/AJS3 - Definition Assistant.

(1) Installing JP1/AJS3 - Definition Assistant

If a JP1/AJS3 - Definition Assistant environment is corrupted due to a disk failure, then install JP1/AJS3 - Definition Assistant first.

(2) Recovering setting information

Restore backed-up files and folders to their original locations.

> **❗ Important**
>
> Before recovering files and folders, make sure that:
>
> - JP1/AJS3 - Definition Assistant has been installed.
> - JP1/AJS3 - Definition Assistant is not running.

(a) Recovering the environment settings files of JP1/AJS3 - Definition Assistant

Restore the environment settings files and folders of JP1/AJS3 - Definition Assistant to their original locations.

(b) Recovering the storage folder for execution result files

Restore the storage folder for execution result files of JP1/AJS3 - Definition Assistant to its original location.

(c) Recovering log files

Restore log files and folders of JP1/AJS3 - Definition Assistant to their original locations.

7

Commands

This chapter describes the commands that are used for JP1/AJS3 - Definition Assistant.

Command description format

The following describes the command description format, including how to specify commands and the command syntax symbols.

How to specify commands

The commands are specified using the following format:

```
ajsxxx
        [Δ₁ -option-A [Δ₀ value-a [, value-b [, value-c · · ·]]]]              · · ·(1)
        [Δ₁ -option-B [Δ₀ value-a [, value-b [, value-c· · ·]]]]               · · ·(1)    · · ·(2)
        [Δ₁ arbitrary-name-X [Δ₁ arbitrary-name-Y [Δ₁ arbitrary-name-Z· · ·]]]


Legend:
    Δ₀: Specify zero or more space characters. Spaces can be omitted.
    Δ₁: Specify one or more space characters. Spaces cannot be omitted.
```

Here, (1) is called an option, and (2) is called an argument.

The following describes the rules for specifying arguments:

- Specify an option first, and then specify an arbitrary name such as a unit name. If you specify any name before the option, the system assumes the entire specification as a name.

- Multiple options can be specified in any order.

- To specify more than one value for one option, use a comma (,) to separate each value.

- Options without a value can be specified in succession.

  Example:

  `-a-b-c` can be specified as `-abc`.

- Two-byte options without a value cannot be specified in succession.

  Example:

  `-a-ab` cannot be specified as `-aab`, or `-cd -cf` cannot be specified as `-cdcf`.

- When specifying options in succession, you can specify a value of the last option.

  Example:

  In `-abc xyz`, `xyz` is a value of the `c` option.

- If you specify a value for an option that does not have a value, the system assumes anything that follows the value to be a name.

- An error occurs if you specify an invalid option.

- To specify a character string beginning with a hyphen (-) for the first name, such as *arbitrary-name-X* in the above example of command specification, specify $-\!-\Delta_1$ before *arbitrary-name-X*. (The system assumes anything that follows $-\!-\Delta_1$ to be a name.)

  You do not need to specify $-\!-\Delta_1$ for the second and subsequent names.

  Example:

  To specify two names `-jobA` and `-jobB`, specify `-- -jobA -jobB`.

- You can use regular expressions for names.

- An error occurs if the number of specified names exceeds the limit.
- Character strings specified in arguments are case-sensitive. Be careful to use a correct combination of uppercase and lowercase letters.

Symbols used for command syntax explanations

The following table lists the conventions used in command syntax explanations:

Table 7–1: Symbols used for command syntax explanations

Symbol	Convention and example

[ ] (brackets)	An item or items enclosed in brackets are optional.
	Example:
	    [A] means that you can specify A as required (you can omit A if unnecessary).
	    B|C means that you can specify B or C as required (you can omit both B and C if they are unnecessary).

Command list

The following table shows the commands for JP1/AJS3 - Definition Assistant.

Table 7–2: List of JP1/AJS3 - Definition Assistant commands

Command name	Function
`ajsdaconvert`	Converts the execution result file.
`jajs_log.bat` or `_04.bat`	Collects data necessary during a fault.

The following pages describe the JP1/AJS3 - Definition Assistant commands in alphabetical order.

ajsdaconvert

Format

```
ajsdaconvert
        -i folder-for-pre-conversion-execution-result-files
        -o folder-for-post-conversion-execution-result-files
        [-q]
```

Function

The `ajsdaconvert` command converts a previous version of the execution result files stored in the folder for pre-conversion execution result files to the current version, and then outputs the files to the folder for post-conversion execution result files.

Since the previous versions of the execution result files are unavailable for the current version of macro functions, you need to convert the execution result files before performing export.

When you upgrade the version of JP1/AJS3 - Definition Assistant, use this command to convert the previous version of the execution result file to the current version.

Although the folder for pre-conversion execution result files contains multiple versions of files, you do not need to identify each file's version. This is because all the files in this folder will be stored with the current version of file format into the folder for post-conversion execution result files.

After conversion, the execution result file is converted to `xls` format in the 32-bit version and to `xlsm` format in the 64-bit version.

Use this command to convert the file format. Note that a file can be converted from `xlsm` format to `xls` format only if the number of definitions is 65,000 units or less.

Permissions for execution

None

Command stored in:

JP1/AJS3 - Definition-Assistant-installation-folder\bin

Arguments

−i *folder-for-pre-conversion-execution-result-files*

Specifies the folder that stores the previous versions of execution result files. Specify the absolute path of the folder.

The specifiable length of a character string is 1 through 184 bytes.

Make sure that the number of execution result files stored in this folder does not exceed 100.

We recommend that if execution result files to be stored are large in size (more than dozens of MBs per file), the number of files stored should be about 20 files because it takes time to process them.

-o *folder-for-post-conversion-execution-result-files*

Specifies the folder that stores the execution result files after conversion. Specify the absolute path of a folder that differs from the one specified in the `-i` option.

You can specify from 1 to 184 characters (units: bytes).

The specifiable length of a character string is 1 through 184 bytes.

-q

Outputs the KAVZ0615-Q message if another file with the same already exists in the folder for post-conversion execution result files. This message asks you whether you want to overwrite the file. Choosing **Yes** button overwrites the file. Choosing **No** button does not overwrite the file.

Notes

- Before executing the `ajsdaconvert` command, make sure that all the definition information management templates are closed and no other processing is being executed.

- Do not execute more than one `ajsdaconvert` command at the same time. This may cause an error in a subsequent command and the KAVZ0814-E message is output.

- This command cannot be executed if automatic import or automatic export is set in the environment settings file (`ajs2da.conf`). The KAVZ0614-E message appears, and the command terminates abnormally. Before you attempt to use this command, cancel the automatic import and export settings.

- The auto-filter that is set for the execution result file before conversion will be canceled after conversion. If you manually set the rows and columns to be hidden, the setting will also be canceled after conversion of the execution result file.

- The command skips processing without converting the files if one of the following occurs. To check which files are skipped, see the log file:

  - In the Japanese version of JP1/AJS3 - Definition Assistant, the folder for execution result files for the English version of JP1/AJS3 - Definition Assistant is specified in the `-i` option of the command.

  - In the English version of JP1/AJS3 - Definition Assistant, the folder for execution result files for the Japanese version of JP1/AJS3 - Definition Assistant is specified in the `-i` option of the command.

  - The execution result file before conversion is not for the definition information management template.

  - The file before conversion is the master file or its name is same as the master file.

  - In the 32-bit version of JP1/AJS3 - Definition Assistant, a new version of a pre-conversion file in `xlsm` format is specified in the command.

  - In the 64-bit version of JP1/AJS3 - Definition Assistant, a new version of a pre-conversion file in `xls` format is specified in the command.

  - In the 32-bit version of JP1/AJS3 - Definition Assistant, a folder in which the number of definitions of pre-conversion files in `xlsm` format is more than 65,000 units is specified in the command.

  - In the folder for pre-conversion execution result files, there are both files in `xls` format and files in `xlsm` format that have the same file name before their extension[#].

    In this case, one file is converted while the other is not. For this reason, do not put files with duplicate names before the extension in the folder for pre-conversion execution result files.
    #
    For example, there are two files with the names of: `AJS2DA-IMPORT-121212121212121.XLS` and `AJS2DA-IMPORT-121212121212121.XLSM`.

- The command just copies the files without converting them if:
    - The file format before and after conversion is the same and the execution result files before conversion are the current or later version.

- If the folder specified in the −o option contains a file with the same name as for the one to be converted, the command converts the file. However, if the −q option is specified, the command outputs the KAVZ0615-Q message that asks you whether you want to overwrite the file.

- After conversion, the person who updated the properties of the execution result file is changed to the user who executed this command.

- The current version of the definition information management template is applied to the files after conversion. As a result, a converted file may contain columns of definition items that did not exist (were not supported) in the file before conversion. However, nothing is set in these definition information columns because the file before conversion does not contain information about these columns. If you want to use the definition information management template after conversion to export information including the definition information columns added to the current version, manually set information for the added definition information columns. Then, perform export.

- Neither push any function key nor enter any character during execution of the command.

- Do not push the ESC key during execution of the command. Pushing the ESC results in interrupting command execution and outputs the KAVZ0616-E message dialog box.

- During execution of the command, do not add (by moving or copying) a file to or delete a file from the folder for pre-conversion execution result files.

    If you add or delete a file, the processing results might not be output correctly to the log file or to a message dialog box that indicates the processing results when conversion finishes.

- Although the contents of the execution result file being converted might not be displayed correctly during execution of the command, there will be no problem with the contents of the execution result file after conversion.

- If you convert many files or a large file, post-processing of the system may take time even after command execution has terminated.

- If R/3 job definition information in the pre-conversion execution result file contains invalid definitions of a yen sign (\) or double quotation mark ("), the invalid definition information will still be invalid after conversion by the command. If you want to export definition information from the execution result file after conversion, correct the definition information before attempting to export.

- Make sure that a unit name is entered in all the unit definitions in the pre-conversion execution result file. A line on which a unit name is not entered is treated as the end of the definition information, and the subsequent lines are not included in the post-conversion execution result file.

- If Microsoft Office IME is used, conversion processing might take time. Therefore, temporarily change the settings to Microsoft IME before executing the command.

- When you convert an execution result file saved in a version earlier than JP1/AJS3 - Definition Assistant 10-00, the values specified for the definition item column (**Condition**, **Judgment value**, and **File name**) for **Judgment type** in the **Basic job definition information** section in the pre-conversion file are set for the definition item column of the **Judgment job definition information** section in the post-conversion file.

- When you convert an execution result file saved in a version earlier than JP1/AJS3 - Definition Assistant 10-00, although the definition item column (**Variable**, judgment value of **Variable (char.)**, and judgment value of **Variable (number)**) in the **Other definition information** section is set in the pre-conversion file by using the save function for unsupported definition information items, the values are not shifted to the definition item column of the **Judgment job definition information** section in the post-conversion file. Instead, they are set for the same definition item column in the **Other definition information** section in the post-conversion file. If you need to shift these values, manually delete the values set for the **Other definition information** section and set the values for the **Judgment job definition information** section in the post-conversion file.

- When converting an execution result file saved with a version of JP1DA earlier than 10-50, even if **Language** (the item specified with a JP1/AJS3 for Enterprise Applications command argument of -1) is configured by **Other R/3 job definition information** in the R/3 job definition information section for the file before the conversion, this setting will not be transferred to the **Language** column of the R/3 job definition information section of the file after the conversion. (After the conversion, the setting will be configured in **Other R/3 job definition information**).

  If transfer of the setting is necessary, for the file after the conversion, manually delete the value configured in **Other R/3 job definition information**, and configure the value in the **Language** column of the R/3 job definition information section.

- Do not launch or display other windows on top of the Excel window while this command is running. If other windows are launched or displayed on top of the Excel window, the conversion processing might take a long time or a message indicating that resources are insufficient might appear.

- If the following message appears while this command is running, the conversion processing might have failed. In this case, reduce the number of files in the folder for storing the pre-conversion execution result files, and then execute the command again.

  "This task cannot be completed due to insufficient resources. Reduce the amount of data to be selected or close other applications, and then try again. Do you want to continue without restoring the previous state?"

Return values

None

Example 1

In this example, the command converts the execution result file (previous version) in the "C:\Program Files\Hitachi\JP1AJS2DA\backup_old" folder to the format of the current version and then stores the file in the "C:\Program Files\Hitachi\JP1AJS2DA\backup" folder:

```
ajsdaconvert -i "C:\Program Files\Hitachi\JP1AJS2DA\backup_old"
             -o "C:\Program Files\Hitachi\JP1AJS2DA\backup"
```

Example 2

This example assumes that the version of JP1/AJS3 - Definition Assistant has been upgraded, but the current version of the program may use the previous version of execution result files to perform export. In this example, the command converts all the versions of execution result files to the current version. The execution result files are stored by their version in the following folders:

- Folder for execution result files 07-00
  D:\BACKUP\ajsdabackup70

- Folder for execution result files 07-00-/B
  D:\BACKUP\ajsdabackup70B

- Folder for the current version of execution result files
  C:\Program Files\Hitachi\JP1AJS2DA\backup

```
ajsdaconvert -i "D:\BACKUP\ajsdabackup70"
             -o "C:\Program Files\Hitachi\JP1AJS2DA\backup"
ajsdaconvert -i "D:\BACKUP\ajsdabackup70B"
             -o "C:\Program Files\Hitachi\JP1AJS2DA\backup"
```

Supplementary note

When all the files are converted, the message dialog box appears, indicating the processing results. The command also outputs the processing results to the log file, unless a command option error occurred.

Log file format

Stored in:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log`

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

Log file name

Current log file name: `ajsdaconvert.log` (latest result)

Storage log file name: `ajsdaconvert0[1-5].log` (The previous result is `01`, the oldest result is `05`. Maximum of five generations are saved.)

Output format

```
*** ajsdaconvert start start-day-time#1 ***          ⎤
Version = current version of JP1/AJS3 - Definition Assistant    ⎥  Header
Before_folder = Folder name before conversion        ⎥  information
After_folder = Folder name after conversion          ⎦

Processed time#1 Processed file names Process result#2   ⎤  Processed file
  :                                                       ⎦  information

Total_file = No. of files to be processed            ⎤
OK_file = No. of files  succeeded                     ⎥
NG_file = No. of files failed                         ⎥  Footer
SKIP_file = No. of files not processed                ⎥  information#3

*** ajsdaconvert end Stop-day-time#1 ***              ⎥
[EOF]                                                 ⎦
```

#1

 Indicates the year, month, day, hour, minute, and second in the *YYYY/MM/DD hh:mm:ss* format.

#2

 Outputs the following information:

Table 7–3: Output information for the processing result

Output information	Meaning	Remarks
OK	Successful	Including the case where the command just copied the files without converting them.
SKIP (*reason-code*)	Unprocessed	The meaning of the reason code is: 01 The file is other than the definition information management template. 02 A file for the English version of JP1/AJS3 - Definition Assistant is specified in the Japanese version. Alternatively, a file for the Japanese version of JP1/AJS3 - Definition Assistant is specified for the English version.

Output information	Meaning	Remarks

`SKIP` (*reason-code*)	Unprocessed	03
		
		    A file is the master file or its name is same as the master file.
		
		04
		
		    A file in `xlsm` format for the new version is specified. (This code is output when the command is executed in the 32-bit version.)
		
		05
		
		    A file in `xls` format for the new version is specified. (This code is output when the command is executed in the 64-bit version.)
		
		06
		
		    The number of files in `xlsm` format exceeds 65,000 units (This code is output when the command is executed in the 32-bit version.)
		
		07
		
		    The name of the file before the extension is the same as that of the file already converted.

`NG` (*reason-code*)	Failure	The meaning of the reason code is:
		
		10
		
		    An attempt to read the file before conversion caused an error (processing continues).
		
		11
		
		    An attempt to save the file after conversion caused an error.
		
		12
		
		    There is a file with the same name as the file before conversion in the post conversion execution result folder and **No** button is pushed for the overwrite confirmation dialog box (processing continues).
		
		13
		
		    An error occurred during conversion.
		
		99
		
		    Other error that cannot be identified.

#3

    If processing is interrupted due to an error, information following this line will not be output.

Output example

The following shows an output example when the `ajsdaconvert` command terminates normally.

```
*** ajsdaconvert start 20xx/06/30 19:50:05 ***
Version=0950
Before_folder=C:\Program Files\Hitachi\JP1AJS2DA\backup_old
After_folder=C:\Program Files\Hitachi\JP1AJS2DA\backup

20xx/06/30 19:50:05 ajs-log1.log SKIP(01)
20xx/06/30 19:50:30 AJS2DA-EXPORT-xx1125090343569.XLS OK
20xx/06/30 19:50:33 AJS2DA-IMPORT-xx1121172118813.XLS NG(12)
20xx/06/30 19:50:52 AJS2DA-IMPORT-xx1201152545220.XLS OK


Total_file=4
OK_file=2
NG_file=1
SKIP_file=1

*** ajsdaconvert end 20xx/06/30 19:50:52 ***
```

jajs_log.bat or _04.bat

Format

```
jajs_log.bat | _04.bat
    [-f storage-folder]
    [-t]
    [-u]
```

Function

These commands acquire maintenance information, such as various JP1/AJS3 - Definition Assistant logs and OS information.

`_04.bat` and `jajs_log.bat` are JP1/AJS3 - Definition Assistant data collection tools.

Both data collection tools have the same basic functions. Use either one of these based on the usage and if customization is necessary.

The following table shows the usage and customizability of `jajs_log.bat` and `_04.bat`.

Table 7–4: Usage and customizability of the data collection tools

Data collection tool	Usage	Customizable
`jajs_log.bat`	Used if you have not changed the log output destination or if you do not need to collect other information.	N
`_04.bat`	Customized and used if you have changed the log output destination or if you will collect other information.[#]	Y

Legend:

    Y: Can customize the data collection tool.

    N: Cannot customize the data collection tool.

\#

    For details about how to customize the tool, see the manual *JP1/Automatic Job Management System 3 Configuration Guide*.

