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Job Management Partner 1 Version 10

Job Management Partner 1/Data Highway - Automatic Job Executor Operation manual

Notices

■ Relevant program products

For details about the supported operating systems and the service packs or patches that are required by Job Management Partner 1/Data Highway - Automatic Job Executor, see the *Release Notes*.

R-1523P-2AAL Job Management Partner 1/Data Highway - Automatic Job Executor 10-50

R-1S23P-2A8L Job Management Partner 1/Data Highway - Automatic Job Executor 10-50

The Job Management Partner 1/DH - AJE consists of the following components.

Job Management Partner 1/Data Highway - Automatic Job Executor (Job Definition) (for Windows XP, Windows Vista, Windows Server 2008, Windows 7, Windows 8, Windows 8.1, Windows Server 2012)

Job Management Partner 1/Data Highway - Automatic Job Executor (Job Execution) (for Windows 2008, Windows Server 2012, Red Hat Enterprise Linux)

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■ Microsoft product name abbreviations

This manual uses the following abbreviations for product names:

Abbreviation		Full name or meaning
Windows	Windows Server 2008	Microsoft(R) Windows Server(R) 2008 Enterprise
		Microsoft(R) Windows Server(R) 2008 Enterprise 32-bit
		Microsoft(R) Windows Server(R) 2008 R2 Enterprise
		Microsoft(R) Windows Server(R) 2008 Standard
		Microsoft(R) Windows Server(R) 2008 Standard 32-bit
		Microsoft(R) Windows Server(R) 2008 R2 Standard
	Windows Server 2012	Microsoft(R) Windows Server(R) 2012 Standard
		Microsoft(R) Windows Server(R) 2012 R2 Standard
		Microsoft(R) Windows Server(R) 2012 Datacenter
		Microsoft(R) Windows Server(R) 2012 R2 Datacenter
		Microsoft(R) Windows Server(R) 2012 Foundation
		Microsoft(R) Windows Server(R) 2012 R2 Foundation
		Microsoft(R) Windows Server(R) 2012 Essentials
		Microsoft(R) Windows Server(R) 2012 R2 Essentials
	Windows 7	Microsoft(R) Windows(R) 7 Enterprise
		Microsoft(R) Windows(R) 7 Enterprise 64-bit edition
		Microsoft(R) Windows(R) 7 Professional
		Microsoft(R) Windows(R) 7 Professional 64-bit edition
		Microsoft(R) Windows(R) 7 Ultimate
		Microsoft(R) Windows(R) 7 Ultimate 64-bit edition
	Windows 8	Windows (R) 8
		Windows (R) 8 Pro
		Windows (R) 8 Enterprise
	Windows 8.1	Windows (R) 8.1
		Windows (R) 8.1 Pro
		Windows (R) 8.1 Enterprise
	Windows Vista	Microsoft(R) Windows Vista(R) Business
		Microsoft(R) Windows Vista(R) Business 64-bit edition
		Microsoft(R) Windows Vista(R) Enterprise
		Microsoft(R) Windows Vista(R) Enterprise 64-bit edition
		Microsoft(R) Windows Vista(R) Ultimate

Abbreviation		Full name or meaning
Windows	Windows Vista	Microsoft(R) Windows Vista(R) Ultimate 64-bit edition
	Windows XP	Microsoft(R) Windows(R) XP Professional Operating System

Windows is sometimes used generically, referring to Windows 7, Windows 8, Windows 8.1, Windows Server 2008, Windows Server 2012, Windows Vista, and Windows XP Professional.

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Revisions

Revisions (3021-3-336-20(E)) Job Management Partner 1/Data Highway - Automatic Job Executor 10-50

Additions and revisions	Location
Description of reception of the delivery in which the storage expiry date has expired was added.	*4.3.3*
KDJH9390-I was added to the message of JP1/DH - AJE (Job Execution).	*5.7*
The maximum number of the recipients of the file transmission of the data transfer command was changed into "the maximum number set up by Data Highway - Server side" from "10".	*7.3.2(1)*
-destinationfile option which appoints recipients by CSV form file was added to the file transmission of the data transfer command.	*7.3.2(1)*
-deliveryid option which receives only specific delivery was added to the file reception of the data transfer command.	*7.3.2(2)*
Messages of the data transfer command were added.	*7.4.2*
The data transfer management command which controls the file transfer from a command line interface was added.	*Chapter8*
Version revisions were moved to the appendix.	*Appendix B*

The simple wrong letters and omitted letters were corrected without notice.

Preface

In this manual, Job Management Partner 1 is abbreviated as *JP1*.

This manual describes how to use JP1/DH - AJE.

■ Intended readers

This manual is targeting for the system manager who uses JP1/DH - AJE.

This manual intended for:

- A user has learnt basic operation of Windows.
- A user has learnt basic knowledge of Linux.
- A user has requisite knowledge as a manager of the computers.
- A user has requisite knowledge as a networks manager.
- A user has requisite knowledge as a security manager.
- A user has requisite knowledge in operating and configuring JP1/AJS3 and JP1/Base.
- A user has requisite knowledge in operating Data Highway - Server.

■ Organization of this manual

This manual organized into the following chapters and some appendixes.

1. Overview

> This chapter explains about feature, function and precondition for JP1/DH - AJE.

2. Installation

> This chapter explains about preparation for installation of JP1/DH - AJE.

3. Installation and Setup of JP1/DH - AJE

> This chapter explains about installation and configuration.

4. Operation explanation

> This chapter explains about operation of JP1/DH - AJE.

5. Messages

> This chapter explains about messages which are outputted by JP1/DH - AJE.

6. Troubleshooting

> This chapter explains about resolving the problems that occurred during using JP1/DH - AJE.

7. The data transfer command

> This chapter explains about overview of the data transfer command.

8. The data transfer management command

> This chapter explains about overview of the data transfer management command.

Appendix A. List of Files and Folders

> This appendix explains about list of files and folders of JP1/DH - AJE.

Appendix B. Version Revisions

> This chapter explains about version revisions.

Appendix C. Reference information of this manual

> This appendix explains about reference manual and notation of this manual.

Appendix D. Glossary

> This appendix explains about glossary of this manual.

■ Reading procedure

You can read some chapters in this manual as your purpose. We recommend you to read this manual according to the use purpose.

The purpose of reading this manual	Location
To learn the rough feature, function and precondition for JP1/DH - AJE.	*Chapter 1*
To learn the products which is pre-required by JP1/DH - AJE and the system composition for JP1/DH - AJE.	*Chapter 2*
To learn the installation and setup method of JP1/DH - AJE.	*Chapter 3*
To learn the operation method of JP1/DH - AJE.	*Chapter 4*
To learn the meaning of message which was outputted during using JP1/DH - AJE and resolving the problems.	*Chapter 5*
To learn resolving the problems that occurred during using JP1/DH - AJE.	*Chapter 6*
To learn the operation method of the data transfer command of JP1/DH - AJE.	*Chapter 7*
To learn the operation method of the data transfer management command of JP1/DH - AJE.	*Chapter 8*
To learn the list of files and folders, version revisions, reference information and glossary of JP1/DH - AJE.	*Appendix*

■ Conventions: Abbreviation which uses operation description for Windows

The abbreviation which uses operation description for Windows is as follows.

| Example font or symbol	Convention
[ ]	Square brackets enclose an element that display on screen. (e.g. a button, and a text box).
[ ]-[ ]	Two square brackets enclose two elements (e.g. menu, or icons) which is display on a screen. And it shows how to choose elements.

■ Conventions: Fonts

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:

Text formatting	Convention
Bold	• Choose a tab of [**Custom Job**]

■ Conventions: Diagrams

This manual uses the following conventions in diagrams:
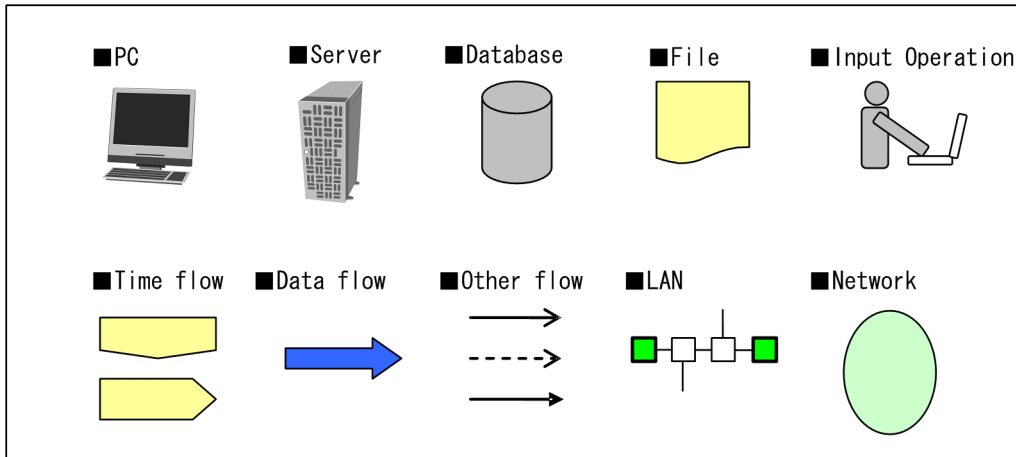
■ Conventions: Notes

Abbreviation	Convention
Note	Contents that end user or a system manager shall take care and shall take action at the time of introduction of this product or after introduction of this product. The contents indicate to work a product function normally and to prevent a security intrusion.
Supplementary note	The content which emphasizes in particular and the information that helps understanding of the text.
Related information	The method of resolving the problems that occurred error, and the convenient information of using this product.
Restriction	The functional restriction of this product.

Contents

1

Overview

This chapter describes an overview of JP1/DH - AJE.

1.1 JP1/DH - AJE

JP1/DH - AJE is a product which automates data sending and receiving with Data Highway - Server.

Since JP1/DH - AJE is provided as a custom job of JP1/AJS3, it can define the job for data sending and receiving by JP1/AJS3 - View.

Thereby, data sending and receiving can be incorporable into a series of business, and since automatic execution by a scheduler can also be performed, it leads to the increase in efficiency of business.

In addition, a custom job for data sending and receiving which is provided by JP1/DH - AJE is called "DH custom job".

1.2 Composition of JP1/DH - AJE

JP1/DH - AJE consists of the following three programs.

- Job definition program
- Job execution program
- The data transfer command

Job definition program is a program which defines, registers and changes the DH custom job sending or receiving files and folders for Data Highway - Server by using JP1/AJS3 - View.

Job execution program is a program which sends or receives files and folders for Data Highway - Server according to the contents of DH custom job when DH custom job defined by Job definition program was executed.

The data transfer command provides a method using a file transfer function of Data Highway - Server from command line interface. Therefore, using the data transfer command, you let Data Highway - Server cooperate with other systems and can do file transfer. In addition, in order to manage the file transfer the command of a management system is provided as the data transfer management command. For more information about the method of the data transfer command see *7.The data transfer command*. For more information about the method of the data transfer management command see *8.The data transfer management command*.

2

Installation

This chapter describes how to install JP1/DH - AJE.

2.1 Preparation before installation

The contents of preparation before installation of JP1/DH - AJE are described below.

2.1.1 System configuration

The example of basic system configuration of JP1/DH - AJE system is described below. The following figure shows the composition using Data Highway - Server.

Figure 2–1: System composition using Data Highway - Server
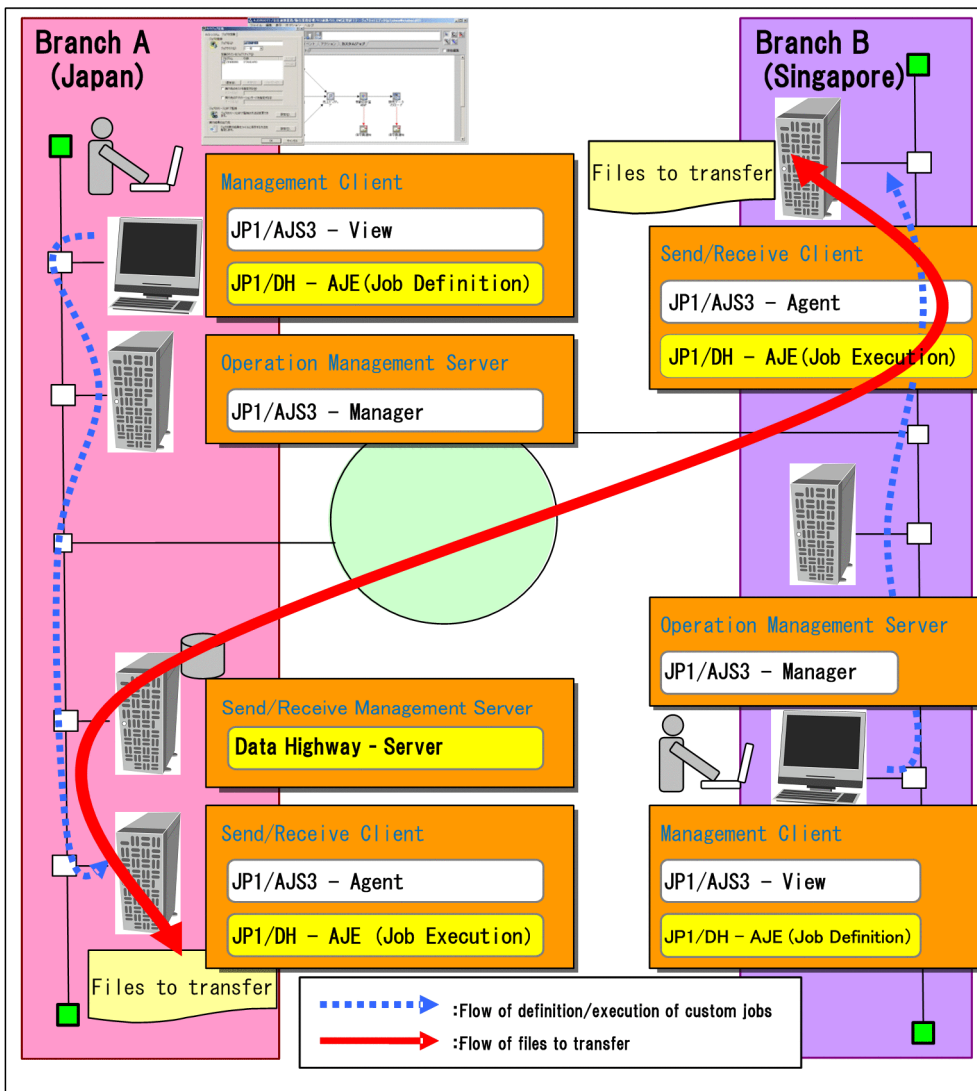
The roles of each hosts which shown in the above figure and the required programs are described below.

(1) Management Client

Management Client is a host which defines and changes DH custom job, and confirms the result of executing DH custom job. You will install JP1/DH - AJE (Job Definition).

When you create two or more Management Clients, you will install JP1/DH - AJE (Job Definition) in all Management Client.

In addition, the number of Management Client which can be created in the system is same as the number of JP1/AJS3 - View which is able to access JP1/AJS3 - Manager. For more information about the number of JP1/AJS3 - View which is able to access JP1/AJS3 - Manager, refer to manual *Job Management Partner 1/AJS3 Design (Configuration) Guide*.

The following table shows the requisite OS and programs in Management Client.

Table 2–1: Requisite OS and programs in Management Client

Items	Software
OS	• Windows XP • Windows Vista • Windows 7 • Windows 8 • Windows 8.1 • Windows Server 2008 • Windows Server 2008 R2 • Windows Server 2012 • Windows Server 2012 R2
Program	• JP1/AJS3 - View 09-00 or later. • JP1/DH - AJE 10-50 (Job Definition)

(2) Operation Management Server

Operation Management Server is a host which manages the custom job's definition information which was defined by Management Client, or sends the custom job's execution request to Send/Receive Client.

The following table shows the requisite OS and programs in Operation Management Server.

Table 2–2: Requisite OS and programs in Operation Management Server

Items	Software
OS	• The OS which JP1/AJS3 - Manager prerequisites.
Program	• JP1/AJS3 - Manager 09-00 or later.

(3) Send/Receive Client

Send/Receive Client is a host which executes sending and receiving files to Data Highway - Server when it was received the custom job's execution request from Operation Management Server. You will install JP1/DH - AJE (Job Execution) in Send/Receive Client. When you create two or more Send/Receive Client, you will install JP1/DH - AJE (Job Execution) in all Send/Receive Client.

In addition, the number of Send/Receive Client which can be created in the system is same as the number of JP1/AJS3 - Agent which is able to access JP1/AJS3 - Manager For more information about the number of JP1/AJS3 - Agent which is able to access JP1/AJS3 - Manager, refer to manual *Job Management Partner 1/AJS3 Design (Configuration) Guide*.

The following table shows the requisite OS and programs in Send/Receive Client.

Table 2–3: Requisite OS and programs in Send/Receive Client

Items	Software
OS	• Windows Server 2008 • Windows Server 2008 R2

Items	Software
OS	• Windows Server 2012 • Windows Server 2012 R2 • Red Hat Enterprise Linux 5 • Red Hat Enterprise Linux 6
Program	• JP1/AJS3 - Manager 09-00 or later. or • JP1/AJS3 - Agent 09-00 or later. • JP1/DH - AJE 10-50 (Job Execution)

(a) About a character code of Linux

The usable character code classification obeys JP1/AJS3. Refer to manual *Job Management Partner 1/AJS3 Configuration Guide 1*.

> **Supplementary note:**
> • Because JP1/DH - AJE operates on the system of JP1/AJS3, the prerequisites to support the cluster system of JP1/DH - AJE are the same as those of JP1/AJS3. For more information about configuration of cluster system for JP1/AJS3 system, refer to manual *Job Management Partner 1/AJS3 Configuration Guide 1*. You have to install JP1/DH - AJE to the physical host only. The operation of JP1/DH - AJE in cluster system follows the operation of Job Management Partner 1/AJS3 in cluster system.

(4) Send/Receive Management Server

Send/Receive Management Server is a host which receives files which were sent by Send/Receive Client. Also, when Send/Receive Management Server received the request from Send/Receive Client, it sends data to Send/Receive Client.

The following table shows the requisite OS and programs in Send/Receive Management Server.

Table 2–4: Requisite OS and programs in Send/Receive Management Server

Items	Software
OS	• The OS which Data Highway - Server prerequisites.
Program	• Data Highway - Server 10-50

2.1.2 Estimates the resources

Quantity of memory requirements and quantity of disk occupation of JP1/DH - AJE is as follows.

(1) Quantity of memory requirements

Quantity of memory requirements of JP1/DH - AJE is as follows.

Table 2–5: Quantity of memory requirements of JP1/DH - AJE

Programs	Quantity of memory requirements
Job definition program	Fixed value:50 [MB] The above value is the value that defined the one DH custom job. When you start the multiple JP1/AJS3 - View and define the DH custom job at the same time, calculate with the following calculation formula.

Programs	Quantity of memory requirements
Job definition program	`fixed value * the number of the DH custom job which defines at the same time`
Job execution program	Fixed value:21 [MB] The above value is the value that executed the one DH custom job. When you execute the multiple DH custom jobs at the same time, calculate with the following calculation formula. `fixed value * the number of the DH custom job which executes at the same time`

(2) Quantity of disk occupation

Quantity of disk occupation of JP1/DH - AJE is as follows.

Table 2–6: Quantity of disk occupation of JP1/DH - AJE

Programs	Quantity of disk occupation
Job definition program	Fixed value:175 [MB] Variable value:17 [MB] (When using the default value in the environment settings file and the number of custom job which defines at the same time is one.) Calculation formula of variable values is as follows. `(Operation log file sizes * The number of backup file) +(Size of the custom job definition file * the number of custom job which defines at the same time)`
Job execution program	Fixed value:410 [MB] Variable value:18 [MB] (When using the default value in the environment settings file and the number of custom job which executes at the same time is one.) Calculation formula of variable values is as follows. `(Operation log file sizes * The number of backup file) + (Size of the custom job definition file * the number of custom job which executes at the same time)` Size of data to receive: When performing reception by Custom Job, contents of the file/folder to receive is temporarily stored in the work folder. So, free disk of the same size as the file/folder to receive is required in <Install destination folder of JP1/DH - AJE(Job Execution)>. When there are multiple custom jobs to carry out at the same time, size of file/folder to receive is a total value of the size of the file/folder to receive by all custom jobs.

(a) Operation log file sizes

You can change the operation log file sizes in the environment setting of JP1/DH - AJE.

You have to consider the size of operation log file because the log file includes starting message, exiting message and other messages.

The default value is 5 MB.

When you change the operation log sizes, refer to *3.3.1(1) Environmental configuration file for JP1/DH - AJE (Job Definition)* or *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

(b) The number of operation logs

You can change the number of operation logs (the number of backup file) in the environment setting of JP1/DH - AJE.

You have to consider the number of operation logs because log file includes starting message, exiting message and other messages.

The default value is 3 areas.

When you change the number of operation logs, refer to *3.3.1(1) Environmental configuration file for JP1/DH - AJE (Job Definition)* or *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

(c) Size of the Custom job definition file

Custom job definition file is the file which is used for the interface of JP1/DH - AJE and JP1/AJS3. This file is created at the start time of JP1/DH - AJE, and it is removed at the end time of JP1/DH - AJE. The size will be in the range of 0.1MB to 1MB.

When you estimate the quantity of disk occupation, consider the size of definition file as 1MB.

When you will execute the multiple custom jobs by JP1/DH - AJE (Job Execution) at the same time, you have to estimate the size of definition file as follow:

1MB * the number of custom job which executes at the same time.

3

Installation and Setup of JP1/DH - AJE

This chapter describes how to install and set up JP1/DH - AJE.

3.1 Overview of installation and setup

The following table shows how to install and setup JP1/DH - AJE (Job Execution).

Table 3–1: Overview of install and setup of JP1/DH - AJE (Job Execution)

Task	Target host	Operation task	Implementation	Refer to
Installation of JP1/DH - AJE (Job Execution)	Send/Receive Client	Install JP1/DH - AJE (Job Execution).	Mandatory	*3.2*
Environment setting of JP1/DH - AJE (Job Execution)	Send/Receive Client	Set up operation log file of JP1/DH - AJE (Job Execution), storage folder of files that be used by system and work folder that is used when DH Custom Job runs.	Mandatory	*3.3.2*
Registration of server certificate	Send/Receive Client	Register of Data Highway Server certificate to library that is used by JP1/DH - AJE (Job Execution).	Mandatory	*3.6*
Consideration for troubleshooting	Send/Receive Client	Backup JP1/DH - AJE (Job Execution) for troubleshooting.	Optional	*3.7*
Register login user ID to Data Highway - Server	Send/Receive Management Server	Register login user ID and password to Send/Receive Management Server. JP1/DH - AJE (Job Execution) use the ID and the password for sending or receiving files and folders.	Mandatory	*3.5*

The following table shows how to install and setup JP1/DH - AJE (Job Definition).

Table 3–2: Overview of install and setup of JP1/DH - AJE (Job Definition)

Task	Target host	Operation task	Implementation	Refer to
Installation of JP1/DH - AJE (Job Definition)	Management Client	Install JP1/DH - AJE (Job Definition).	Mandatory	*3.2*
Environment setting of JP1/DH - AJE (Job Definition)	Management Client	Set up operation log file of JP1/DH - AJE (Job Definition).	Optional	*3.3.1*
Consideration for troubleshooting	Management Client	Backup JP1/DH - AJE (Job Definition) for troubleshooting.	Optional	*3.7*
Registration DH Custom Job	Management Client	Register DH Custom Job to JP1/AJS3.	Mandatory	*3.4*

3.2 Installation of JP1/DH - AJE

This section describes how to install JP1/DH - AJE.

3.2.1 Notes for installation

There are some notes for installation of JP1/DH - AJE.

(1) In Windows

- Install this program as an OS user who has Administrators permission. You can't install this program as an OS user who has not permission to write in the registry key.

- When you start the installer as an OS user who has not Administrators permission, a dialog box (UAC dialog) which requests to switch to a user with the Administrators permission may be displayed. If you enter the user name with Administrators permission and password, you will switch to the user and you can start the installer.

- Operate JP1/DH - AJE (Job Execution) on the OS that JP1/DH - AJE (Job Execution) premises.

- Don't specify following folders as the install destination folder of this program.

   1. The root level of the drive (example: `C:\`)

   2. The install destination folder of other product

   3. The folder that includes multi byte character in the folder name.

- Do not install the Japanese version JP1/DH - AJE (R-1523P-2AA4) and this product (R-1523P-2AAL) on the same host. When the either of them is already installed, install the other JP1/DH - AJE after uninstalling the JP1/DH - AJE.

- When JP1/DH - AJE is installed for the first time, JP1/DH - AJE is set up to use the language according to the system locale of OS (Control Panel - [**Language**] - [**Administrative**] - [**Language for non-Unicode programs**]). If you change the language which is used by JP1/DH - AJE, refer to *3.3.3 How to change the language of JP1/DH - AJE*.

(2) In Linux

- Install this program as an OS user who has superuser permission.

- Do not install the Japanese version JP1/DH - AJE (R-1S23P-2A81) and this product (R-1S23P-2A8L) on the same host. When the either of them is already installed, install the other JP1/DH - AJE after uninstalling the JP1/DH - AJE.

- When JP1/DH - AJE is installed for the first time, JP1/DH - AJE is set up to use "English". If you change the language which is used by JP1/DH - AJE, refer to *3.3.3 How to change the language of JP1/DH - AJE*.

(3) Windows and Linux common notes

- Carry out installation after confirming that there is the space that is enough for a disk.

- Do not install this program using the terminal service, because you might not be able to set up correctly after installation.

- This program does not support remote installation.

- After installation, the rebooting is unnecessary.

- You can install the prerequisite programs and this program in any order. Therefore, you must complete the installation of the prerequisite program by the time of setting the environment setting and executing the program.

- If installation is canceled during installation by any error, confirm information that message dialog displays and reinstall this program.

- Installation of this program may be failed when you specify network drive, shared drive on network or removable disk as the install destination folder of this program. Specify fixed drive as the install destination folder.