By default, the data collection tool execution result is output to the following folders under `%TEMP%\jp1ajs2\backlog`:

1. `JP1_DEFAULT\JP1_DEFAULT_1st`

   Data for the first report is output.

2. `JP1_DEFAULT\JP1_DEFAULT_2nd`

   Data for the second report is output.

3. `JP1_DEFAULT\JP1_DEFAULT_3rd`

   Other data is output.

Permissions for execution

Administrators group permissions

Command stored in:

For `jajs_log.bat`
> *JP1/AJS3 - Definition-Assistant-installation-folder*`\tools`

For `_04.bat`
> *JP1/AJS3 - Definition-Assistant-installation-folder*`\tools`

Arguments

-f *storage-folder*

Specify the name of the folder to output the collected data to using the absolute path or the relative path from the location where the command is executed. However, you cannot specify directly under the drive.

If the path includes a blank space, surround the path in double quotation marks (`""`) to specify the blank space.

If you specify a folder that does not exist, a new folder is created using that name.

If there is already collected data in the specified storage folder, a message will be displayed to confirm you want to overwrite the file.

If you omit this option, the data is output to `%TEMP%\jp1ajs2\backlog`. If you specify this option, this option's value is prioritized more than if you changed the storage folder through customization.

-t

Specify this option when you are not acquiring the `hosts` or `services` file.

Notes

1. If you execute this command while the JP1/AJS3 service is running, the job may end abnormally. Therefore, the tool does not collect data from the ISAM database.

2. If you collect data from the logical host of the cluster configuration, execute this command on the host where the logical host is operating.

3. This tool does not compress the collected data. Compress it using a separate compression tool.

4. If the file that outputs the batch file execution result is completed, a message is output to confirm the overwriting of information. To overwrite the file, respond with **y**, and to cancel, respond with **n**.

5. When a batch file is executed, an error message that says `Sharing Violation` may be displayed for files in the *installation-folder-of-JP1/AJS3 - Manager-or-JP1/AJS3 - Agent*`\sys` folder. However, this is not a problem.

6. Directly after you execute the data collection tool, if you operate, such as move or delete, the collected data, a message may be output that says, `The process cannot access the file because it is being used by another process.` This is output because the process for internally collecting the OS information is still operating, even if the data collection tool is terminated. If this message is output, wait a while and then operate the data.

7. If you are using Outlook, when you execute the data collection tool, the following message dialog box may be displayed:

```
A program is trying to access e-mail addresses you have stored in Outlook
. Do you want to allow this?
```

This is due to the operation of the machine configuration information collection program (`msinfo32`) executed within the data collection tool. There is no problem with the data collection tool or with Outlook.

The data collection tool does not collect email addresses. Click the **No** button on the message dialog box.

8. If you execute the data collection tool, you must start the command prompt as the administrator. If you do not start the command prompt as the administrator, the UAC feature's confirmation dialog box is displayed numerous times while the data collection tool is operating. You do not have to start the command prompt as the administrator if the UAC feature is disabled.

9. Do not execute multiple instances of the data collection tool.

Return values

0	Ended normally.
Value other than 0	Ended abnormally.

Messages

Message	Explanation	Operation
`Finished. Press any key.`	Processing ended normally. Press any key.	Waits for a response from the user.
`Failed. Press any key.`	Processing did not end normally. Press any key. See any messages output by the OS, remove the cause of the error, and then re-execute the command.	Waits for a response from the user.
`File file-name is exist. Delete to continue? (y/n)`	The file created last time still exists. To delete it and continue processing, press **y**, to cancel, press **n**.	Waits for a response from the user.
`Directory directory-name is exist. Delete to continue? (y/n)`	The directory created last time still exists. To delete it and continue processing, press **y**, to cancel, press **n**.	Waits for a response from the user.
`Error exist in option.`	There is a mistake in the option specification. Specify the correct option and execute the command again.	Processing ends.
`The collection of detailed information on EmbedDB_JF*`[#] ` begins.`	Begins collection of the detailed information of the embedded database.	Processing continues.
`The collection of detailed information on EmbedDB_JF*`[#] ` ended.`	Ends collection of the detailed information of the embedded database.	Processing continues.
`The collection of detailed information on JP1/Base begins.`	Begins collection of the detailed information of JP1/Base.	Processing continues.
`The collection of detailed information on JP1/Base ended.`	Ends collection the detailed information of JP1/Base.	Processing continues.
`The collection of Event Log in text format begins.`	Begins collection of the event log in text format.	Processing continues.
`The collection of Event Log in text format ended.`	Ends collection of the event log in text format.	Processing continues.

\#

`_JF*` is the identifier (`_JF0`, `_JF1`, `_JF2`, ...) for the embedded database. This command collects the detailed information for each identifier.

Example

In this example, the command collects data from the physical host.

```
jajs_log.bat
or
_04.bat
```

8

Messages

This chapter describes the messages (beginning with KAVZ) that are issued by JP1/AJS3 - Definition Assistant, and the actions to be taken in response to the messages.

8.1 Message formats

This section shows the format of messages that are issued by JP1/AJS3 - Definition Assistant, and the notations used in this manual to explain the messages.

8.1.1 Message output format

This subsection explains the format of the messages issued by JP1/AJS3 - Definition Assistant. Each message consists of the message ID, followed by the message text. The message format is as follows:

`KAVZ`*nnnn-Z message-text*

The message ID consists of the following:

`K`

System identifier

`AVZ`

Indicates a message output by JP1/AJS3 - Definition Assistant.

nnnn

Serial number of the message

Z

Type of the message:

- `E`

Error message. The system stops processing.

- `W`

Warning message. The system resumes processing after message output.

- `I`

Information message that provides the user with information

- `Q`

Query message that prompts the user for a response

During execution of JP1/AJS3 - Definition Assistant, JP1/AJS messages (those beginning with KAVC, KAVS, KAVT, KAVU or KAVV) may be output.

For details about these messages, see the manual *JP1/Automatic Job Management System 3 Messages*.

8.1.2 Format of message explanation

This section describes the format used to explain messages in this manual. The portion of message text that is shown in italics represents information that is variable depending on the situation. Note that nothing may be displayed for maintenance information in the message. The manual lists the messages in the order of the message IDs. The following illustrates the format of a message explanation:

message-ID

> *message-text*

Explanation of the message

(S)

Explains the processing performed by the system.

(O)

Explains the action the operator should take when the message is displayed.

8.2 Messages

This section shows a list of messages beginning with KAVZ (messages about JP1/AJS3 - Definition Assistant).

The output destination of messages is a message dialog box or a cell within the definition information management template.

KAVZ0001-E

Processing cannot start because the master file is corrupted.

Processing cannot be performed because the master file is corrupted.

(S)

Stops startup of the master file.

(O)

Re-install JP1/AJS3 - Definition Assistant.

KAVZ0002-E

Execution is not possible because the installation path of JP1/AJS3 - Definition Assistant was not found.

Execution is impossible because the folder containing JP1/AJS3 - Definition Assistant is not found. Operations can be executed only on the host where JP1/AJS3 - Definition Assistant is installed.

(S)

Stops processing.

(O)

Take one of the following actions:

- Install JP1/AJS3 - Definition Assistant.

- Execute the operation on the host where JP1/AJS3 - Definition Assistant is installed.

If JP1/AJS3 - Definition Assistant has already been installed, the operation environment may be corrupted. Re-install JP1/AJS3 - Definition Assistant.

KAVZ0003-E

The resource file was not found. : *file-name maintenance-information-1 maintenance-information-2 maintenance-information-3*

The resource file was not found.

(S)

Stops command execution.

(O)

Make sure that the resource file indicated by *file-name* exists, and then re-execute the command. If the resource file does not exist, re-install JP1/AJS3 - Definition Assistant.

KAVZ0004-E

The message id could not be acquired. : *file-name maintenance-information-1 maintenance-information-2 maintenance-information-3*

The message was not found in the resource file.

(S)

Stops command execution.

(O)

The operation environment might be corrupted. Re-install JP1/AJS3 - Definition Assistant.

KAVZ0005-E

An error occurred during the product information check. : *cause-of-error*

An error occurred while product information was being checked.

(S)

Stops processing.

(O)

If you are using a definition information management template for a version of JP1/AJS3 - Definition Assistant other than the version of JP1/AJS3 - Definition Assistant that you are currently using, perform either of the following operations:

- If the execution result file is for a previous version of JP1/AJS3 - Definition Assistant, use the `ajsdaconvert` command to convert the file to the most current version, and then retry the processing.

- Perform the operations on a computer on which the installed version of JP1/AJS3 - Definition Assistant matches the version of the definition information management template.

If neither of these solutions work, the operation environment might be corrupted. Re-install JP1/AJS3 - Definition Assistant.

KAVZ0006-E

The file failed to start. : *cause-of-error*

An attempt to open a file failed due to an error that occurred while opening it.

(S)

Stops processing.

(O)

Correct the cause of the error according to the *cause-of-error* indicated below, and then restart:

- If the reason is *invalid file format*, disable the macro function, open the file in question, and then if the extension of the file is `XLS`, save it again in `xlsm` format. If the extension of the file is `XLSM`, save it again in `xls` format.

KAVZ0007-E

The operation is not enabled for the definition information management template of xlsm type. : *error operation*

The 64-bit version of Excel and the 64-bit version of JP1/AJS3 - Definition Assistant were not found in the environment of the machine. Therefore, an operation could not be performed with the definition information management template in `xlsm` format.

(S)

Stops processing.

(O)

Take one of the following actions:

- Perform the operation on a machine where the 64-bit version of Excel is installed.

- Use the `ajsdaconvert` command to convert the definition information management template to `xls` format, and then perform the operation.

KAVZ0008-E

The operation is not enabled for the definition information management template of xls type. : *error operation*

The 32-bit version of Excel and the 64-bit version of JP1/AJS3 - Definition Assistant were not found in the environment of the machine. Therefore, an operation could not be performed with the definition information management template in `xls` format.

(S)

Stops processing.

(O)

Take one of the following actions:

- Perform the operation on a machine where the 32-bit version of Excel is installed.

- Use the `ajsdaconvert` command to convert the definition information management template to `xls` format, and then perform the operation.

KAVZ0009-E

The operation is not enabled because the 32/64 bit versions of the installed product were different. : *error operation*

The probable causes are:

- The 64-bit version of JP1/AJS3 - Definition Assistant is used on the 32-bit version of Excel.

- The 32-bit version of JP1/AJS3 - Definition Assistant is used on the 64-bit version of Excel.

(S)

Stops processing.

(O)

Take one of the following actions:

- When the definition information management template is in `xls` format, perform the operation on a machine environment with the 32-bit versions of Excel and JP1/AJS3 - Definition Assistant.

- When the definition information management template is in `xlsm` format, perform the operation on a machine environment with the 64-bit versions of Excel and JP1/AJS3 - Definition Assistant.

For details about how to switch between the 32-bit and 64-bit versions of JP1/AJS3 - Definition Assistant, see *E. Migration Procedure and Notes*.

KAVZ0101-E

An invalid value is specified for the keyword (*keyword-name*) in the environment settings. : *cause-of-error maintenance-information*

An attempt to start the definition information management template has failed because an invalid value was specified for the keyword in the environment settings parameter. For details about the environment settings parameter, see *3.2.1 Settings for environment settings parameters*.

(S)

Stops processing.

(O)

Correct the value of the keyword in the environment settings parameter according to the meaning of *cause-of-error* shown below, and then restart:

- *Invalid byte size* means that the byte size exceeds the value that can be used for a keyword.
- *Invalid numerical value* means that a nonnumeric value is specified for the keyword where a numeric value is required.
- *Invalid range applied* means that a value outside the specifiable range for the keyword is specified.
- *Invalid value used* means that an invalid character for the keyword is specified.
- *Invalid combination* means that an invalid value is specified for a combination with another keyword.

If the cause of the error is *Invalid value used* and the characters that can be used for the keyword are specified, the version of the execution result file might be older than the current version. See **Summary** in **Properties** for the execution result file to check the JP1/AJS3 - Definition Assistant version, and then use the `ajsdaconvert` command to convert the execution result file to the current version.

KAVZ0103-E

The required keyword is not set in the environment settings parameter. : *keyword-name*

An attempt to start the definition information management template has failed because all the necessary keywords were not specified for the keyword in the environment settings parameter.

For details about the environment settings parameter, see *3.2.1 Settings for environment settings parameters*.

(S)

Stops processing.

(O)

Correct the value of the keyword name in the environment settings parameter, and then restart the definition information management template.

KAVZ0200-E

The specified value and name are not included in the input candidates.

The specified value is not included in the input candidates registered in the drop-down list. If the contents of the comment indicated by the title of the definition item differ from the input restrictions, the input candidates specified in the environment settings parameters for the settings for input restriction take effect.

(S)

 Stops input processing if the definition information is being entered, or cancels check processing if the definition information is being checked.

(O)

 Correct the entered data.

 If you are entering the definition information, click **Retry** button to correct the entered data. Click **Cancel** button to clear the entered data.

 If you are checking the definition information, click **OK** button. Then, select a value from the drop-down list, and enter it.

KAVZ0201-E

 The number of bytes that can be specified is *numeric-value*. *maintenance-information*

The number of bytes in the specification exceeds the limitation. If the contents of the comment indicated by the title of the definition item differ from the limitation, the limitation specified in the environment settings parameter for the settings for limitations takes effect.

For a definition item for which multiple entries can be specified, *maintenance-information* indicates the line where the error occurred in the `Line=`*value* format.

(S)

 Stops input processing if the definition information is being entered, or cancels check processing if the definition information is being checked.

(O)

 Correct the entered data.

 If you are entering the definition information, click **Retry** button to correct the entered data. Click **Cancel** button to clear the entered data.

 If you are checking the definition information, click **OK** button. Then, re-enter the value using the number of bytes within the limitation.

KAVZ0202-E

 A value from *lower-limit* to *upper-limit* can be specified. *maintenance-information*

The specified value is out of the valid range. If the contents of the comment indicated by the title of the definition item differ from the limit, the limit specified in the environment settings parameters for the settings for input restriction or the value of the environment settings parameter `SCHEDULELIMIT` takes effect.

For a definition item for which multiple entries can be specified, *maintenance-information* indicates the line where the error occurred in the `Line=`*value* format.

(S)

 Stops input processing if the definition information is being entered, or cancels check processing if the definition information is being checked.

(O)

 Correct the entered data.

 If you are entering the definition information, click **Retry** button to correct the entered data. Click **Cancel** button to clear the entered data.

If you are checking the definition information, click **OK** button. Then, re-enter the value within the valid range to the selected cell.

KAVZ0203-E

Specify "/" at the beginning of the unit name.

A forward slash (/) is not entered at the beginning of the unit name.

(S)

Stops processing.

(O)

Enter a complete unit name that begins with a forward slash (/).

KAVZ0204-E

Enter a host name.

The host name is not entered.

(S)

Stops processing.

(O)

Enter the host name for the connection destination JP1/AJS3 - Manager.

KAVZ0205-E

Enter a scheduler service name.

The scheduler service name is not entered.

(S)

Stops processing.

(O)

Enter the scheduler service name for the connection destination.

KAVZ0207-E

Enter a unit name.

The unit name is not entered.

(S)

Stops processing.

(O)

To perform import, enter the complete unit name for which you want to acquire definition information.

To perform export by using the batch definition function, enter the complete name of the upper unit to which you want to apply the batch definition.

KAVZ0208-E

The unit definition information is empty.

The unit definition information is empty. The target of processing is from the first row of the unit definition information to the row where the **Unit name** column is empty.

(S)

Stops processing.

(O)

Enter the unit definition information. Also make sure that the **Unit name** column for the first row is not empty.

KAVZ0209-E

An invalid character exists in the unit name. (Row : *row-number*, Col : *column-number*)

An invalid character is used for the unit name. The probable causes are:

- The unit name contains any of the characters that cannot be used in JP1/AJS3 - Definition Assistant. The range of characters that cannot be used varies depending on the setting specified for the environment settings parameter RESTRICT-CHAR-RANGE. For details, see information regarding the environment settings parameter RESTRICT-CHAR-RANGE provided in *3.2.1 Settings for environment settings parameters*.
- A forward slash (/) is specified for the unit name.
- Only a forward slash (/) is specified for the complete name of the upper unit.
- The complete name of the upper unit ends with a forward slash (/).

For the unit whose name contains invalid characters for JP1/AJS3 - Definition Assistant, you can perform neither export that involves modification or deletion, nor linkage with JP1/AJS3 - View.

(S)

Stops processing.

(O)

Check and, if necessary, correct the definition that contains the error.

To change or delete the unit definition that has already been defined in JP1/AJS3- Manager, use JP1/AJS3 - View. JP1/AJS3 - View for this unit must be started from the **Start** menu in Windows.

To define the units in a batch or individually, specify the correct characters for the unit name, and then re-execute export.

KAVZ0210-E

An invalid character is specified in the unit name. : *unit-name*

An invalid character was used for the unit name. The probable causes are:

- Importing or exporting was attempted when the unit completion name contained one or more of the characters that cannot be used in JP1/AJS3 - Definition Assistant. The range of characters that cannot be used varies depending on the setting specified for the environment settings parameter RESTRICT-CHAR-RANGE. For details, see information regarding the environment settings parameter RESTRICT-CHAR-RANGE provided in *3.2.1 Settings for environment settings parameters*.
- Importing was attempted when the upper unit completion name contained one or more of the following characters:

```
*  ?
```

You cannot perform importing or exporting for a unit whose name contains characters that are invalid in JP1/AJS3 - Definition Assistant.

(S)

Stops processing.

(O)

Specify correct characters in the unit completion name, and then re-execute importing or exporting.

KAVZ0211-E

The last updated time cannot be changed.

An attempt was made to change the last updated time, which cannot be changed.

(S)

Stops processing.

(O)

Click the **Cancel** button.

KAVZ0212-E

Enter a user name.

A user name was not entered.

(S)

Stops processing.

(O)

Enter a user name.

KAVZ0213-E

The user name or password is invalid. : *host-name JP1-user-name*

The user could not be authenticated because the JP1 user name or password was invalid.