- When you carry out the overwrite installation of this program, the registered server certificate is deleted. Therefore, the re-registration of the server certificate is necessary. When you do not perform the re-registration of the server certificate, the DH custom job finishes an error. Refer to *3.6 Register server certificate*, and carry out the re-registration of the server certificate by all means.

- If config.xml exists and you overwrite install this program, config.xml does not be overwritten. If you want to initialize config.xml, you should copy config.xml.template to config.xml.

- You can't overwrite install from newer version to older version. In this case, you have to remove this program that already installed and install older version.

- Don't install JP1/DH - AJE (Job Deification) and JP1/DH - AJE (Job Execution) to the same install destination folder.

- When you install this program to cluster system, you have to install the same version of this program to each physical host. In addition, don't install this program to shared-folder.

- The installer of JP1/DH - AJE (Job Deification) is included in the installer of JP1/DH - AJE (Job Execution). If you want to install JP1/DH - AJE (Job Deification), you have to install JP1/DH - AJE (Job Execution) and get the installer of JP1/DH - AJE (Job Deification) from the following folder.

  On Windows Environment:
  ```
  <Install destination folder of JP1/DH - AJE (Job Execution)>\Definition
  \setup.exe
  ```
  On Linux Environment:
  ```
  /opt/jp1dh/aje/ajee/definition/setup.exe
  ```

- At execution, the Installer automatically installs the Hitachi Network Objectplaza Trace Library (HNTRLib2). The installation folder is as follows:

  On Windows x86 Environment:
  ```
  System drive\Program Files\Hitachi\HNTRLib2\
  ```
  On Windows x64 Environment:
  ```
  System drive\Program Files(x86)\Hitachi\HNTRLib2\
  ```
  On Linux Environment:
  ```
  /opt/hitachi/HNTRLib2
  ```
  This installation folder is fixed in the system drive. You cannot change the installation folder.

- After you execute installer, it may take time to display install dialog or it may take time to until installation is started. Don't execute installer again if you already execute installer. If you do so, Install of this program may be failed.

3.2.2 Procedure of the new installation

The following procedure shows how to install JP1/DH - AJE:

(1) In Windows

1. Log in as an OS user that has Administrator permission to the host that you want to install JP1/DH - AJE.

2. If you want to install JP1/DH - AJE (Job Execution)

- Choose JP1/Data Highway - Automatic Job Executor from the Hitachi Integrated Installer, and proceed with the installation according to instructions of the installer.

- The installer of JP1/DH - AJE (Job Deification) is included in the installer of JP1/DH - AJE (Job Execution). If you want to install JP1/DH - AJE (Job Deification), you have to install JP1/DH - AJE (Job Execution) and get the installer of JP1/DH - AJE (Job Deification) from the following folder.

  ```
  (<Install destination folder of JP1/DH - AJE (Job Execution)>\Definition
  \setup.exe)
  ```

  In addition, the installer of JP1/DH - AJE (Job Deification) is necessary when you install overwrite of JP1/DH - AJE (Job Deification). Acquire the backup of the installer of JP1/DH - AJE (Job Deification).

3. If you want to install JP1/DH - AJE (Job Deification)

Executes setup.exe that you have got from install destination of JP1/DH - AJE (Job Execution) in advance. Proceed with the installation according to instructions of the installer.

(2) In Linux

1. Log in as an OS user that has superuser permission to the host that you want to install JP1/DH - AJE (Job Execution).

2. Choose JP1/Data Highway - AJE from the Hitachi PP Installer, and proceed with the installation according to instructions of the installer.

   - The installer of JP1/DH - AJE (Job Deification) is included in the installer of JP1/DH - AJE (Job Execution). If you want to install JP1/DH - AJE (Job Deification), you have to install JP1/DH - AJE (Job Execution) and get the installer of JP1/DH - AJE (Job Deification) from the following folder.

     ```
     (/opt/jp1dh/aje/ajee/definition/setup.exe)
     ```

     In addition, the installer of JP1/DH - AJE (Job Deification) is necessary when you install overwrite of JP1/DH - AJE (Job Deification). Acquire the backup of the installer of JP1/DH - AJE (Job Deification).

For more information about the folder which is created after installation, refer to *Appendix A. List of Files and Folders*.

3.2.3 Procedure of the overwrite installation

The overwrite installation is a method to reinstall JP1/DH - AJE to achieve following purposes:

1. Restore the environment state which has already been installed JP1/DH - AJE.

2. Version up JP1/DH - AJE.

(1) In Windows

In overwrite installation, you need not to reenter "User Name", "Organization", and "install destination folder". That information takes over from first installation.

The following procedure shows how to overwrite install JP1/DH - AJE:

1. Log in as an OS user that has Administrator permission to the host that you want to install JP1/DH - AJE.

2. In overwrite installation of JP1/DH - AJE (Job Execution)

   - Stop JP1/DH - AJE (Job Execution) on the Send/Receive management server. If DH Custom Jobs are running, stop them. In addition, don't run DH Custom Jobs during overwrite installation.

   - Choose JP1/Data Highway - Automatic Job Executor from the Hitachi Integrated Installer, and proceed with the installation according to instructions of the installer.

3. In overwrite installation of JP1/DH - AJE (Job Definition)

- Stop JP1/DH - AJE (Job Definition) on the Management client. Close all DH Custom Job definition windows.

- Executes setup.exe that you have got from install destination of JP1/DH - AJE (Job Execution) in advance. Proceed with the installation according to instructions of the installer.

(2) In Linux

1. Log in as an OS user that has superuser permission to the host that you want to install JP1/DH - AJE (Job Execution).

2. Choose JP1/Data Highway - Automatic Job Executor from the Hitachi PP Installer, and proceed with the installation according to instructions of the installer.

> **Note:**
> - When you carry out the overwrite installation or update installation of this program, it is necessary for you to do the re-registration of the server certificate. For more information see *3.6 Register server certificate*.

3.3 Environment settings of JP1/DH - AJE

This section describes the procedure of environment settings of JP1/DH - AJE.

> **Note:**
> - Don't edit files except for the environmental configuration file of data transfer command, the environmental configuration file (config.xml) and the batch file for the information collection tool (In Windows: dhaje_log.bat, In Linux: dhaje_log.sh).

3.3.1 How to change settings of JP1/DH - AJE (Job Definition)

In JP1/DH - AJE (Job Definition), you can change settings about operation log file by using environmental configuration file (config.xml).

In JP1/DH - AJE (Job Definition), you can change the following settings by using environmental configuration file (config.xml):

1. Language that JP1/DH - AJE (Job Definition) will use.
2. Settings of the operation log file.

   You can change the output folder, the log output level, the log file size, and the number of log backup files for the operation log file.

If you use JP1/DH - AJE (Job Definition) by using default value, changing config.xml is unnecessary.

> **Note:**
> - If you specified invalid value to config.xml, DH Custom Job definition window doesn't be displayed.
> - The character code of config.xml is UTF-8. Do not save config.xml as other character codes. If you do so, the DH Custom Job definition window may not be displayed.
> - If you change InfoLogSize and InfoLogBackCount, remove mmap folder that is created under the log output folder. If you don't so, those changes aren't effective.
> - Do not specify path name that includes multi-byte code to LogOutDir.
> - Language of the operation logs is decided by the system locale of OS. If you change Language that this program uses, change system locale of OS also.

> **Supplementary note:**
> - If you use JP1/DH - AJE (Job Definition) in a cluster system, use the same environment settings file of JP1/DH - AJE (Job Definition) for the active node and for the standby node. In addition, specify the shared folder on the shared disk as the output log folder.

(1) Environmental configuration file for JP1/DH - AJE (Job Definition)

The detail of Environmental configuration file is as follows:

1. File path

   ```
   <Installation folder of JP1/DH - AJE (Job Definition)>\settings\config.xml
   ```

2. Format of the environmental configuration file

   The format of the environmental configuration file is as follows:

   ```
   <?xml version="1.0" encoding="UTF-8" ?>
   <config>
       <MessageLanguage>en</MessageLanguage>
       <LogOutDir>C:\ProgramData\Hitachi\jp1\jp1_default\JP1DH\AJE\AJED\log</
   LogOutDir>
   ```

```
        <InfoLogLevel>info</InfoLogLevel>
        <InfoLogSize>5</InfoLogSize>
        <InfoLogBackCount>3</InfoLogBackCount>
</config>
```

3. Details of definition items

The tag name, definition item, and default value of the environmental configuration file is as follows:

Table 3–3: Definition items of the environmental configuration file of JP1/DH - AJE (Job Definition)

Tag name	Definition items	Default value

MessageLanguage	Specify language that JP1/DH - AJE (Job Definition) will use.
	Specify MessageLanguage as follows:
	• ja
	  JP1/DH - AJE (Job Definition) will use Japanese.
	• en
	  JP1/DH - AJE (Job Definition) will use English.
	You can specify the above values by using lowercase and uppercase.
	If you didn't specify any value as MessageLanguage, JP1/DH - AJE (Job Definition) will use Japanese.
		#1

LogOutDir	Specify the destination folder of outputting operation log files. The maximum length of the destination folder name depends on OS. The total of length of folder name and length of log file name must be less than the limit of file name length of OS. Specify suitable value to LogOutDir. If you specified the following folder to LogOutDir, the DH Custom Job window isn't displayed. • A folder that doesn't exist. • A folder that can't read or write by OS user who uses DH Custom Job window. You should make the LogOutDir folder before you use DH Custom Job window. In addition, you should add read/write permissions to the folder for OS users who uses DH Custom Job window.	#2

InfoLogLevel	Specify the output level of the operation log as follows:
	• error
	  Outputs only the error level (E).
	• warn
	  Outputs the error level (E) and the warning level (W).
	• info
	  Outputs the error level (E), the warning level (W), and the information level (I).
	When you specify other value to InfoLogLevel, the DH Custom Job window isn't displayed.
		info

InfoLogSize	Specify the maximum size of the operation log file by an integer number. The minimum of InfoLogSize is 5(MB), and the maximum is 16(MB). When you specify the value outside the above range, the DH Custom Job window isn't displayed.	5
InfoLogBackCount	Specify the number of the backup files of operation log file by an integer number. The minimum of InfoLogBackCount is 3, and the maximum is 64. When you specify the value outside the above range, the DH Custom Job window isn't displayed. The name of operation log file is as follows: • dhajed_information[x].log ([x] is an integer number.)	3

#1:

  The default value is decided by the system locale of OS that is defined at the installation of JP1/DH - AJE (Job Definition).

  - System locale is English(or other language except for Japanese):en

  - System locale is Japanese: empty or jp

  If you want to change the language of JP1/DH - AJE, see *3.3.3*.

#2:

  The default value is different depending on the OS.

  • For Windows XP:

```
<Installation folder of JP1/DH >\log\
```

  • For other than Windows XP:

```
%ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH\AJE\AJED\log
```

  %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

3.3.2 How to change settings of JP1/DH - AJE (Job Execution)

In JP1/DH - AJE (Job Execution), you can change the following settings by using environmental configuration file (config.xml):

1. Language that JP1/DH - AJE (Job Execution) will use.

2. Settings of the operation log file.

   You can change the output folder, the log output level, the log file size, and the number of log backup files for the operation log file.

3. The location of outputting of files that is used by system.

4. Setting about operation of the system.

5. The location of work folder that is used by running of DH Custom Job.

If you use JP1/DH - AJE (Job Execution) by using default value, changing config.xml is unnecessary.

Note:
  • If you specified invalid value to config.xml, DH Custom Job is not executed.
  • The character code of config.xml is UTF-8. Do not save config.xml as other character codes. If you do so, DH Custom Job may not be executed.
  • If you change InfoLogSize and InfoLogBackCount, remove mmap folder that is created under the log output folder. If you don't so, those changes aren't effective.
  • Do not specify path name that includes multi-byte code to LogOutDir.
  • Language of the operation logs is decided by the system locale of OS. If you change Language that this program uses, change system locale of OS also.

Supplementary note:
  • If you use JP1/DH - AJE (Job Execution) in a cluster system, use the same environment settings file of JP1/DH - AJE (Job Execution) for the active node and for the standby node. In addition, specify the shared folder on the shared disk as the output log folder.

---

(1) Environmental configuration file for JP1/DH - AJE (Job Execution)

The detail of Environmental configuration file is as follows:

(a) In Windows

1. File Path

```
<Installation folder of JP1/DH - AJE (Job Execution)>\settings\config.xml
```

2. Format of the environmental configuration file

The format of the environmental configuration file is as follows:

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
    <MessageLanguage>en</MessageLanguage>
    <LogOutDir>C:\ProgramData\Hitachi\jp1\jp1_default\JP1DH\AJE\AJEE\log</
LogOutDir>
    <InfoLogLevel>info</InfoLogLevel>
    <InfoLogSize>5</InfoLogSize>
    <InfoLogBackCount>3</InfoLogBackCount>
    <RecvListDir>C:\Program Files\HITACHI\JP1DH\AJE\AJEE\recvlist</
RecvListDir>
    <CmdJreHome>C:\Program Files\HITACHI\JP1DH\AJE\AJEE\csmi\jdk\jre</
CmdJreHome>
    <SendRecvTemp>C:\ProgramData\Hitachi\jp1\jp1_default\JP1DH\AJE\AJEE
\work</SendRecvTemp>
    <ResumeCount>12</ResumeCount>
    <ResumeWaitTime>300</ResumeWaitTime>
    <SuspendResumeCount>24</SuspendResumeCount>
    <SuspendResumeWaitTime>3600</SuspendResumeWaitTime>
</config>
```

3. Details of definition items

The tag name, definition item, and default value of the environmental configuration file is as follows:

Table 3–4: Definition items of the environmental configuration file of JP1/DH - AJE (Job Execution) (In Windows)

Tag name	Definition items	Default value
MessageLanguage	Specify language that JP1/DH - AJE (Job Execution) will use. Specify MessageLanguage as follows: • ja 　JP1/DH - AJE (Job Execution) will use Japanese. • en 　JP1/DH - AJE (Job Execution) will use English. You can specify the above values by using lowercase and uppercase. If you didn't specify any value as MessageLanguage, JP1/DH - AJE (Job Execution) will use Japanese.	#1
LogOutDir	Specify the destination folder of outputting operation log files. The maximum length of the folder name depends on OS. The total of length of folder name and length of log file name must be less than the limit of file name length of OS. Specify suitable value to LogOutDir. If you specified the following folder to LogOutDir, the DH Custom Job isn't executed. • A folder that doesn't exist. • A folder that can't read by OS user who executes DH Custom Job. You should make the LogOutDir folder before you execute DH Custom Job.	`%ALLUsersProfile% \Hitachi \jp1\jp1_default\JP1DH \AJE\AJEE\log` %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

Tag name	Definition items	Default value
LogOutDir	In addition, you should add read/write permissions to the folder for OS users who executes DH Custom Job.	`%ALLUsersProfile% \Hitachi \jp1\jp1_default\JP1DH \AJE\AJEE\log` %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

InfoLogLevel	Specify the output level of the operation log as follows:
	
	• error
	  Outputs only the error level (E).
	• warn
	  Outputs the error level (E) and the warning level (W).
	• info
	  Outputs the error level (E), the warning level (W), and the information level (I).
	
	When you specify other value to InfoLogLevel, the DH Custom Job isn't executed.
		info

InfoLogSize	Specify the maximum size of the operation log file by an integer number. The minimum of InfoLogSize is 5(MB), and the maximum is 16(MB). When you specify the value outside the above range, the DH Custom Job isn't executed.	5
InfoLogBackCount	Specify the number of the backup files of operation log file by an integer number. The minimum of InfoLogBackCount is 3, and the maximum is 64. When you specify the value outside the above range, the DH Custom Job isn't executed. The name of operation log file is as follows: dhajee_information[x].log ([x] is an integer number.)	3
RecvListDir	Specify the storage folder of files that is used by system. The maximum length of the folder name depends on OS. The length of folder name + 49 must be less than the limit of file name length of OS. Specify suitable value to RecvListDir. If you specified the following folder to RecvListDir, the DH Custom Job isn't executed. • A folder that doesn't exist. • A folder that can't read or write by OS user who executes DH Custom Job. You should make the RecvListDir folder before you execute DH Custom Job. In addition, you should add read/write permissions to the folder for OS users who executes DH Custom Job. If you changed the value of RecvListDir, you should make a folder that is named "list", and add the same permissions of RecvListDir.	`<Installation folder of JP1/DH - AJE (Job Execution)>\recvlist`
CmdJreHome	This is the install destination folder of library that is used by JP1/DH - AJE (Job Execution). This item is set at the time of installation automatically. Do not change this item. When designation of the install destination folder of library includes an error, the DH Custom Job isn't executed.	`<Installation folder of JP1/DH - AJE (Job Execution)>\csmi\jdk \jre`

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Tag name	Definition items	Default value
SendRecvTemp	Specify work folder that is used by running of DH Custom Job. If you specified the following folder to SendRecvTemp, the DH Custom Job isn't executed. • A folder that doesn't exist. • A folder that can't read or write by OS user who executes DH Custom Job.	`%ALLUsersProfile% \Hitachi \jp1\jp1_default\JP1DH \AJE\AJEE\work` %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).
ResumeCount	When the disorder that can reopen during data transmission and reception occurs, set the maximum number of times (ResumeCount) of retry of the reopening. The minimum of ResumeCount is 0, and the maximum is 2147483647. When you specify the value outside the above range, the DH Custom Job isn't executed.	`12`
ResumeWaitTime	When the disorder that can reopen during data transmission and reception occurs, set waiting time (ResumeWaitTime) until the reopening in seconds. The minimum of ResumeWaitTime is 0(second), and the maximum is 3600(second). When you specify the value outside the above range, the DH Custom Job isn't executed.	`300`
SuspendResumeCount	When the suspended state during data transmission and reception occurs, set the maximum number of times (SuspendResumeCount) of retry of the reopening. The minimum of SuspendResumeCount is 0, and the maximum is 2147483647. When you specify the value outside the above range, the DH Custom Job isn't executed.	`24`
SuspendResumeWaitTime	When the suspended state during data transmission and reception occurs, set waiting time (SuspendResumeWaitTime) until the reopening in seconds. The minimum of SuspendResumeWaitTime is 0(second), and the maximum is 2147483647(second). When you specify the value outside the above range, the DH Custom Job isn't executed.	`3600`

#1:

The default value is decided by the system locale of OS that is defined at the installation of JP1/DH - AJE (Job Execution).

- System locale is English (or other language except for Japanese): en

- System locale is Japanese: empty or jp

If you want to change the language of JP1/DH - AJE, see *3.3.3*.

(b) In Linux

1. File Path

   `/opt/jp1dh/aje/ajee/settings/config.xml`

2. Format of the environmental configuration file

   The format of the environmental configuration file is as follows:

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
    <MessageLanguage>en</MessageLanguage>
    <LogOutDir>/var/opt/jp1dh/aje/ajee/log</LogOutDir>
    <InfoLogLevel>info</InfoLogLevel>
    <InfoLogSize>5</InfoLogSize>
    <InfoLogBackCount>3</InfoLogBackCount>
    <RecvListDir>/opt/jp1dh/aje/ajee/recvlist</RecvListDir>
    <CmdJreHome>/opt/jp1dh/aje/ajee/csmi/jdk/jre</CmdJreHome>
```

```
    <SendRecvTemp>/var/opt/jp1dh/aje/ajee/work</SendRecvTemp>
    <ResumeCount>12</ResumeCount>
    <ResumeWaitTime>300</ResumeWaitTime>
    <SuspendResumeCount>24</SuspendResumeCount>
    <SuspendResumeWaitTime>3600</SuspendResumeWaitTime>
</config>
```

3. Details of definition items

The tag name, definition item, and default value of the environmental configuration file is as follows:

Table 3–5: Definition items of the environmental configuration file of JP1/DH - AJE (Job Execution) (In Linux)

Tag name	Definition items	Default value

MessageLanguage	Specify language that JP1/DH - AJE (Job Execution) will use.
	Specify MessageLanguage as follows:
	• ja
	  JP1/DH - AJE (Job Execution) will use Japanese.
	• en
	  JP1/DH - AJE (Job Execution) will use English.
	You can specify the above values by using lowercase and uppercase.
	If you didn't specify any value as MessageLanguage, JP1/DH - AJE (Job Execution) will use Japanese.
		en[#1]

LogOutDir	Specify the destination folder of outputting operation log files. The maximum length of the folder name depends on OS. The total of length of folder name and length of log file name must be less than the limit of file name length of OS. Specify suitable value to LogOutDir. If you specified the following folder to LogOutDir, the DH Custom Job isn't executed. • A folder that doesn't exist. • A folder that can't read by OS user who executes DH Custom Job. You should make the LogOutDir folder before you execute DH Custom Job. In addition, you should add read/write permissions to the folder for OS users who executes DH Custom Job.	`/var/opt/jp1dh/aje/ajee/log`

InfoLogLevel	Specify the output level of the operation log as follows:
	• error
	  Outputs only the error level (E).
	• warn
	  Outputs the error level (E) and the warning level (W).
	• info
	  Outputs the error level (E), the warning level (W), and the information level (I).
	When you specify other value to InfoLogLevel, the DH Custom Job isn't executed.
		info

InfoLogSize	Specify the maximum size of the operation log file by an integer number. The minimum of InfoLogSize is 5(MB), and the maximum is 16(MB). When you specify the value outside the above range, the DH Custom Job isn't executed.	5
InfoLogBackCount	Specify the number of the backup files of operation log file by an integer number.	3

Tag name	Definition items	Default value
InfoLogBackCount	The minimum of InfoLogBackCount is 3, and the maximum is 64. When you specify the value outside the above range, the DH Custom Job isn't executed. The name of operation log file is as follows: dhajee_information[x].log ([x] is an integer number.)	3
RecvListDir	Specify the storage folder of files that is used by system. The maximum length of the folder name depends on OS. The length of folder name + 49 must be less than the limit of file name length of OS. Specify suitable value to RecvListDir. If you specified the following folder to RecvListDir, the DH Custom Job isn't executed. • A folder that doesn't exist. • A folder that can't read or write by OS user who executes DH Custom Job. You should make the RecvListDir folder before you execute DH Custom Job. In addition, you should add read/write permissions to the folder for OS users who executes DH Custom Job. If you changed the value of RecvListDir, you should make a folder that is named "list", and add the same permissions of RecvListDir.	/opt/jp1dh/aje/ajee/recvlist
CmdJreHome	This is the install destination folder of library that is used by JP1/DH - AJE (Job Execution). This item is set at the time of installation automatically. Do not change this item. When designation of the install destination folder of library includes an error, the DH Custom Job isn't executed.	/opt/jp1dh/aje/ajee/csmi/jdk/jre
SendRecvTemp	Specify work folder that is used by running of DH Custom Job. If you specified the following folder to SendRecvTemp, the DH Custom Job isn't executed. • A folder that doesn't exist. • A folder that can't read or write by OS user who executes DH Custom Job.	/opt/jp1dh/aje/ajee/work
ResumeCount	When the disorder that can reopen during data transmission and reception occurs, set the maximum number of times (ResumeCount) of retry of the reopening. The minimum of ResumeCount is 0, and the maximum is 2147483647. When you specify the value outside the above range, the DH Custom Job isn't executed.	12
ResumeWaitTime	When the disorder that can reopen during data transmission and reception occurs, set waiting time (ResumeWaitTime) until the reopening in seconds. The minimum of ResumeWaitTime is 0(second), and the maximum is 3600(second). When you specify the value outside the above range, the DH Custom Job isn't executed.	300
SuspendResumeCount	When the suspended state during data transmission and reception occurs, set the maximum number of times (SuspendResumeCount) of retry of the reopening. The minimum of SuspendResumeCount is 0, and the maximum is 2147483647. When you specify the value outside the above range, the DH Custom Job isn't executed.	24
SuspendResumeWaitTime	When the suspended state during data transmission and reception occurs, set waiting time (SuspendResumeWaitTime) until the reopening in seconds.	3600

Tag name	Definition items	Default value
SuspendResumeWaitTime	The minimum of SuspendResumeWaitTime is 0(second), and the maximum is 2147483647(second). When you specify the value outside the above range, the DH Custom Job isn't executed.	3600

#1:
The default value of language which is used by JP1/DH - AJE (Job Execution) is set up en (English). If you want to change the language of JP1/DH - AJE, see *3.3.3*.

3.3.3 How to change the language of JP1/DH - AJE

If you want to change the language of JP1/DH - AJE, change the language by the following procedure:

(1) JP1/DH - AJE (Job Definition)

1. Change the value of MessageLanguage of the Environmental configuration file for JP1/DH - AJE (Job Definition). For details, see *3.3.1 How to change settings of JP1/DH - AJE (Job Definition)*.

(2) JP1/DH - AJE (Job Execution)

1. Change the value of MessageLanguage of the Environmental configuration file for JP1/DH - AJE (Job Execution). For details, see *3.3.2 How to change settings of JP1/DH - AJE (Job Execution)*.

2. Change the value of DEF_MESSAGE_LOCALE of the environmental configuration file of the data transfer command.

The detail of the environmental configuration file of the data transfer command is as follows:

1. File path

   In Windows

   ```
   <Installation folder of JP1/DH - AJE (Job Execution)>\bin\DWClient
   \Const.properties
   ```

   In Linux

   ```
   /opt/jp1dh/aje/ajee/bin/DWClient/Const.properties
   ```

2. Format of the environmental configuration file

   ```
   DEF_MESSAGE_LOCALE=
     .
     .
     .
   ```

3. Details of definition items

   Table 3–6: Definition items of the environmental configuration file of the data transfer command

Tag name	Definition items	Default value
DEF_MESSAGE_LOCALE	Specify language that the data transfer command will use. Specify DEF_MESSAGE_LOCALE as follows: • ja 　JP1/DH - AJE (Job Execution) will use Japanese. • en 　JP1/DH - AJE (Job Execution) will use English.	#1

Tag name	Definition items	Default value
DEF_MESSAGE_LOCALE	You can specify the above values by using lowercase and uppercase. If you didn't specify any value as DEF_MESSAGE_LOCALE, the data command will use Japanese.	#1
Other Tags	Not publication	Not publication

#1:

The default value is decided by the system locale of OS that is defined at the installation of JP1/DH - AJE.

- System locale is English(or other language except for Japanese):en

- System locale is Japanese: empty

Note:

- If you changed the language of AJE, suit the language to "Language type of the system" of JP1/AJS3 (JP1/AJS3 is the prerequisite product of JP1/DH - AJE). If you don't so, the result of command may not be displayed correctly, and the command may be failed.

- If you want to use AJE using Japanese in the Windows OS (English version), the following settings are necessary.

  A)

  In the setting of "Region and Language", set "Japanese (Japan)" to "Format" or "Standards and formats".

  B)

  In the setting of "Region and Language", set "Japanese (Japan)" to "Language for non-Unicode programs".

  If you don't so, multibyte characters doesn't output correctly to log files.

- The language of the system menu of Windows, and the language of detailed error messages that is outputted by OS are decided by the system local of OS.

3.4 Register DH Custom Job

This section describes the procedure of registration DH Custom Job to JP1/AJS3 - View.

JP1/DH - AJE (Job Execution) varies in contents to register by the OS.

In Windows

On Management client, you should register DH Custom Job to JP1/AJS3 - View.

If there are some Management clients, you should register DH Custom Job to each Management clients.

The procedure of registration of DH Custom Job is as follows:

1. Display the [**Register Custom Jobs**] dialog box by following steps.
   - Select [**All Program**] from Windows [**Start**] menu.
   - Select [**JP1_Automatic Job Management System 3 - View**].
   - Select [**Register Custom Jobs**].

2. Click [**Add**] button of the [**Register Custom Jobs**] dialog box.
   [**Set Properties of Custom Job**] dialog box is displayed.

3. Specify following information to the each setting items of the [**Set Properties of Custom Job**] dialog box.

   Table 3–7: Setting items of [**Set Properties of Custom Jobs**] dialog box (In Windows)

Definition items	Values
Name	Enter the Custom Job name "DHAJEW". Or, You can enter any name of up to 8 bytes.
comment	Enter any comment up to 40 bytes. This value is the default name of new Custom Jobs. If you don't specify "comment", The value of "Name" is the default name of new Custom Jobs.
Definition program	Specify the execution file name of JP1/DH - AJE (Job Definition) with an absolute path. The execution file exists on the Management client. For example: \<Installation folder of JP1/DH - AJE (Job Definition) t on the Management client\> `\bin\dhajed.exe`
Execution program	Specify the execution file name of JP1/DH - AJE (Job Execution) with an absolute path. The execution file exists on the Send/Receive Client. For example: \<Installation folder of JP1/DH - AJE (Job Execution) on the Send/Receive Client\> `\bin\dhajee.exe`
Version	Specify "0600".
Class name	Specify "DHAJEW"
Job type	Chooses the [**PC Job**].

> **Supplementary note:**
> - If you uses JP1/DH - AJE (Job Execution) on the following status:
>   A) You installed JP1/DH - AJE (Job Execution) into some Send/Receive clients.
>   B) The install destination folder of JP1/DH - AJE (Job Execution) are different on each hosts.
>   You should use "Environment setting parameter".
>   "Environment setting parameter" is a function of JP1/AJS3.
>   In this case, you should specify [{JP1_DEFAULT|logical-host}`\JP1NBQAGENT\Variable`] to "Execution program".
>   For more details, see the section "Defining variables for work paths used during job execution" of the manual "*Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*"

> **Note:**
> - You should use the values in the above table as version, class name and job type. If you change them, the icon of Custom Job of JP1/DH - AJE may not be displayed on the [**Jobnet Editor**] window of JP1/AJS3 - View.
> - You should register the Custom Job of JP1/DH - AJE for Windows only one thing. If you register the Custom Job two or more, Custom Job may not be executed by inconsistent.

4. Click [**OK**] button.

5. If the version of JP1/AJS3 - view is less than 10-00, you should copy the icon file for Windows from the install destination folder of JP1/DH - AJE to the storage folder of Custom Job images of JP1/AJS3 - view. If the version of JP1/AJS3 - view is 10-00 or later, you can skip this step.

   - The icon file of DH Custom Job

```
<Install destination folder of JP1/DH - AJE (Job Definition)\custom
\CUSTOM_PC_DHAJEW.gif
```

   - The storage folder of Custom Job images of JP1/AJS3 - View

```
<Install destination folder of JP1/AJS3 - View>\image\custom
```

6. Check the Custom Job of JP1/DH - AJE which you registered.

   Displays the [**Jobnet Editor**] window of JP1/AJS3 - View and select the Custom Job tab of the icon list. Check the icon [ ] of the Custom Job is displayed.

In Linux

On Management client, you should register DH Custom Job to JP1/AJS3 - View.

If there are some Management clients, you should register DH Custom Job to each Management clients.

The procedure of registration of DH Custom Job is as follows:

1. Display the [**Register Custom Jobs**] dialog box by following steps.
   - Select [**All Program**] from Windows [**Start**] menu.
   - Select [**JP1_Automatic Job Management System 3 - View**].
   - Select [**Register Custom Jobs**].

2. Click [**Add**] button of the [**Register Custom Jobs**] dialog box.
   [**Set Properties of Custom Job**] dialog box is displayed.

3. Specify following information to the each setting items of the [**Set Properties of Custom Job**] dialog box.

   Table 3–8: Setting items of [**Set Properties of Custom Jobs**] dialog box (In Linux)

Definition items	Values
Name	Enter the Custom Job name "DHAJEL". Or, You can enter any name of up to 8 bytes.
comment	Enter any comment up to 40 bytes. This value is the default name of new Custom Jobs. If you don't specify "comment", The value of "Name" is the default name of new Custom Jobs.
Definition program	Specify the execution file name of JP1/DH - AJE (Job Definition) with an absolute path. The execution file exists on the Management client. For example: <Installation folder of JP1/DH - AJE (Job Definition) t on the Management client> \bin\dhajed.exe
Execution program	Specify the execution file name of JP1/DH - AJE (Job Execution) with an absolute path. The execution file exists on the Send/Receive Client.

Definition items	Values
Execution program	`/opt/jp1dh/aje/ajee/bin/dhajee.sh`
Version	Specify "0600".
Class name	Specify "DHAJEL".
Job type	Chooses the [**PC Job**].

> **Note:**
> - You should use the values in the above table as version, class name and job type. If you change them, the icon of Custom Job of JP1/DH - AJE may not be displayed on the [**Jobnet Editor**] window of JP1/AJS3 - View.
> - You should register the Custom Job of JP1/DH - AJE for Linux only one thing. If you register the Custom Job two or more, Custom Job may not be executed by inconsistent.

4. Click [**OK**] button.

5. If the version of JP1/AJS3 - view is less than 10-00, you should copy the icon file for Linux from the install destination folder of JP1/DH - AJE to the storage folder of Custom Job images of JP1/AJS3 - view. If the version of JP1/AJS3 - view is 10-00 or later, you can skip this step.

   - The icon file of DH Custom Job

```
<Install destination folder of JP1/DH - AJE (Job Definition)\custom
\CUSTOM_PC_DHAJEL.gif
```

   - The storage folder of Custom Job images of JP1/AJS3 - View

```
<Install destination folder of JP1/AJS3 - View>\image\custom
```

6. Check the Custom Job of JP1/DH - AJE which you registered.

   Displays the [**Jobnet Editor**] window of JP1/AJS3 - View and select the Custom Job tab of the icon list. Check the icon [ ] of the Custom Job is displayed.

3.5　Setting of Data Highway - Server side

3.5.1　Register login user ID

You should register login user ID and password for logging in Data Highway - Server.

When I perform data transmission and reception using DH custom job from Job Management Partner 1/Data Highway - Automatic Job Executor, I cannot appoint "Login by Certification" of the certification method. Please appoint "Login by Password" or "LDAP authentication".

For more information about settings, refer to the manual *Job Management Partner 1/Data Highway - Server System Administrator Guide*.

3.5.2　Setting of the compress method of the delivery policy

When the compress method of the delivery policy can be chosen, please be sure to set "Extended" to the compress method of the delivery policy.

When "Standard" is specified, if you perform the transmission that is specified folders, an error of "DWCO2207_E Can not specify [**-resumestatus**] option because of including folders." will occur and the transmission has failed.

For more information about settings, refer to the manual *Job Management Partner 1/Data Highway - Server System Administrator Guide*.

3.6 Register server certificate

JP1/DH - AJE (Job Execution) needs the server certificate of the Data Highway - Server for Sending or Receiving files or folders.

Before you use JP1/DH - AJE (Job Execution), you should get the server certificate from Data Highway - Server that you want to send or receive files or folders, and register the server certificate to library that is used by JP1/DH - AJE (Job Execution).

You should register the server certificate to JRE on all Send/Receive clients.

The procedure of registration of the server certificate is as follows:

1. Access to the Data Highway - Server that you want to send/receive by using Web browser.

2. Click the key mark that is displayed next to the URL, and display [**Website Identification**] dialog box. Click the [**View certificates**] button. [**Certificate**] dialog box is displayed.

Figure 3–1: View certificates
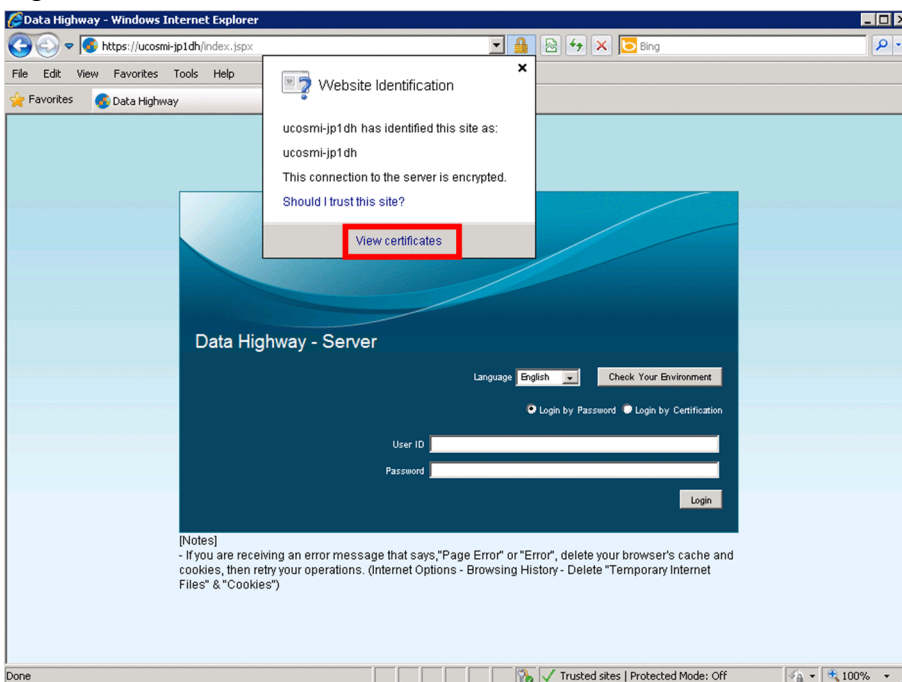
3. Select [**Details**] tab and Click [**Copy to the file...**].

Figure 3–2: The [**Certificate**] dialog box
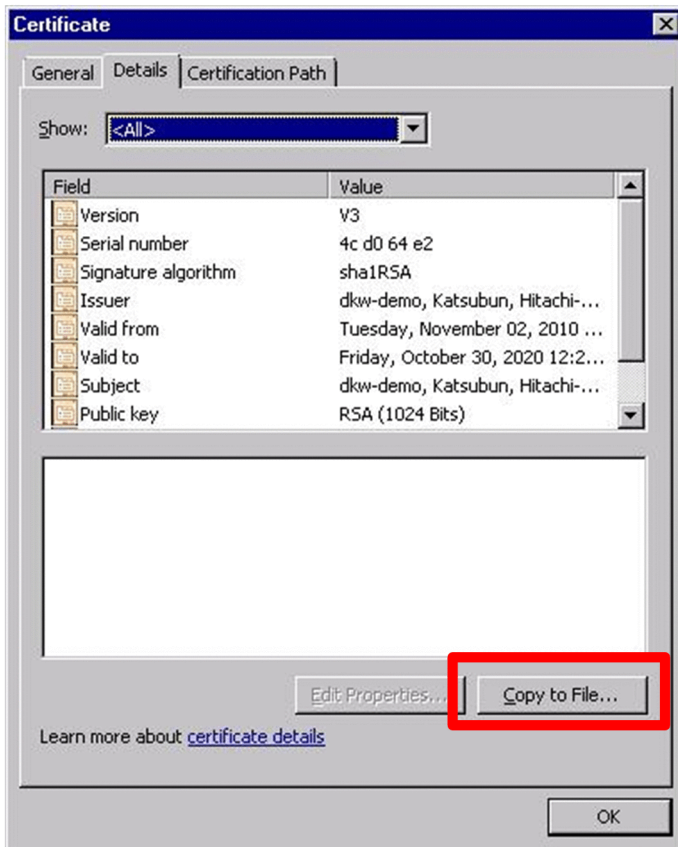

```
Version:XX
Serial number:XX XX XX XX
Signature algorithm:XXXXXXX
Issuer:XXXX, XXXXX, XXXXXXX
Valid from:XXXXX, XXXXX XX, XXXX
Valid to:XXXXXX, XXXXXX XX, XXXX
Subject:XXXXXX, XXXXXX, XXXXXX
Public key:XXXXXXXXX
Thumbprint algorithm:XXXXXXXX
Thunbprint:XXXXXXXXXX
```

4. The [**Certificate Export Wizard]** dialog box is displayed. Click [**Next**] button.

5. The [**Export File Format**] dialog box will be displayed. Select [**DER encoded binary X509(.CER)**] from "Select the format you want to use:" Click [**Next**].

6. The [**File to Export**] dialog box is displayed. Enter file name to the File name text box and click [**Next**].

7. The [**Completing the Certificate Export Wizard**] dialog box is displayed. Click [**Finish**].

8. The [**The export was successful**] dialog box is displayed. The server certificate exports to the file that you specified on [**File to Export**] dialog box.

9. Run command prompt, and change current directory to the library directory under the JP1/DH - AJE (Job Execution). Then, run the following command.

   In Windows

   keytool -import -alias [**The alias of server certificate**][#1] -file [**The path name of the server certificate file**] - keystore < Installation folder of JP1/DH - AJE (Job Execution) >`\csmi\jdk\jre\lib\security`
   `\cacerts -storepass changeit`

#1

Specify any name of server certificate to the alias of server certificate.

For example: Installation folder of JP1/DH - AJE (Job Execution) is "`C:\Program Files\HITACHI\JP1DH\AJE`", and the value of CmdJreHome is "`C:\AJE\server.cer`":

```
> cd "C:\Program Files\HITACHI\JP1DH\AJE\AJEE\csmi\jdk\jre\bin"
> keytool -import -alias test1 -file "C:\AJE\server.cer " -keystore "C:\Program Files
\HITACHI\JP1DH\AJE\AJEE\csmi\jdk\jre\lib\security\cacerts" -storepass changeit
```

In Linux

`/opt/jp1dh/aje/ajee/csmi/jdk/jre/bin/keytool` -import -alias [**The alias of server certificate**]#1 -file [**The path name of the server certificate file**] -keystore `/opt/jp1dh/aje/ajee/csmi/jdk/jre/lib/security/cacerts -storepass changeit`

#1

Specify any name of server certificate to the alias of server certificate.

In Linux, appoint the keytool in full path.

For example: The value of CmdJreHome is "`/opt/server.cer`":

```
$ cd /opt/jp1dh/aje/ajee/csmi/jdk/jre/bin
$ /opt/jp1dh/aje/ajee/csmi/jdk/jre/bin/keytool -import -alias test1 -file /opt/
server.cer -keystore /opt/jp1dh/aje/ajee/csmi/jdk/jre/lib/security/cacerts -storepass
changeit
```

10. The keytool command asks you "**Trust this certificate? [no]**". Enter "**yes**" and press return.

11. Registration is completed.

> **Note:**
> When you carry out the overwrite installation or update installation of this program, the registered server certificate is deleted. Therefore, when you carry out the overwrite installation or update installation of this program, carry out the registration of the server certificate. When you do not register the server certificate, the DH custom job finishes an error.

3.7 Consideration for troubleshooting

This section describes what you should do before any trouble occurs.

It is vital to plan such measures in advance so that the system can be restored with little impact should an unpredictable event occur.

3.7.1 Setup of the information collection tool

When any trouble occurs on JP1/DH - AJE (Job Execution), collect data by using the collection information tool. We recommend customizing the information collection tool before any trouble occurs.

For customizing, see *6.3.2(1)(a) About the information collection tool*.

3.7.2 Back up the system

We recommend back up the system periodically in case of any troubles.

Timing and acquisition method of back up is as follows:

(1) Timing which backs up

The timing which backs up the system in addition to periodical backup is shown below.

- When JP1/DH - AJE is set up
- When the settings of JP1/DH - AJE is changed
- Before carrying out overwrite installation (restoration or upgrade) of the JP1/DH - AJE
- When shifting JP1/DH - AJE to another host

(2) Back up acquisition method

(a) Back up of JP1/DH - AJE (Job Definition)

1. Copy Environmental configuration file (config.xml) to any folder.

(b) Back up of JP1/DH - AJE (Job Execution)

1. Copy Environmental configuration file (config.xml) to any folder.
2. Copy all files and folders those are included in the following folder to any folder:
   The folder that is defined as RecvListDir in Environmental configuration file (config.xml).

See *Appendix A. List of Files and Folders* about detail of files and folders.

About how to restore the above backup files, See *6.4 Restore*.

About <RecvListDir>, see *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

3.8 Uninstalling of JP1/DH - AJE

This section describes how to uninstall JP1/DH - AJE.

3.8.1 Uninstallation of JP1/DH - AJE

(1) The notes for uninstallation

There are some notes for uninstallation of JP1/DH - AJE.

(a) In Windows

- Uninstall this program as an OS user who has Administrators permission. You can't uninstall this program as an OS user who has not permission to write in the registry key.

(b) In Linux

- Uninstall this program as an OS user who has superuser permission.

- All folders are deleted when you uninstall. Therefore, when you carry out installation after uninstallation, it becomes the initial state at the time of the new installation. When you want to maintain a state before the uninstallation, carry out backup before uninstallation, and carry out restore work after installation. For more information see *3.7.2 Back up the system* and *6.4 Restore*.

(c) Windows and Linux common notes

- Do not uninstall this program using the terminal service, because you might not be able to uninstall this program correctly.

- After uninstallation, the rebooting OS is unnecessary.

- If uninstallation was canceled during uninstallation by any error, you may not be able to uninstall this program. In this case, reinstall this program and uninstall this program again.

(2) Procedure of the uninstallation

The following procedure shows how to uninstall JP1/DH - AJE.

(a) In Windows

1. Log in as an OS user that has Administrator permission to the host that you want to uninstall JP1/DH - AJE.

2. In uninstallation of JP1/DH - AJE (Job Definition)

   - Stop JP1/DH - AJE (Job Definition) on the Management client. Close all DH Custom Job definition windows.

   - Remove Data Highway - Automatic Job Executor (Job Definition) from "Add or Remove Programs" or "Programs and features" of the control panel of the Windows.

3. In uninstallation of JP1/DH - AJE (Job Execution)

   - Stop JP1/DH - AJE (Job Execution) on the Send/Receive management server. If DH Custom Jobs are running, stop them. In addition, don't run DH Custom Jobs during uninstallation. The uninstallation of this program may fail when processes of this program is running during uninstallation.

   - Remove Data Highway - Automatic Job Executor(Job Execution) from "Add or Remove Programs" or "Programs and features" of the control panel of the Windows.

4. Remove some files manually after installation. Even if uninstalled this product, some files will not be removed. Remove the following files manually after uninstallation of this program.

   1. The case of uninstallation of JP1/DH - AJE (Job Definition)

- All files in the installation folder of JP1/DH - AJE (Job Definition).

- All files in the following folder if JP1/DH - AJE (Job Definition) is installed in other than Windows XP:
  `%ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH\AJE\AJED\log`

- All files in the folder that is specified as the destination folder of outputting operation log files in the environmental configuration file.

   2. The case of uninstallation of JP1/DH - AJE (Job Execution)

- All files in the installation folder of JP1/DH - AJE (Job Execution).
  `%ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH\AJE\AJEE\log`

- All files in the folder that is specified as the destination folder of outputting operation log files in the environmental configuration file.

- All files in the folder that is specified as the storage folder of files that is used by system.

- All files in the folder that is specified as work folder that is used by running of DH Custom Job.

(b) In Linux

1. Log in as an OS user that has superuser permission to the host that you want to uninstall JP1/DH - AJE (Job Execution).

2. Choose JP1/Data Highway - Automatic Job Executor from uninstallation of the Hitachi PP Installer, and carry out uninstallation.

3. Remove some files manually after installation. Even if uninstalled this product, some files will not be removed. Remove the following files manually after uninstallation of this program.

- All files in the installation folder of JP1/DH - AJE (Job Execution).

- All files in the folder that is specified as the destination folder of outputting operation log files in the environmental configuration file.

- All files in the folder that is specified as the storage folder of files that is used by system.

- All files in the folder that is specified as work folder that is used by running of DH Custom Job.

4

Operation explanation

This chapter describes how to operate JP1/DH - AJE.

4.1 The types of DH Custom Jobs

This section describes about the type of DH Custom Jobs.

There are two types for DH Custom Jobs:

1. Send Custom Job
2. Receive Custom Job

4.1.1 Send Custom Job

Send Custom Job is a Custom Job that sends files or folders to Data Highway - Server. The following figure shows the basic operation of Send Custom Job.

Figure 4–1: The basic operation of Send Custom Job
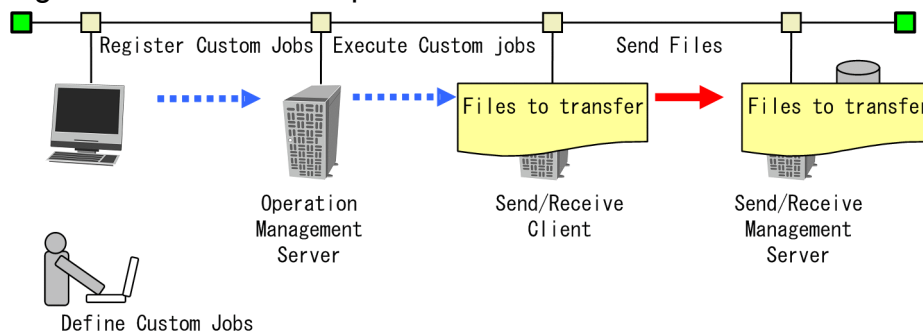
4.1.2 Receive Custom Job

Receive Custom Job is a Custom Job that receives files and folders from Data Highway - Server. The following figure shows the basic operation of Receive Custom Job.

Figure 4–2: The basic operation of Receive Custom Job

Register Custom Jobs | Execute Custom jobs

Files to transfer

Management Client

Define Custom Jobs

Operation
Management
Server

Send/Receive
Client

Receive Files

Files to transfer

Send/Receive
Management
Server
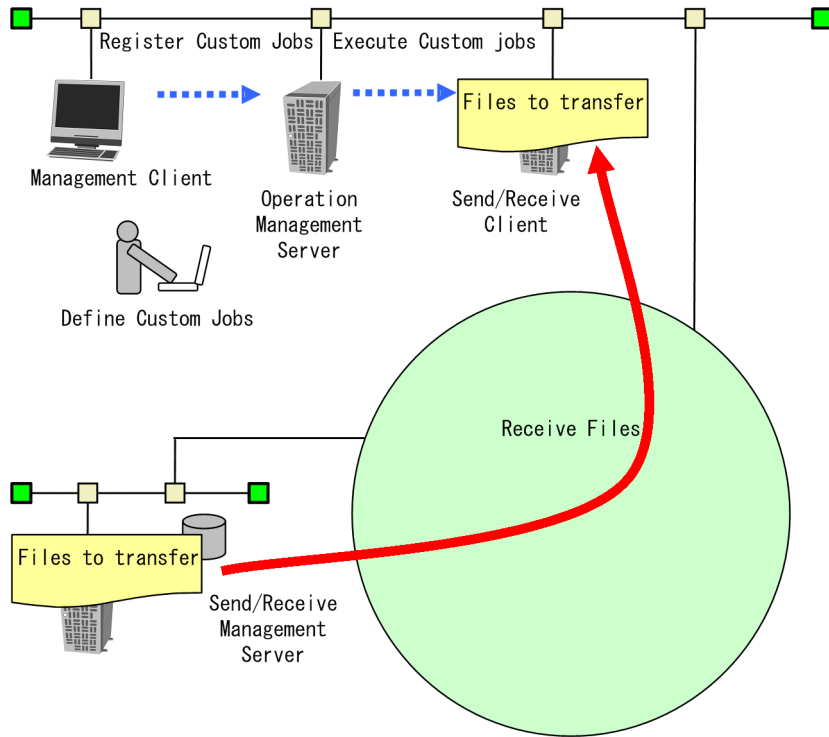
4.2 Definition of a DH Custom Job

4.2.1 The procedure of definition of a DH Custom Job

The following procedure shows how to define a DH Custom Job.