(S)

Stops processing.

(O)

Make sure that:

- The entered JP1 user name and password are registered on the connection destination authentication server.

- The user information is set correctly on the connection destination JP1/AJS3 - Manager host.

Correct the error, and then re-execute the processing.

KAVZ0250-I

No input errors occurred.

The definition information was checked because the **CHECK** button was clicked. No error was found in the input information.

(S)

Terminates checking of input information.

(O)

Click the **OK** button.

KAVZ0251-E

An invalid definition item is set for the unit type (*unit-type*). (Row : *row-number*, Col : *column-number*)

An invalid definition item is specified for the specified unit type.

(S)

Moves the cursor to the cell where the error occurred.

(O)

Delete data for the definition information or correct the unit type. Then, re-check the definition information.

KAVZ0252-E

The unit type is not specified. (Row : *row-number*)

The unit type is not specified.

(S)

Moves the cursor to the cell where the error occurred.

(O)

Select the unit type, and then re-execute the processing.

KAVZ0253-E

Specify "/" at the beginning of the unit name. (Row : *row-number*, Col : *column-number*)

A forward slash (/) is not entered at the beginning of the unit name.

(S)

Moves the cursor to the cell where the error occurred.

(O)

Change the unit name to a complete unit name that begins with a forward slash (/), and then re-execute processing.

KAVZ0254-E

A required item is not specified. (Row : *row-number*, Col : *column-number*) *maintenance-information*

The required item is not entered in the unit definition. The definition item to be checked has been specified in the environment settings parameter for the required settings items to be checked. (Users cannot specify items in the **Custom job definition information** section.)

For a definition item for which multiple entries can be specified, *maintenance-information* indicates the line where the error occurred in the Line=*value* format.

(S)

Moves the cursor to the cell where the error occurred.

(O)

Specify the required item, and then re-execute the check.

KAVZ0255-E

The structure of the unit definition is invalid. (Row : *row-number*)

The structure of the unit definition applicable to batch definition is invalid. The probable causes are:

- The upper unit is not defined in the previous row.
- The units are not defined in order from the upper unit to lower unit.
- The specified layer is higher than the unit that is specified in the first row of the batch definition.

(S)

Selects the row in which the error occurred.

(O)

Correct the cause of the error, and then re-execute.

KAVZ0256-E

"Recovery" cannot be specified for the unit type (*unit-type*). (Row : *row-number*)

Recovery is specified for **Type** in **Unit common attribute information** for the unit type for which recovery cannot be specified.

(S)

Sets the cursor to the row where the error occurred.

(O)

Take one of the following actions, and then re-execute:

- Change the value of **Unit type** to the unit type for which recovery can be specified.
- Change the specification for **Type** to **Normal**.

KAVZ0257-E

Definition items that cannot be specified simultaneously are specified. (Row : *row-number* , Col : *column-number-1*, *column-number-2*) *maintenance-information*

Values are specified in items that cannot be specified simultaneously.

For a definition item for which multiple entries can be specified, *maintenance-information* indicates the line where the error occurred in the `Line=`*value* format.

(S)

Stops processing.

(O)

Change the value of at least one of the items indicated in *column-number*, and then re-execute the processing.

KAVZ0258-E

There is an error in the custom job definition information specifications.(Row : *row-number*, Col : *column-number*) *maintenance-information*

Custom job definition information is specified incorrectly. The probable causes are:

For R/3 job definition information

- The number of job step definitions exceeds the limit.
- A mismatch exists in the number of definitions in the definition items for job steps.
- The value of the definition item **Program type** is invalid.
- An invalid definition item is specified for the definition item **Program type**.
- In the definition item **Environment variables**, the number of specifications of **Variables** and **Values** differ.
- In the definition item **Environment variables**, there is a line where only a line break is specified.

For a definition item for which multiple entries can be specified, *maintenance-information* indicates the line where the error occurred in the `Line=`*value* format.

(S)

Stops processing.

(O)

Correct the error, and then re-execute the processing that failed.

KAVZ0259-E

There is an error in the passing information specifications of the passing information setting job. (Row : *row-number* ,Col : *column-number*) *maintenance-information cause-of-error*

The passing information of the passing information setting job is specified incorrectly.

The line position where the error occurred is displayed in *maintenance-information* in `Line=`*value* format.

Correct the value based on the meaning of *cause-of-error*:

- For `Invalid value used`, there is a line specified only with a line feed.
- For `Invalid character string`, there is a line containing a name that includes a single-byte space.
- For `Invalid duplication`, the name of the output macro variable has already been used.
- For `Invalid definition count`, the number of the output macro variable definitions and the number of the input regular expression definitions do not match.
- For `Invalid maximum definition count`, the number of passing information definitions exceeds the upper limit.
- For `Invalid byte size`, the maximum length that can be specified for a character string was exceeded.
- For `Invalid total byte size`, the total length of the character string specified for the output macro variable exceeds the upper limit.

(S)

Stops processing.

(O)

    Correct the error, and then re-execute the failed processing.

KAVZ0260-E

The specified of the environment variable exceeds the maximum. (Row : *row-number* ,Col : *column-number*)

The specifications of the environment variables of the SAP job exceed the upper limit.

(S)

    Stops processing.

(O)

    Correct the error, and then re-execute the failed processing.

KAVZ0261-E

The environment variable is duplicated. (Row : *row-number*) Line1=*line-location1* Line2=*line-location2*

A variable name of the environment variables of the SAP job is duplicated.

(S)

    Stops processing.

(O)

    After correcting the variable names of the environment variables, re-execute the processing that failed.

    Do not specify variable names that are spelled the same, and differ only in the use of uppercase and lowercase characters. Such environment variables will be interpreted as being duplicated.

KAVZ0262-E

Definition items that cannot be specified are specified. (Row : *row-number*, Col : *column-number*)

A value is specified for the definition item that cannot be specified for the custom type.

(S)

    Sets the cursor to the row where the error occurred.

(O)

    Correct the cause of the error, and then re-execute.

KAVZ0263-E

Specify {":C"|":D"} in the first row of the cell. (Row : *row-number*, Col : *column-number*)

The `:C` or `:D` option used to delete calendar information (open days and closed days) is specified in a place other than the first row of the cell.

(S)

    Sets the cursor to the row where the error occurred.

(O)

    Correct the cause of the error, and then re-execute.

KAVZ0264-E

You cannot specify ":D" as both an open day and a closed day. (Row : *row-number*, Col : *column-number-1*, *column-number-2*)

The `:D` option for deleting calendar information is specified for both an open day and a closed day.

(S)

Sets the cursor to the row where the error occurred.

(O)

Correct the cause of the error, and then re-execute.

KAVZ0265-E

There is a mistake in the specification of the option for deleting calendar information. (Row : *row-number*, Col : *column-number*)

The option for deleting calendar information is incorrectly specified. The probable causes are:

- The `:C` option is preceded or followed by unnecessary characters.
- The `:D` option is not specified in the *YYYY/MM/DD*`:D` format.
- The date specifying the `:D` option is not in the range from 1994/01/01 to *YYYY*/12/31.
  YYYY: The value of the environment settings parameter `SCHEDULELIMIT`

(S)

Sets the cursor to the row where the error occurred.

(O)

Correct the cause of the error, and then re-execute.

KAVZ0302-I

The definition information was imported. Unit : *processing-count*

Import of the definition information terminated normally. This message indicates the number of imported units.

(S)

Continues processing.

KAVZ0304-E

Import ended abnormally. : *maintenance-information-1 maintenance-information-2*

An attempt to import the definition information has failed.

(S)

Stops import processing.

(O)

Check the contents of the connection destination JP1/AJS3 - Manager message [#] indicated in *maintenance-information-1* and *maintenance-information-2* (see the manual *JP1/Automatic Job Management System 3 Messages*).

Correct the cause of the error, and then re-execute.

#

The message may not be indicated correctly if the character set type specified for import does not match the character set type for the connection destination scheduler service.

KAVZ0305-Q

Are you sure you want to discard the data being edited?

This message asks you whether you want to discard the edit data and execute import processing.

(S)

Waits for a response.

(O)

Click **Yes** button to discard the data being edited and perform the import. Click **No** button to cancel the import.

KAVZ0306-W

Execute import on a master file.

Import could not be executed because it was attempted on other than the master file. Import can be executed only on the master file.

(S)

Stops import processing.

(O)

Open the master file and re-execute import.

KAVZ0307-E

The number of unit definition information items for import exceeds the limit. (Unit: *number-of-units*)

Import cannot be performed because the number of unit definitions to be imported exceeds the limitation. The maximum number of units that can be imported has been defined in the environment settings parameter (see *3.2.1 Settings for environment settings parameters*).

(S)

Stops import processing.

(O)

Take one of the following actions:

- Reduce the number of units to be imported, and then re-execute import.

- In the environment settings parameter, change the maximum number of units that can be imported. After changing the environment settings, you need to restart the master file.

KAVZ0308-I

A message was output when importing started. : *message-ID*

This message appears if a message is output to the definition information management template during import. For *message-ID*, the entire message ID output to the definition information management template is displayed.

(S)

Continues processing.

(O)

Check the contents of the displayed message ID. Note that depending on the contents of the message, the imported definition may require some modifications before it can be exported.

KAVZ0310-W

All data could not be output to the cell. (Col : *column-number*)

This message appears if all data could not be output to the cell during import. If you perform Batch or Individual export by specifying the type of the row for which this error message is output to the type, an error occurs or data will be missing.

(S)

Continues processing.

(O)

If export is successful, make sure that no data is missing in the definition. If export is not successful, change the value of the cell for the column number, and then re-execute export.

KAVZ0311-W

The unit type (*unit-type*) is not supported by JP1/AJS2 - Definition Assistant.

This message appears if a job that is not supported by JP1/AJS3 - Definition Assistant exists during import. You cannot perform Batch, Individual, or Change export by specifying the type of the row for which this message is output.

(S)

Continues processing.

(O)

Cancel the specification for the section of the row for which the message is output, and then re-execute export.

KAVZ0312-E

A unit with invalid definition information exists. : *unit-full-name*

This message appears when an attempt to analyze definition information has failed. When this message appears, is possible that the definition information might have been corrupted.

(S)

Cancels import processing.

(O)

Make sure that the unit that is output for the complete unit name in JP1/AJS at the connection destination is valid, and then re-execute importing.

KAVZ0313-W

Definition information that cannot be parsed exists. : *maintenance-information*

This message appears when there is definition information that cannot be analyzed. The probable causes are:

For an SAP job

1. The version of JP1/AJS3 for Enterprise Applications at the connection destination is higher than the version of JP1/AJS3 - Definition Assistant. Moreover, when JP1/AJS3 for Enterprise Applications and JP1/AJS3 - Definition Assistant versions are the same, items are specified that do not exist in JP1/AJS3 for Enterprise Applications.

2. Definition information is invalid.

maintenance-information indicates the definition information that could not be analyzed in the `Info=`*value* format. If multiple values are indicated, they are separated by commas.

(S)

Continues processing.

(O)

For an SAP job

- If cause 1 above is applicable, and all values indicated in *maintenance-information* are definition items that do not exist in the above version of JP1/AJS3 for Enterprise Applications, there is no problem. You can use this definition information.

- If cause 1 above is not applicable, check the relevant job definition information in JP1/AJS3 - Manager at the connection destination.

KAVZ0314-W

There was an error in the output macro variable specifications of the passing information. (Col : *column-number*) *maintenance-information maintenance-information*

An error was found in the output macro variable specifications of the passing information of the passing information setting job. The following are possible causes for output of this message:

- The output macro variable specified in the parameters was not found in the environment variables.

- The output macro variable specified in the environment variables was not found in the parameters.

In *maintenance-information*, an output macro variable that exists only in the parameters is displayed in `prm=`*value* format, and an output macro variable that exists only in the environment variables is displayed in `env=`*value* format.

(S)

The output macro variable specified in the environment variables is set as the output macro variable for the passing information, and the processing continues.

(O)

Make sure the unit on the line for which this message was output is on the connection destination JP1/AJS.

There is no problem with the JP1/AJS3 - Definition Assistant processing, which can be used as is.

KAVZ0315-E

Import analysis ended abnormally. : *cause-of-error complete-unit-name maintenance-information*

The import analysis terminated abnormally because line feed characters or tab characters are used for items in which these characters are not allowed.

(S)

Stops import processing.

(O)

Correct the cause of the error according to the *cause-of-error* indicated below, and then re-execute importing.

- If the *cause-of-error* is a *line feed character* or a *tab character*, check the unit that is output for the complete unit name in JP1/AJS3 - View or with the `ajsprint` command, and then remove any invalid character.

  If the *cause-of-error* is a *line feed character* and there is no invalid line feed character at the beginning of the value or there is no invalid tab character before the invalid line feed character, a part of the set value is displayed in *maintenance-information*.

KAVZ0402-I

The definition information was exported.

Batch : *processing-count* / *number-of-specifications*

Individual : *processing-count* / *number-of-specifications*

Change : *processing-count* / *number-of-specifications*

Delete : *processing-count* / *number-of-specifications*

Export of the definition information terminated. For each processing section, this message indicates the number of definitions exported successfully and the number or rows specified for that section.

(S)

Continues processing.

(O)

If there is any definition information for which export has failed, the processing section cell is indicated in red. Check the message indicated in the last cell of the colored row, and then correct the cause of the error (see *6.4.1 Export does not terminate normally*).

The method of re-executing export depends on the cause of the error:

- If an invalid definition caused the error, re-execute export according to the export type specified for **Section**:

  Batch: Export all rows for which **Batch** is specified

  Individual: Export only the row in which the error occurred.

  Change: Export only the definition item in which the error occurred.

- For other errors, check the export results in JP1/AJS3 - View according to the processing count shown in the message, and then re-execute export from the unit definition that was not processed. If you cannot determine the start point of execution, re-execute export from the beginning.

KAVZ0403-E

The specified unit type (*unit-type*) is not supported in JP1/AJS2 - Definition Assistant. (Row : *row-number*)

The specified unit type is not supported by JP1/AJS3 - Definition Assistant.

(S)

Stops processing.

(O)

Upgrade the version of JP1/AJS3 - Definition Assistant. Alternatively, remove the definition information of the unsupported unit type from the target of export.

KAVZ0404-W

Export could not be executed because the definition item was invalid for the unit type (*unit-type*).

An invalid definition item is specified for the unit type. Export will be performed, skipping the definition item for this message.

(S)

Continues export processing.

(O)

Check and, if necessary, correct the definition item for the message. To prevent the same error from occurring, we recommend you correct and manage the definition information management template before export.

KAVZ0405-W

The definition item did not process by Export because it was invalid for the unit type (*unit-type*).

An invalid definition item was specified for the unit type when a batch or individual export was performed. The export processing was performed by ignoring the definition item referred to in the message.

The following possible causes for output of this message:

- In an environment in which VIEW is specified for the USESET-PASSINGINFO environment settings parameter, the execution file name, parameter, or environment variable is specified for the passing information setting job.

- In an environment where COM is specified for the USESET-PASSINGINFO environment settings parameter, either an input regular expression or an output macro variable is specified for the passing information setting job.

(S)

Continues export processing.

(O)

Revise the content of the definition item for which the message was output. We recommend that you modify and manage the definition information management template before an export is performed so that the same error does not occur again.

KAVZ0407-Q

"Delete" is specified. Do you want to export?

This message asks you whether you want to delete the definition information on JP1/AJS3 - Manager.

(S)

Waits for a response.

(O)

Click the **Yes** button to delete. Click the **No** button to cancel the deletion.

KAVZ0408-W

Export cannot be executed on a master file.

Export could not be executed because it was attempted on the master file. Export can be executed on other than the master file.

(S)

Stops export processing.

(O)

Save the master file with an alias, and then re-execute the export.

KAVZ0409-W

> Specify the processing section.

Export was performed with no processing section.

(S)

Stops export processing.

(O)

Enter the processing section for *Section* in the definition information, and then re-execute the export.

KAVZ0410-W

> The specified definition item is not yet supported.

The definition information could not be changed because the definition item was not supported in the version of the connection destination JP1/AJS3 - Manager.

(S)

Continues export processing.

(O)

Check and, if necessary, correct the definition item for the message. Make sure that the absence of the definition item does not affect application designs. To prevent the same error from occurring, we recommend you correct and manage the definition information management template before export.

KAVZ0411-E

> The number of unit definition information items for export exceeds the limit. (Unit : *number-of-units*)

Export cannot be performed because the number of unit definitions to be exported exceeds the limitation. The maximum number of units that can be exported has been defined in the environment settings parameter (see *3.2.1 Settings for environment settings parameters*).

(S)

Stops export processing.

(O)

Take one of the following actions:

- Reduce the number of units to be exported, and re-execute import.

- In the environment settings parameter, change the maximum number of units that can be exported.
  After changing the environment settings, you need to restart the definition information management file.

KAVZ0416-E

> The value of the specified definition item is invalid. : *maintenance-information-1 maintenance-information-2*

The definition item could not be changed because the specified value of the definition item is invalid.

(S)

Continues export processing.

(O)

Review the contents of the specified value for the definition item that this message applies to.

This message is also output if a value that is not supported by the version of the connection destination JP1/AJS3 - Manager is specified for the definition item.

Make sure that not changing the definition item does not affect the application design. We recommend that you revise and manage the definition information management template from before export execution to prevent the same error from reoccurring.

KAVZ0501-E

The user could not be authenticated at the specified host. : *host-name JP1-user-name*

User authentication has failed at the connection destination JP1/AJS3 - Manager host. Alternatively, authentication cannot be checked by user mapping due to insufficient memory during user mapping for the JP1 user name.

(S)

Terminates processing.

(O)

Make sure that:

- User information is correct at the connection destination JP1/AJS3 - Manager host (see *3.1.2 Setting up user information*).

- There is sufficient memory space in the connection destination JP1/AJS3 - Manager host.