1. Display the map area of the [**Jobnet Editor**] window of JP1/AJS3 - View.

2. Choose a tab of [**Custom Job**], and select [**Exclusive edit**] check box.

3. Drag a job icon [ ] of JP1/DH - AJE and drop it in the map area.

   Figure 4–3: The [**Jobnet Editor**] window
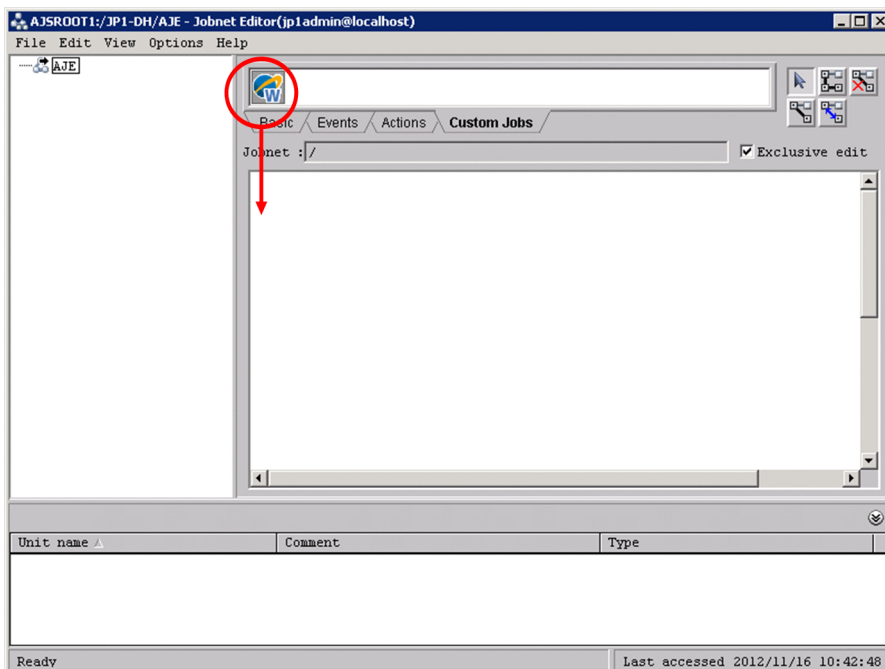
When the Job execution program is for Linux, the indication of the icon of DH custom job is [ ].

> **Note:**
> - In the case of the system that both DH custom job for Windows and DH custom job for Linux are available, do not choose a wrong icon.

4. The Custom Job of JP1/DH - AJE is added in a map area of Jobnet, and the [**Define Details - [Cstom Job]**] dialog box is displayed.

Figure 4–4: The [**Define Details - [Custom Job]**] dialog box

5. Define the definition items of the common items of the [**Define Details - [Custom Job]**] dialog box as follows.

Table 4–1: The common items of [**Define Details - [Custom Job]**] dialog box

Item name	Definition method	Designation
[**Unit name**]	The unit name of custom job. Use a character string of up to 30 bytes.	mandatory
[**Comment**]	The comment of custom job. Specify a character string of up to 80 bytes.	optional
[**Exec-agent**]	Job Execution Agent Name that execute the Custom Job. Specify a character string of up to 255 bytes.	mandatory

6. Define the definition items of the Definition page of the [**Define Details - [Custom Job**] dialog box as follows.

Table 4–2: The items of the Definition page of the [**Define Details - [Custom Job]**] dialog box

Item name		Definition method	Designation
[**Priority**]		Choose the priority of the custom job execution. You can set None, or 1 to 5.	optional
[**Standard output**]		Specify the name of the standard output file to be used for job execution. Use a character string of up to 511 bytes. Specify a full path file name.	optional
[**Standard error**]		Specify the name of the standard error output file to be used for job execution. Use a character string of up to 511 bytes. Specify a full path file name.	optional
[**End judgment**]	Rule	Choose conditions for end judgment.	optional

Item name		Definition method	Designation
[**End judgment**]	Warning	When you choose [**Judgment by threshold**] in [**End judgment**], specify the warning threshold of a return code in the range of 0 to 2,147,483,647.	optional
	Abnormal	When you choose [**Judgment by threshold**] in [**End judgment**], specify the abnormal threshold of a return code in the range of 0 to 2,147,483,647.	optional
	File name	When you choose [**Normal if specified file exists**] or [**Normal if file was updated**] in [**End judgment**], specify the file name. You can use a character string of up to 511 bytes for the file name.	optional
[**Retry on abnormal end**]		Select whether to retry execution when the program ends in an error.	optional
[**Return code**]		If Yes is selected for Retry on abnormal end, specify the range of return codes for which to retry jobs. The value you can specify is in the range of 1 to 4,294,967,295.	optional
[**Maximum retry times**]		When Yes is selected for Retry on abnormal end, specify the maximum number of times a job can be retried. You can specify a value in the range from 1 to 12.	optional
[**Retry interval**]		When Yes is selected for Retry on abnormal end, specify how long the system waits between the error occurring and retrying the job. You can specify a value in the range from 1 to 10 (minutes).	optional
[**User name**]		Specify the name of OS user of host for job execution. Use a character string of up to 63 bytes.	optional
[**Define detailed info**]		When you click Details button, displays [**DH Custom Job Definition**] window.	mandatory

7. Define the definition items of the Attributes page of the [**Define Details - [Custom Job]** dialog box as follows.

Table 4–3: The items of the attributes page of the [**Define Details - [Custom Job]]** dialog box

Item name	Definition method	Designation
[**Hold**]	Specify whether to place the unit in the hold status in advance.	optional
[**Type**]	Set the unit type to Normal or Recovery.	optional
[**Set timeout period**]	Select whether to set a time-out period for the Custom Job execution.	optional
[**Timeout period**]	When you choose [**yes**] in [**Set timeout period**], specify the timeout period in minutes. The value that you can specify is in the range of 1 to 1,440 minutes. Specify Timeout period carefully. If it isn't enough, processing of Custom job will be terminated in halfway.	optional
[**Delayed end**]	Specify whether to monitor delayed end of jobs based on time required for execution. Select the Time-required-for-execution check box to monitor delayed end of jobs.	optional

Item name	Definition method	Designation
[**Delayed end**]	When you select the Time-required-for-execution check box, specify the time required for execution for a job in the range of 1 to 1,440 minutes.	optional
[**Owner**]	Specify the Unit owner. Use a character string of up to 31 bytes.	optional
[**JP1 resource groups**]	Specify The JP1 resource group name. Use a character string of up to 63 bytes.	optional
[**Executed by**]	Select the user who executes the job. You can select either of the following. • [**User who registered**] The JP1 user who registered the custom job executes the custom job. • [**User who owns**] The JP1 user who owns the custom job executes the job. The default value is [**User who registered**].	optional

8. After definition of each items of the [**Define Details - [Custom Job]**] window, click Details button of the Definition page on the [**Define Details - [Custom Job]**] window, then displays [**DH Custom Job Definition**] window.

Figure 4–5: The [**DH Custom Job Definition**] window
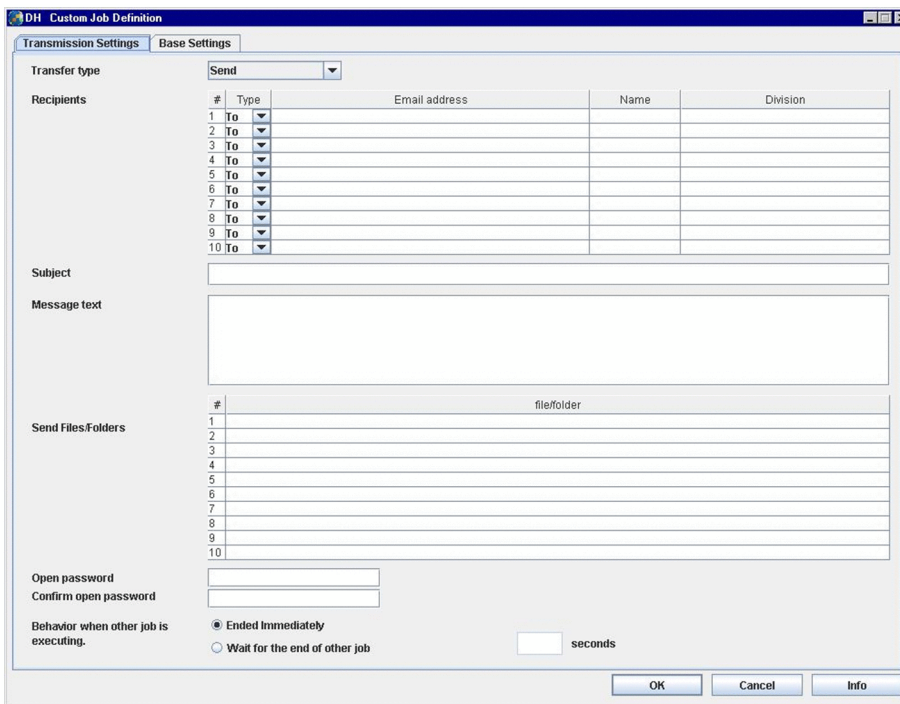
For definition of a Send Custom Job or a Receive Custom Job by using the [**DH Custom Job Definition**] window, see the following table and define items of each window.

Table 4–4: Items that is needed for definition of Send Custom Job or Receive Custom Job

Window name	Send Custom Job	Receive Custom Job
[**Transmission Setting (Send)**] window	Need to define	N/A
[**Transmission Setting(Receive)**] window	N/A	Need to define
[**Base Setting**] window	Need to define	Need to define

> **Note:**
> - If the language that job definition program uses is English, don't use multi-byte characters for definition of DH custom job. If you do so, the data transfer command may be failed because the multi-byte characters will be change to the invalid characters. Do not specify surrogate pairs characters for definition of DH Custom Job. If you do so, might be changed to the invalid characters because the character is not recognized correctly. It is not checked whether it is the characters which it cannot use.
> - When the [**DH Custom Job Definition**] window doesn't be displayed by an error (e.g. The invalid config.xml is specified), **OK** button on the [**Define Details - [Custom Job]**] window will be enabled. In this case, click Cancel button and close the [**DH Custom Job Definition**] window. Then, define a custom job by using the [**DH Custom Job Definition**] window again. If you click OK button in the above case, invalid DH Custom Job will be registered and you can't edit it. If you made such Custom Job, delete it.

9. Click OK button on the [**DH Custom Job Definition**] window, and returns to the [**Define Details - [Custom Job]**] window. Check the specified contents, and click OK button on the [**Define Details - [Custom Job]**] window. The custom job for JP1/DH - AJE is defined on the [**Jobnet Editor**] window.

4.2.2 The [Transmission Setting (Send)] window

The [**Transmission Setting (Send)**] window defines some information of "Send". For example, files or folders that you want to send, recipients, and information of the mail.

The information of the mail is used for sending mail from Data Highway - Server to the recipients.

Select Transmission Settings page form the [**DH Custom Job Definition**] window and select [**Send**] on the Transfer type drop-down list. The [**Transmission Setting (Send)**] window will be displayed.

Figure 4–6: The [**Transmission Setting (Send)**] window
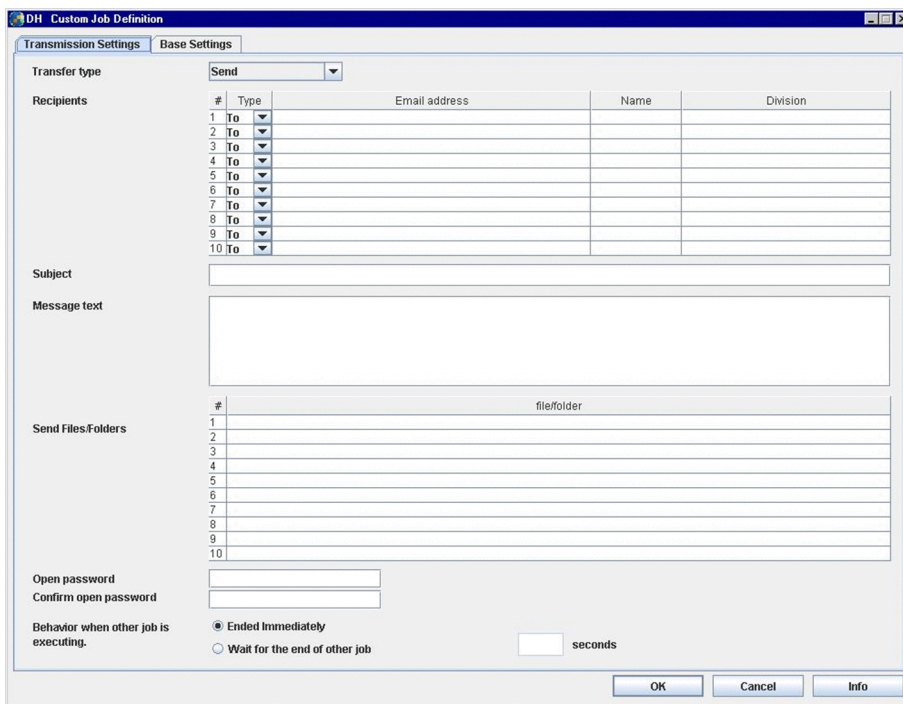
The details of items and contents of the [**Transmission Setting (Send)**] window as follows:

Table 4–5: The definition items of the [**Transmission Setting (Send)**] window

Item Name	Description	AJS macro variables allowed	Specification
Transfer type	Select the type of custom job that you want to define. Select "Send".	No	mandatory
Recipients: Type	Select the type of mail that sends to recipients. Select one from "TO", "CC", or "BCC".	No	mandatory
Recipients: Email address	Specify the email address or the group name (English) of recipients. This item must be a string of from 1 to 256 characters. When @ (at mark) is not included in the value, the value is registered as a group name. The multi-byte character, Colon and double quote are prohibited characters for this item. In addition, special symbol (&"<>^|\ %) and Half space cannot specify at the same time.	Yes	mandatory
Recipients: Name	Specify the name of recipients. This item must be a string of from 1 to 30 characters. This item must not be a space character or a period. Furthermore, you can't use the following symbols as this item: /\?*:|"<>@^ In addition, special symbol (&"<>^|\ %) and Half space cannot specify at the same time. When you specify the group name in the Recipients, the designation here is ignored.	Yes	optional
Recipients: Division	Specify the Division of recipients. This item must be a string of from 1 to 30 characters. Colon and double quote are prohibited characters for this item. In addition, special symbol (&"<>^|\ %) and Half space cannot specify at the same time. When you specify the group name in the Recipients, the designation here is ignored.	Yes	optional
Subject	Specify the Subject of the mail. This item must be a string of from 1 to 30 characters. Double quote are prohibited characters for this item. In addition, special symbol (&"<>^|\ %) and Half space cannot specify at the same time.	Yes	optional
Message text	Specify body of the mail. This item must be a string of from 1 to 1,000 characters. Double quote are prohibited characters for this item.	Yes	optional
Send Files/Folders	Specify files or folders that you want to send to recipients on the agent host carrying out DH custom job. Specify an absolute path name for this item. This item must be a string of from 1 to 255 characters. Double quote are prohibited characters for this item.	Yes	mandatory
Open password	Specify the open password. The open password is required when you send files or folders to the recipients that are not registered to Data Highway - Server. This item must be a string of from 6 to 32 characters. This item must consist of two or more types of character from number, uppercase alphabet, lowercase alphabet, and symbols.	No	#1

Item Name	Description	AJS macro variables allowed	Specification
Open password	You can use the following characters as symbols. `!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~`	No	#1
Confirm open password	Specify the same strings that you specified as the open password. This item is used for confirmation of the open password.	No	#1
Behavior when other job is executing	Select the behavior of DH custom job from the following two types. • [**Ended Immediately**] When the DH custom job runs during other DH custom job is running, the DH custom job ends immediately. • [**Wait for the end of other job**] When the DH custom job runs during other DH custom job is running, the DH custom job waits for the end of previous DH custom job in seconds that you specified. If timeout occurred, the DH custom ends without anything. If you select [**Wait for the end of other job**], specify seconds from 0 to 86,400.	No	mandatory

#1

   If you send files or folders to recipients that are registered to Data Highway - Server, specification is unnecessary.

Supplementary note:
- You can specify 10 recipients on the [**Transmission Setting (Send)**] window. However, if the maximum number of destinations is limited 9 or less by the delivery policy of Data Highway - Server, the running of the DH custom job that is specified 10 recipients will fail. Confirm the delivery policy and specify the valid numbers of recipients.
- When there is a recipient that is specified the name or the division and Email address is empty, the error dialog box will be displayed.
- You can specify 10 files or folders on the [**Transmission Setting (Send)**] window. However, if the maximum number of files is limited 9 or less by the delivery policy of Data Highway - Server, the running of the DH custom job that is specified 10 files or folders will fail Confirm the delivery policy and specify the valid numbers of files or folders.
- AJS macro variable is a function of JP1/AJS3 for automating the task that includes tasks that changed values during executing jobs. See *Job Management Partner 1/Automatic Job Management System 3 Overview*.
- When you specify the group name in the Recipients, specify the group name (English).
- Cannot select the compress level and the compress method when you send the data. The compress level and the compress method follow the delivery policy of Data Highway - Server. When several compress level are selected, the highest priority is applied. The priority is as follows.
  1. No compression
  2. STRONG
  3. MIDDLE
  4. WEAK

  And, When the compress method of the delivery policy can be chosen, please be sure to set "Extended" to the compress method of the delivery policy. When "Standard" is specified, if you perform the transmission that is specified folders, an error of "DWCO2207_E Cannot specify [**-resumestatus**] option because of including folders." will occur and the transmission has failed.
- The maximum size of the file or folder which is sent obeys setting of Data Highway - Server. For details, see the manual *Job Management Partner 1/Data Highway - Server Configuration and Administration Guide*.

Note:
- Do not specify, as the file name or the folder name, a path beginning with a network drive name. A network drive is reconnected after a user logs on to Windows. If the user does not log on to Windows, the system may not be able to recognize the path name of the execution file. Specify a path beginning with a computer name such as `\\computer-name\shared-folder\ file-name`. Do not use a path beginning with a network drive name.

4.2.3 The [Transmission Setting (Receive)] window

The [**Transmission Setting (Receive)**] window defines some information of "Receive". For example, the folder name that stores received files or folders, overwriting files or folders.

Select Transmission Settings page form the [**DH Custom Job Definition**] window and select [**Receive**] on the Transfer type drop-down list. The [**Transmission Setting (Receive)**] window will be displayed.

Figure 4–7: The [**Transmission Setting (Receive)**] window
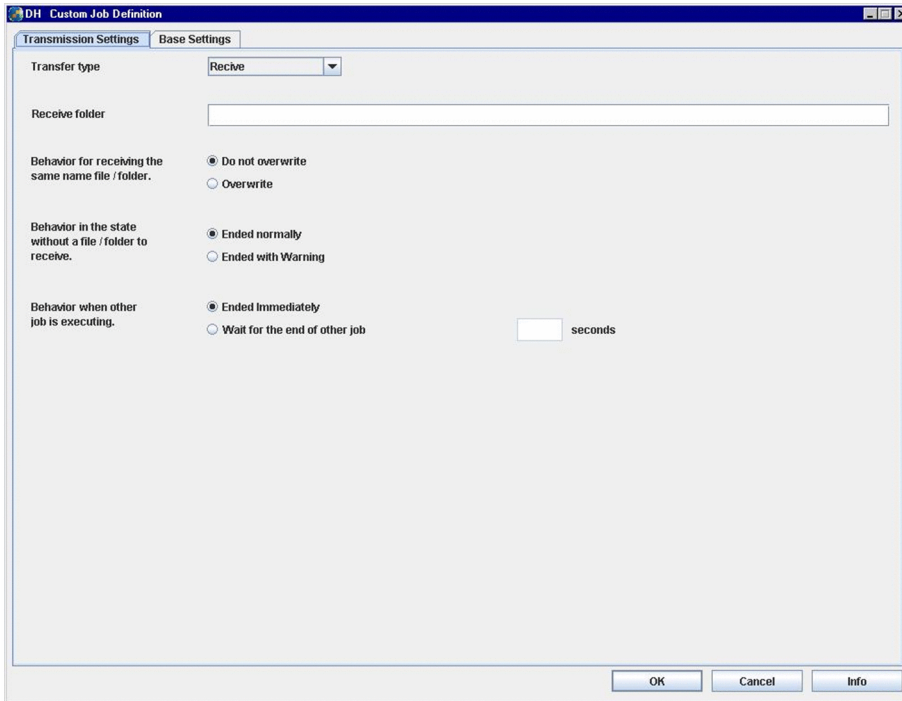
The details of items and contents of the [**Transmission Setting (Receive)**] window as follows:

Table 4–6: The definition items of the [**Transmission Setting (Receive)**] window

Item Name	Description	AJS macro variables allowed	Specification
Transfer type	Select the type of custom job that you want to define. Select "Receive".	No	mandatory
Receive folder	Specify the receive folder name on the agent host carrying out DH custom job. Specify an absolute path name for this item. This item must be a string of from 1 to 255 characters. Double quote are prohibited characters for this item.	Yes	mandatory

Behavior for receiving the same name file / folder	Select the behavior of the DH custom job when the DH custom job received the same file or folder that is included in the "Receive folder".
	• When "Do not overwrite" is selected:
	  The receiving of the file or the folder will be skipped when the same file or folder exists in the "Receive folder".
	• When "Overwrite" is selected:
	  The receiving of the file or the folder won't be skipped and overwrite the file or folder in the "Receive folder".
		No	mandatory

Item Name	Description	AJS macro variables allowed	Specification
Behavior in the state without a file / folder to receive	Select the behavior of the DH custom job when the DH custom job received nothing. • When "Ended normally" is selected: When the DH custom job received nothing, the DH custom job returns normal end (Return code: 0). • When "Ended with Warning" is selected: When the DH custom job received nothing, the DH custom job returns warning (Return code: 1).	No	mandatory
Behavior when other job is executing	Select the behavior of DH custom job from the following two types. • [**Ended Immediately**] When a DH custom job runs during other DH custom job is running, the DH custom job ends immediately. • [**Wait for the end of other job**] When a DH custom job runs during other DH custom job is running, the DH custom job waits for the end of previous DH custom job in seconds that you specified. If timeout occurred, the DH custom ends without anything. If you select [**Wait for the end of other job**], specify seconds from 0 to 86,400. Furthermore, the DH custom job will be ended with the return code 8 when the previous running DH custom job is a "Receive Custom Job" even though you selected "Ended Immediately" or "Wait for the end of other job".	No	mandatory

---

Supplementary note:
- AJS macro variable is a function of JP1/AJS3 for automating the task that includes tasks that changed values during executing jobs. See *Job Management Partner 1/Automatic Job Management System 3 Overview*.

Note:
- Specify the following folder as the "Receive folder".
  - A folder that already exists.
  - A folder that can read or write by OS user who runs the DH custom job.
  If you don't specify a folder like the above, the execution of the Receive Custom Job will fail.
- The DH custom job returns code 4 when the following conditions are satisfied.
  1. "Do not overwrite" is selected in "Behavior for receiving the same name file / folder".
  2. There is one or more same files in the "Receive folder" when the DH custom job
  For example, there is the file B in the "Receive folder".
  And then, you execute a Receive Custom Job that receives the file A, the file B, and the file C.
  In this case, the Receive Custom Job will receive the file A and the file C, but the Receive Custom Job will skip receiving of the file B.
  The Receive Custom Job will return code 4.
  If you don't want to recognize the above case as an error, modify the threshold value of End judgment of the [**Define Details - [Custom Job]**] dialog box.
- Do not specify, as the file name or the folder name, a path beginning with a network drive name. A network drive is reconnected after a user logs on Windows. If the user does not log on to Windows, the system may not be able to recognize the path name of the execution file. Specify a path beginning with a computer name such as `\\computer-name\shared-folder\folder-name`. Do not use a path beginning with a network drive name.
- You can specify a string of from 1 to 255 as "Receive folder". But, when the DH custom job receives a file or a folder, the length of a file name will be:
  The length of "Receive folder name" + the length of "a file name that the DH custom job received"

So, if the length of file name over the limit of OS, the execution of a DH custom job will be failed.

Specify "Receive folder" with considering the length of received filename.

- When a folder is included in contents to receive, the length of the following folders name is necessary: the length of "<*Installation folder of JP1/DH - AJE (Job Execution)*>\bin\DWClient\work" which is specified as the [**Transmission Setting (Receive)**] window + the length of "a folder name that the DH custom job received". So, if the length of file name over the limit of OS, the execution of a DH custom job will be failed. When you do the transmission and reception that appointed a folder, specify folder name of the transmission and reception with considering the length of the folder name.
- By the reception for Linux, reception file / folder is made using umask level 000.

4.2.4 The [Base Setting] window

The [**Base Setting**] window defines some information about the "Send/Receive Management Server". For example, the server name of Data Highway - Server, the login ID and the password for Data Highway - Server, and information about proxy server.

Select Base Settings page form the [**DH Custom Job Definition**] window. The [**Base Setting**] window will be displayed.

Figure 4–8: The [**Base Setting**] window

The details of items and contents of the [**Base Setting**] window as follows:

Table 4–7: The definition items of the [**Base Setting**] window

Item Name	Description	AJS macro variables allowed	Specification
Connection server URL	Specify the URL of Data Highway - Server that the DH custom job sends or receives files or folders. This item must be a string of from 1 to 256 characters. Double quote are prohibited characters for this item.	Yes	mandatory
User ID	Specify the user ID for logging in to the connection server. This item must be a string of from 1 to 256 characters.	Yes	mandatory

Item Name	Description	AJS macro variables allowed	Specification
User ID	The multi-byte character and double quote are prohibited characters for this item.	Yes	mandatory
Password	Specify the password for logging in to the connection server. This item must be a string of from 1 to 256 characters. Authentication system of the login user appoints a password registered with a directory server of the connection at the time of "LDAP authentication system". The multi-byte character and double quote are prohibited characters for this item.	No	mandatory
Set proxy	Select whether the DH custom job use a proxy server or not. • When check box is not selected, the DH custom job doesn't use proxy server. • When check box is selected, the DH custom job uses proxy server.	No	optional
Host name	Specify the host name or the IP address of the proxy server. This item must be a string of from 1 to 256 characters. Double quote are prohibited characters for this item.	Yes	#1
Port number	Specify the port number of the proxy server. This item must be a number from 0 to 65,535.	Yes	#1
Auth ID	Specify the authentication ID of the proxy server. This item must be a string of from 1 to 256 characters. The multi-byte character and double quote are prohibited characters for this item.	Yes	#1
Auth password	Specify the authentication password of the proxy server. This item must be a string of from 1 to 256 characters. The multi-byte character and double quote are prohibited characters for this item.	No	#1

#1 This item is mandatory when "Set proxy" check box is selected.