- When you use the user authentication function and specify Y for the environment settings parameter SERVERHOST-USE-REVERSELOOKUP, the settings for reverse DNS server lookup or the settings in the hosts file are correct.

- When you use the user authentication function and the connected JP1/AJS3 version is earlier than 11-50, the settings for reverse DNS server lookup or the settings in the hosts file are correct.

- When you use the user authentication function to run JP1/AJS3 - Definition Assistant from JP1/AJS3 - View, 0 is not specified for the environment settings parameter USERCHECKLEVEL.

Correct the cause of the error, and then re-execute processing.

KAVZ0502-E

The connection destination host or JP1/AJS2 Monitor service on the connection destination host cannot be connected. : *host-name*

The connection destination host or the JP1/AJS3 service on the connection destination host cannot be connected. The probable causes are:

- The JP1/AJS3 service is not running on the connection destination host.

- The definition of the port number (jp1ajs2monitor) in the services file is inconsistent between the connection source and destination.

- The connection destination host is not running.

- Network connection with the connection destination host is disabled.

- The firewall between JP1/AJS3 - Definition Assistant and the connection destination is set up to prevent the access.

- JP1/AJS3 - Manager does not exist on the connection destination host.

- JP1/AJS3 - Manager on the host is not set correctly when the connection destination host is specified with an IPv6 address.

- Even when the encrypted communication function is used, the function is not enabled in JP1/AJS3 - Manager on the connection destination host.

(S)

Terminates processing.

(O)

Correct the cause of the error, and then re-execute.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0503-E

A communication timeout occurred during the communication with JP1/AJS2 on the connection destination host. : *host-name*

A timeout occurred during communication with the JP1/AJS3 - Manager on the connection destination host.

(S)

Terminates processing.

(O)

Make sure that:

- No error has occurred in the connection destination JP1/AJS3 - Manager host.

- The value of the port number (`jp1ajs2monitor`) specified in the `services` file is consistent between the connection source and connection destination.

- JP1/AJS3 - Manager on the host is not set correctly when the connection destination host is specified with an IPv6 address.

Correct the cause of the error, and then re-execute processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0504-E

The connection was reset during the communication with JP1/AJS2 on the connection destination host. : *host-name*

The connection was disconnected during communication with JP1/AJS3 - Manager on the connection destination. The probable causes are:

1. Large amounts of data are set for a cell to be changed.

2. An error occurred in the communication environment with the destination host.

3. A unit that did not exist in the export destination was specified and batch export was performed.

4. A change was made with the number of HTTP status codes specified for **Return code specification** of the **Http connection job definition information** section exceeding the limitation.

(S)

Terminates processing.

(O)

Take action as follows according to the cause of the error:

1. Specify **Batch** or **Individual** for **Section**, and then execute export, or use JP1/AJS3 - View to change the cell data.

2. Make sure that TCP/IP communication is possible with the specified JP1/AJS3 - Manager host name. If communication is impossible, check the network settings including hardware. If the connection destination host is specified with an IPv6 address, make sure that JP1/AJS3 - Manager on the host is set correctly. Correct the cause of the error, and then re-execute processing.

3. If the connection destination JP1/AJS3 - Manager is using a function that restricts connections, make sure that the host using JP1/AJS3 - Definition Assistant is designated in the connection permission configuration file. Correct the cause of the error, and then re-execute processing.

4. When the destination JP1/AJS3 - Manager is using the encrypted communication function, make sure that the function is also enabled in JP1/AJS3 - Definition Assistant, and that the unencrypted communication host settings file does not contain the name of the host running the destination JP1/AJS3 - Manager. Correct the cause of the error, and then re-execute the processing.

5. In the connected JP1/AJS3 - Manager, make sure that the unit in the export destination exists. If the unit in the export destination does not exist, create the unit and perform batch export again.

6. Make sure that the number of HTTP status codes specified for **Return code specification** is not exceeding the limitation. Correct the cause of the error, and then re-execute the processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0505-E

An error exists in the data received from JP1/AJS2 on the connection destination (*host-name*). : *maintenance-information*

Processing has failed because invalid data was received from the connection destination JP1/AJS3 - Manager host.

(S)

Terminates processing.

(O)

Make sure that the definition of the port number (`jp1ajs2monitor`) in the `services` file is consistent between the connection source and destination.

Correct the cause of the error, and then re-execute processing.

KAVZ0506-E

The host name cannot be resolved. : *host-name*

The host name for the connection destination JP1/AJS3 - Manager cannot be resolved.

(S)

Terminates processing.

(O)

Make sure the following and correct the cause of the error, and then re-execute:

- The host name is specified correctly.
- The settings in the `hosts` file allows the host name to be resolved.

KAVZ0507-E

The port number could not be obtained. Confirm whether the service name is defined correctly.

An attempt to acquire the port number failed.

(S)

Terminates processing.

(O)

Make sure that the port number (`jp1ajs2monitor`) is defined in the `services` file.

Correct the cause of the error, and then re-execute processing.

KAVZ0508-E

The server host name cannot be resolved. : *host-name*

An attempt to resolve the server host name used for user mapping of the JP1 user failed.

(S)

Terminates processing.

(O)

If the connected JP1/AJS3 - Manager is 11-50 or later, specify N for the environment settings parameter `SERVERHOST-USE-REVERSELOOKUP`, restart the definition information management template, and then re-execute the processing.

In any other case, make the settings for reverse DNS server lookup or the settings in the `hosts` file so that reverse lookup (converting an IP address to a host name) can be used. Then, restart the definition information management template and re-execute the processing.

KAVZ0515-E

An error occurred in JP1/AJS2 - Manager on the connection destination host. : *host-name maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4*

An error occurred in the connection destination (*host-name*) JP1/AJS3 - Manager.

(S)

Terminates processing.

(O)

Check the cause of the error according to the log information for the connection destination JP1/AJS3 - Manager. If the cause is unknown, contact the system administrator and collect information (see *6.2 Information that must be collected in the event of a problem*).

Make sure that the user name and password of the OS user that is configured in the connection destination JP1/AJS3 are specified correctly for connection. In addition, make sure that the account for the OS user is not locked out.

If the connection destination JP1/AJS3 - Manager is using a function that restricts connections, make sure that the host using JP1/AJS3 - Definition Assistant is designated in the connection permission configuration file.

Correct the cause of the error, and then re-execute processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0516-E

The command ended abnormally. : *maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4 maintenance-information-5*

An attempt to execute the command within JP1/AJS3 - Definition Assistant has failed.

(S)

Terminates processing.

(O)

Check the cause of the error according to the log information for the connection destination JP1/AJS3 - Manager. If the cause is unknown, contact the system administrator and collect information (see *6.2 Information that must be collected in the event of a problem*).

If the error occurred during import, correct the cause of the error, and then re-execute import. If the error occurred during export, re-execute export processing for the definition item that caused the error.

KAVZ0518-E

A socket communication error occurred. : *maintenance-information-1 maintenance-information-2*

A socket communication error occurred.

(S)

Terminates processing.

(O)

Make sure that TCP/IP communication is possible with the specified JP1/AJS3 - Manager host name. If communication is impossible, check the network settings including hardware. If the connection destination JP1/AJS3 - Manager is using a function that restricts connections, make sure that the host using JP1/AJS3 - Definition Assistant is designated in the connection permission configuration file. Correct the cause of the error, and then re-execute processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0520-E

Communication access was denied at the connection destination. : *host-name*

Connection is impossible because the connection destination JP1/Base is set up to reject the communication for the host name or IP address specified for the connection host.

(S)

Terminates processing.

(O)

Check the settings of the connection destination JP1/Base to make sure that the IP bind method is set for the physical host for receiving data. If the IP bind method is set, specify either of the following:

- The IP address set for the connection destination host name

- The host name which can be resolved to the IP address for the connection destination host name

If the connection destination host is specified with an IPv6 address, make sure that JP1/AJS3 - Manager on the host is set correctly.

KAVZ0521-E

A scheduler service name is invalid. : *service-name*

The probable causes are:

- The scheduler service name is specified incorrectly.
- The connection destination host is incorrect.
- The host name is not properly converted into the corresponding IP address.

(S)

Terminates processing.

(O)

Check the following to correct the cause of the error, and then re-execute the processing:

- Whether the scheduler service name is correctly specified in **Service name** of the Import of unit definition or Export of unit definition dialog box.
- Whether the host name is correctly specified in **Host name** of the Import of unit definition or Export of unit definition dialog box.
- Whether the host name can be resolved by using the `hosts` file or other settings.

KAVZ0550-E

An attempt to read the root certificate failed. : *logical-host-name file-name file-name maintenance-information*

An attempt to read the root certificate failed.

(S)

Terminates processing.

(O)

The probable causes are as shown below. Correct the cause of the error, and then re-execute the processing.

- The root certificate specified in the environment settings parameter does not exist.
- The access permission to the root certificate is not assigned.
- A temporary file access error occurred during the attempt to read the root certificate.
- A temporary error occurred during the processing of the SSL library.

KAVZ0551-E

An attempt to verify the root certificate failed. : *logical-host-name connection-destination-host-name maintenance-information*

An attempt to verify the root certificate failed. The probable causes are:

- The connection destination host name does not match the CN/SAN.
- The root certificate associated with the server certificate of the connection destination server is not stored.

(S)

Terminates processing.

(O)

Take any of the following actions to correct the cause of the error, and then re-execute the processing.

When the connection destination host name does not match the CN/SAN:

Modify the connection destination host name so that it matches the CN/SAN.

When the root certificate associated with the server certificate of the connection destination server is not stored:

Put the associated root certificate in place.

KAVZ0552-E

An error occurred during the SSL communication. : *connection-destination-host-name maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4*

An error occurred during the processing of the SSL communication.

(S)

Terminates processing.

(O)

The probable causes are as shown below. Correct the cause of the error, and then re-execute the processing.

- The access permission to the root certificate is not assigned.
- A temporary file access error occurred during the attempt to read the root certificate.
- The encrypted communication function is not enabled in the connection destination.
- A temporary communication error occurred.
- A temporary error occurred during the processing of the SSL library.
- The version of SSL communications available is different from that of the host at the connection destination.

KAVZ0601-E

The specified options are insufficient.

The specified command options are insufficient.

(S)

Terminates the command.

(O)

Correctly specify the argument, and then re-execute the command.

KAVZ0602-E

Option (*option*) appears twice or more.

The same option is specified more than once.

(S)

Stops command execution.

(O)

Specify the indicated option only once, and then re-execute the command.

KAVZ0603-E

Illegal option (*option*) exists.

An invalid option is specified in the command.

(S)

Stops command execution.

(O)

Specify the correct option, and then re-execute the command.

KAVZ0604-E

Extra argument(s) exist.

Unnecessary arguments are specified.

(S)

Stops command execution.

(O)

Delete unnecessary arguments, and then re-execute the command.

KAVZ0605-E

Value for option (*option*) is not specified.

No value is specified for the option that requires a value.

(S)

Stops command execution.

(O)

Specify a value for the option, and then re-execute the command.

KAVZ0606-E

Option (*option*) value exceeds prescribed length.

The value of the option is longer than the limit.

(S)

Stops command execution.

(O)

Correct the value of the option, and then re-execute the command.

KAVZ0608-E

The folder specified in option (*option*) does not exist.

The folder specified for the option does not exist.

(S)

Stops command execution.

(O)

Specify a correct folder name in the option, and then re-execute the command.

KAVZ0609-E

An attempt to start the command failed. : *maintenance-information*

An attempt to start the command has failed.

(S)

Stops command execution.

(O)

Make sure that JP1/AJS3 - Definition Assistant has been installed. If JP1/AJS3 - Definition Assistant has not been installed, install it and then execute the command.

If JP1/AJS3 - Definition Assistant has been installed, the master file might be corrupted. Re-install JP1/AJS3 - Definition Assistant.

KAVZ0610-E

The same value is specified in separate options : (*option*, *option*).

The same folder is specified for the folder for pre-conversion execution result files and the folder for post-conversion execution result files.

(S)

Stops command execution.

(O)

Specify different folders for the folder for pre-conversion execution result files and the folder for post-conversion execution result files, and then re-execute the command.

KAVZ0611-I

Conversion terminated.

Processing result : *number-of-successfully-converted-files* / *number-of-conversion-target-files*

The `ajsdaconvert` command completes the conversion of the execution result files. This message indicates the processing result that contains the number of files to be converted and the number of files which are converted successfully.

(S)

Continues processing.

(O)

If the number of files to be converted does not match the number of files which are converted successfully, conversion of some files may have failed.

See the log file for the `ajsdaconvert` command, and check whether an error has occurred in a file.

The storage location of the log file is as follows:

```
%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\ajsdaconvert.log
```
The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

After checking, re-execute only the execution result file in which the error occurred.

KAVZ0613-E

The master file was not found.

The `ajsdaconvert` command could not be executed because the master file was not found.

(S)

Stops command execution.

(O)

Make sure that the master file exists, and then re-execute the command. If the master file does not exist, re-install JP1/AJS3 - Definition Assistant.

KAVZ0614-E

The command cannot execute because automatic import or automatic export is set.

The `ajsdaconvert` command could not be executed because `Y` was set for automatic import (`AUTO-IMPORT`) or automatic export (`AUTO-EXPORT`) in the environment settings parameters.

(S)

Stops command execution.

(O)

Set `N` for automatic import (`AUTO-IMPORT`) or automatic export (`AUTO-EXPORT`) in the environment settings parameters, and then re-execute the command.

KAVZ0615-Q

Is it OK to update the execution result file (*execution-result-file-name*)?

This message asks you whether you want to update the execution result file.

(S)

Updates (rewrites) the file if the **Yes** button is clicked.
Does not update the file if the **No** button is clicked.

(O)

Click the **Yes** button to update the file. Click the **No** button not to update the file.

KAVZ0616-E

The command could not be executed. : *maintenance-information*

Fails in command execution.

(S)

Stops command execution.

(O)

Take one of the following actions.

- Make sure ESC key is not pushed during command execution. Pushing the ESC key results in interrupting command execution, and this message is output and the command terminates abnormally.

- If the KAVZ0101-E message has been output before this message is output, take actions for KAVZ0101-E message, then re-execute the command.

- In another cases, contact the system administrator and collect data. For details, see *6.2 Information that must be collected in the event of a problem*.

KAVZ0617-E

Invalid value for option(*option*).

The specified value of the option is invalid.

(S)

Stops command execution.

(O)

Specify the value of the option correctly, and re-execute the command.

KAVZ0618-E

An attempt to save the execution result file after conversion failed. : *post-conversion-execution-result-file-name maintenance-information-1 maintenance-information-2*

An attempt to save the execution result file after conversion has failed. The probable causes are:

- You do not have permissions for the folder used to save the execution result files after conversion.
- The disk where the file is to be saved does not have sufficient free space.

(S)

Stops command execution after the **OK** button is clicked.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*. If you re-execute the `ajsdaconvert` command without correcting the error, the same error might occur again.

KAVZ0619-E

An error occurred during conversion processing. : *execution-result-file-name maintenance-information-1 maintenance-information-2*

An error occurred during conversion processing.

(S)

Stops command execution after the **OK** button is clicked.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*. Then, using the information in the log file, re-execute the `ajsdaconvert` command for the execution result file that caused the error and the execution result file that is not converted yet.

If you cannot determine the cause of the error, contact the system administrator and collect data (see *6.2 Information that must be collected in the event of a problem*).

KAVZ0620-E

The registry could not be read. : *maintenance-information*

An attempt to read the Windows registry failed.

(S)

Stops processing.

(O)

Memory may be insufficient. Exit unnecessary applications, and then perform the operation again. If the problem still persists, the configuration of JP1/AJS3 - Definition Assistant may be corrupted. Re-install JP1/AJS3 - Definition Assistant.

KAVZ0700-E

Execution is not possible because the installation path of JP1/AJS2 - View is not found.

Execution is impossible because the folder containing JP1/AJS3 - View is not found. JP1/AJS3 - View can be linked only when JP1/AJS3 - Definition Assistant and JP1/AJS3 - View are installed on the same host.

(S)

Stops processing.

(O)

Take one of the following actions:

- Install JP1/AJS3 - View 10-00 or a later version on the host on which JP1/AJS3 - Definition Assistant has been installed.
- If JP1/AJS3 - View has been installed, make sure that there is no problem with the installation environment for JP1/AJS3 - View.

KAVZ0702-E

Choose one definition information item.

The definition information is not selected. Alternatively, more than one definition information item is selected.

(S)

Stops processing.

(O)

Select one definition information item to be displayed in JP1/AJS3 - View in either of the following way:

- Select the entire row for the definition information to be displayed.
- Select a cell on the target row.

KAVZ0703-E

An attempt to start JP1/AJS2 - View failed. : *maintenance-information*

An attempt to start JP1/AJS3 - View by executing the `ajs` command has failed.

(S)

 Stops processing.

(O)

 Take one of the following actions:

 - If the value indicated in *maintenance-information* is 53, this means that the ajs command was not found. Make sure that there is no problem with the installation environment for JP1/AJS3 - View.

 - For any other value, contact the system administrator and collect information (see *6.2 Information that must be collected in the event of a problem*).

KAVZ0803-E

 You do not have permission to use the folder (*folder-name*).

You do not have permission to use the folder.

(S)

 Terminates processing.

(O)

 Check the access permissions for the folder, and then re-execute the processing with the user who has access permissions.

 If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0805-E

 A file (*file-name*) is not found. *maintenance-information-1 maintenance-information-2 maintenance-information-3*

The file is not found.

(S)

 Terminates processing.

(O)

 Take one of the following actions, and then re-execute:

 - If *maintenance-information-2* indicates an error message, correct the cause of the error according to this message.

 - If the file or folder is read-only, clear the read-only attribute.

 - For other cases, make sure that the file path exists and you have access permissions.

 If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0806-E

 The folder (*folder-name*) does not exist. *maintenance-information-1 maintenance-information-2*

The folder is not found.

(S)

Terminates processing.

(O)

Take one of the following actions, and then re-execute:

- If *maintenance-information-2* indicates an error message, correct the cause of the error according to this message.