Supplementary note:
- AJS macro variable is a function of JP1/AJS3 for automating the task that includes tasks that changed values during executing jobs. See *Job Management Partner 1/Automatic Job Management System 3 Overview*.

Note:
- When you specify the same connection server URL in the basic setting of Receive Custom Jobs, you must specify the same strings. If you specify different strings, those are regarded different connection server URL. For example, "https://dh-server.com" and "https://dh-server.com/" is regarded different connection server URL.

4.3 Execution of a DH custom job

This section describes how to execute a DH custom job.

When you finish that define Jobnet which includes the custom job, you register jobnet for execution with JP1/AJS3 - View.

Check the following points before you register jobnet.

- The user who registers jobnet is the JP1 user who has the privilege to manipulate the custom job.

For more information about registering jobnets for execution, see the manual *Job Management Partner 1/Automatic Job Management System 3 Operator's Guide*.

> **Note:**
> - Do not some operation on the connection server of the custom job.(ex: Send, Receive, and remove file). This may cause failure of execution of the custom job.

4.3.1 The execution of multiple DH custom jobs at the same time

Custom jobs that use the same user ID cannot be executed at the same time.

If custom jobs that use the same user ID executes at the same time, only one custom job is executed.

And then, the executions of other custom jobs are as follows and it becomes the error:

(1) If you ran DH Custom Jobs at the same time, and DH Custom Jobs consisted of All Send Custom Jobs or DH Custom Jobs consisted of the combination of some Send Custom Jobs and a Receive Custom Job, and Selected [Ended Immediately] for [Behavior when other job is executing] in All Custom Jobs:

All custom jobs except the executing custom job are ended and return code 8.

(2) If you ran DH Custom Jobs at the same time, and DH Custom Jobs consisted of All Send Custom Jobs or DH Custom Jobs consisted of the combination of some Send Custom Jobs and a Receive Custom Job, and Selected [Wait for the end of other job] for [Behavior when other job is executing] in All Custom Jobs:

All custom jobs except the executing custom job wait the end of the executing custom job for specified seconds. When the execution custom job is ended, one custom job that is in waiting status is executed. If there is some custom job in waiting status, a custom job is executed randomly. If the seconds that specified as [**Behavior when other job is executing**] has gone, all custom jobs in waiting status are ended and return code 8.

(3) If you ran DH Custom Jobs at the same time, and DH Custom Jobs consisted of All Receive Custom Jobs:

All custom jobs except the executing custom job are ended immediately and return code 8.

And then, the error message "DWCO1114_E Failed to write to a received list.", "DWCO1115_E Failed to read a received list" or "DWCO1116_E Failed to create a received list." is displayed.

Furthermore, when some custom jobs that specified the same folder as Receive folder are executed at the same time, the error message "DWCO1301_E Failed to receive a file/folder. A file/folder with the same name already exists in the destination folder and cannot be rewritten." may be displayed.

4.3.2 Resume function

Resume function is a function to resume processing without finishing processing immediately, in the range that you appointed with the environmental configuration file, when the disorder that can resume during data transmission and reception occurs, or when the suspended state during data transmission and reception occurs (It is a function to resume stopped transfer halfway).

(1) Control of the resumption

It is not necessary for a user to be conscious of control of the resumption. The DH custom job performs control of the resumption automatically. You set "time before starting the resumption" (the retry interval) and "the number of times to resumption" (the retry number of times) to the environmental configuration file. It resumes processing in the range that you appointed with the environmental configuration file.

(2) Item of the environmental configuration file controlling the resumption

You set "time before starting the resumption" (the retry interval) and "the number of times to resume" (the retry number of times) to the environmental configuration file (config.xml).

You set "items to use at the time of an obstacle" and "items to use at the time of suspended" separately.

- items to use at the time of an obstacle

  ResumeCount, ResumeWaitTime

  In the case of default setting, it establishes the interval of 300 seconds (5 minutes) and resumption is tried 12 times.

- items to use at the time of suspended

  SuspendResumeCount, SuspendResumeWaitTime

  In the case of default setting, it establishes the interval of 3600 seconds (60 minutes) and resumption is tried 24 times.

For more information see *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

(3) When resumption failed

Even if it performs resumption for the number of times of the resumption maximum (number of times of a retry) defined as the environment settings file, when the data transmission and reception are not resumed, DH custom job finish abnormally or finish in the state of a stop. Since the resume function is effective only in execution of DH custom job, resumption cannot be performed after DH custom job is completed. When DH custom job finish abnormally or finish in the state of a stop, it is necessary to perform DH custom job again because the data transfer has not completed. And

the data of an abnormal end or a stop in the Data Highway - Server remains till the delivery expired. When you become unnecessary, delete them with the function of Data Highway - Server.

> **Note:**
> - DH custom job does not have functions that change the state of the data transmission and reception to the suspended from all over the practice. Function to change to the state of the suspended is offered in Data Highway - Server.
>
>   For details, see the manual *Job Management Partner 1/Data Highway - Server System Administrator Guide*.

4.3.3 Reception of the delivery in which the storage expiry date has expired

When you are going to receive the delivery in which the storage expiry date has expired, the DH custom job is ended and return code 4 (end with warning). And then, the error message "DWCO1065_W Cannot receive the delivery because it expired." is displayed.

4.4 Check the execution result of a DH Custom Job

This section describes how to confirm the custom jobs' progresses and the execution results.

4.4.1 How to check the custom job's progress

You can check the custom job's progress in JP1/AJS3 - View.

For details, see the manual *Job Management Partner 1/Automatic Job Management System 3 Operator's Guide*.

4.4.2 How to check the custom job execution result
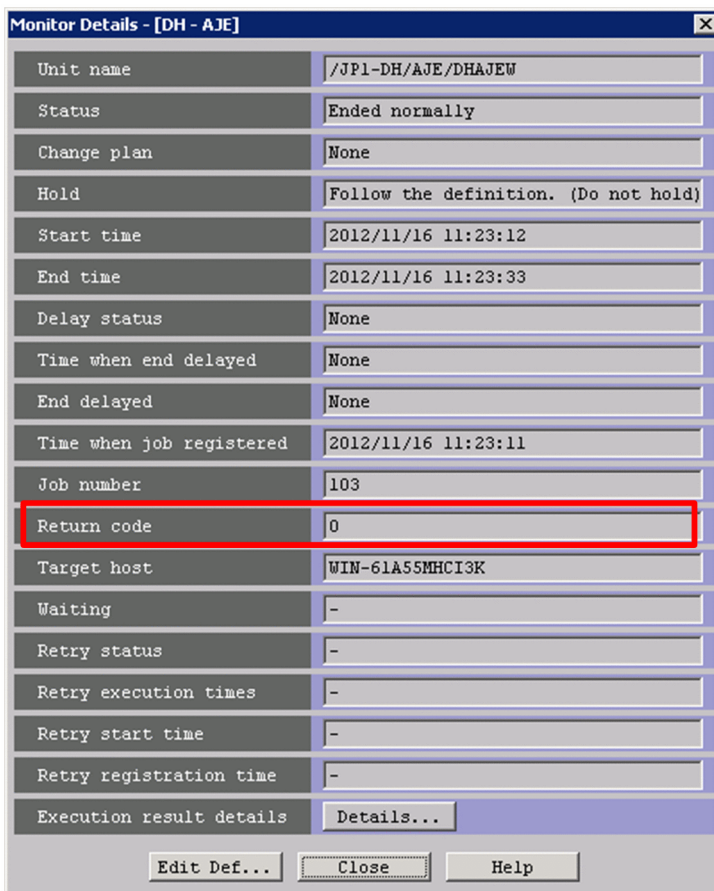
(1) The return code of the DH custom job

You can confirm the result of running of a DH custom job by the return code from a DH custom job.

You can see the return code by the [**Jobnet Monitor**] window of JP1/AJS3 - View.

For details, see the manual *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide Checking the return code of a job*.

Figure 4–9: The return code of [**Monitor Details**] dialog box

The detail of code and content of return codes of DH custom job are as follows:

Table 4–8: The codes and contents of the return codes of DH custom job.

Return code	Contents
0	The DH custom job ended normally. If the DH custom job is a Receive Custom Job, the DH custom job received all files.
1	The DH custom job ended with warning. This code is returned when the following condition is satisfied: • The custom job is a Receive Custom Job. • There is no file that the custom job receives. • "Ended with Warning" is selected for "Behavior in the state without a file / folder to receive" in the custom job.
2	The DH custom job ended in the state of the suspended. You have to rerun the DH custom job, because The data transmission is not completed.
3	The DH custom job ended, because transfer denied. You have to rerun the DH custom job, after waiting for a refusal state of the transfer to be removed in the Data Highway - Server side.
4	The DH custom job ended with warning. • This code is returned when the following condition is satisfied: • Some tasks ended abnormally but other tasks ended normally.
8	The DH custom job doesn't be executed because of another DH custom job already be running.
16	The file transfer command ended abnormally.
32	Java VM ended abnormally.
64	Java VM could not be run. Confirm the folder name which you appointed in the "install destination folder of library that is used by JP1/DH -AJE (Job Execution) <CmdJreHome>" of Environment configuration file(config.xml).
200	An error occurred in the interface between JP1/AJS3 - Agent (or JP1/AJS3 - Manager) and JP1/DH - AJE.
201	An attempt to read the environmental configuration file (config.xml) has failed.
202	An attempt to output a log has failed.
203	An attempt to output a command property file has failed.
204	The custom job could not execute the file transfer command. The causes are as follow: • An attempt to output the message file was failed. • The environmental configuration file was invalid.
205	An attempt to reading or writing the file that is used by the system has failed.
206	The fatal failure occurred in JP1/DH - AJE.
207	The failure that prevents running of the file transfer command has occurred in JP1/DH - AJE.

(2) Execution Result Details

You can see the information that DH custom job has outputted on the [**Execution Result Details**] dialog box.

The [**Execution Result Details**] dialog box is displayed by clicking the [**Details...**] button of the [**Monitor Details**] dialog box.

Figure 4–10: The [**Execution Result Details**] dialog box

Click [Details...] button.

Result of a DH custom job is displayed.
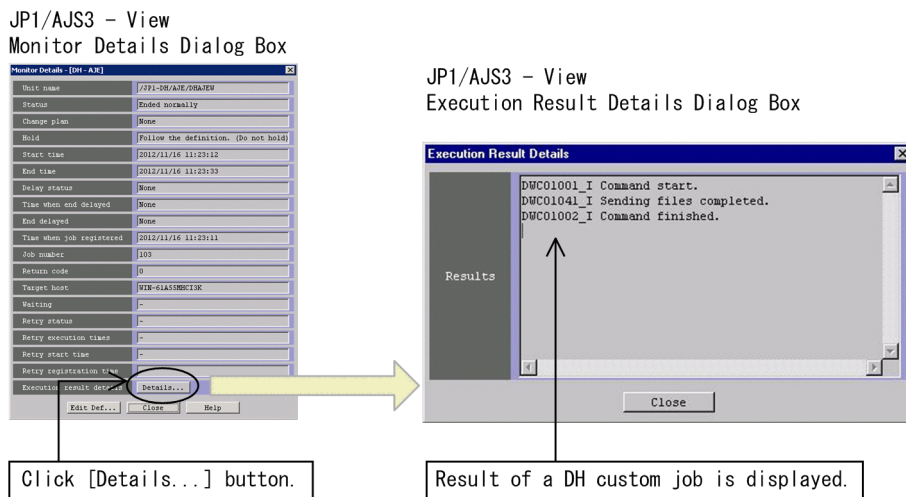
The result of Send or Receive is displayed as the [**Execution Result Details**].

(a) When the execution of the custom job has ended normally:

• Send Custom Job

The message that file transfer is ended normally is displayed.

The following figure is an example:

Figure 4–11: An example the [**Execution Result Details**] dialog box when Send has succeeded
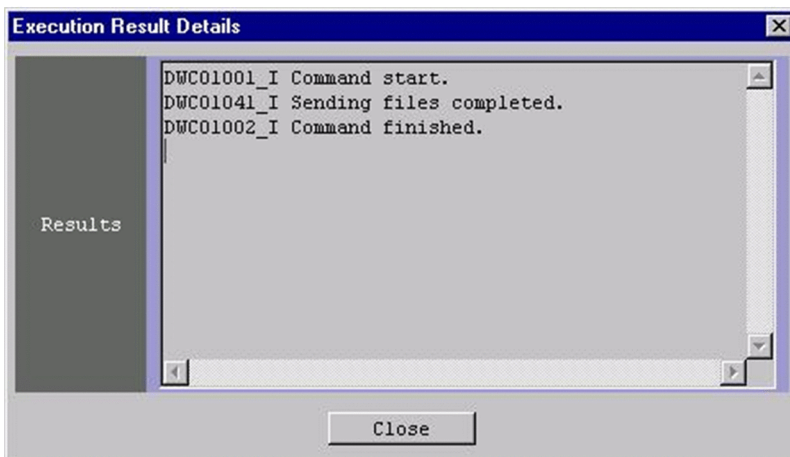
• Receive Custom Job

The message that file transfer is ended normally is displayed.

In addition, file names and folder names that the custom job has received is displayed.

The following figure is an example:

Figure 4–12: An example the [**Execution Result Details**] dialog box when Receive has succeeded
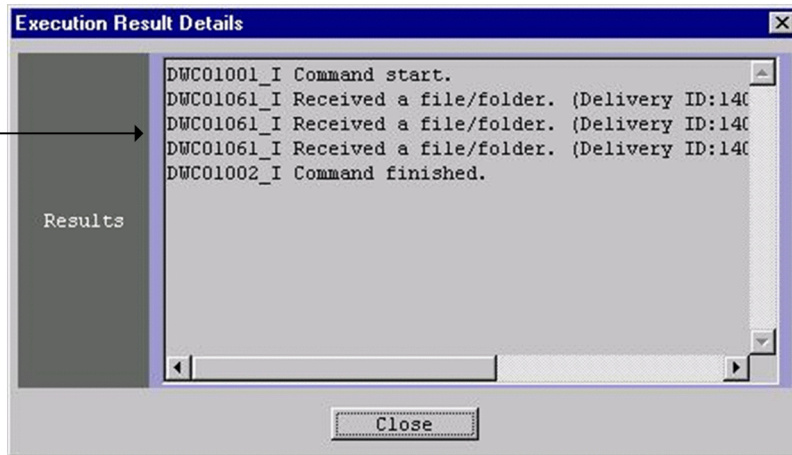

```
DWC01001_I Command start.
DWC01061_I Received a file/folder. (Delivery ID:1408, File ID:1, File/Folder name:XXXX.txt)
DWC01061_I Received a file/folder. (Delivery ID:1408, File ID:2, File/Folder name:XXXX.txt)
DWC01061_I Received a file/folder. (Delivery ID:1408, File ID:3, File/Folder name:XXXX.txt)
DWC01002_I Command finished.
```

(b) When the execution of the custom job has failed:

The error message is displayed.

The following figure is an example:

Figure 4–13: An example the [**Execution Result Details**] dialog box when a custom job has failed
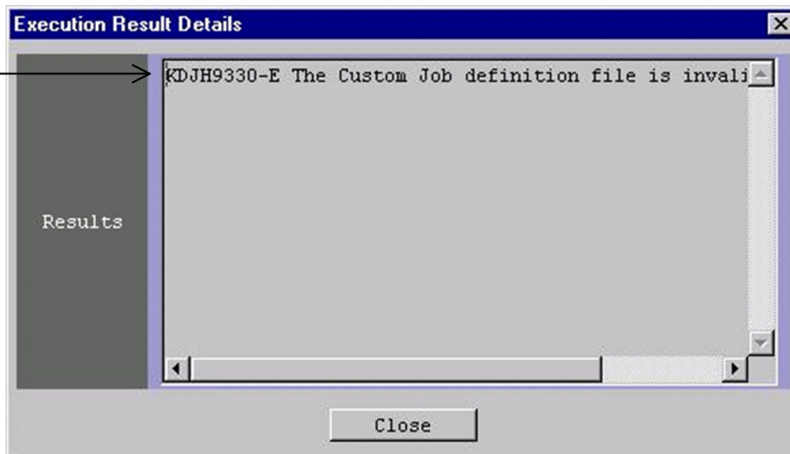

```
KDJH9330-E The Custom Job definition file is invalid. Details:XXXXXXX
```

4.5 The notes for DH Custom Jobs

This section describes the notes of using a DH custom job.

4.5.1 When a DH custom job was terminated forcibly:

When a DH custom job is running, the custom job may be terminated forcibly.

This occurs in the following cases:

- You have terminated the DH custom job forcibly.
- When the Timeout period is specified to the custom job and the timeout has occurred. About Timeout period, see *Table 4-3*.
- When you choose forcibly termination of the job for stopping services of JP1/AJS3.

In Windows, the file transfer will be continued when the file transfer has running and the DH custom job was terminated forcibly (In Linux, the file transfer will be terminated forcibly).

But "-1" is set to the return code of the custom job by JP1/AJS3, so you cannot confirm whether the file transfer has succeeded or not from the window of JP1/AJS3 - View.

In the above case, confirm the status by the following procedure and solve it.

1. See the operation log file that includes the contents that the DH custom job was forcibly terminated.

2. Judge the status from the contents that was included in the log file.
   The following table shows the contents of operation log file and the status:

   Table 4–9: The contents of the operation log file and the status

The contents of the operation log file	Status
None	A
KDJH9300 Data Highway - Automatic Job Executor (Job Execution) has started.	B
KDJH9360 Data Highway - Automatic Job Executor (Job Execution) has started to execute the Send file (**The data transfer command** UPLOAD). Command Line: **Command Line** or KDJH9364 Data Highway - Automatic Job Executor (Job Execution) has started to execute the Receive file (**The data transfer command** DOWNLOAD). Command Line: **Command Line** or KDJH9368 Data Highway - Automatic Job Executor (Job Execution) has started to execute Resume the Send file (**The data transfer command** RESUME). Command-line : Command Line or KDJH9370 Data Highway - Automatic Job Executor (Job Execution) has started to execute Resume the Receive file (**The data transfer command** RESUME). Command-line : Command Line	C
KDJH9361 Data Highway - Automatic Job Executor (Job Execution) has finished executing the Send file (**The data transfer command** UPLOAD). Command Line: **Command Line** or KDJH9365 Data Highway - Automatic Job Executor (Job Execution) has finished executing the Receive file (**The data transfer command** DOWNLOAD). Command Line: **Command Line**	D
KDJH9301 Data Highway - Automatic Job Executor (Job Execution) has finished its processing	E

The contents of the operation log file	Status
or KDJH9369 Data Highway - Automatic Job Executor (Job Execution) has finished executing Resume the Send file (**The data transfer command** RESUME). Return Code : **Return code of the data transfer command** or KDJH9371 Data Highway - Automatic Job Executor (Job Execution) has finished executing Resume the Receive file (**The data transfer command** RESUME). Return Code : **Return code of the data transfer command**.	E

3. If the status is "A" or "B", rerun the DH custom job.

4. If the status is "D" or "E" and there is a succeeding job, run the succeeding job.

5. If the status is "C", confirm the status of "Send" or "Receive" by the following procedures:

   1. Log in to the Data Highway - Server using the connection server URL, the User ID, and the password.

   2. If the custom job was a "Send Custom Job", see the Out-box and confirm the result of "Send". If "Send" has ended successfully and there is a succeeding job, run the succeeding job. If "Send" has failed, wait until the transmission is completed.

   3. If the custom job was a "Receive Custom Job", see the In-box and confirm the result of "Receive". If "Receive" has ended successfully and there is a succeeding job, run the succeeding job. If "Receive" has failed and there is a succeeding job, run the succeeding job, after having waited until the reception was completed.

4.5.2 The action if the result of running of a DH custom job is the error or the warning

See the return code of the custom job and investigate the cause, and then solve the problem and rerun the DH custom job. See *4.4.2(1) The return code of the DH custom job* about the return code of JP1/DH - AJE.

In addition, if the custom job was a "Receive Custom Job", an incomplete file or a folder may be left in the receive folder which was specified by the DH custom job. In that case, delete an unnecessary file or the folder.

4.5.3 The notes for seeing log files

When you see log files, copy it and see the copied file. Some programs that you use to see the log file impose an exclusive control lock on the log file. If a DH custom job definition window runs or a DH custom job runs during the log file was locked, the log may not output correctly.

5

Messages

This chapter lists the messages that JP1/DH - AJE might output.

5.1 Classification of the messages

The classification of a message is described below.

During operating, the message of JP1/AJS3 which is pre-required program of JP1/DH - AJE and the message of JP1/Base which is pre-required program of JP1/AJS3 will output as well as the message of JP1/DH - AJE.

The following tables show the correspondence between the message ID and their references.

Table 5–1: Correspondence between Message ID and their references which describe the details of the message

Message ID	Manual
The message which begin with "KDJH"	*Chapter 5.5 Common Messages* *Chapter 5.6 Message of JP1/DH - AJE (Job Definition)* *Chapter 5.7 Message of JP1/DH - AJE (Job Execution)* *Chapter 5.8 Message of the installer*
The sub-message which begin with "DWCO"	*Chapter 7.4.2 Messages of the data transfer command*
The message which begin with "KAJP"	*Job Management Partner 1/Base Messages*
The message which begin with "KAVA"	
The message which begin with "KAIU"	
The message which begin with "KNAM"	
The message which begin with "KAVC"	*Job Management Partner 1/Automatic Job Management System 3 Messages 1*
The message which begin with "KAVS"	
The message which begin with "KAVT"	
The message which begin with "KAVU"	*Job Management Partner 1/Automatic Job Management System 3 Messages 2*
The message which begin with "KAVV"	
The message which begin with "KFP"	
The message which begin with "KNAC"	
The message which begin with "KNAD"	

5.2 Message formats

The message formats are described below.

The message formats are constructed from message ID and the message text.

5.2.1 Message formats

(1) The message which begin with "KDJH"

The message formats which are outputted by JP1/DH - AJE are constructed from message ID and the message text. The message formats are as follows.

```
KDJHnnnn-Z Message text
```

Message ID shows the following contents.

K

Indicates the system ID.

DJH

Indicates the message is a JP1/DH message.

nnnn

Displays the message's serial number.

Z

Indicates the message type.

- E

  "E" means this message is an error message.

  It shows that the system error occurred.

  After output the message, processing is suspended.

- W

  "W" means the message is a warning message.

  It shows that something wrong in the user operation or other.

  After output the message, the processing continues.

- I

  "I" means the information message.

  It provides information to the user.

- Q

  "Q" means the Inquiry message.

  It asks to a user to select an action.

(2) The sub-message which begin with "DWCO"

This outputs the message which the data transfer command outputs as a sub-message to a Contents part of the KDJH9381-E. In addition, this outputs the message which the data transfer command outputs as a sub-message to the KDJH9390-I.

For more information about the message see *7.4.2 Messages of the data transfer command*.

5.3 Format of message explanations

The format to explain the message is as follows.

Message ID

Message text

Message explanations

(S)

Text indicating the processing performed by the system.

(O)

Text indicating the action to be taken by the operator when the message is output.

> **Note:**
> - A part, be described with Italic type in the message text, is changed depending on the state.

5.4 The outputting destination of the message

The outputting destination of the message is described below.

The table below shows the outputting destination where JP1/DH - AJE outputs the each kind of message. Note that the outputting destination is different depending on the types of message.

The outputting destination is described like explanatory notes in the table.

(Explanatory notes)

    stdout: The standard output

    stderr: The standard error output

    Operation log: the operation log file of JP1/DH - AJE.

    Dialog: The message dialog box

    Job Definition: JP1/DH - AJE (Job Definition)

    Job Execution: JP1/DH - AJE (Job Execution)

    --: The message is not output.

Table 5–2: The outputting destination of messages

Message ID	Outputting destination			
	stdout	stderr	Operation log	Dialog
KDJH9000-E	--	Job Execution	--	Job Definition
KDJH9001-E				
KDJH9002-E				
KDJH9003-E				
KDJH9004-E				
KDJH9029-E				
KDJH9039-E				
KDJH9059-E				
KDJH9100-I	--	--	Job Definition	--
KDJH9101-I				
KDJH9130-I				
KDJH9131-I				
KDJH9132-I				
KDJH9133-I				
KDJH9102-E	--	--	Job Definition	Job Definition
KDJH9134-E				
KDJH9135-E				
KDJH9136-E				
KDJH9250-E				
KDJH9251-E				

Message ID	Outputting destination			
	stdout	stderr	Operation log	Dialog
KDJH9110-E	--	--	--	Job Definition
KDJH9111-E				
KDJH9112-E				
KDJH9129-E				
KDJH9160-E				
KDJH9161-E				
KDJH9162-E				
KDJH9163-E				
KDJH9164-E				
KDJH9165-E				
KDJH9166-E				
KDJH9167-E				
KDJH9168-E				
KDJH9169-E				
KDJH9170-E				
KDJH9190-E				
KDJH9191-E				
KDJH9210-E				
KDJH9211-E				
KDJH9212-E				
KDJH9213-E				
KDJH9214-E				
KDJH9215-E				
KDJH9216-E				
KDJH9300-I	--	--	Job Execution	--
KDJH9301-I				
KDJH9340-I				
KDJH9350-I				
KDJH9360-I				
KDJH9361-I				
KDJH9362-I				
KDJH9363-E				
KDJH9364-I				
KDJH9365-I				

5. Messages

Message ID	Outputting destination			
	stdout	stderr	Operation log	Dialog
KDJH9366-I	--	--	Job Execution	--
KDJH9367-E				
KDJH9368-I				
KDJH9369-I				
KDJH9370-I				
KDJH9371-I				
KDJH9380-I				
KDJH9381-E				
KDJH9390-I				
KDJH9460-E				
KDJH9461-E				
KDJH9302-E	--	Job Execution	Job Execution	--
KDJH9330-E				
KDJH9331-E				
KDJH9332-E				
KDJH9333-E				
KDJH9334-E				
KDJH9335-E				
KDJH9336-E				
KDJH9337-E				
KDJH9338-E				
KDJH9462-E				
KDJH9310-E	--	Job Execution	--	--
KDJH9311-E				
KDJH9901-E	--	--	--	Job Definition Job Execution
KDJH9902-E				
KDJH9903-E				
KDJH9904-E				
KDJH9905-E				
KDJH9906-E				
KDJH9907-E				
KDJH9908-E				
KDJH9909-E				

5.5 Common Messages

KDJH9000-E

The environmental configuration file could not be read. Cause: *Cause-of-error*

The environmental configuration file could not be read.