- For other cases, make sure that the folder exists.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0807-E

An attempt to open the file (*file-name*) failed. : *maintenance-information-1* (*maintenance-information-2*)

An attempt to open the file has failed.

(S)

Terminates processing.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*, and then re-execute the failed processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0808-E

An attempt to read the file (*file-name*) failed. : *maintenance-information-1* (*maintenance-information-2*)

An attempt to read the file has failed.

(S)

Terminates processing.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*, and then re-execute the failed processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0809-E

An attempt to write to the file (*file-name*) failed. : *maintenance-information-1* (*maintenance-information-2*)

An attempt to write the file has failed.

(S)

Terminates processing.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*, and then re-execute the failed processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0810-E

The environment settings file (*file-name*) does not exist.

The environment settings file does not exist.

(S)

Stops processing.

(O)

Make sure that the environment settings file exists. If you deleted the file by mistake, copy the *JP1/AJS3 - Definition Assistant-installation-folder*\conf\ajs2da.conf.mode file to create an ajs2da.conf file. As required, edit the environment settings file.

KAVZ0812-E

An attempt to delete a file failed. : *maintenance-information-1 maintenance-information-2 maintenance-information-3*

An attempt to delete the file has failed.

(S)

Stops processing.

(O)

Take one of the following actions for the file path name indicated in *maintenance-information-1*:

- If *maintenance-information-3* indicates an error message, check the cause of the error according to this message.

- If *maintenance-information-3* does not indicate an error message, make sure that the file path exists and you have access permissions.

Correct the cause of the error, and then re-execute the failed processing.

If *maintenance-information-1* shows the *name of the folder for temporary files* for import or export specified in the environment settings parameter, unnecessary files may remain. You must delete the remaining files in the folder for temporary files when you finish the investigation of the cause of the error. Do not perform import or export when deleting the temporary files.

KAVZ0813-E

The file (*file-name*) could not be closed. : *maintenance-information-1 maintenance-information-2*

An attempt to close the file has failed.

(S)

Stops processing.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*, and then re-execute processing.

When you finish the investigation of the cause of the error, you must delete the remaining files in the folder for temporary files for import or export specified in the environment settings parameter. Do not perform import or export when deleting the temporary files.

KAVZ0814-E

The copying of files failed. : *file-name maintenance-information-1 maintenance-information-2*

An attempt to copy the file has failed.

(S)

Terminates processing.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information-2*, and then re-execute processing.

If this error occurs when the `ajsdaconvert` command is executed, the `ajsdaconvert` command might be executed multiply. After previous execution of the `ajsdaconvert` command complete, re-execute.

KAVZ0815-E

An attempt to read the unencrypted communication host settings file failed. : *maintenance-information*

An attempt to start the definition information management template has failed because reading the unencrypted communication host settings file (`ajsda_nosslhost.conf`) was unsuccessful.

(S)

Terminates processing.

(O)

Correct the cause of the error according to the error message indicated in *maintenance-information*, and then restart the definition information management template.

- If `line=`*number* appears in *maintenance-information*, the string (host name or IP address) contained in the line indicated by the *number* exceeds 255 characters in length.
- If `line over` appears in *maintenance-information*, the unencrypted communication host settings file contains more than 1,024 lines, which is the maximum number of lines allowed in that file.

KAVZ0901-E

An I/O error occurred. *maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4*

A file I/O error occurred during processing.

(S)

Stops processing.

(O)

Check the access permission for the file name indicated in *maintenance-information-4*, and then re-execute the failed processing.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0902-E

Insufficient memory occurred. : *maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4*

Memory became insufficient.

(S)

Terminates processing.

(O)

Check the cause of insufficient memory, and increase the amount of available memory. Alternatively, close some files if you have opened many definition information management templates.

KAVZ0903-E

A system error occurred. : *maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4*

A system error occurred during processing.

(S)

Terminates processing.

(O)

Contact the system administrator and collect information (see *6.2 Information that must be collected in the event of a problem*).

KAVZ0904-E

An unexpected error occurred in JP1/AJS2 - Definition Assistant. : *maintenance-information-1 maintenance-information-2 maintenance-information-3 maintenance-information-4 maintenance-information-5*

An unexpected error occurred during processing.

(S)

Terminates processing.

(O)

Take one of the following actions, and then re-execute the processing:

- If the message *function-name* `was not found in the dll file ajdrcmd.dll.` is displayed in the maintenance information, JP1/AJS3 - Definition Assistant might not be installed correctly (*function-name* differs depending on the version). Close all the definition information management templates, perform an overwrite installation of JP1/AJS3 - Definition Assistant, and then re-execute the processing.

  If the problem has not been resolved by the re-execution, or if the situation is not as described above, contact the system administrator after obtaining the necessary data (See *6.2 Information that must be collected in the event of a problem*).

- If the message `Invocation of the BtnImport_Click 5 procedure or argument is invalid.` is displayed in the maintenance information, the unit definition information contains a line feed character. Remove the line feed character, and then re-execute the processing.

- If `A file is not found.` and `ajdrcmd.dll` are displayed in the maintenance information, take one of the following actions:

  - Make sure that the OS user operating JP1/AJS3 - Definition Assistant has read and execute permissions for `ajdrcmd.dll`.

  - Make sure that the value for the `PATH` environment variable is correct.

- If the maintenance information displays a file path that is under the OpenSSL-related module folder, make sure that the file at the specified path exists.

  If the file does not exist, reinstall JP1/AJS3 - Definition Assistant.

  If the file exists, possible causes include those shown below. Resolve the cause of the problem before restarting operations.

  - You might not have the permissions for the OpenSSL-related module folder or its contents.

  - A temporary file access error occurred.

  - A temporary error occurred during the processing of the SSL library.

KAVZ0907-E

No more space in the file (*file-name*).

An attempt is made to write a file to the file system or device which does not have sufficient free space.

(S)

Terminates processing.

(O)

Take one of the following actions, and then re-execute:

- Delete unnecessary files to increase the amount of free space.

- If the amount of available space in the disk area is insufficient, change the limitation.

- Use the environment settings parameter to change the output destination of the file.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0910-E

The file processing count exceeds the limit.

The number of files to be processed exceeds the limit.

(S)

Terminates processing.

(O)

Close unnecessary windows or dialog boxes, and then re-execute.

If this error occurs during export processing, check the export results in JP1/AJS3 - View, and then re-execute export from the unit definition that was not processed. If you cannot determine the target unit definition, re-execute export from the beginning.

KAVZ0914-E

The number of execution result files that exist in the folder (*folder-name*) exceeded the maximum.

The number of Excel files contained in the folder for execution result files exceeds *maximum-number-of-execution-result-files* specified in the environment settings parameter.

(S)

Terminates processing.

(O)

Take one of the following actions, and then re-execute:

- Delete unnecessary Excel files from the folder for execution result files.

- In the environment settings file, change the name of the folder for execution result files, and then restart the definition information management template.

- In the environment settings file, change the maximum number of execution result files than can be stored, and then restart the definition information management template.

KAVZ0916-E

An attempt to save the execution result file failed. : *folder-name maintenance-information*
Specify the location where the execution result file is saved.

An attempt to save the execution result file has failed. The probable causes are:

- The folder for execution result files does not exist.

- The folder for execution result files does not have permissions.

- The path including the execution result file name is too long.

- The disk where the file is to be saved does not have sufficient free space.

(S)

Displays the Save As dialog box after the **OK** button is clicked.

(O)

To save the file, specify the location to save the file, and then click **Save** button. Click **Cancel** button not to save the file. After the save processing finishes, correct the cause of the error according to the error message indicated in *maintenance-information*. If you do not correct the cause of the error, the same error may occur again.

KAVZ0918-Q

Are you sure you want to end JP1/AJS2 - Definition Assistant?

Cancel was chosen in response to the message that asked the location for saving the execution result file. This message asks you whether you want to terminate JP1/AJS3 - Definition Assistant.

(S)

Displays the process result message either KAVZ0302-I or KAVZ0402-I and terminates processing if the **Yes** button is clicked.
Displays the Save As dialog box if the **No** button is clicked.

(O)

Click the **Yes** button not to save the file. To save the file, click the **No** button, and then in the Save As dialog box specify the location to save the file.

KAVZ0919-E

The acquisition of the definition line failed by lack of memory.

Memory became insufficient during the process of reading values in the definition columns.

(S)

Stops processing.

(O)

If this error occurs during import processing, lower the value of the memory loading level in the environment settings parameter `IMPORT-USEMEMORY`, and then try again.

If this error occurs during export processing, lower the value of the memory loading level in the environment settings parameter `BATCHEXPORT-USEMEMORY`, and then try again.

8.3 Messages output by the installer

The following table shows messages that are output by the installer.

Table 8–1: Messages output by the installer

Messages	Cause-of-error	Actions
The installation will stop because the 32-bit JP1/AJS3 - Definition Assistant is installed.Please uninstall the existing 32-bit JP1/AJS3 - Definition Assistant before install the 64-bit JP1/AJS3 - Definition Assistant.	In an environment where JP1/AJS3 - Definition Assistant 11-10 or earlier, or the 32-bit version of JP1/AJS3 - Definition Assistant has been installed, installation of the 64-bit version of JP1/AJS3 - Definition Assistant was attempted, causing the installation process to stop.	Make sure that you executed the correct installer of JP1/AJS3 - Definition Assistant. If the installer executed is correct, uninstall JP1/AJS3 - Definition Assistant or JP1/AJS2 - Definition Assistant, and then re-install the software.
The installation will stop because the 64-bit JP1/AJS3 - Definition Assistant is installed.Please uninstall the existing 64-bit JP1/AJS3 - Definition Assistant before install the 32-bit JP1/AJS3 - Definition Assistant.	In an environment where the 64-bit version of JP1/AJS3 - Definition Assistant has been installed, installation of the 32-bit version of JP1/AJS3 - Definition Assistant was attempted, causing the installation process to stop.	Make sure that you executed the correct installer of JP1/AJS3 - Definition Assistant. If the installer executed is correct, uninstall the 64-bit version of JP1/AJS3 - Definition Assistant, and then re-install the software.
Failed to set up OpenSSL. Restart the system, and then retry the installation.	OpenSSL setup failed, causing the installation process to stop.	If the following message appears during installation of this product, restart the host on which this product is to be installed, check the following, and then perform the installation again: • Check whether the amount of disk space required for the installation is available.[1] • If the contents of the DVD-R are copied to and executed from the HDD, check whether the contents were copied to a directory path that includes spaces. If the problem persists after performing the above steps, collect the following information and contact your system administrator: • Details about what operations were performed • Hard copies of screenshots of displayed dialog boxes • Logs of the Hitachi integrated installer[2]

#1

For details about the disk size required for installation, see the *Release Notes*.

#2

The logs of the Hitachi integrated installer are output to *system-drive*\Windows\Temp\HCDINST.

Appendixes

A. Files and Directories

This appendix explains the files and directories for JP1/AJS3 - Definition Assistant.

About the following tables:

- The following abbreviation is used:

  DA_path: the installation folder for JP1/AJS3 - Definition Assistant

- The following is the default installation folder for JP1/AJS3 - Definition Assistant:

  `C:\Program Files`[#]`\HITACHI\JP1AJS2DA`

  #

  If the 32-bit version of JP1/AJS3 - Definition Assistant is to be installed on the 64-bit version of Windows, replace `Program Files` with `Program Files (x86)`.

A.1 Files and folders expanded during installation

The following tables list the files and folders expanded during installation.

Table A–1: List of files and folders expanded during installation

Contents	Folder or file name
Folder for execution result files[#1]	`%ALLUSERSPROFILE%`[#2]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\backup`
Folder for executable files	*DA_path*`\bin`

File for command remote execution functionality	**In the 32-bit version**
	    DA_path`\bin\ajdrcmd.dll`
	In the 64-bit version
	    DA_path`\bin\ajdrcmdx64.dll`

VB script for starting JP1/AJS3 - Definition Assistant (for JP1/AJS3 - View linkage)	*DA_path*`\bin\ajsdastart.vbs`
Execution result file conversion file	*DA_path*`\bin\ajsdaconvert.vbs`
Japanese message management file	*DA_path*`\bin\ajsda_vbs_msg_resource_ja.txt`
English message management file	*DA_path*`\bin\ajsda_vbs_msg_resource_en.txt`

Master file for the definition information management template	**In the 32-bit version**
	    DA_path`\bin\AJS2DAMASTER.xls`
	In the 64-bit version
	    DA_path`\bin\AJS2DAMASTER.xlsm`

System management modules	*DA_path*`\bin\hlicense.xsd`
	DA_path`\bin\hlicense.dll`
	DA_path`\bin\hlicensehula.dll`
	DA_path`\bin\hlicmgr.dll`
	DA_path`\bin\hlicmgrjni.dll`
	DA_path`\bin\hlicreg.dll`

Contents	Folder or file name
System management modules	*DA_Path*\bin\activation.xsd
	DA_Path\bin\licensekeyfile.xsd
Folder for environment settings files	*DA_path*\conf
Environment settings file	*DA_path*\conf\ajs2da.conf
Sample of the environment settings file	*DA_path*\conf\ajs2da.conf.model
Base sample of the environment settings file	*DA_path*\conf\ajs2da.conf.model.model
Unencrypted communication host settings file (model file)	*DA_path*\conf\ssl\ajsda_nosslhost.conf.model
Root certificate storage folder	*DA_path*\conf\ssl\rootcer
Product type	*DA_path*\ProductInfo.txt
Readme file	*DA_path*\Readme_ja.txt *DA_path*\Readme_en.txt
Folder for OpenSSL related modules	*DA_path*\ssl
Model name and version information	*DA_path*\Version.txt
Folder for temporary files for use with IMPORT and EXPORT execution.	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp
Folder for temporary files for import results modification[#1]	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\input
Folder for temporary files during export execution[#1]	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\output
Folder for error information files[#1]	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\errlog
Tool folder	*DA_Path*\tools
Data collection tool	*DA_Path*\tools_04.BAT
	DA_Path\tools\jajs_log.bat
Folder for log files and history files	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log
ajsdaconvert command execution history file	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\ajsdaconvert.log
ajsdaconvert command execution history file for saving.	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\ajsdaconvert0[1-5].log
License management log	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hliclibtrc{1|2|3|4|5}.log
	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hlicliberr{1|2|3|4|5}.log
	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hliclibmgrtrc{1|2|3|4|5}.log
	%ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hliclibmgrerr{1|2|3|4|5}.log

Contents	Folder or file name
License management log	`%ALLUSERSPROFILE%`[#2]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hliclibtrc.conf`
	`%ALLUSERSPROFILE%`[#2]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hlicliberr.conf`
	`%ALLUSERSPROFILE%`[#2]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hliclibmgrtrc.conf`
	`%ALLUSERSPROFILE%`[#2]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\log\hliclibmgrerr.conf`

#1

Since an error will occur when this does not exist, make sure anything other than the default has already been created.

#2

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData.`

A.2 Files created during import and export

The following files are created when import or export is performed:

- Execution result files
- Temporary files
- Error information files

An error occurs if an attempt is made to create or save the above files when the destination folder does not exist. When changing the destination folder to something other than that set during setup, make sure that the folder is already created.

The following describes each file.

(1) Execution result files

When import or export is performed, the definition information management template used during operation is saved under a different name, as an execution result file.

The following table lists the execution result files. The file names are different between the 32-bit and 64-bit versions.

Table A–2: Execution result files

Bit versions	Contents	File name	Folder
32-bit	Import execution result file	`AJS2DA-IMPORT-`*YYMMDDhhmmssxxx*`.XLS`	`%ALLUSERSPROFILE%`[#1]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\backup`
	Export execution result file	`AJS2DA-EXPORT-`*YYMMDDhhmmssxxx*`.XLS`	
64-bit	Import execution result file	`AJS2DA-IMPORT-`*YYMMDDhhmmssxxx*`.XLSM`	

Bit versions	Contents	File name	Folder
64-bit	Export execution result file	`AJS2DA-EXPORT-`*`YYMMDDhhmmssxxx`*`.XLSM`	`%ALLUSERSPROFILE%`[#1]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\backup`

Legend:

YY: The year of the execution date (last two digits)[#2]

MM: The month of the execution date (in two digits)[#2]

DD: The day of the execution date (in two digits)[#2]

hh: The hour of the execution date (in two digits)[#2]

mm: The hour of the execution date (in two digits)[#2]

ss: The second of the execution date (in two digits)[#2]

xxx: The millisecond of the execution date (in three digits)[#2]

#1

The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData.`

#2

Execution date means, to be precise, the date and time at which importing or exporting starts.

The number of execution result files saved is limited to the maximum specified by the `MAX-BACKUP-FILENUM` environment settings parameter. When the maximum number of files is reached, import and export cannot be performed. In this case, save these files in another location, or delete them, and then perform import or export again.

(2) Temporary files

When import or export is performed, a temporary file is created for modifying command remote execution results in the list format of the definition information management template. This file is created before, and deleted after, command remote execution.

The following table lists the temporary files.

Table A–3: Temporary files

Contents	Purpose	Folder
Temporary file for import results modification	Contains information about the process of modifying import results in the list format of the definition information management template	`%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\input`
Temporary file during export execution	Contains unit definition parameters passed to the `ajsdefine`	`%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\output`

Contents	Purpose	Folder
Temporary file during export execution	command during export, and error messages for the executed command.	`%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\output`

\#

> The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

(3) Error information files

If an error occurs with the `ajsdefine` command when definition information is individually or batch exported, the unit definition parameter for which the error occurred is moved from the folder for temporary files during export execution, and saved as an error information file, to facilitate error analysis.

The following table describes the error information file.

Table A–4: Error information file

Contents	Purpose	Folder
Error information file	`AJS2_UNIT_`*YYMMDDhhmmssxxx_nnnn*`.txt`	`%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2DA\tmp\errlog`

Legend:

> *YY*: The year of the export execution date (last two digits)
>
> *MM*: The month of the export execution date (in two digits)
>
> *DD*: The day of the export execution date (in two digits)
>
> *hh*: The hour of the export execution date (in two digits)
>
> *mm*: The hour of the export execution date (in two digits)
>
> *ss*: The second of the export execution date (in two digits)
>
> *xxx*: The millisecond of the export execution date (in three digits)
>
> *nnnn*: A four-digit serial number from 0001 to 1000, for classification when individual execution is specified multiple times

\#

> The default value of `%ALLUSERSPROFILE%` is *system-drive*`\ProgramData`.

The number of error information files saved is limited to the maximum specified by the `MAX-ERRLOG-FILENUM` environment settings parameter. When the maximum number of files is reached, the oldest file will be deleted to make room for a new one.

B. Limitations

B.1 Processing limitations

The following table shows the processing limitations for JP1/AJS3 - Definition Assistant.

Table B–1: Processing limitations

Item		Maximum
Number of scheduler services that can connect simultaneously to the definition information management template		1
32-bit	Number of units that can be imported into the definition information management template	65,000
	Number of units that can be exported simultaneously from the definition information management template	65,000
64-bit	Number of units that can be imported into the definition information management template	1,048,556
	Number of units that can be exported simultaneously from the definition information management template	1,048,556
Number of HTTP status codes that can be specified for **Return code specification** of the **Http connection job definition information** by **Change** export (total number of HTTP status codes specified for return codes 0 to 9)		250

The following table lists, for open days and closed days in the calendar definition, the maximum number of days per calendar definition that JP1/AJS3 - Definition Assistant can handle.

Table B–2: Calendar definition limitations (open day and closed day)

Item	Maximum
Number of days that can be imported into the calendar definition	2,978
Number of days that can be applied by export through the batch or individual definition function	2,978
Number of days that can be added by **Change** export	2,978
Number of days that can be removed by **Change** export	62

B.2 Character limitations

The characters that can be used in JP1/AJS3 - Definition Assistant vary depending on the type of character encoding used for the connected JP1/AJS3 - Manager.

The following table explains the limitations for characters used in JP1/AJS3 - Definition Assistant.

Table B–3: Character limitations

Characters that can be used	Characters that cannot be used
• Alphanumeric characters • JIS X 0208-1990 • Single-byte katakana characters • The following symbols:	• The 3rd level and 4th level Kanji characters added in JIS 2004 • External characters, platform-dependent characters • If the character encoding used in JP1/AJS3 - Manager is EUC, the following characters cannot be used.

Characters that can be used	Characters that cannot be used

`! # $ % + @`
including:
`-` (hyphen)
`.` (period)
`_` (underscore)
	`~  //  ‒  ¢  £  ¬`
	• If the character encoding used in JP1/AJS3 - Manager is UTF-8, the following characters cannot be used
	`~  //  ‒  ¢  £  ¬  \`

Note that in JP1/AJS3 - Definition Assistant, the following characters cannot be used in a unit name:

- When `ST` (default setting) is set for the environment settings parameter `RESTRICT-CHAR-RANGE`

  `" & ' * < > ? [ \ ] ^ ` { | } ~ ( )`

- When `CP` is set for the environment settings parameter `RESTRICT-CHAR-RANGE`

  `( )`

> 🛈 **Important**
>
> When the definition information management template is to be started from JP1/AJS3 - View, the following characters cannot be used in a unit name regardless of what setting is specified for the environment settings parameter `RESTRICT-CHAR-RANGE`:
>
> `" & ' * < > ? [ \ ] ^ ` { | } ~`

For details about characters that cannot be used in JP1/AJS3, see the topic that describes the language types and character sets used in the system in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

C. Estimation

The following explains estimates for the resources necessary to run JP1/AJS3 - Definition Assistant.

C.1 Estimating processing performance for JP1/AJS3 - Definition Assistant

Consider the following points when estimating the import and export processing performance for JP1/AJS3 - Definition Assistant:

- Processing performance for the machine on which JP1/AJS3 - Definition Assistant is installed
- Processing performance and load status of the connection destination JP1/AJS3 - Manager machine
- Performance of the network between the machine on which JP1/AJS3 - Definition Assistant is installed and the connection destination JP1/AJS machine
- Number of units to be processed and the amount of data to be defined

When definition information is imported and exported, JP1/AJS commands are remotely executed for the connection destination JP1/AJS. An increase in the number of units to process has a dramatic effect on performance.

(1) Recommended configuration

We recommend that you consider the above, and perform the following three operations for JP1/AJS3 - Definition Assistant to mitigate the network load for data transmission, to prevent degradation in performance for processing of the definition information management template and execution command:

- Perform load balancing by separating the machine on which JP1/AJS3 - Definition Assistant is installed from the connection destination JP1/AJS3 - Manager machine.
- Perform processing at a time when the JP1/AJS3 - Manager machine is not performing operations.
- Divide the processing units so that as few units are processed simultaneously as possible.

Functionally speaking, JP1/AJS3 - Definition Assistant can process definition information for more than 10,000 units simultaneously. However, keeping performance load in mind, we recommend that you keep the maximum number of units processed simultaneously for one operation to around 1,000.

Note that the following definitions significantly lower performance, and should not be made:

- The number of the specified schedule rules for a jobnet is 10 or more.
- The complete unit name is too long.

(2) Estimating the import processing time

Although performance depends on differences in machine specifications, you can generally use the following formula to obtain an approximate time required for importing definition information.

```
Import-processing-time (seconds) =
    ((0.15*a*b)*(1-i-j)) + (0.01*c) + (0.01*d) + (0.025*e) + (0.001*f) +
    (0.08*g) + h
```

Legend:

a: Average size of the unit definition

Estimate the size of the standard output file that was obtained by executing the ajsprint -a command for a single unit with the most definition information defined.

b: Number of units

c: Total number of "Open day"

d: Total number of "Closed day"

e: Total number of lines of "Command statement"

f: Total number of a Relations

g: Total number of lines of "Environment variables"

h: Time required for saving the execution result file

The following table provides guidelines for how much time is required.

Table C–1: Approximate time required to save an import execution results file

Execution result file size (unit: megabytes)	Required time (unit: seconds)
2	10
10	50
20	100

i: If 1 is specified for IMPORT-USEMEMORY, use 0.05 for an estimate. If 0 is specified for IMPORT-USEMEMORY, use 0 for an estimate.

j: If Y is specified for IMPORT-TIME-IMPROVE and the version of JP1/AJS3 at the connection destination is 10-00 or later, use 0.25 for an estimate. If these conditions do not apply, use 0.

(3) Estimating the export processing time

Although performance depends on differences in machine specifications, you can generally use the following formula to obtain an approximate time required for exporting definition information.

- When the value of the BATCHEXPORT-USEMEMORY environment settings parameter is 0

<In the case of 32-bit version of JP1/AJS3 - Definition Assistant>

```
Export-processing-time (seconds) =
  (a*a*i/10000000) + (0.002*a*i) + (0.3*b) + (0.02*c) + (0.3*d) +
  (0.02*e) + (0.02*f) + (0.3*g) + h
```

<In the case of 64-bit version of JP1/AJS3 - Definition Assistant>

```
Export-processing-time (seconds) =
  (a*a*i/10000000) + (0.02*a*i) + (0.3*b) + (0.02*c) + (0.3*d) +
  (0.02*e) + (0.02*f) + (0.3*g) + h
```

- When the value of the BATCHEXPORT-USEMEMORY environment settings parameter is 1

<In the case of 32-bit version of JP1/AJS3 - Definition Assistant>

```
Export-processing-time (seconds) =
  (0.003*a) + (0.3*b) + (0.02*c) + (0.3*d) + (0.02*e) + (0.02*f)
  + (0.3*g) + h
```

<In the case of 64-bit version of JP1/AJS3 - Definition Assistant>

```
Export-processing-time (seconds) =
    (a*a/100000000) + (0.0015*a) + (0.3*b) + (0.02*c) + (0.3*d) +
    (0.02*e) + (0.02*f) + (0.3*g) + h
```

Legend:

a: Number of units specified for batch definition

b: Number of units specified for independent definition

c: Total number of the lines in the cell of the Previous fileds.

d: Number of modification items specified for modification

e: Total number of the lines in the cell of the marking Previous fileds

f: Total number of the lines in the cell of the marking Waiting-target units fileds

g: Number of units specified for deletion

h: Time required for saving the execution result file

The following table provides guidelines for how much time is required.

Table C–2: Approximate time required to save an export execution results file

Execution result file size (unit: megabytes)	Required time (unit: seconds)
2	10
10	50
20	100

i: Estimate this value by referring to the values shown in the table below.

Table C–3: i value

Version of Excel used	Value for the 32-bit version of JP1/AJS3 - Definition Assistant	Value for the 64-bit version of JP1/AJS3 - Definition Assistant
Excel 2016	1.0	1.0
Excel 2019	1.6	
Excel 2021	2.0	1.8

(4) Estimating the ajsdaconvert command processing time

Although performance depends on differences in machine specifications, you can generally use the following formula to obtain an approximate time required for `ajsdaconvert` command.

```
ajsdaconvert command-processing-time (seconds) = (a*(8.5*b) + 5) + 30
```

Legend:

a: Number of files before conversion

b: File size of the execution result file (megabyte)

Estimate the size of the file by using the execution result file that has the largest size before conversion.

If the above process is difficult, estimate the size by using the following formula:

```
File size of the execution result file (megabytes) = c*d
```

c: Average size of the unit definition

Estimate the size of the standard output file that was obtained by executing the `ajsprint -a` command for a single unit with the most definition information defined.

If the above process is difficult, estimate the size by using the value 0.007.

d: Number of units

If all of the files before conversion are in xls format, estimate the size by using either the value of `MAX-IMPORT-UNIT` or `MAX-EXPORT-UNIT` in the environment settings parameters, whichever is larger.

For other formats, estimate the size by using the value of `XLSM-MAX-IMPORT-UNIT` or `XLSM-MAX-EXPORT-UNIT` in the environment settings parameters.

C.2 Estimating system performance

(1) Estimating memory usage

For details about memory requirements, see *Release Notes*.

(2) Estimating disk usage

For details about disk usage, see *Release Notes*.

D. Port number to be set

This section explains the port number to be set and the direction through the firewall.

The port number to be used is set to the default and stored in the `services` file upon delivery of the product.

You can change the port number according to the user environment.

The protocol used is TCP/IP.

The following table shows the protocol number used in JP1/AJS3 - Definition Assistant.

Table D–1: Port number used in JP1/AJS3 - Definition Assistant

Service name	Port number	Usage
jp1ajs2monitor	20244	Communicate with JP1/AJS3 - Manager

The direction through the firewall is from JP1/AJS3 - Definition Assistant to JP1/AJS3 - Manager. To set the firewall, at the port of jp1ajs2monitor, the ANY replies to the sessions established on the port number of jp1ajs2monitor should go through.

If you install JP1/AJS3 - Definition Assistant on the firewall server machine, communication on the same machine might also be affected by the firewall. Accordingly, specify the settings so that communication on the same machine is allowed.

JP1/AJS3 - Definition Assistant supports network address translation (NAT) in static mode, but does not support translation between a single global IP address and multiple local IP addresses, such as NAPT (IP Masquerade, NAT+).

E. Migration Procedure and Notes

This appendix explains the procedure to migrate the environment from the 32-bit version of JP1/AJS3 - Definition Assistant to the 64-bit version, or vice versa.

The following shows how the file and directory related to JP1/AJS3 - Definition Assistant are indicated.

About the following tables:

- The following abbreviation is used:

  DA_path: the installation folder for JP1/AJS3 - Definition Assistant

  The following is the default installation folder for JP1/AJS3 - Definition Assistant:

  `C:\Program Files`[#]`\HITACHI\JP1AJS2DA`

  \#

  If the 32-bit version of JP1/AJS3 - Definition Assistant is to be installed on the 64-bit version of Windows, replace `Program Files` with `Program Files (x86)`.

E.1 Migration procedure from the 32-bit version of JP1/AJS3 - Definition Assistant to the 64-bit version

This section describes how to migrate the 32-bit version of JP1/AJS3 - Definition Assistant to the 64-bit version. The following figure shows the migration steps.
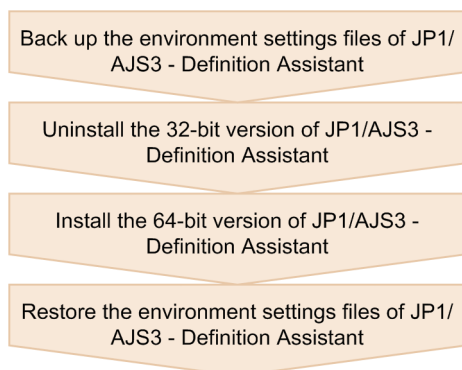
(1) Backing up the environment settings files of JP1/AJS3 - Definition Assistant

Back up the environment settings files of JP1/AJS3 - Definition Assistant.

Table E–1: What should be backed up

File and folder names	Description
DA_Path`\conf\ajs2da.conf`	Environment settings file
DA_Path`\conf\ssl\rootcer`	Root certificate storage folder[#1]
DA_Path`\conf\ssl\ajsda_nosslhost.conf`	Unencrypted communication host settings file[#2]

\#1

  The file can be found in JP1/AJS3 - Definition Assistant 11-00 or later.

\#2

    The file can be found if SSL communication is set up.

(2) Uninstalling the 32-bit version of JP1/AJS3 - Definition Assistant

Uninstall the 32-bit version of JP1/AJS3 - Definition Assistant. For details about how to do so, see *3.1.9 Uninstallation*.

After the uninstallation is finished, delete all files and folders under the installation folder of JP1/AJS3 - Definition Assistant.

(3) Installing the 64-bit version of JP1/AJS3 - Definition Assistant

Install the 64-bit version of JP1/AJS3 - Definition Assistant. For details about how to do so, see *3.1.1 Installation*.

(4) Restoring the environment settings files of JP1/AJS3 - Definition Assistant

Restore (recover) the environment settings files of JP1/AJS3 - Definition Assistant.

Manually copy the files and folders backed up in *(1) Backing up the environment settings files of JP1/AJS3 - Definition Assistant* to the restore destinations listed below.

Table E–2: Where to restore to

File and folder names	Description
DA_Path\conf\ajs2da.conf	Environment settings file
DA_Path\conf\ssl\rootcer	Root certificate storage folder[#]
DA_Path\conf\ssl\ajsda_nosslhost.conf	Unencrypted communication host settings file[#]

\#

    Restore the file and folder if it has been backed up.

(5) Notes on migration

- The model name of JP1/AJS3 - Definition Assistant varies depending on the number of bits of your Excel. Install the JP1/AJS3 - Definition Assistant version that corresponds to the number of bits of Excel you use.

- The 32-bit version of Excel (Office) cannot be changed to the 64-bit version (Office). Therefore, if you want to change the number of bits of Excel (Office), you need to first uninstall the 32-bit version, and then install the 64-bit version of Excel (Office).

- In the 64-bit version of JP1/AJS3 - Definition Assistant, the import and export functions are not available on the definition information management template in `xls` format. When you use the import and export functions, convert the definition information management template into `xlsm` format. However, you can edit the definition information management template in `xls` format.

- Review the settings of environment setting parameters if necessary. For environment setting parameters available, see *3.2 Environment settings parameters*.

E.2 Migration procedure from the 64-bit version of JP1/AJS3 - Definition Assistant to the 32-bit version

This section describes how to migrate the 64-bit version of JP1/AJS3 - Definition Assistant to the 32-bit version. The following figure shows the migration steps.

Back up the environment settings files of JP1/
AJS3 - Definition Assistant

Uninstall the 64-bit version of JP1/AJS3 -
Definition Assistant

Install the 32-bit version of JP1/AJS3 -
Definition Assistant

Restore the environment settings files of JP1/
AJS3 - Definition Assistant
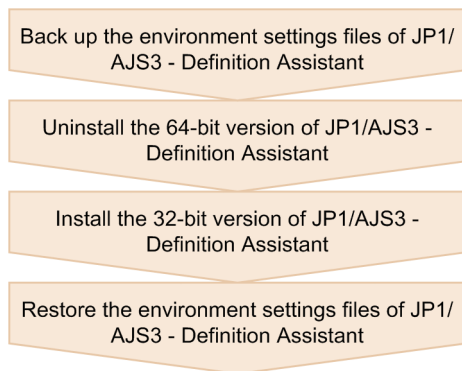
(1) Backing up the environment settings files of JP1/AJS3 - Definition Assistant

Table E–3: What should be backed up

File and folder names	Description
DA_Path\conf\ajs2da.conf	Environment settings file
DA_Path\conf\ssl\rootcer	Root certificate storage folder[1]
DA_Path\conf\ssl\ajsda_nosslhost.conf	Unencrypted communication host settings file[2]

#1
    The file can be found in JP1/AJS3 - Definition Assistant 11-00 or later.

#2
    The file can be found if SSL communication is set up.

(2) Uninstalling the 64-bit version of JP1/AJS3 - Definition Assistant

Uninstall the 64-bit version of JP1/AJS3 - Definition Assistant. For details about how to do so, see *3.1.9 Uninstallation*.

After the uninstallation is finished, delete all files and folders under the installation folder of JP1/AJS3 - Definition Assistant.

(3) Installing the 32-bit version of JP1/AJS3 - Definition Assistant

Install the 32-bit version of JP1/AJS3 - Definition Assistant. For details about how to do so, see *3.1.1 Installation*.

(4) Restoring the environment settings files of JP1/AJS3 - Definition Assistant

Restore (recover) the environment settings files of JP1/AJS3 - Definition Assistant.

Manually copy the files and folders backed up in *(1) Backing up the environment settings files of JP1/AJS3 - Definition Assistant* to the restore destinations listed below.

Table E–4: Where to restore to

File and folder names	Description
DA_Path\conf\ajs2da.conf	Environment settings file
DA_Path\conf\ssl\rootcer	Root certificate storage folder[#]
DA_Path\conf\ssl\ajsda_nosslhost.conf	Unencrypted communication host settings file[#]

#
　　Restore the file and folder if it has been backed up.

(5) Notes on migration

- The model name of JP1/AJS3 - Definition Assistant varies depending on the number of bits of your Excel. Install the JP1/AJS3 - Definition Assistant version that corresponds to the number of bits of Excel you use.