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove the error factor with one or more of the procedures described below:

- Check whether the environmental configuration file exists.
- Check whether the execution user of DH Custom Job has the permission to read the environmental configuration file.
- Check whether you do not change the format of the environmental configuration file.
- When you remove the environmental configuration file, copy the template file into the environmental configuration file. When you have spoiled the file, copy the template file and specify the environmental values again as needed.

KDJH9001-E

The contents of the environmental configuration file are invalid. Cause: *Cause-of-error*

The contents of the environmental configuration file are invalid.

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove the error factor with one or more of the procedures described below:

- Check whether you do not change the tag name of the setting items in the environmental configuration file.
- Check whether the settings you specified in the environmental configuration file is valid.

KDJH9002-E

An unexpected error occurred during the reading of the environmental configuration file. Cause: *Cause-of-error*

An unexpected error occurred during the reading of the environmental configuration file.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9003-E

An installation folder name of the program cannot be acquired.

An installation folder name of the program cannot be acquired.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9004-E

An unexpected error occurred during the reading of property file name

An unexpected error occurred during the reading of property file name.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9029-E

An unexpected error occurred during the reading of the environmental configuration file. Terminates the processing of Data Highway - Automatic Job Executor.

An unexpected error occurred during the reading of the environmental configuration file.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9039-E

An unexpected error occurred. Terminates the processing of Data Highway - Automatic Job Executor.

An unexpected error occurred during the booting of JP1/DH - AJE.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9059-E

A log file cannot be output. Cause: *Cause-of-error* Terminates the processing of Data Highway - Automatic Job Executor.

An operation log file or an internal trace log file cannot be output.

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove the error factor with one or more of the procedures described below:

- Check whether the folder name which you specified as the log output folder in the environmental configuration file is valid.

- Check whether the execution user has the permission to write the folder which you specified as the log output folder in the environmental configuration file.

- Check whether other users access the log file so that the log file is locked.

5.6 Message of JP1/DH - AJE (Job Definition)

KDJH9100-I

Data Highway - Automatic Job Executor (Job Definition) has started.

JP1/DH - AJE (Job Definition) has started.

(S)

None

(O)

None

KDJH9101-I

Data Highway - Automatic Job Executor (Job Definition) has finished its processing.

JP1/DH - AJE (Job Definition) has finished its processing.

(S)

None

(O)

None

KDJH9102-E

Data Highway - Automatic Job Executor (Job Definition) cannot start. Details: *Detailed-information*

JP1/DH - AJE (Job Definition) cannot start.

(S)

Terminates the processing.

(O)

JP1/AJS3-View triggers JP1/DH - AJE (Job Definition) to start. Otherwise, JP1/DH - AJE (Job Definition) cannot start. If the message is output when you use JP1/AJS3-View to trigger JP1/DH - AJE (Job Definition), contact the system administrator.

KDJH9110-E

Boot program has failed getting the installation path of Data Highway - Automatic Job Executor (Job Definition). : *Detailed-information*, Error code : *Error Code*

The boot program of JP1/DH - AJE (Job Definition) has failed getting the installation path of JP1/DH - AJE (Job Definition).

(S)

Terminates the processing.

(O)

Contact the system administrator and request removal of the cause of an error.

KDJH9111-E

Boot program of Data Highway - Automatic Job Executor (Job Definition) has failed with an unexpected error.

The boot program of JP1/DH - AJE (Job Definition) has failed with an unexpected error.

(S)

Terminates the processing.

(O)

Contact the system administrator and request removal of the cause of an error.

KDJH9112-E

Boot program of Data Highway - Automatic Job Executor (Job Definition) has failed outputting to a log file.
Cause: *Cause-of-error*.

The boot program of JP1/DH - AJE (Job Definition) has failed outputting to a log file.

(S)

Terminates the processing.

(O)

Contact the system administrator and request removal of the cause of an error.

KDJH9129-E

Because an unexpected error occurred, Data Highway - Automatic Job Executor (Job Definition) finished the processing.

An unexpected error occurred in JP1/DH - AJE (Job Definition).

(S)

Terminates the processing.

(O)

Contact the system administrator and request removal of the cause of an error.

KDJH9130-I

Data Highway - Automatic Job Executor (Job Definition) starts to read the Custom Job definition file.

JP1/DH - AJE (Job Definition) starts to read the Custom Job definition file.

(S)

None

(O)

None

KDJH9131-I

Data Highway - Automatic Job Executor (Job Definition) has finished reading the Custom Job definition file.

JP1/DH - AJE (Job Definition) has finished reading the Custom Job definition file.

(S)

    None

(O)

    None

KDJH9132-I

Data Highway - Automatic Job Executor (Job Definition) starts to write the Custom Job definition file.

JP1/DH - AJE (Job Definition) starts to write the Custom Job definition file.

(S)

    None

(O)

    None

KDJH9133-I

Data Highway - Automatic Job Executor (Job Definition) has finished writing the Custom Job definition file.

JP1/DH - AJE (Job Definition) has finished writing the Custom Job definition file.

(S)

    None

(O)

    None

KDJH9134-E

An attempt to read the Custom Job definition file has failed. Details: *Detailed-information* Cause:*Cause-of-error*

An attempt to read the Custom Job definition file has failed.

(S)

    Terminates the processing.

(O)

    Contact the system administrator and request removal of the cause of an error.

KDJH9135-E

The form of the Custom Job definition file is wrong. Details: *Detailed-information*

The form of the Custom Job definition file is wrong.

(S)

    Terminates the processing.

(O)

    When this error occurred during the definition of the DH Custom Job after modifying the invalid config.xml, click the cancel button on the Detail Definition - Custom Job window and define the DH Custom Job again.

When you clicked the OK button on the Detail Definition - Custom Job window after this error occurred and created the DH Custom Job, delete the job and define the DH Custom Job again.

With except for the above-mentioned case, if you do not define the job with the following method before executing JP1/DH - AJE (Job Definition), then contact the system administrator.

- As one of the method to define the job, you can register the job by executing the ajsdefine command after you defined the unit in the Unit Definition File. If you registered the custom job of JP1/DH - AJE by this method, remove the error factor after you confirmed the information which contained in the message with the Unit Definition File. In addition, for more information the Unit Definition File, refer to the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

KDJH9136-E

An attempt to output the Custom Job definition file has failed. Details: *Detailed-information* Cause: *Cause-of-error*

An attempt to output the Custom Job definition file has failed.

(S)

Terminates the processing.

(O)

Check the displayed *cause-of-error*, and remove an error factor.

- If the *detailed-information* mentions a particular filename, make sure that an execution user has the permission to write and read the file or the storage folder of the file.

KDJH9160-E

Specify the valid Name of Recipients. The Name of Recipients must be either the character string of no more than 30 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (/ \ ? * : | " < > @ ^) cannot be used for the Name of Recipients. The Name of Recipients consists of a blank only or a period (.) only cannot be used, either.

The specified Name of Recipients is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Name of Recipients is valid, and if the value is invalid please specify the valid one.

KDJH9161-E

Specify the valid E-mail address of Recipients. The E-mail address of Recipients must be either the character string of no more than 256 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (: ") cannot be used for The E-mail address of Recipients.

The E-mail address of Recipients is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the E-mail address of Recipients is valid, and if the value is invalid please specify the valid one.

KDJH9162-E

Specify the valid Division of Recipients. The Division of Recipients must be either the character string of no more than 30 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (`:"`) cannot be used for Division of Recipients.

The Division of Recipients is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Division of Recipients is valid, and if the value is invalid please specify the valid one.

KDJH9163-E

Specify the valid Subject. The Subject must be either the character string of no more than 30 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (`"`) cannot be used for Subject.

The specified Subject is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Subject is valid, and if the value is invalid please specify the valid one.

KDJH9164-E

Specify the valid Message text. The Message text must be either the character string of no more than 1000 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (`"`) cannot be used for Message text.

The specified Message text is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Message text is valid, and if the value is invalid please specify the valid one.

KDJH9165-E

Specify the valid Send Files/Folders. The Send Files/Folders must be either the character string of no more than 255 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (**"**) cannot be used for Send Files/Folders.

The specified Send Files/Folders is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Send Files/Folders is valid, and if the value is invalid please specify the valid one.

KDJH9166-E

Specify the valid Open password. The Open password must be the alphanumeric character or sign which is more than 6 and no more than 32 and consists of more than 2 of 4types (number, English lower-case character, English upper-case character, sign). The following character can be used for a sign.
```
!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~
```

The specified Open password is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Open password is valid, and if the value is invalid please specify the valid one.

KDJH9167-E

Specify the valid Wait for the end of other job. The Wait for the end of other job must be the number within the range from 0 to 86400.

The specified Wait for the end of other job is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Wait for the end of other job is invalid is valid, and if the value is invalid please specify the valid one.

KDJH9168-E

Specify the valid E-mail address of Recipients. The E-mail address of Recipients is mandatory.

There is the Recipients as which the E-mail address/group name is not specified.

(S)

Returns to the previous window.

(O)

Specify the E-mail address/group name into the Recipients.

KDJH9169-E

Specify the valid Confirm open password. Open password differs from Confirm open password.

Open password differs from Confirm open password.

(S)

Returns to the previous window.

(O)

Specify the same contents as Open password as Confirm open password.

KDJH9170-E

The sign (`&"<>^|\%`) and a space cannot be specified in the same item.

The sign and a space cannot be specified in the same item on the Send Dialog. The item on the Send Dialog is as follows:

E-mail address of Recipients, Name of Recipients, Division of Recipients, and Subject

(S)

Returns to the previous window.

(O)

Specify the valid value into the item caused error.

KDJH9190-E

Specify the valid Receive folder. The Receive folder must be either the character string of no more than 255 characters or the Job Management Partner 1/AJS3 macro variable.
In addition, the sign (`"`) cannot be used for Receive folder.

The specified Receive folder is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Receive folder is valid, and if the value is invalid please specify the valid one.

KDJH9191-E

Specify the valid Wait for the end of other job. The Wait for the end of other job must be the number within the range from 0 to 86400.

The specified Wait for the end of other job is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Wait for the end of other job is invalid is valid, and if the value is invalid please specify the valid one.

KDJH9210-E

Specify the valid Connection server URL. The Connection server URL must be either the character string of no more than 256 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (**"**) cannot be used for Connection server URL.

The specified Connection server URL is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Connection server URL is valid, and if the value is invalid please specify the valid one.

KDJH9211-E

Specify the valid User ID. The User ID must be either the character string of no more than 256 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (**"**) cannot be used for User ID.

The specified User ID is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the User ID is valid, and if the value is invalid please specify the valid one.

KDJH9212-E

Specify the valid Password. The Password must be the character string of no more than 256 characters.

In addition, the sign (**"**) cannot be used for Password.

The specified Password is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Password is valid, and if the value is invalid please specify the valid one.

KDJH9213-E

Specify the valid Host name of Set proxy. The Host name of Set proxy must be either the character string of no more than 256 characters or the Job Management Partner 1/AJS3 macro variable.

In addition, the sign (**"**) cannot be used for Host name of Set proxy.

The specified Host name of Set proxy is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Host name of Set proxy is valid, and if the value is invalid please specify the valid one.

KDJH9214-E

Specify the valid Port number of Set proxy. The Port number of Set proxy must be either the number within the range from 0 to 65535 or the Job Management Partner 1/AJS3 macro variable.

The specified Port number of Set proxy is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Port number of Set proxy is valid, and if the value is invalid please specify the valid one.

KDJH9215-E

Specify the valid Auth ID of Set proxy. The Auth ID of Set proxy must be either the character string of no more than 256 characters or the Job Management Partner 1/AJS3 macro variable.
In addition, the sign (**"**) cannot be used for Auth ID of Set proxy.

The specified Auth ID of Set proxy is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Auth ID of Set proxy is valid, and if the value is invalid please specify the valid one.

KDJH9216-E

Specify the valid Auth password of Set proxy. The Auth password of Set proxy must be the character string of no more than 256 characters.
In addition, the sign (**"**) cannot be used for Auth password of Set proxy.

The specified Auth password of Set proxy is invalid.

(S)

Returns to the previous window.

(O)

Check whether the value you specified as the Auth password of Set proxy is valid, and if the value is invalid please specify the valid one.

KDJH9250-E

An unexpected error occurred during the booting of Data Highway - Automatic Job Executor (Job Definition). Details: *Detailed-information*, Error code: *Error Code*

An unexpected error occurred during the booting of JP1/DH - AJE (Job Definition).

(S)

    Terminates the processing.

(O)

    Contact the system administrator and request removal of the cause of an error.

KDJH9251-E

An unexpected error occurred. Details: *Detailed-information*

An unexpected error occurred during the executing of JP1/DH - AJE (Job Definition).

(S)

    Terminates the processing.

(O)

    Contact the system administrator and request removal of the cause of an error.

5.7 Message of JP1/DH - AJE (Job Execution)

KDJH9300-I

Data Highway - Automatic Job Executor (Job Execution) has started.

JP1/DH - AJE (Job Execution) has started.

(S)

None

(O)

None

KDJH9301-I

Data Highway - Automatic Job Executor (Job Execution) has finished its processing.

JP1/DH - AJE (Job Execution) has finished its processing.

(S)

None

(O)

None

KDJH9302-E

Data Highway - Automatic Job Executor (Job Execution) cannot start.

(S)

Terminates the processing.

(O)

JP1/AJS3-Manager/Agent triggers JP1/DH - AJE (Job Execution) to start. Otherwise, JP1/DH - AJE (Job Execution) cannot start. If the message is output when you use JP1/AJS3 to trigger JP1/DH - AJE (Job Execution), contact the system administrator.

KDJH9310-E

Boot program has failed getting the installation path of Data Highway - Automatic Job Executor (Job Execution). : *Detailed-information*, Error code : *Error Code*

The boot program of JP1/DH - AJE (Job Execution) has failed getting the installation path of JP1/DH - AJE (Job Execution).

(S)

Terminates the processing.

(O)

Contact the system administrator and request removal of the cause of an error.

KDJH9311-E

Boot program of Data Highway - Automatic Job Executor (Job Execution) has failed with an unexpected error.

The boot program of JP1/DH - AJE (Job Execution) has failed with an unexpected error.

(S)

Terminates the processing.

(O)

Contact the system administrator and request removal of the cause of an error.

KDJH9330-E

The form of the Custom Job definition is wrong. Details: *Parameter name*

The form of the DH Custom Job definition which JP1/DH - AJE (Job Execution) tried to execute is invalid.

(S)

Terminates the processing.

(O)

If you defined the Job Definition with the import function of JP1/AJS3, import it again after confirming the contents or re-create it after removing the job which you defined. If the message is output when you do not use the import function, contact the system administrator.

KDJH9331-E

An attempt to output the Command Property File has failed. Cause: *Cause-of-error*

An attempt to output the Command Property File has failed.

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove an error factor.

- If the *Cause-of-error* mentions a particular filename, make sure that an execution user has the permission to write and read the file or the storage folder of the file.

KDJH9332-E

An attempt to output the Message File has failed. Cause: *Cause-of-error*

An attempt to output the Message File has failed.

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove an error factor.

- If the *Cause-of-error* mentions a particular filename, make sure that an execution user has the permission to write and read the file or the storage folder of the file.

KDJH9333-E

The Received list management file could not be read. Cause: *Cause-of-error*

The file which a system uses could not be read. (The Received list is the file which the system is using.)

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove an error factor.

- Make sure the folder which is defined at <RecvListDir> in the environment setting file of the Job execution program exist. When the folder exists, make sure that an execution user has the permission to read the file or the storage folder. For more information < RecvListDir >, refer to *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

KDJH9334-E

The contents of the Received list management file are invalid. Cause: *Cause-of-error*

The contents of the file which a system uses are invalid. (The Received list is the file which the system is using.)

(S)

Terminates the processing.

(O)

Check the displayed *Cause-of-error*, and remove the error factor with one or more of the procedures described below:

- Overwrite the folder which is defined at < RecvListDir > in the backed up environment setting file of the Job execution program. For more information, refer to *6.4.2 Restore of JP1/DH - AJE (Job Execution)*.

- If there is no backup file, delete files under the folder which is defined at < RecvListDir > in the environment setting file of the Job execution program. Then the file which has already been received may be received again. For more information < RecvListDir >, refer to *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

KDJH9335-E

An unexpected error occurred during the reading of the Received list management file. Cause: *Cause-of-error*

An unexpected error occurred during the reading of the file which a system uses. (The Received list is the file which the system is using.)

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9336-E

An unexpected error occurred during the reading of the Received list management file. Terminates the processing of Data Highway - Automatic Job Executor.

An unexpected error occurred during the reading of the file which a system uses. (The Received list is the file which the system is using.)

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9337-E

The sign (`&"<>^|\%`) and a space cannot be specified in the same item. Cause: *Cause-of-error*

DH Custom Job cannot be executed because the sign (`&"<>^|\%`) and a space are specified in the same item on the Custom Job Definition.

(S)

Terminates the processing.

(O)

If you defined the Job Definition with the import function of JP1/AJS3, import it again after confirming the contents or re-create it after removing the job which you defined. If the message is output when you do not use the import function, contact the system administrator.

KDJH9338-E

The sign (") cannot be specified. Cause: *Cause-of-error*

DH Custom Job cannot be executed because the sign (") is specified on the Custom Job Definition.

(S)

Terminates the processing.

(O)

If you defined the Job Definition with the import function of JP1/AJS3, import it again after confirming the contents or re-create it after removing the job which you defined. If the message is output when you do not use the import function, contact the system administrator.

KDJH9340-I

The environment variable was set up. The environment variable : DW_CMD_JRE_HOME=*Installation folder of JAVA* USERNAME=*User name* USERNAME(HASH)=*Hash value of user name* TMP=*Temporary folder*

Job execution program set up the environment variable.

(S)

None

(O)

None

KDJH9350-I

The other process is processing the Received list management file. The analysis processing the Received list management file is executed again.

Two or more processes accessed simultaneously for the file which a system uses. (The Received list is the file which the system is using.)

(S)

   After having waited for monitoring interval, the program continues processing.

(O)

   When this message is output in succession, and DH custom job becomes the error.

   • Please delete it if the lock file which a system uses exists, for Linux.

     Lock file name:

     In Windows:

     The folder that is defined as `<RecvListDIR>` in the environmental configuration file of `JP1/DH - AJE` `(JobExecution)/recvuserlist.xml.lck`

     In Linux:

     `/opt/jp1dh/aje/ajee/recvlist/recvuserlist.xml.lck`

   • If you executed DH custom job concurrently, please review the maximum number of concurrently executable jobs.

KDJH9360-I

Data Highway - Automatic Job Executor (Job Execution) has started to execute the Send file (*The data transfer command* UPLOAD). Command-line : *Command-line*

JP1/DH - AJE (Job Execution) has started executing the Send file (*The data transfer command* UPLOAD).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

   None

(O)

   None

KDJH9361-I

Data Highway - Automatic Job Executor (Job Execution) has finished executing the Send file (*The data transfer command* UPLOAD). Command-line : *Command-line*

JP1/DH - AJE (Job Execution) has finished executing the Send file (*The data transfer command* UPLOAD).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

   None

(O)

   None

KDJH9362-I

Send file (*The data transfer command* UPLOAD) ended normally.

Send file (*The data transfer command* UPLOAD) ended normally.

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9363-E

An error occurred during the processing of Send file (*The data transfer command* UPLOAD).

An error occurred during the processing of Send file (*The data transfer command* UPLOAD).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    Terminates the processing.

(O)

    Confirm the sub-message on the Execution Result Details dialog which is outputted by DH Custom Job, or confirm the sub-message on the KDJH9390-I which is outputted by DH Custom Job, and make a request to the Send file again after removing the error factor.

KDJH9364-I

Data Highway - Automatic Job Executor (Job Execution) has started to execute the Receive file (*The data transfer command* DOWNLOAD). Command-line : *Command-line*

JP1/DH - AJE (Job Execution) has started to execute the Receive file (*The data transfer command* DOWNLOAD).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9365-I

Data Highway - Automatic Job Executor (Job Execution) has finished executing the Receive file (*The data transfer command* DOWNLOAD). Command-line : *Command-line*

JP1/DH - AJE (Job Execution) has finished executing the Receive file (*The data transfer command* DOWNLOAD).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9366-I

Receive file (*The data transfer command* DOWNLOAD) ended normally.

Receive file (*The data transfer command* DOWNLOAD) ended normally.

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9367-E

An error occurred during the processing of Receive file (*The data transfer command* DOWNLOAD).

An error occurred during the processing of Receive file (*The data transfer command* DOWNLOAD).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    Terminates the processing.

(O)

    Confirm the sub-message on the Execution Result Details dialog which is outputted by DH Custom Job, or confirm the sub-message on the KDJH9390-I which is outputted by DH Custom Job, and make a request to the Receive file again after remove the error factor.

KDJH9368-I

Data Highway - Automatic Job Executor (Job Execution) has started to execute resumption the Send file (*The data transfer command* RESUME). Command-line : *Command Line*

Data Highway - Automatic Job Executor (Job Execution) has started to execute resumption the Send file (*The data transfer command* RESUME).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9369-I

Data Highway - Automatic Job Executor (Job Execution) has finished executing resumption the Send file (*The data transfer command* RESUME). Return Code : *Return code of the data transfer command*

Data Highway - Automatic Job Executor (Job Execution) has finished executing resumption the Send file (*The data transfer command* RESUME).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9370-I

Data Highway - Automatic Job Executor (Job Execution) has started to execute resumption the Receive file (*The data transfer command* RESUME). Command-line : *Command Line*

Data Highway - Automatic Job Executor (Job Execution) has started to execute resumption the Receive file (*The data transfer command* RESUME).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9371-I

Data Highway - Automatic Job Executor (Job Execution) has finished executing resumption the Receive file (*The data transfer command* RESUME). Return Code : *Return code of the data transfer command*

Data Highway - Automatic Job Executor (Job Execution) has finished executing resumption the Receive file (*The data transfer command* RESUME).

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

    None

(O)

    None

KDJH9380-I

AJSJOBNAME: *Job name*, AJS_AJSCONF: *Scheduler service name*, AJSEXECID: *Job execution ID*, JobID:*Job number*, COMMAND: *(UPLOAD or DOWNLOAD)*, Return Code: *Return code of the data transfer command*

The send/receive data command displays the above result when the command ended normally.

(S)

None

(O)

The send/receive data command displays this message when the command ended normally.

- The value outputted to AJSJOBNAME, AJS_AJSCONF, AJSEXECID and JobID is the value of environment variable which is set by JP1/AJS3. Use the command when you need to specify the job of JP1/AJS3. For more information the environment variable, refer to the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

- The value outputted to COMMAND indicates the send/receive data command which was executed by JP1/AJS3 is whether the send command or the receive command.

- The return code of the send/receive data command is outputted to Return Code.

KDJH9381-E

AJSJOBNAME: *Job name*, AJS_AJSCONF: *Scheduler service name*, AJSEXECID: *Job execution ID*, JobID: *Job number*, COMMAND: *(UPLOAD or DOWNLOAD)*, Return Code: *Return code of the data transfer command*, Contents: *The message starts with Message ID(DWCxxxx-E) among messages the data transfer command displays.(If two or more messages exist, display message which is combined with comma (,) and these messages.)*

The send/receive data command displays the above result when the command ended abnormally.

(S)

Terminates the processing.

(O)

The send/receive data command displays this message when the command ended abnormally. Confirm the contents of error which occurred during the executing of the send/receive data command, and make a request to execute the send/receive data command again after removing the error factor.

- Check whether the settings you specified in the DH Custom Job Definition window is valid.

- Check whether the settings of Data Highway - Server you specified is valid.

- The value outputted to AJSJOBNAME, AJS_AJSCONF, AJSEXECID and JobID is the value of environment variable which is set by JP1/AJS3. Use the command when you need to specify the job of JP1/AJS3. For more information the environment variable, refer to the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

- The value outputted to COMMAND indicates the send/receive data command which was executed by JP1/AJS3 is whether the send command or the receive command.

- The return code of the send/receive data command is outputted to Return Code.

- The error message of the executed send/receive data command is displayed in the Contents.

This message is displayed when there are no files to receive and you selected "Ended with Warning" at "Behavior in the state without a file/folder to receive" on the Receive custom job dialog. In this case, message "Receiving file not found." is displayed in the Contents.

KDJH9390-I

The sub-message on the Execution Result Details dialog which is outputted by DH Custom Job

The sub-message on the Execution Result Details dialog which is outputted by DH Custom Job is outputted line by line.

(S)

None

(O)

None

KDJH9460-E

An unexpected error occurred. Details: *Detailed-information*

An unexpected error occurred.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9461-E

An exception occurred during the executing of the command. Command name: *Command name* Details: *Detailed-information*

An exception occurred during the executing of the command.

(S)

Terminates the processing.

(O)

Contact the system administrator.

KDJH9462-E

The data transfer command cannot start.

The data transfer command cannot start.

(In Windows, the part of *the data transfer command* displays it with DWClient.bat. In Linux, the part of *the data transfer command* displays it with DWClient.sh.)

(S)

Terminates the processing.

(O)

Check the following contents and request again after remove the error factor.

- If the *data transfer command* does not exist, perform an overwrite installation to recover the *data transfer command*.

5.8 Message of the installer

KDJH9901-E

> This platform is unsupported. Installation will now be cancelled.

You are going to install the product into the unsupported platform.

(S)

Installation will now be cancelled.