- The 64-bit version of Excel (Office) cannot be changed to the 32-bit version (Office). Therefore, if you want to change the number of bits of Excel (Office), you need to first uninstall the 64-bit version, and then install the 32-bit version of Excel (Office).

- In the 32-bit version of JP1/AJS3 - Definition Assistant, the import and export functions are not available on the definition information management template in xlsm format. When you use the import and export functions, convert the definition information management template into xls format. However, you can edit the definition information management template in xlsm format.

- Review the settings of environment setting parameters if necessary. For environment setting parameters available, see *3.2 Environment settings parameters*.

F. Version compatibility

This section describes the version compatibility between JP1/AJS3 - Definition Assistant and the following products:

- JP1/AJS3 - Manager
- JP1/AJS3 - View

F.1 Compatibility with JP1/AJS3 - Manager

JP1/AJS3 - Definition Assistant can be used within the functional range of the connected JP1/AJS3 - Manager version. However, if the version of JP1/AJS3 - Definition Assistant is not the same as the version of JP1/AJS3 - Manager, you pay attention to the following notes.

Notes:

- When you set a new definition item added in JP1/AJS3 - Definition Assistant, you cannot perform an export to the JP1/AJS3 - Manager that is older than the JP1/AJS3 - Definition Assistant version.

- If the upper-level unit-attribute inheritance function that uses the unit-attribute profile is enabled in JP1/AJS3 - Manager, the JP1/AJS3 - Manager settings are enabled when the unit is created during export, and they might be different from the definition in JP1/AJS3 - Definition Assistant. If you want to apply the settings defined in JP1/AJS3 - Definition Assistant without change, we recommend that you temporarily disable the upper-level unit-attribute inheritance function.

- When the version of JP1/AJS3 - Manager is not the same for import and export, the execution result is as follows:
  - When the version at the export destination is newer than the version at the import source: Normal end
  - When the version at the export destination is older than the version at the import source:
    - If a definition item added in the newer version is not set: Normal end
    - If a definition item added in the newer version is set: Error

F.2 Compatibility with JP1/AJS3 - View

Nothing to note.

G. Version Revisions

This appendix lists the changes in each version of the program.

G.1 Revisions in 13-10

Custom Event Jobs (Service Linkage Objects Monitoring Jobs) are now supported.

Along with this, **Definition parameters** was added to the event job definition information section.

G.2 Revisions in 13-00

- The following OSs are no longer supported:
  - Microsoft(R) Windows(R) 7
  - Windows(R) 8
  - Windows(R) 8.1
  - 32-bit version of Windows 10
  - Microsoft(R) Windows Server(R) 2012
  - Microsoft(R) Windows Server(R) 2012 R2
- Added support for the Office desktop application (Excel) as part of the Office subscription service.
  In addition, Excel 2013 (Office 2013) is no longer supported.
- Added or changed the following descriptions regarding the use of JP1/AJS3 - Definition Assistant in 2037 and later:
  - Versions of prerequisite programs for use in 2037 and later
  - Calendar year values that can be specified as the execution start day of a jobnet in schedule rules
  - Calendar year values that can be specified as an **Open day** and **Closed day** in the **Calendar definition information** section
  - Calendar year values that can be specified as the **Valid term** and **Year/Month** in the **Schedule definition information** section
- Changed the description regarding JP1/Base for prerequisite programs on the system (manager host).
- Added an item on **Valid term** schedule limits as a check item for the error-checking function.
  As a result, the environment settings parameter SCHEDULELIMIT was added.
- Added notes on installation.
- Standard custom jobs in Linux (JP1AMR3UX, JP1AMR3CPUX, and JP1AMR3BWUX) added in JP1/AJS3 for Enterprise Applications 13-00 are now handled in the same way as standard custom jobs in Windows (JP1AMR3, JP1AMR3CP, and JP1AMR3BW).
  As a result, JP1AMR3UX, JP1AMR3CPUX, and JP1AMR3BWUX were added to **Custom type** in the **Unit definition information** section.
- Added support for system management information added in JP1/AJS3 for Enterprise Applications 13-00. As a result, the following items were added to the **R/3 job definition information** section:
  - System management information
  - System management extended information

- Added TLS version 1.3 to protocols supported by the encrypted communication function.
  As a result, the environment settings parameter SSLPROTOCOL was added.
- Added descriptions on changing the settings of the host running JP1/AJS3 - Definition Assistant.
- Added a description about the use of a WAN environment for communications.
- Added the CSA*custom-job-name* custom job to **Custom type** in the **Unit definition information** section.
- Added descriptions on KAVZ0202-E and KAVZ0265-E.
- Changed the actions the operator takes for the KAVZ0552-E message.

G.3 Revisions in 12-50#

- Excel 2010 (Office 2010) is no longer supported.
- Added the following definition items, which were added in JP1/AJS3 12-50, to the definition items related to the HTTP connection job.
  - **Extended mode**
  - **URL parameter**
  - **Message body**
  - **Return code specification**

  In response to this, the following explanations were added.
  - Added items related to the HTTP connection job definition information to the check items for the error-checking function and the error check performed upon export.
  - Added the number of HTTP status codes that can be specified for **Return code specification** of the HTTP connection job to the processing limitations for JP1/AJS3 - Definition Assistant.
- Added the cause and action to take for the KAVZ0504-E message.
- Added the following OSs to the applicable OSs:
  - Windows Server 2022
  - Windows 11
- Added support for the 32-bit version and 64-bit version of Excel 2021 (Office 2021).
- Changed the description on time zones for the manager host (JP1/AJS3 - Manager machine) and the JP1/AJS3 - Definition Assistant machine in *Notes on the environment*.
- Changed the description of items that cannot be exported with changes in the **Basic job definition information** section of R/3 job in *Notes on operation*.
- Changed the formula to estimate the export processing time in the 64-bit version of JP1/AJS3 - Definition Assistant when the environment settings parameter BATCHEXPORT-USEMEMORY is set to 0.

#

Includes manual revisions in version 12-50.

G.4 Revisions in 12-10

- Added the environment settings parameters `FINISHING-REFERENCESTYLE`, `IMPORT-OPCL-LATEST`, `EXPORT-CHECK-ITEMS`, `ERROR-CHECK-ITEMS`, and `RESTRICT-CHAR-RANGE`.

  In response to this, the following information was either changed or added:

  - Notes on using the definition information management template
  - Notes on using JP1/AJS3 - Definition Assistant
  - Error checking of exported unit definition information
  - Error check function and check items
  - Notes on the environment settings parameters `IMPORT-UNIT-NAME`, `EXPORT-UNIT-NAME`
  - Check function for the environment settings parameters `SELECT-EXECHOST`, `SELECT-OWNER`, `SELECT-JP1GROUP`, `SELECT-EXECUSER`, `SELECT-JOBNETCALENDAR`, `SELECT-ENVFILE`, `SELECT-NICE`, `LIMIT-UNITNAME`, `LIMIT-COMMENT`, `LIMIT-SAVEGEN`, `LIMIT-ABCODE`, `LIMIT-WACODE`
  - **Unit name** in the Import of unit definition dialog box and the Export of unit definition dialog box
- Added information regarding permissions for execution that are necessary for JP1 users used with JP1/AJS3 - Definition Assistant.
- Added notes on the environment settings parameters specified in the environment settings file.
- Made a change so that, when the number of days defined in the imported calendar information (open days and closed days specified on a per-day basis) exceeds the maximum limit, newer dates are displayed under the **Open day** or **Closed day** heading in the calendar definition information section.[#]

  #

  For details about the specification of how dates are displayed in the calendar definition information section, see information regarding the `IMPORT-OPCL-LATEST` environment settings parameter.
- Changed the range of characters that cannot be used in unit names specified with JP1/AJS3 - Definition Assistant.
- Added options that can be used to edit calendar information by using JP1/AJS3 - Definition Assistant.
- Changed the description of cause for KAVZ0209-E and KAVZ0210-E.
- Added the message for KAVZ0263-E, KAVZ0264-E, and KAVZ0265-E.
- The maximum number of days that can be added to the calendar definition by performing **Change** export was increased to 2,978 days.
- Changed the formulas to estimate the import processing time and the export processing time.

G.5 Revisions in 12-00[#]

- The following OSs are no longer supported:
  - Microsoft(R) Windows Server(R) 2008 R2 Datacenter
  - Microsoft(R) Windows Server(R) 2008 R2 Enterprise
  - Microsoft(R) Windows Server(R) 2008 R2 Standard
- The 32-bit version of Excel 2007 (Office 2007) is no longer supported.
- Notes for usage that were listed in the *Release Notes* were added.
- Supported the following definition items added in JP1/AJS3 for Enterprise Applications 12-00:

- The definition items for the standard custom job (`JP1AMR3CP`) that copies the jobs of the R/3 system
- The definition items related to the output of the R/3 job log message type
- The definition items related to temporary variants in the job step information

The following items to the **R/3 job definition information** section were also added.

- Name of the source job
- Job count of the source job
- Number of the first step to start copying job
- New name of the copied job

- Added notes on the display of the Export of unit definition dialog box to the descriptions of batch definition of definition information, unit definition, changing unit definition information, and deleting units.
- Added notes on the export destination of definition information to the description of batch definition of definition information.
- Added the message for KAVZ0262-E.
- Added the section that describes messages that are output by the installer.
- Changed the formula to estimate the `ajsdaconvert` command processing time.
- Added the following OSs to the applicable OSs:
  - Windows Server 2019
- Added support for the 32-bit version and 64-bit version of Excel 2019 (Office 2019).

\#

These include the functions supported after the 12-00 release.

G.6 Revisions in 11-50

- Added the settings to use the user authentication function.
- Added the environment settings parameters `SERVERHOST-USE-REVERSELOOKUP`, `IMPORT-USEMEMORY`, and `IMPORT-TIME-IMPROVE`.
- Changed the definition of the environment settings parameter `AJS-SET-SERVERHOST`.
- Added the message for KAVZ0315-E and KAVZ0508-E.
- Changed the actions the operator takes for the KAVZ0005-E, KAVZ0501-E, and KAVZ0919-E messages.
- Added the cause of the error and actions the operator takes for the KAVZ0504-E message.
- Added how to estimate the import, export, and `ajsdaconvert` command processing time.

G.7 Revisions in 11-10

- Added support for the 64-bit version of JP1/AJS3 - Definition Assistant.
- Added the following OSs to the applicable OSs:
  - Windows Server 2016
- Added support for the 32-bit version of Excel 2016 (Office 2016).

- Added support for the 64-bit version of Excel 2010 (Office 2010), Excel 2013 (Office 2013), or Excel 2016 (Office 2016).
- Added the following notes on usage:
  - Notes on the environment
  - Notes on using the definition information management template
  - Notes on operation
- Changed the error-checking function supported for the **R/3 job definition information** section.
- Added the following items to the **R/3 job definition information** section.
  - Logon by sapnwrfc.ini file
  - Language
  - Environment variable: Variable
  - Environment variable: Value
- Changed the definitions of the following environment setting parameters: MANAGER-HOST, MAX-IMPORT-UNIT, MAX-EXPORT-UNIT, IMPORT-MANAGER-HOST, IMPORT-UNIT-NUM-CHECK, EXPORT-MANAGER-HOST
- Added the following environment setting parameters: XLSM-MAX-IMPORT-UNIT, XLSM-MAX-EXPORT-UNIT, BATCHEXPORT-USEMEMORY
- Changed **Destination** in the **Flexible job definition information** section to **Destination / Broadcast Agent**. **Broadcast execution** was also added.
- Changed the upper limit of the number of units that can be processed in JP1/AJS3 - Definition Assistant.
- Changed the definition items in the support status of the definition items in JP1/AJS3 - View table.
- Added the section that describes backup and recovery of JP1/AJS3 - Definition Assistant setting information.
- Added the description of the argument -i, notes, and output information for the processing result, with regard to the ajsdaconvert command.
- Added the message for KAVZ0006-E to KAVZ0009-E, KAVZ0260-E, KAVZ0261-E, KAVZ0620-E, and KAVZ0919-E
- Added the cause of the error to the KAVZ0258-E message.
- Changed the actions the operator takes for the KAVZ0904-E message.
- Added the section that describes messages that are output by the installer.
- Added the procedures for migration from the 32-bit version to the 64-bit version or from the 64-bit version to the 32-bit version.

G.8 Revisions in 11-00

- Added Windows 10 to the applicable OS.
- Added the encrypted communication function.
- Added the definition items related to the flexible job.
- Added the definition items related to the HTTP connection job.
- Added the custom jobs ADSHPC, ADSHUX, and DHAJEW to **Custom type** in the **Unit definition information** section.

- Added the environment settings parameters `SSL-ENABLE`, `CACERTIFICATEFILE`, `IMPORT-UNIT-NUM-CHECK`, `TYPE-FLEXIBLE-JOB`, and `TYPE-HTTP-CONNECTION-JOB`.

- Added the message for KAVZ0005-E, KAVZ0103-E, KAVZ0550-E, KAVZ0551-E, KAVZ0552-E, and KAVZ0815-E.

- Added the cause of the error to the KAVZ0502-E message.

- Changed the actions the operator takes for the KAVZ0504-E message.

- The following OSs are no longer supported:
  - Microsoft(R) Windows Server(R) 2008 Enterprise
  - Microsoft(R) Windows Server(R) 2008 Standard
  - Microsoft(R) Windows Server(R) 2003, Enterprise Edition
  - Microsoft(R) Windows Server(R) 2003, Standard Edition
  - Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition
  - Microsoft(R) Windows Server(R) 2003 R2, Standard Edition
  - Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition
  - Microsoft(R) Windows Server(R) 2003, Standard x64 Edition
  - Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition
  - Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition
  - Microsoft(R) Windows Vista(R) Business
  - Microsoft(R) Windows Vista(R) Enterprise
  - Microsoft(R) Windows Vista(R) Ultimate
  - Microsoft(R) Windows(R) XP Professional Operating System

- Excel 2002 (Office XP) and Excel 2003 (Office 2003) are no longer supported.

- JP1/AJS2 - View, JP1/AJS2 - Manager, and JP1/AJS2 for Enterprise Application are no longer supported.

G.9 Revisions in 10-50

- Added the following OSs to the applicable OSs:
  - Microsoft(R) Windows Server(R) 2012
  - Windows(R) 8
  - Windows(R) 8.1

- Added support for the 32-bit version of Excel 2013 (Office 2013).

- Made it so that you can import and export the additional definition information (definition information of the count schedule calculated by number of days) for Job Management Partner 1/Automatic Job Management System 3 - Manager 10-50.

- Added the environment setting parameter `IMPORT-PD-SORTUNITINF`.

- Added the data collection tool `jajs_log.bat`.

- Added the message for KAVZ0416-E.

- Added *maintenance-information-2* to the message for KAVZ0304-E.

- Changed the actions the operator takes for the following messages: KAVZ0504-E, KAVZ0515-E, KAVZ0518-E, and KAVZ0904-E.
- Added a note for when executing anti-virus software.

G.10 Revisions in 10-00

- The product name has been changed to JP1/Automatic Job Management System 3 - Definition Assistant.
- Support of the following OSs has been added:
  - Windows 7
  - Windows Server 2008
  - Windows Vista
- IPv6 can be used as the communication protocol.
- Excel 2000 (Office 2000) is not supported.
- The 32-bit version of Excel 2010 (Office 2010) is supported.
- Linkage with JP1/AJS3 - Manager and JP1/AJS3 - View is supported.
- The user authentication function by which JP1/AJS3 - Definition Assistant can be operated by specifying a JP1 user is supported.
- The following specifications in the definition information management template have been changed.
  - **Target host** in the **Unit common definition information** section has been changed to **Exec-agent**.
  - **Judgment type** in the **Basic job definition information** section has been moved to the **Judgment job definition information** section
  - Definition items related to the detailed definition of JP1/AJS3 for Enterprise Applications are supported.
- The following specifications have been added to the definition information management template.
  - To the **Unit definition information** section:
    nc for the **Unit type** item (jobnet connector)
    AJSVAR for the **Custom type** item (passing information setting job)
  - To the **Unit common definition information** section:
    Exec. order control
    Jobnet connector
    Exec. order method
    Connection range
    Connection host
    Connection service
  - The **Jobnet connector definition information** section
  - To the **Basic job definition information** section:
    Retry on abnormal end
    Return code
    Maximum retry times
    Retry interval
  - The **Judgment job definition information** section

- **Expire right after starting** has been added to the **Event job definition information** section.

- **Time-required-for-execution** has been added to the **Job common attribute information** section.

- The **Waiting condition definition information** section

- The **Tool unit definition information** section

- **Extended password** has been added to the **R/3 job definition information** section.

- The **Last updated time** information section

- The **Error message** information section

- The message management file has been added.

- Notes on executing antivirus software have been added.

- Notes on using the upper-level unit-attribute inheritance function in JP1/AJS3 - Manager have been added.

- An explanation about version compatibility between JP1/AJS3 - Definition Assistant 09-50 and the following products has been added:

  - JP1/AJS3 - Manager or JP1/AJS2 - Manager

  - JP1/AJS3 - View or JP1/AJS2 - View

- The KAVZ0003-E, KAVZ0004-E, KAVZ0211-E, KAVZ0212-E, KAVZ0213-E, KAVZ0259-E, KAVZ0314-W, and KAVZ0405-W messages have been added.

- Error causes have been added to the KAVZ0502-E, KAVZ0503-E, KAVZ0504-E, and KAVZ0520-E messages.

H. Reference Material for This Manual

This appendix provides reference information, including various conventions, for this manual.

H.1 Related publications

This manual is part of a related set of manuals. The manuals in the set are listed below (with the manual numbers):

About JP1/AJS3:

- *JP1 Version 13 Job Management: Getting Started (Job Scheduler)* (3021-3-L41(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Overview* (3021-3-L42(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 System Design (Configuration) Guide* (3021-3-L43(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 System Design (Work Tasks) Guide* (3021-3-L44(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Configuration Guide* (3021-3-L45(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Administration Guide* (3021-3-L46(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Troubleshooting* (3021-3-L47(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Operator's Guide* (3021-3-L48(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Command Reference* (3021-3-L49(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Linkage Guide* (3021-3-L50(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 Messages* (3021-3-L51(E))
- *JP1 Version 13 JP1/Automatic Job Management System 3 for Enterprise Applications Description, User's Guide and Reference* (3021-3-L54(E))

About JP1:

- *JP1 Version 13 JP1/Base User's Guide* (3021-3-L09(E))
- *JP1 Version 13 JP1/Base Messages* (3021-3-L10(E))
- *JP1 Version 13 JP1/Base Function Reference* (3021-3-L11(E))
- *Job Management Partner 1 Version 9 Job Management Partner 1/Base User's Guide (*3020-3-R71(E))
- *Job Management Partner 1 Version 9 Job Management Partner 1/Base Messages (*3020-3-R72(E))
- *Job Management Partner 1 Version 8 Job Management Partner 1/Base User's Guide (*3020-3- K06(E))
- *Job Management Partner 1 Version 8 Job Management Partner 1/Base Messages (*3020-3-K07(E))
- *Job Management Partner 1 Version 8 Job Management Partner 1/Integrated Management - Planning Operation* (3020-3-K13(E))

H.2 Conventions: Abbreviations for product names

This manual uses the following abbreviations for product names:

Abbreviation			Full name or meaning
JP1/AJS	JP1/AJS3	JP1/AJS3 - Manager	JP1/Automatic Job Management System 3 - Manager
		JP1/AJS3 - Agent	JP1/Automatic Job Management System 3 - Agent
		JP1/AJS3 - View	JP1/Automatic Job Management System 3 - View
	JP1/AJS2	JP1/AJS2 - Manager	JP1/Automatic Job Management System 2 - Manager
		JP1/AJS2 - Agent	JP1/Automatic Job Management System 2 - Agent
		JP1/AJS2 - View	JP1/Automatic Job Management System 2 - View
JP1/AJS2 - Advanced Manager			JP1/Automatic Job Management System 2 - Advanced Manager[#]
JP1/AJS2 - Light Edition			JP1/Automatic Job Management System 2 - Light Edition[#]
JP1/AJS2 - Client Toolkit			JP1/Automatic Job Management System 2 - Client Toolkit[#]
JP1/AJS3 - Definition Assistant			JP1/Automatic Job Management System 3 - Definition Assistant
JP1/AJS2 - Definition Assistant			JP1/Automatic Job Management System 2 - Definition Assistant
JP1/AJS3 for Enterprise Applications			JP1/Automatic Job Management System 3 for Enterprise Applications
JP1/AJS2 for Enterprise Applications			JP1/Automatic Job Management System 2 for Enterprise Applications
JP1/AJS2 for Oracle E-Business Suite			JP1/Automatic Job Management System 2 for Oracle E-Business Suite
JP1/FTP			JP1/File Transmission Server/FTP
R/3			SAP's product SAP R/3(R), or SAP S/4HANA(R)
SAP			
SAP BW			SAP Business Information Warehouse

Version 7

H.3 Conventions: Acronyms

This manual also uses the following acronyms:

Acronym	Full name or meaning
CN	Common Name
DNS	Domain Name System
NAT	Network Address Translator
NAPT	Network Address Port Translation
OS	Operating System
PC	Personal Computer
PEM	Privacy Enhanced Mail
SAN	Subject Alternative Name
SSL	Secure Socket Layer

Acronym	Full name or meaning
TLS	Transport Layer Security
TCP/IP	Transmission Control Protocol/Internet Protocol

H.4 Conventions: Diagrams

This manual uses the following conventions in diagrams:

● Jobnet   ● Job   ● Event job   ● Job group
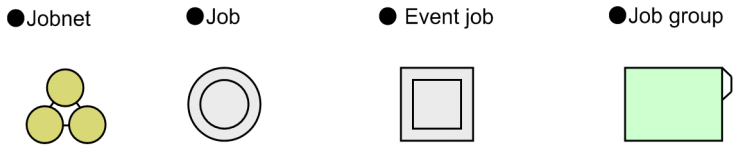
H.5 Conventions: Fonts and symbols

The following table explains the text formatting conventions used in this manual:

Text formatting	Convention
Bold	Bold characters indicate text in a window, other than the window title. Such text includes menus, menu options, buttons, radio box options, or explanatory labels. For example: • From the **File** menu, choose **Open**. • Click the **Cancel** button. • In the **Enter name** entry box, type your name.
Italic	Italic characters indicate a placeholder for some actual text to be provided by the user or system. For example: • Write the command as follows: `copy` *source-file target-file* • The following message appears: `A file was not found. (file = ` *file-name*`)` Italic characters are also used for emphasis. For example: • Do *not* delete the configuration file.
`Monospace`	Monospace characters indicate text that the user enters without change, or text (such as messages) output by the system. For example: • At the prompt, enter `dir`. • Use the `send` command to send mail. • The following message is displayed: `The password is incorrect.`

The following table explains the symbols used in this manual:

Symbol	Convention
`|`	In syntax explanations, a vertical bar separates multiple items, and has the meaning of OR. For example: `A|B|C` means A, or B, or C.
`{ }`	In syntax explanations, curly brackets indicate that only one of the enclosed items is to be selected. For example: `{A|B|C}` means only one of A, or B, or C.

Symbol	Convention
[ ]	In syntax explanations, square brackets indicate that the enclosed item or items are optional. For example: [A] means that you can specify A or nothing. [B|C] means that you can specify B, or C, or nothing.
...	In coding, an ellipsis (...) indicates that one or more lines of coding have been omitted. In syntax explanations, an ellipsis indicates that the immediately preceding item can be repeated as many times as necessary. For example: A, B, B, ... means that, after you specify A, B, you can specify B as many times as necessary.
x	Multiplication sign
/	Division sign

H.6 Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

- 1 KB (kilobyte) is 1,024 bytes.

- 1 MB (megabyte) is $1,024^2$ bytes

- 1 GB (gigabyte) is $1,024^3$ bytes.

- 1 TB (terabyte) is $1,024^4$ bytes.

H.7 Conventions: Meaning of "member of the Administrators group"

The term *member of the Administrators group* in this manual refers to a user who is a member of the Administrators group on the local PC only. The privileges of local users, domain users, and Active Directory users are no different as long as these users are members of the Administrators group on the local PC.

H.8 Default installation folder

The default installation folder is as follows:

system-drive\Program Files[#]\HITACHI\JP1AJS2DA

\#

If the 32-bit version of JP1/AJS3 - Definition Assistant is to be installed on the 64-bit version of Windows, replace Program Files with Program Files (x86).

I. Glossary

Numerics

32-bit version of JP1/AJS3 - Definition Assistant
JP1/AJS3 - Definition Assistant that is used with the 32-bit version of Excel (Office).

64-bit version of JP1/AJS3 - Definition Assistant
JP1/AJS3 - Definition Assistant that is used with the 64-bit version of Excel (Office).

A

action job
A job that sends emails, message queues, and notification events for JP1/IM and JP1/Cm2 statuses.

agent host
A host that executes jobs as requested by a manager host. This is the host on which JP1/AJS3 - Agent is installed.

Note that you can install JP1/AJS3 - Manager on an agent host because JP1/AJS3 - Manager has JP1/AJS3 - Agent functionality.

Once execution for a requested job is completed, the agent host receives the execution results (return value) of the execution file, and sends the job execution results to the manager host.

B

base day
The day on which a month starts, in the calendar information.

base time
The time at which a day starts and ends for JP1/AJS operation.

For example, if the base time is set to 8:00, anything up to 7:59 is treated as the previous day.

C

calendar information
Information about open days and closed days for operation. This information can be defined for each job group. This information is used to decide on which days jobnets within the job group are executed, and on which days they are not, but note that such jobnets may be executed on closed days if set to be shifted.

You can also set the base day, base month, and base time, to suit operation.

closed day

A day on which a jobnet is not executed. Note that such jobnets may be executed on closed days if set to be shifted.

custom event job

This is an event job corresponding to a linked program and has the characteristics of an event job.

custom job

A job defined ahead of time, to execute a job having a certain function. In addition to the standard custom jobs provided for file transmission and job requests for mainframes, you can also register as a custom job a job used often during operation. When registering a job as a custom job, you can create special icons, pictures, or dialog boxes for entering job information.

Note that when using a custom job you must install any programs required by the job.

D

definition information management template

An Excel file that can be used to manager JP1/AJS definition information in a list format. You can use such Excel functions as auto-fill and auto-filtering to improve the efficiency of entering and editing definition information. By defining JP1/AJS definition information according to the displayed items, you can perform unit definition more efficiently. The template also provides import, export, and error-checking functions, which you can operate by clicking the corresponding buttons.

Note that *definition information management template* is a general term for master files (including replicas) and execution result files.

E
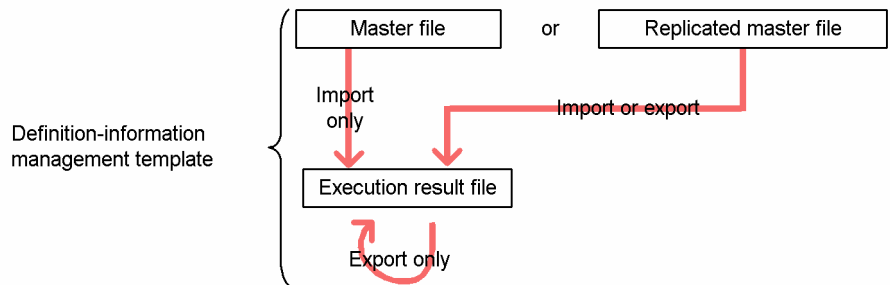
error information file

A file that contains the unit definition parameters for which an error occurred, when definition information is individually or batch defined, and an error occurs in the execution of the `ajsdefine` command. You can use this to find out what kind of error existed in the definition information, so that you can fix the displayed parameters.

event job

A job that monitors the occurrence of a certain event within the system. By starting an event job, you can start monitoring file updates and message reception.

execution result file

A file that is output when import or export is performed from the definition information management template. This is the same file as the definition information management template, but saved under a different name. This name contains the operation performed, as well as the execution time. The file itself contains the target information (the names of the target host, the target service, and the target unit) for when operation was performed. You can use this file to understand at what time what kind of operation was performed for which target, making it easier to track changes in definition information.

For details about the location in which these files are saved automatically, or about the format of the names of these files, see *A. Files and Directories*.

export

Refers to applying to the connection destination manager host JP1/AJS definition information edited using the definition information management template. You can individually and batch define definition information, as well as delete or modify it. Export operations can be performed from a master file saved under another name, or from an import or export execution result file. Once export is completed, the definition information management template is automatically saved under another name, and the operation output results are output as an execution result file.

F

fixed execution registration

An execution registration method in which an execution time is calculated based on a schedule definition, a jobnet is started according to that time, and processing starts.

fixed schedule

A schedule fixed by an absolute time, as determined by fixed execution registration.

H

Hostlink jobnet

A jobnet defined in JP1/AJS to monitor another jobnet that is managed by a mainframe scheduler service. A host link jobnet is managed in units of JP1/AJS for Mainframe *net groups*, to link to the mainframe jobnet.

I

import

Refers to obtaining JP1/AJS definition information defined on the connection destination manager host, and bringing it into the definition information management template. Import operations can be executed from the master file (AJS2DAMASTER.XLS or AJS2DAMASTER.XLSM), or from a master file saved under another name. Once import is completed, the master file is automatically saved under another name, and the operation output results are output as an execution result file.

J

job

A collection of items such as commands, shell scripts, and Windows execution files.

job group

A folder for dividing and managing multiple operations.

jobnet

A collection of jobs related by order of execution. When a jobnet is executed, the jobs within it are automatically executed according to their execution order.

jobnet connector

A unit for controlling the control execution order of a root jobnet. The jobnet connector has a connection relation with the controlled root jobnet and waits for the jobnet to start or end.

JP1/AJS3 for Enterprise Applications

A program that controls SAP system jobs, such as entering, deleting, and monitoring SAP jobs, from a system other than SAP.

By registering custom jobs for JP1/AJS3 for Enterprise Applications during definition of a JP1/AJS jobnet, you can automatically execute SAP jobs from JP1/AJS.

JP1/Base

A program that provides the event service function, enabling control over such things as the order in which services start, and the transmission of JP1 events. JP1/Base is required to run JP1/IM, JP1/AJS, and JP1/Power Monitor. By using JP1/IM and JP1/AJS on a system, you can control the operations of JP1 users.

JP1 user

A user name for using JP1/AJS or JP1/IM. By registering with the authentication server as a JP1 user, you can control access to monitoring targets (resources).

judgment job

A job that judges specified conditions, and executes subordinate jobs or jobnets as the judgment results dictate.

judgment value

A value used to judge whether a job terminated normally or abnormally.

M

manager host

A host that manages jobnet definition information and schedule information in a database, and executes jobs by requesting execution from agent hosts. This is the host on which JP1/AJS3 - Manager is installed.

Jobnet execution schedules are created on manager hosts, based on defined schedule information. When an execution start time is reached, the manager host starts an execution file defined as a job, sends the job definition information to an agent host, and has the agent host execute the job. When execution is

completed, the manager host receives the job execution results on the agent host, and applies them to the database. The manager host can then use this information to execute subsequent jobs and create the next execution schedule.

manager job group
A job group for monitoring, from JP1/AJS3 - Manager, operations on another JP1/AJS3 - Manager.

manager jobnet
A jobnet for monitoring, from JP1/AJS3 - Manager, operations on another JP1/AJS3 - Manager.

master file
A definition information management template that contains no definition information.

- In the 32-bit version of JP1/AJS3 - Definition Assistant

  The master file is kept in the folder *JP1/AJS3 - Definition-Assistant-installation-folder*\bin, under the name AJS2DAMASTER.XLS.

- In the 64-bit version of JP1/AJS3 - Definition Assistant

  The master file is kept in the folder *JP1/AJS3 - Definition-Assistant-installation-folder*\bin, under the name AJS2DAMASTER.XLSM.

You can display the master file by choosing, from the **Start** menu, **JP1_Automatic Job Management System 3 - Definition Assistant**, and then **Import definition information**. You can also open the master file by double clicking AJS2DAMASTER.XLS or AJS2DAMASTER.XLSM in Explorer.

Only import can be performed from the master file. To perform export, replicate the master file by saving it under a different name. You can also perform import from a replicated master file.

The master file contains various settings for worksheets and cells. If these settings are changed, some functions may no longer function properly, so do not change these settings, and do not update the master file.

maximum number of shift days
The number of days for the interval within which another execution day is searched for, when the original shifted day is a closed day.

maximum number of substitute days
The number of days for the interval within which another substitute day is searched for, when the original substitute day is a closed day.

N

nested jobnet
A jobnet defined within another jobnet.

O

open day
A day on which a jobnet is executed.

P

planned execution registration

An execution registration method in which a jobnet is started and processing starts, based on a schedule definition.

planning group

A unit for regularly switching and executing multiple root jobnets. By creating within a planning group multiple root jobnets whose definitions differ from each other, and defining different schedules for each one, you can automatically switch an execute jobnets, based on a specified schedule.

previous job

A job executed immediately before another job or jobnet.

previous jobnet

A jobnet executed immediately before another job or jobnet.

processing cycle

The duration between one jobnet execution start day and the next. You can define the processing cycle so that jobnets are executed on a regular basis.

R

recovery job

A job executed when the previous job or jobnet terminates abnormally.

recovery jobnet

A jobnet executed when the previous job or jobnet terminates abnormally.

registration for immediate execution

An execution registration method used for starting a jobnet, and starting processing, at the same time as execution registration.

S

schedule by days from start

A schedule defined to re-calculate the next scheduled execution day, treating the next scheduled execution day, as originally decided according to the execution start day, processing cycle, and closed-day substitution, as the start date.

schedule information file

A text file containing schedule information parameters, which are used as input information when jobnets are registered for fixed execution by command.

schedule rule

Information about a jobnet, such as the execution start day and processing cycle. A maximum of 144 schedule rules can be defined for a single jobnet.

scheduler service

A service that manages schedules for jobnet execution, and that performs processing based on those schedules. Scheduler services manage the units under the root job group that has the same name as a given unit.

Multiple scheduler services can run on one manager, enabling each scheduler service to manage a root job group. For example, when a scheduler service is run for each operation, each scheduler service can perform parallel execution (of jobnets and jobs) independently, without being affected by other scheduler services.

service linkage objects monitoring job

This belongs to a custom event job and can monitor objects in a cloud-based object storage service.

start condition

When executing a jobnet based on a certain event, the conditions that need to be satisfied for the jobnet to be executed.

subordinate job

A job that is executed based on the judgment results of a judgment job.

subordinate jobnet

A jobnet that is executed based on the judgment results of a judgment job.

subsequent job

A job executed immediately after another job or jobnet.

subsequent jobnet

A jobnet executed immediately after another job or jobnet.

substitution

Refers to executing a jobnet on another day when the next execution day as determined by the schedule is a closed day.

suspend

Refers to preventing execution of a root jobnet, or the units below it.

When you change the definition of units below a root jobnet registered for execution, you must suspend the root jobnet to prevent any mistaken operations, such that caused by a discrepancy between definition processing and execution control processing. By suspending the root jobnet, you can change definitions in synchronizing execution control processing.

T

threshold
> A value used to judge the termination status of a job. You can define thresholds for abnormal termination and warning termination for a job.

time-out period
> The time after which a forced cancellation is performed for an executed job if no response is received from the job, or the job does not terminate.

U

unit
> An element consisting of operations that can be automated by JP1/AJS (for example, a job group, jobnet, or job).

unit definition parameter file
> A text file containing unit definition parameters, which are used as input information when units are defined by commands.

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