(O)

Install the product into the supported platform.

KDJH9902-E

> The login account does not have the permissions necessary for installation or un-installation.
> Please log in as a user with administrator permissions.

The login account does not have the administrator permissions.

(S)

The installation or un-installation has finished, and the system returns to the before situation which the installer executes.

(O)

Install or uninstall with the administrative account.

KDJH9903-E

> The specified installation folder path is too long.
> Specify the installation folder path again.

The specified installation folder path is too long.

(S)

Return to the specification dialog of installation folder path.

(O)

Specify the valid installation folder path. The installation folder path must be the character string of no more than 45bytes.

KDJH9904-E

> The specified folder: '*The specified folder path*' is invalid, incomplete or cannot be writable.

The specified folder is invalid, incomplete or cannot be writable.

(S)

Return to the specification dialog of installation folder path.

(O)

Specify the writable folder as installation folder path.

KDJH9905-E

Unable to overwrite installation because the new version of Data Highway - Automatic Job Executor has already been installed. Install the Data Highway - Automatic Job Executor again after un-installation of the installed Data Highway - Automatic Job Executor.

You are trying to perform a version down.

(S)

Installation will now be cancelled.

(O)

Unable to install with version down. Install JP1/DH - AJE again after un-installing the new version of JP1/DH - AJE.

KDJH9906-E

Unable to overwrite installation because the registry information could not be acquired. Install Data Highway - Automatic Job Executor again after un-installing the installed Data Highway - Automatic Job Executor.

Unable to overwrite installation because the registry information could not be acquired.

(S)

The installation or un-installation has finished, and the system returns to the before situation which the installer executes.

(O)

Install or uninstall with the administrative account.

KDJH9907-E

An attempt to install the Hitachi trace library has failed. (*Detailed-information*) Contact the system administrator.

An attempt to install the Hitachi trace library has failed.

(S)

Installation will now be cancelled.

(O)

Check the permissions of folders and files under the following folder.

System drive\ `Program Files# \Hitachi`

If the installation media has been invalid, contact the developing agency.

\#

If your operating system is Windows 64 bits version, interpret "Program files" as "Program files(x86)".

KDJH9908-E

An unexpected error occurred. (*Detailed-information*) Contact the system administrator.

An unexpected error occurred.

(S)

Installation will now be cancelled.

(O)

Check the permissions of installation folder path, and install JP1/DH - AJE again. When the error still occurred, get the installation logs and contact the developing agency.

Normally, the installation logs are outputted to the following folder.

Windows folder#\Temp\ HCDINST

\#

The default of Windows folder is "C:\WINDOWS ".

KDJH9909-E

An attempt to install the Hitachi Java library has failed. (*Detailed-information*)
Contact the system administrator.

An attempt to install the Hitachi Java library has failed.

(S)

Installation will now be cancelled.

(O)

Contact the system administrator and request removal of the cause of an error.

6

Troubleshooting

This chapter describes how to solve problems that occurred in JP1/DH - AJE.

6.1 The procedure to solve problems

This section describes the procedure to solve problems.

1. Confirmation of the problem

   Confirm the problem when the trouble occurs. See the message that is outputted to the operation log file, the dialog box, and the [**Execution Result Details**] dialog box of JP1/AJS3 - View. See *5.5 Common Messages* - *5.8 Message of the installer* about the cause of the message and the solve procedures. In addition, see *6.2 The types of log files and the storage folders of log file* about the messages that are outputted by JP1/DH - AJE. If you couldn't find the outputted message in *5.5 Common Messages* - *5.8 Message of the installer*, the message may be a message of JP1/AJS3 or JP1/Base. In this case, see *5.1 Classification of the messages* and see the suitable manual to solve the trouble.

2. Corrective action

   See *6.5 Corrective actions for each problems* and solve the trouble.

3. Collection data for troubleshooting

   When you can't solve the problem, you need to collect data for troubleshooting. See *6.3 The data to be collected when you can't solve a problem* and collect data for troubleshooting. After collecting data, contact to the system administrator.

4. Restore

   If you have already backup JP1/DH - AJE, you can restore JP1/DH - AJE to the status that you made backup.

6.2 The types of log files and the storage folders of log file

This section describes the types of log files and the storage folders of log file.

6.2.1 The type of log files

The log files that are outputted by JP1/DH - AJE are as follows:

(1) Operation log file

This file stores the operation log of the JP1/DH - AJE.

There are two log files.

The operation log file for JP1/DH - AJE (Job Definition) and the operation log file for JP1/DH - AJE (Job Execution).

(a) The file path

- The file path of the operation log for JP1/DH - AJE (Job Definition)
  1. In Windows XP

  ```
  <The install destination folder of JP1/DH - AJE (Job Definition)>\log
  \dhajed_information[x].log
  ```

  [x] is the number of backup files of the operation log file.

  [x] is the integer value from 1 to the maximum number of the backup files.

  The maximum number of the backup files is defined as InfoLogBackCount in the environmental configuration file.

  For detail about InfoLogBackCount, see *3.3.1(1) Environmental configuration file for JP1/DH - AJE (Job Definition)*.

  2. In other than Windows XP

  ```
  %ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH\AJE\AJED\log\dhajed_information[x].log
  ```

  %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

  [x] is the number of backup files of the operation log file.

  [x] is the integer value from 1 to the maximum number of the backup files.

  The maximum number of the backup files is defined as InfoLogBackCount in the environmental configuration file.

  For detail about InfoLogBackCount, see *3.3.1(1) Environmental configuration file for JP1/DH - AJE (Job Definition)*.

- The file path of the operation log for JP1/DH - AJE (Job Execution)
  1. In Windows

  ```
  %ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH\AJE\AJEE\log\dhajee_information[x].log
  ```

  %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

  2. In Linux

  ```
  /var/opt/jp1dh/aje/ajee/log/dhajee_information[x].log
  ```

[x] is the number of backup files of the operation log file.

[x] is the integer value from 1 to the maximum number of the backup files.

The maximum number of the backup files is defined as InfoLogBackCount in the environmental configuration file.

For detail about InfoLogBackCount, see *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*

> **Supplementary note:**
> - If you changed LogOutDir in the environmental configuration file, the operation log files are created under the folder that you specified as LogOutDir. For detail about LogOutDir, see *3.3.1(1) Environmental configuration file for JP1/DH - AJE (Job Definition)* or *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

(b) The output information

The following information is outputted to the operation log file.

Table 6–1: The output information to the operation log file

Item name	Length	Contents
Number	Fixed length(4 digits)	The serial number of the trace records.
Date	Fixed length(10 digits)	The date that the trace record was outputted. Format: yyyy/mm/dd
Time	Fixed length(12 digits)	The time that the trace record was outputted. Format: hh:mm:ss.sss
Application name	Fixed length(16 characters)	DH - AJE
Process ID	Fixed length(8digits)	The process ID Format: The process ID that is changed to the hexadecimal
Thread ID	Fixed length(8 digits)	The thread ID Format: The thread ID that is changed to the hexadecimal

Message ID	Fixed length(16 characters)	KDJHnnnn-Z
		K: Denotes the system identifier.
		DJH: Indicates that the message is a JP1/DH - AJE message.
		nnnn: Displays the message's serial number.
		Z: Indicates the message type:
		    E:Error
		    W:Warning
		    I:Information

Type	Fixed length(5 characters)	The log level. Format: ERR,WARN,INFO ERR: Indicates outputting Error message only. WARN: Indicates outputting Error and Warning message. INFP: Indicates outputting Error, Warning and Information message.
Message text	Variable length	The message text of JP1/DH - AJE

Also, the following headers are outputted at the beginning of outputting the log.

0	5	22	31	42	47
**** DH - AJE		Process ID	File size	Number of backup logs	00000002CRLF

0	5	66	83	116
	OS&version	Local host name	Timezone	Date&time beginning of trace CRLF

0	5	50	59	68	90
	yyy/mm/dd hh:mm:ss.sss	pid	tid	message-id	message(locale=*LOCALE*) CRFCF

6.3 The data to be collected when you can't solve a problem

This section describes that the data to be collected when you can't solve a problem.

If you can't solve the problem, collect the data by the following procedures.

6.3.1 The procedure of collecting the data of JP1/DH - AJE (Job Definition)

Collect only the log files for JP1/DH - AJE (Job Definition).

Copy the files that are included in the following folder to any folder.

1. In Windows XP

```
<The install destination folder of JP1/DH - AJE (Job Definition)>\log\
```

2. In other than Windows XP

```
%ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH\AJE\AJED\log
```

%AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

But if you changed LogOutDir in the environmental configuration file, copy the files that are included in the LogOutDir to any folder. For detail about LogOutDir, see *3.3.1(1) Environmental configuration file for JP1/DH - AJE (Job Definition)*.

6.3.2 The procedures for collecting the data of JP1/DH - AJE (Job Execution)

If you can't solve the problem, collect the following two data:

1. The data that relates to JP1/DH - AJE (Job Execution)
2. The data that relates to JP1/AJS3

Collect the data by the following procedures.

(1) The procedures for collecting the data that relates to JP1/DH - AJE (Job Execution)

Use the information collection tool for collecting the data that relates to JP1/DH - AJE (Job Execution).

The detail about the information collection tool is as follows:

(a) About the information collection tool

The information collection tool is a batch file.

In Windows

1. The file path

```
<The install destination folder of JP1/DH - AJE (Job Execution)>\tools\dhaje_log.bat
```

2. The function

This tool collects the following data as files

Table 6–2: The data that is collected by the information collection tool (In Windows)

Items	Assumed size [KB]	Contents	Storage file or folder of the collected data
The files under the install destination folder ob JP1/DH - AJE (Job Execution)	281,600+ (The operation log file size * the number of the backup files of the operation log file)	The files under the install destination folder of JP1/DH - AJE	`file\sdata\DHAJE\`
The log files	Variable by the environment settings	The log files of JP1/DH - AJE (Job Execution)	The case of a default: `file\pdata\log\dhajee_information[x].log` When you change the destination of the log file: `file\cdata\log_custom\dhajee_information[x].log`
The registry information about JP1/DH - AJE (Job Execution)	20	The contents of the following registry keys: • `HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\JP1DH\AJE\AJEE` • `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\HITACHI\JP1DH\AJE\AJEE`(In theWow64 Environment)	registry1.txt or registry2.txt #1
The process list of OS	20	• Image name • Process ID • Session name • Session • Memory usage • Status • User name • CPU time • Window title	tasklist.txt
The system information of OS	15	• Host Name • OS Name • OS Version • OS Manufacturer • OS Configuration • OS Build Type • Registered Owner • Registered Organization • Product ID • Original Install Date	systeminfo.txt

Items	Assumed size [KB]	Contents	Storage file or folder of the collected data
The system information of OS	15	• System Boot Time • System Manufacturer • System Model • System Type • Processor(s) • BIOS Version • Windows Directory • System Directory • Boot Device • System Locale • Input Locale • Time Zone • Total Physical Memory • Available Physical Memory • Virtual Memory: Max Size • Virtual Memory: Available • Virtual Memory: In Use • Page File Location(s) • domain • Logon Server • Hotfix(s) • Network Card(s)	systeminfo.txt
The system information of Windows event log	Variable by the server condition	• Log Name • Source • Date • Event ID • Task • Level • Opcode • Keyword • User • User Name • Computer • Description	evevtsystem.txt
The application information of Windows event log	Variable by the server condition	• Log Name • Source • Date • Event ID • Task • Level • Opcode • Keyword • User • User Name • Computer • Description	eventapp.txt
The information of netstat	2	All connections and listening ports	netstata.txt
The information of netstat	2	Ethernet statistics	netstate.txt

Items	Assumed size [KB]	Contents	Storage file or folder of the collected data
The information of netstat	2	Address and port numbers	netstatn.txt
The information of netstat	2	Routing table	netstatr.txt
The information of netstat	2	Per-protocol statistics	netstats.txt
Program files that used by system	Variable by the server condition	Program files that used by system	Not publication

#1 The registry1.txt is made if JP1/DH - AJE (Job Execution) is installed in a 32bit OS, and the registry2.txt is made if JP1/DH - AJE (Job Execution) is installed in a 64bit OS.

Make sure there is enough space as the output destination of the information collection tool. In addition, don't run DH custom jobs during the running of the information collection tool. If you run a DH custom job during the running of the information collection tool, the running of the DH custom job may fail.

During practice of information collection tool, please do not access output destination of the information collection tool.

And then, don't move the information collection tool. Use it in the installed place.

3. The execute permission

An OS user who has Administrators privilege.

4. The procedure of running the information collection tool

1. If a problem occurred in a host that JP1/DH - AJE is installed, log in to the host as an OS user who has the administrator's privilege.

2. If you want to change the output destination of information that is collected by the information collection tool, edit the tool (dhaje_log.bat) by an editor, and changes the "OUT_DIR_CUST" to the folder that you want to output information. The folder name that you specified as the "OUT_DIR_CUST" shouldn't be enclosed by double quotes even though the folder name includes spaces.

Example:

```
set OUT_DIR_CUST=C:\temp\JP1DHAJE
```

3. You edit The information collection tool (dhaje_log.bat) by editors and, for CUST_LOG_DIR or CUST_RCV_DIR or CUST_WRK_DIR, set the folder name which you changed, when you change modifiable item "the destination folder of outputting operation log files <LogOutDir >" or "the storage folder of files that is used by system <RecvListDir>" or "work folder that is used by running of DH Custom Job <SendRecvTemp>" in Environment configuration file(config.xml). The folder name that you specified as the "OUT_DIR_CUST" shouldn't be enclosed by double quotes even though the folder name includes spaces.

Example:

```
set CUST_LOG_DIR=C:\temp\JP1DHAJE\log
set CUST_RCV_DIR=C:\tempJP1DHAJE\recvlist
set CUST_WRK_DIR=C:\temp\JP1DHAJE\work
```

4. Execute the information collection tool.

5. The exit status code

Table 6–3: The exit status code of the information collection tool

Exit status code	Meaning	Contents
0	Normal	The collection of information has finished normally.

Exit status code	Meaning	Contents
1	Warning	The running of the information collection tool was canceled.
		If the output destination folder \already existed, the tool asks to a user whether the tool remove the folder or not.
		If the user select "N", the tool does not remove the folder, stop the running, and return the exit status code.
10	Error	The collection of information has failed.

6. The storage folder of the result of running of the information collection tool

If you didn't change the OUT_DIR_CUST, the result of running of the information collection tool is stored in the following folder:

```
%TEMP%\DHAJE\backlog\information
```

%TEMP% means the environment value %TEMP% of Windows.

Note:

When you carry out the overwrite installation from 10-00 version, the information collection tool (dhaje_log.bat) returns to initial state.

When you change contents of the information collection tool (dhaje_log.bat) in 10-00 version, carry it out after editing the information collection tool (dhaje_log.bat) again.

In Linux

1. The file path

```
/opt/jp1dh/aje/ajee/tools/dhaje_log.sh
```

2. The function

This tool collects the following data as files

Table 6–4: The data that is collected by the information collection tool (In Linux)

Items	Assumed size [KB]	Contents	Storage file or folder of the collected data
The files under the install destination folder ob JP1/DH - AJE (Job Execution)	281,600+ (The operation log file size * the number of the backup files of the operation log file)	The files under the install destination folder of JP1/DH - AJE	`file/sdata`
The log files	Variable by the environment settings	The log files of JP1/DH - AJE (Job Execution)	The case of a default: `file/pdata/log/ dhajee_information[ x].log` When you change the destination of the log file: `file/cdata/ log_custom/ dhajee_information[ x].log`
The process list of OS	20	• List of processes starting in the system	Process.txt
The system information of OS	20	• Information of the system	systeminfo.txt
The information of syslog	Variable by the system condition	• syslog files	syslog/

Items	Assumed size [KB]	Contents	Storage file or folder of the collected data
The information of netstat	2	All connections and listening ports	netstata.txt
The information of netstat	2	Ethernet statistics	netstate.txt
The information of netstat	2	Address and port numbers	netstatn.txt
The information of netstat	2	Routing table	netstatr.txt
The information of netstat	2	Per-protocol statistics	netstats.txt
The patch information of OS	Variable by the system condition	The patch information of OS	rpminfo.txt
Program files that used by system	Variable by the send/receive condition	Program files that used by system	Not publication

Make sure there is enough space as the output destination of the information collection tool. In addition, don't run DH custom jobs during the running of the information collection tool. If you run a DH custom job during the running of the information collection tool, the running of the DH custom job may fail.

During practice of information collection tool, please do not access output destination of the information collection tool.

And then, don't move the information collection tool. Use it in the installed place.

3. The execute permission

An OS user who has superuser privilege.

4. The procedure of running the information collection tool

1. If a problem occurred in a host that JP1/DH - AJE is installed, log in to the host as an OS user who has the superuser's privilege.

2. If you want to change the output destination of information that is collected by the information collection tool, edit the tool (dhaje_log.sh) by an editor, and changes the "OUT_DIR_CUST" to the folder that you want to output information. The folder name that you specified as the "OUT_DIR_CUST" shouldn't be enclosed by double quotes even though the folder name includes spaces.

Example:

```
OUT_DIR_CUST="/tmp/ajee/backlog"
```

3. You edit The information collection tool(dhaje_log.sh) by editors and, for CUST_LOG_DIR or CUST_RCV_DIR or CUST_WRK_DIR, set the folder name which you changed, when you change modifiable item "the destination folder of outputting operation log files <LogOutDir >" or "the storage folder of files that is used by system <RecvListDir>" or "work folder that is used by running of DH Custom Job <SendRecvTemp>" in Environment configuration file(config.xml).

Example:

```
CUST_LOG_DIR="/tmp/DHAJE/log"
CUST_RCV_DIR="/tmp/DHAJE/recvlist"
CUST_WRK_DIR="tmp/DHAJE/work"
```

4. Execute the information collection tool.

5. The exit status code

Table 6–5: The exit status code of the information collection tool

Exit status code	Meaning	Contents
0	Normal	The collection of information has finished normally.
1	Warning	The running of the information collection tool was canceled. If the output destination folder \already existed, the tool asks to a user whether the tool remove the folder or not. If the user select "N", the tool does not remove the folder, stop the running, and return the exit status code.
10	Error	The collection of information has failed.

6. The storage folder of the result of running of the information collection tool

If you didn't change the OUT_DIR_CUST, the result of running of the information collection tool is stored in the following folder:

```
/tmp/ajee/backlog/information
```

(2) The collecting information of JP1/AJS3

The collecting information of JP1/AJS3 is needed for investigation of the source of a problem.

The following information is needed.

(a) The DH custom job definition information

See manual *Job Management Partner 1/Automatic Job Management System 3 Administration Guide Backing Up and Restoring Jobnets* about the getting method of the definition information.

(b) The information of JP1/AJS3 - Manager or JP1/AJS3 - Agent that DH custom jobs have been executed on them.

See *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting Collecting data for troubleshooting* about the getting method of the information.

6.4 Restore

This section describes the procedure to restore JP1/DH - AJE.

6.4.1 Restore of JP1/DH - AJE (Job Definition)

1. New install the program or overwrite install the program.

2. Overwrite the environmental configuration file (config.xml) from the backup folder to the environmental configuration file included in the install destination folder.

6.4.2 Restore of JP1/DH - AJE (Job Execution)

1. New install the program or overwrite install the program.

2. Overwrite the environmental configuration file (config.xml) from the backup folder to the environmental configuration file included in the install destination folder.

3. Overwrite the all files and folders that are included in the following folder from the backup folder:

   • The folder that is defined as <RecvListDIR> in the environmental configuration file of JP1/DH - AJE (Job Execution)

See *Appendix A. List of Files and Folders* about each files and folders. See *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)* about <RecvListDir>.

6.5 Corrective actions for each problems

This section describes troubles that may happen on JP1/DH - AJE, and then explains how to take action for each problem.

6.5.1 Problems of JP1/DH - AJE (Job Definition)

Troubles that may happen on JP1/DH - AJE (Job Definition), and how to take action for each trouble, are described below.

(1) The icon of DH custom job isn't displayed on JP1/AJS3 - View

Cause

1. The version of JP1/AJS3 - View is lower than 10-00, and you didn't copy the icon file of DH custom job to a folder that included in the JP1/AJS3 - View.

2. In Windows, the Class name that you specified at registration of DH custom job wasn't "DHAJEW".

   In Linux, the Class name that you specified at registration of DH custom job wasn't "DHAJEL".

Action

Log in to JP1/AJS3 - View again after taking the following actions.

1. Copy the icon file of DH custom job to a folder that included in the JP1/AJS3 - View. For the details, see *3.4 Register DH Custom Job*.

2. In Windows, make sure the Class name of the registration information of DH custom job is "DHAJEW".

   In Linux, make sure the Class name of the registration information of DH custom job is "DHAJEL".

(2) The [DH Custom Job Definition] window wasn't displayed from JP1/AJS3 - View

Cause

1. The environmental configuration file was invalid.

2. The environmental configuration file didn't exist.

3. The OS user who executed JP1/AJS3 - View didn't have the permission of reading of the environmental configuration file.

4. The memory was insufficient.

5. The free space of the folder <System drive of Windows>\temp was insufficient.

6. The OS user who executed JP1/AJS3 didn't have the permission of reading or writing to the folder < System drive of Windows>\temp.

7. You specified invalid file to the Definition program at registration of DH custom job.

Action

Take the following actions, and push Cancel button on the [**Define Details - [Custom Job]**] dialog box. The [**Define Details - [Custom Job]**] dialog box will be closed. And then, define a DH custom job again.

1. Make sure the contents of the environmental configuration file are correct.

2. If the environmental configuration file didn't exist, make the environmental configuration file by copying the template file. And then change the contents of the file as appropriate to the operation of JP1/DH - AJE.

3. Grant the reading permission of the environmental configuration file to the OS user who uses JP1/AJS3 - View.

4. Stop unnecessary processes to free the memory.

5. Increase the free size of the <Windows system drive>\temp folder.

6. Grant the reading and writing permission to the <Windows system drive>\temp folder to the OS user who uses JP1/AJS3 - View.

7. Make sure the execution file that you specified as Definition program on the [**Set Properties of Custom Jobs**] dialog box. For detail, see *3.4 Register DH Custom Job*.

(3) An error occurred at definition or modification of a DH custom job

Cause

1. The memory was insufficient.

2. The free space of the folder <System drive of Windows>\temp was insufficient.

3. The OS user who executed JP1/AJS3 didn't have the permission of reading or writing to the folder < System drive of Windows>\temp.

Action

1. Stop unnecessary processes to free the memory.

2. Increase the free size of the <Windows system drive>\temp folder.

3. Grant the reading and writing permission to the <Windows system drive>\temp folder to the OS user who uses JP1/AJS3 - View.

(4) An error occurred during reading a DH custom job

Cause

1. The memory was insufficient.

2. The OS user who executed JP1/AJS3 didn't have the permission of reading or writing to the folder < System drive of Windows>\temp.

Action

1. Stop unnecessary processes to free the memory.

2. Grant the reading and writing permission to the <Windows system drive>\temp folder to the OS user who uses JP1/AJS3 - View.

6.5.2 Problems of JP1/DH - AJE (Job Execution)

Troubles that may happen on JP1/DH - AJE (Job Execution), and how to take action for each trouble, are described below.

(1) JP1/AJS3 - View couldn't run a DH custom job

Cause

1. The environmental configuration file was invalid.

2. The environmental configuration file didn't exist.

3. Files that are used by the system are invalid. Those files are included in the <RecvListDir> folder.

4. The OS user who executed JP1/AJS3 - Agent or JP1/AJS3 - Manager didn't have the permission of reading of the environmental configuration file.

5. The memory was insufficient.

6. You specified invalid file to the Execution program at registration of DH custom job.

Action

1. Make sure the contents of the environmental configuration file are correct.

2. If the environmental configuration file didn't exist, make the environmental configuration file by copying the template file. And then change the contents of the file as appropriate to the operation of JP1/DH - AJE.

3. If there are backup files of files that are used by system, overwrite them to files that are included in the <RecvListDir> folder. If there are not backup files, remove the `recvuserlist.xml` in the <RecvListDir> folder and remove all files under the <RecvListDir>\list folder. In this case, some file that you already received might be received again. For detail of <RecvListDir>, see *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)*.

4. Grant the reading permission of the environmental configuration file to the OS user who uses JP1/AJS3 - Manager or JP1/AJS3- Agent.

5. Stop unnecessary processes to free the memory.

6. Make sure the execution file that you specified as Execution program on the [**Set Properties of Custom Jobs**] dialog box. For detail, see *3.4 Register DH Custom Job*.

(2) An error occurred during reading a DH custom job

Cause

1. The memory was insufficient.

2. The definition of a DH custom job that was invalid. Definitions of DH custom job are registered to JP1/AJS3 - Manager or JP1/AJS3 - Agent.

Action

1. Stop unnecessary processes to free the memory.

2. Remove the custom job that has failed to read, and then define the same custom job again.

(3) An error occurred during Send or Receive

Cause

1. The contents of the base setting were invalid.

2. JP1/DH - AJE could not connect to the Data Highway - Server.

3. Invalid files or invalid folders were specified as the Send Files or the Send Folders of the custom job.

4. The OS user who ran the DH custom job didn't have the access permission to the files or the folders for sending.

5. The OS user who ran the DH custom job didn't have the access permission to the folder for receiving.

6. The file that had been used by the system wasn't removed.

7. The server certificate has not been registered.

Action

1. Make sure the contents of the base setting of the DH custom job.

2. Make sure that you can log in to the Data Highway - Server using the contents of the base setting of the DH custom job.

3. Make sure that the files or folders that are specified on the [**Transmission Setting (Send)**] window exist.

4. Grant the access permission for the files or folders that are specified on the [**Transmission Setting (Send)**] window to the OS user.

5. Grant the permission to the OS user, for creating files and folders in the folder for receiving.

6. Remove the following file.

<The folder that is specified as SendRecvTemp in the environment configuration file for JP1/DH - AJE (Job Execution)>
\dwcXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.X

X means an integer value.

See *3.3.2(1) Environmental configuration file for JP1/DH - AJE (Job Execution)* about <SendRecvTemp>.

In Linux, delete it if the lock file which a system uses exists.

In Windows

The folder that is defined as `<RecvListDIR>` in the environmental configuration file of `JP1/DH - AJE (JobExecution)/recvuserlist.xml.lck`

In Linux

`/opt/jp1dh/aje/ajee/recvlist/recvuserlist.xml.lck`

7. Register the server certificate. See *3.6 Register server certificate*.

6.5.3 Problems in the cluster system

The following procedure describes how to recover JP1/DH - AJE when you used JP1/DH - AJE in a cluster system and the failover has occurred by any failure.

How to recover

Recover JP1/DH - AJE by the following procedure:

1. Solve the cause of the failure after the failover.

2. Make sure whether any DH custom jobs which were running in the primary node exist.

3. If the status of the DH custom jobs that were running is "Killed" or "Unknown end status", log in to the Data Highway - Server and make sure the status of the Send or the Receive that was executed by the DH custom jobs. If the Send or the Receive was incomplete, execute the DH custom jobs again.

7

The data transfer command

This chapter describes how to use the data transfer command.

7.1 Overview of the data transfer command

Overview of the data transfer command is as follows.

7.1.1 The data transfer command

The data transfer command provides method which executes the file transfer facility of Data Highway - Server by a command line interface. Thereby, the data transfer command enables Data Highway - Server to cooperate with other systems, and to transfer files.

By using it combining the data transfer management command managing the file transfer, a flexible file transfer becomes possible.

In addition, for more information about Data Highway - Server, refer to the manual of Data Highway - Server. For more information about the data transfer management command managing the file transfer see *8.The data transfer management command*.

Functions which the data transfer command provides is as follows.

- The sending files
- The receiving files
- Resumption of the file transfer which is under suspending

7.1.2 Precondition for installation

A precondition required for client PC when using the data transfer command is shown below.

(1) Prerequisite software

Prerequisite software for client PC is as follows.

Table 7–1: Prerequisite software for client PC (In Windows)

Items	Product name
OS	One of the following is required. • Windows XP Professional (32bit) (Service Pack 3 or later) • Windows Server 2008 R2 (Service Pack 1 or later) • Windows 7 (32bit/64bit) (Service Pack 1 or later) • Windows(R) 8 • Windows(R) 8 Pro • Windows(R) 8 Enterprise • Windows(R) 8.1 • Windows(R) 8.1 Pro • Windows(R) 8.1 Enterprise • Windows Server 2012 Standard • Windows Server 2012 Datacenter • Windows Server 2012 R2 Standard • Windows Server 2012 R2 Datacenter

Table 7–2: Prerequisite software for client PC (In Linux)

Items	Product name
OS	One of the following is required. • Red Hat Enterprise Linux 5 • Red Hat Enterprise Linux 6

(2) Free space of hard disk

When you download a file, the system requires free space of hard disk twice as much as the file size.

And, the drive which was installed the data transfer command requires free space of hard disk more than the file size which you will download.

(3) Restriction

Cannot specify surrogate pairs in this command. Do not specify surrogate pairs for user name, installation folder name and arguments (Subject, Message, File path and so on).

7.2 Installation of the data transfer command

Installation of the data transfer command is as follows.

7.2.1 Installation of the data transfer command

The data transfer command is enclosed by JP1/DH - AJE (Job Execution). Therefore, it is necessary to install JP1/DH - AJE (Job Execution) in PC which executes the data transfer command. For more information about installation of JP1/DH - AJE (Job Execution), refer to *3.2 Installation of JP1/DH - AJE*.

In Windows, the data transfer command is stored in `<Install destination folder of JP1/DH - AJE (Job Execution)>\bin\DWClient`.

In Linux, the data transfer command is stored in `/opt/jp1dh/aje/ajee/bin/DWClient`.

> **Note:**
> - Do not use the data transfer command which was moved or copied from stored folder.

7.2.2 Environment configuration for the data transfer command

(1) Settings for the environment variable

Specify the install destination folder of the library which is used by the data transfer command to the environment variable. In Windows, the library is stored in `<Install destination folder of JP1/DH - AJE (Job Execution)>\csmi\jdk\jre`. In Linux, the library is stored in `/opt/jp1dh/aje/ajee/csmi/jdk/jre`.

(a) In Windows

The contents which are specified to the environment variable are as follows.

Example:

In case `<Install destination folder of JP1/DH - AJE (Job Execution)>` is `C:\Program Files (x86)\HITACHI\JP1DH\AJE\AJEE`

The name of environment variable: DW_CMD_JRE_HOME

Variable value: `C:\Program Files (x86)\HITACHI\JP1DH\AJE\AJEE\csmi\jdk\jre`

(b) In Linux

Specify `DW_CMD_JRE_HOME=/opt/jp1dh/aje/ajee/csmi/jdk/jre` to the environment variable.

Example:

In case the environment variable is added to /.bashrc.

```
export DW_CMD_JRE_HOME=/opt/jp1dh/aje/ajee/csmi/jdk/jre
```

(2) Setting for the data transfer command

Edit the following configuration file in setting for the data transfer command. In addition, for more information about configuration file, refer to *7.3.1(6) Configuration files*.

Copy the sample file of the Command Property File (property.xml) from the install destination folder to any folder.

In Windows, the sample file is stored in `<Install destination folder of JP1/DH - AJE (Job Execution)>\bin\DWClient`. In Linux, the sample file is stored in `/opt/jp1dh/aje/ajee/bin/DWClient`. Do not edit the sample file directly because the sample file is initialized by the overwrite installation.

Open the copied Command Property File (property.xml), and save the file after you specified the following information.

- Connection server URL
- User ID
- Password
- Authentication method
- Path of the certificate file
- Password of the certificate file
- Authentication information of proxy server

7.2.3 Uninstalling of the data transfer command

When you uninstall the data transfer command, you need uninstall JP1/DH - AJE (Job Execution). For more information about uninstalling of JP1/DH - AJE (Job Execution), refer to *3.8 Uninstalling of JP1/DH - AJE*.

7.2.4 Cancelation for the environment configuration of the data transfer command

(1) Cancelation for the environment variable

Operate only when you operated *7.2.2(1) Settings for the environment variable* at the installation. Administrator's permissions are required.

(a) In Windows

Delete the following environment variable.

Example:

In case `<Install destination folder of JP1/DH - AJE (Job Execution)>` is `C:\Program Files (x86)\HITACHI\JP1DH\AJE\AJEE`

The name of environment variable: DW_CMD_JRE_HOME

Variable value: `C:\Program Files (x86)\HITACHI\JP1DH\AJE\AJEE\csmi\jdk\jre`

(b) In Linux

Delete `DW_CMD_JRE_HOME=/opt/jp1dh/aje/ajee/csmi/jdk/jre` from the environment variable.

Example:

In case the environment variable is added to /.bashrc.

Delete the following added line.

```
export DW_CMD_JRE_HOME=/opt/jp1dh/aje/ajee/csmi/jdk/jre
```

7.3 Reference

This section describes commands which are provided by the data transfer command and settings.

7.3.1 Common specifications

Describe common specifications of the data transfer command. The contents are as follows.

- Command format and the grammatical rule
- Common options
- Return code
- Log outputting
- File path
- Configuration files
- Operation at the time of the data transfer failure
- The execution at the same time on the same PC

(1) Command format and the grammatical rule

Describe the format, the grammatical rule and the specification method of the data transfer command. In addition, in the case of Linux, read the extension "bat" of a command name as "sh".

```
DWClient.bat
    △ Command type
    [△-Option A[△ Value a[△Value b[△ Value c...]]]]    ···(i) ⎫(ii)
    [△-Option B[△Value a[△Value b[△ Value c...]]]]    ···(i) ⎭
```

Call (i) "Option", and call (ii) "Argument".

Specify the data transfer command in accordance with the following grammatical rule.

- A specification order is arbitrary when you specify two or more options.
- Cannot specify two or more same options.
- The command becomes an error when you specify the option not existing.
- Enclose by double quotes the value if you specify the value including blank.
- Specify an escape character (^) before the character if you specify the command line special character & (Ampersand), ^ (Circumflex accent) and so on.
- Cannot specify " (double quotes).
- Specify the command whose length is less than 8192 characters.
- When you specify two or more values to one option, divide and specify between values by blank.
- When two or more values are specified as an option, the value specified first is used as the option in which only one has a value. All the values are used as an option with two or more values.

(2) Common options

Common options of the data transfer command is as follows.

Table 7–3: The list of common options

No	Options	Meaning
1	-property	Specify the path of the Command Property File (property.xml) which is described the information on User ID/Password to send or receive the data. For more information about the Command Property File, refer to *7.3.1(6) (a) The Command Property File (property.xml)*.
2	-concurrenttimeout	If the data transfer command has already been executed, this option means the timeout value (seconds) to wait the termination of other execution. Specify 0 to 86400 (24 hours). If you specify 0, the data transfer command ends without the end of execution of other data transfer commands. If you do not specify the timeout value, 0 is applied.

(3) Return code

The return code which is outputted by the execution of the data transfer command is as follows.

In Windows, if it is immediately after termination of the data transfer command, you can check the return value with environment variable "ERRORLEVEL". For example, if you execute "`echo %ERRORLEVEL%`" by the command line interface immediately after termination of the data transfer command, the return code can be outputted to the standard output.

Table 7–4: The list of the return code

Return code	Explanation
0	The data transfer command ended normally.
2	The state of the suspended is ended.
3	Refusal state of the reception is ended.
4	The data transfer command ended with warning. Although some tasks ended abnormally, other tasks ended normally.
8	The data transfer command does not execute because another data transfer command has already been executed.
12	Cancellation is ended.
16	The data transfer command ended abnormally. When the error occurred, the following processing is not executed. Details of the error are outputted to log files.
32	Java VM ended abnormally.
64	Java VM could not be run because of the invalid path was specified to the environment variable.

(4) Log outputting

This section describes the application log which is outputted by the data transfer command.

(a) Log level

The list of the application log's log level is as follows.

Table 7–5: The list of the application log's log level

No	Log level	ID	Severity level	Contents	For monitoring
1	Error	E	Need to manage by representation user or system administrator.	Processing of the data transfer command cannot be continued because of the following cause. • The problem of execution environment such as network environment. • The problem of the input parameter of the data transfer command. This failure is required to manage by representation user. Management by a system administrator may be required. In this case, the return code 16 or 8 is outputted to log files.	Yes
2	Warn	W	Temporary failures	When you execute the data transfer command, the abnormal event has occurred. Processing of the data transfer command is continued. In this case, the return code 4 is outputted to log files.	Alternative
3	Info	I	Usual events	This log level indicates processing is executing normally.	No

(b) Log files

The specification of log files is as follows.

Table 7–6: The specification of log files

No	Items	Format or value
1	File format	Text format
2	Character code	UTF-8
3	Newline code	CR+LF

Log files are outputted to the following path. The storage period is 30 days.

`<Install destination folder of JP1/DH - AJE (Job Execution)>`\log\dwc-yyyyMMddhhmmss-GUID.log

(Explanatory notes)

- `<Install destination folder of JP1/DH - AJE (Job Execution)>`: The folder which was installed the data transfer command.
- yyyyMMddhhmmss : The execution date-time of the data transfer command. (yyyy : 4 figures of A.D., MM : 2figures of month, dd : 2figures of day, hh : 2figures of time (24hours), mm : minute, ss : second)
- GUID : The random character string of GUID format

> **Note:**
> Whenever you execute the data transfer command, a new log file is outputted to the default output folder. When the log output folder does not exist, it is created automatically and the log is outputted. In addition, if you execute the data transfer command after the storage period, log files will be deleted automatically.

(c) Output format

The output format of the application log is as follows.

```
Date Delimiter Time Δ Version Δ Log level Δ Message ID Δ Message text
```

(Explanatory notes)

    Δ　: This sign shows a blank which is one byte.

The example output of the application log is as follows.

```
2011/04/19T20:38:21.500 01-07 INFO DWCO1001_I Command start.
2011/04/19T20:38:28.250 01-07 INFO DWCO1041_I Sending files completed.
2011/04/19T20:38:28.250 01-07 INFO DWCO1002_I Command finished.
```

The output contents of the application log are as follows. For concrete messages, refer to *7.4.2 Messages of the data transfer command*.

Table 7–7:　The output contents of log files

No	Items	Figures	Output contents
1	Date	10	yyyy/MM/dd • yyyy : 4 figures of A.D. • MM : 2figures of month • dd : 2figures of day
2	Delimiter	1	T
3	Time	12	HH:mm:ss.SSS • HH : 2figures of time (24hours) • mm : minute • ss : second • SSS : millisecond In addition, the output time is the time of client.
4	Version	8	01-05 Left-justification, and right-hand side is filled up with Δ .
5	Log level	5	Log level. This is left-justification. For more information, refer to *7.3.1(4) (a) Log level*.
6	Message ID	10	ID to specify the messages. XXXXYYYY_Z • XXXX : Product code • YYYY : Message number • Z : ID of the log level (I : Info, W : Warn, E : Error)
7	Message text	Variable length	The contents of message Newline may be included when it includes the stack trace information on Java.

(5) File path

Specify the file path of the data transfer command with an absolute path.

The path notation can be specified in the format of both UNC format and local path format. But the transmission speed may become a low under the following condition because the transmission speed between the client and the network folder becomes a bottleneck.

• When you send files on the network

• When you receive files by the network folder

In such a case, we recommend you to specify the local file path which is specified as the data transfer command because the fast communication which is the feature of Data Highway - Server cannot be employed efficiently.

(6) Configuration files

The explanation about the configuration files is as follows.

Table 7–8: The list of the configuration files

No	Configuration files	Explanation
1	The Command Property File	Specify the information on user's User ID/Password.
2	The Received List File	Received delivery information is indicated.

(a) The Command Property File (property.xml)

This is the XML file which is described the information on user's User ID/Password. Specify this file's path as an argument when you execute the data transfer command. Since the password is described with plain text, set up suitable security such as setting up the right to access.

The specification of the Command Property File is as follows.

Table 7–9: The specification of the Command Property File

No	Items	Format or value
1	File format	XML format
2	Character code	UTF-8
3	Newline code	CR+LF

The format of the Command Property File is as follows.

```xml
<?xml version="1.0" encoding="utf-8" ?>
<property>
    <serverUrl>value</serverUrl>
    <userId>value</userId>
    <password>value</password>
    <authenticationMethod>value</authenticationMethod>
    <certificatePath>value</certificatePath>
    <certificatePassword>value</certificatePassword>
    <useProxy>value</useProxy>
    <proxyHost>value</proxyHost>
    <proxyPort>value</proxyPort>
    <proxyId>value</proxyId>
    <proxyPassword>value</proxyPassword>
</property>
```

Each setting item is as follows.

Table 7–10: Setting items of the Command Property File

No	Setting items	Element name	Explanation	Default value
1	Connection server URL	serverUrl	Specify URL of the connection server. (Example) https://jp1dh-hitachi.co.jp/	N/A

No	Setting items	Element name	Explanation	Default value
2	User ID	userId	Specify the User ID for login to the connection server. When you specify "Login by Certification" as Authentication method, you can omit to specify this setting item. When you specify "Login by Password" as Authentication method, you must specify this setting item. (Example) user@company	N/A
3	Password	password	Specify the Password for login to the connection server. Authentication system of the login user appoints a password registered with a directory server of the connection at the time of "LDAP authentication system". When you specify "Login by Certification" as Authentication method, you can omit to specify this setting item. When you specify "Login by Password" as Authentication method, you must specify this setting item. Specify the password character string[#1] by plain text, or specify the digest[#2] of the password character string by the hexadecimal format. Use "LDAP authentication" for authentication system, cannot appoint the digest form. Example of the specification in plain text : password When you specify this setting item by the digest, the digest character string of 40 characters is filled in after "text:HEX:". The digest character string portion does not have distinction of a capital letter and a small letter. The digest can be specified what is displayed on the password area at exporting. Example of the specification in the digest : text:HEX: 5baa61e4c9b93f3f0682250b6cf8331b7ee68fd8 In addition, you cannot specify the character string which starts in "text:HEX:" as the password character string of plain text. (Example) password	N/A
4	Authentication method	authenticationMethod	Specify the authentication method. When you omit to specify this setting item, "Login by Password" is applied. • PASSWORD : Login by Password • CERTIFICATION : Login by Certification	PASSWORD
5	Path of the certificate file	certificatePath	Specify the path of the certificate file with an absolute path. When you specify "Login by Password" as Authentication method, you can omit to specify this setting item. When you specify "Login by Certification" as Authentication method, you must specify this setting item.	N/A
6	Password of the certificate file	certificatePassword	Specify the password of the certificate file. When you specify "Login by Password" as Authentication method, you can omit to specify this setting item. When you specify "Login by Certification" as Authentication method, you must specify this setting item.	N/A

7. The data transfer command

No	Setting items	Element name	Explanation	Default value
7	Proxy use flag	useProxy	Specify whether the command uses the proxy server. • When the command uses the proxy server : true • When the command does not use the proxy server : false This setting item does not distinguish a capital letter and a small letter. (Example) true	False
8	Hostname of the proxy server	proxyHost	Specify the hostname or IP address of the proxy server. (Example1) Proxyserver (Example2) 192.168.0.1	N/A
9	Port number of the proxy server	proxyPort	Specify the port number of the proxy server. This item can be specified with the range of 0 to 65535. (Example) 3128	N/A
10	Authentication ID of the proxy	proxyId	Specify the Authentication ID of the proxy server. (Example) user	N/A
11	Authentication password of the proxy	proxyPassword	Specify the Authentication password of the proxy server. (Example) password	N/A

#1

One-byte alphabet and numbers can be used. The number of letters must meet the requirements of authentication rules. The following symbols can also be used.

!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~

#2

The digest is the format which Data Highway - Server stores the password in the database. It is impossible to restore an actual password character string from this value. The password information is outputted with the digest format on Password in the export CSV.

Specify the value in accordance with the input rule of XML. Especially, be careful when you specify the special symbol in XML. When you specify the following character, replace it to the entity reference (escape character) or use the CDATA section.

Table 7–11: Escape character of XML

No	Character	Notation by the entity refernce
1	<	<
2	>	>
3	&	&
4	"	"
5	'	'

In addition, control characters such as the newline may be shown with the entity according to the standard of XML. The order of the appearance of XML's attribute does not have sequentiality according to the protocol of XML.

Example for setting is as follows.

```
<?xml version="1.0" encoding="utf-8" ?>
<property>
    <serverUrl>https://jp1dh-hitachi.co.jp/</serverUrl>
    <userId>user@company</userId>
```

```
    <password>password</password>
    <authenticationMethod>CERTIFICATION</authenticationMethod>
    <certificatePath>C:/hitachi/hitachi01.dat</certificatePath>
    <certificatePassword>hitachi01</certificatePassword>
    <useProxy>true</useProxy>
    <proxyHost>proxyserver</proxyHost>
    <proxyPort>8080</proxyPort>
    <proxyId>proxyid</proxyId>
    <proxyPassword>proxypassword</proxyPassword>
</property>
```

(b) The Received List File

The received list is described in this file. Specify this file's path as an argument when you execute the data transfer command. The delivery which are described in this file are treated as being received, and they are not received after that.

Do not modify this file because it is updated automatically when the command receive the data. And, it is necessary to prepare another file for every user of Data Highway - Server.

(7) Operation at the time of the data transfer failure

When a certain error occurs during execution of the data transfer command and the command fails, the data transfer is cancelled including the following processing. The retry is not executed automatically. Send or receive the data again.

(8) The execution at the same time on the same PC

The data transfer command cannot be executed at the same time on the same PC. When the command is executed at the same time on the same PC, it becomes in a suspended state while the timeout which is specified as options is passed. However, even if it is the case on the same PC, when OS account which executes the data transfer command is divided, it can be executed at the same time according to the number of the execution account.

7.3.2 The list of the data transfer command

The list of the data transfer command is as follows. In addition, in the case of Linux, read the extension "bat" of a command name as "sh".

Table 7–12: The list of the data transfer command

No	Function	Command	Explanation	Refer to
1	The sending and receiving files	DWClient.bat △ UPLOAD	Send files.	*7.3.2(1) The sending files*
2		DWClient.bat △ DOWNLOAD	Receive files.	*7.3.2(2) The receiving files*
3	Resumption of the file transfer which is under suspending	DWClient.bat △ RESUME	Resume the file transfer which is under suspending.	*7.3.2(3) Resumption of the file transfer which is under suspending*

> **Note:**
> The user who is not registered to the system cannot transfer files by using the data transfer command. You can send files to unregistered users, but you cannot receive them by the data transfer command.

(1) The sending files

Send files.

(a) Format

```
DWClient.bat △ UPLOAD
   [[[ △ -to △ email address [-toname name ][-todivision division]]|#
     [ △ -cc △ email address [-ccname name ][-ccdivision division]]|#
     [ △ -bcc △ email address [-bccname name ][-bccdivision division]]]|#
    [ △ -destinationfile △ the path of the Destination File]]
   △ -file △ [file path [ △ file path]]|[folder path [ △ folder path]]...
   [ △ -title △ title]
   [ △ -message △ message | -messagefile △ message file]
   [ △ -openpassword △ open password]
   [ △ -resumestatus △ the folder which is stored the resumption information
file]
   △ -property △ the path of the Command Property File
   [ △ -concurrenttimeout △ timeout time (second)]
```

\#
   Specify one or more options among these.

(b) Argument

Table 7–13: The argument of sending files

No	Option	Explanation
1	-to	Specify the address to send by to. You can specify the email address or the group name (English). Do not distinguish a capital letter and a small letter. When @ (atmark) is not contained in this value, it is registered as a group name. When you specify two or more addresses, divide them with a colon (:). You can specify to, cc, and bcc to the maximum number of the recipients set up by Data Highway - Server side in all. For more information about settings of the maximum number, refer to the manual *Job Management Partner 1/Data Highway - Server Configuration and Administration Guide*. You can also specify the email address and the group name together.
2	-toname	Specify the address name which is specified to -to option with colon (:) division. You can specify to the number which is specified to -to option. When the specified arguments are less than the number of -to option, it is considered that the specification was omitted. When you specify the group name as the address, this option is ignored.
3	-todivision	Specify the address division which is specified to -to option with colon (:) division. You can specify to the number which is specified to -to option. When the specified arguments are less than the number of -to option, it is considered that the specification was omitted. In addition, you cannot include the colon (:) to the division. When you specify the group name as the address, this option is ignored.
4	-cc	Specify the address to send by cc. You can specify the email address or the group name (English). The specification method is the same as that of -to option.
5	-ccname	Specify the address name which is specified to -cc option with colon (:) division.

No	Option	Explanation
5	-ccname	You can specify to the number which is specified to -cc option. When the specified arguments are less than the number of -cc option, it is considered that the specification was omitted.
6	-ccdivision	Specify the address division which is specified to -cc option with colon (:) division.
		You can specify to the number which is specified to -cc option. When the specified arguments are less than the number of -cc option, it is considered that the specification was omitted.
		In addition, you cannot include the colon (:) to the division.
7	-bcc	Specify the address to send by bcc. You can specify the email address or the group name (English).
		The specification method is the same as that of -to option.
8	-bccname	Specify the address name which is specified to -bcc option with colon (:) division.
		You can specify to the number which is specified to -bcc option. When the specified arguments are less than the number of -bcc option, it is considered that the specification was omitted.
9	-bccdivision	Specify the address division which is specified to -bcc option with colon (:) division.
		You can specify to the number which is specified to -bcc option. When the specified arguments are less than the number of -bcc option, it is considered that the specification was omitted.
		In addition, you cannot include the colon (:) to the division.
10	-destinationfile	It is used when specifying recipients by CSV form file. Specify the path of the Destination File which indicated recipients. It cannot specify simultaneously with other recipients specification options shown below.
		• -to, -cc, -bcc
		• -toname, -ccname, -bccname,
		• -todivision, -ccdivision, -bccdivision
		For more information about Destination File see *(e) Destination File*.
		If the version of Data Highway - Server is 10-50 or later, this option can be used. When this option to less than 10-50 Data Highway - Server version is specified, an error of "DWCO1913_E The server returned an error. Server does not support this command. " occurs.
11	-file	Specify the path of sending files or folders.
		When you specify two or more files or folders, divide them by a half space (Δ). You can specify to ten at the maximum. But when the maximum of the number of files is specified as less than ten by the delivery policy, it can be specified to the number.
12	-title	Specify the subject. You can specify to a hundred characters at the maximum. When this option is omitted, the subject is a blank. But the subject of the email is applied the system default subject.
13	-message	Specify the messages which are described on the email. You can specify to 256 characters at the maximum. When this option is omitted, the message is a blank. Cannot specify the newline.
14	-messagefile	Specify the path of the text file which is described message to write to the email.
		The character code of the text file must be described with UTF-8. If the text file is not described with UTF-8, it may be displayed incorrectly.
		In addition, BOM and the newline code are not cared about their existence. You can specify to 4,096 characters at the maximum. But when the file is attached BOM, you can specify to 4,095 characters at the maximum.
		The newline is treated as one character.
		When this option is omitted, the message is a blank. When this option is specified with -message option, the command ends with an error.
15	-openpassword	Specify the open password for sending to the unregistered address. When this option is omitted, the open password is a blank. But the command ends with an error because the open password is indispensable for sending to the unregistered address.
		When you specify the open password for sending to the registered address, it is not used and ignored.
		An open password must be between 6 and 32 letters, include two or more kinds of characters (numbers, small letters, big letters, symbols). You can use the following symbols.
		!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~

No	Option	Explanation
15	-openpassword	In addition, when the open password is surrounded by " (double quote), the inner character is considered as the password. For example, if the specified password is "Password01", then Password01 is the open password.
16	-resumestatus	Specify the folder path which is stored the information to resume sending. When the sending is suspended by the demand of the suspended from Data Highway - Server, the resumption information file is saved to the path which is specified by this option. If the resumption information file is already existed in the specified folder, the file is overwritten. In addition, even if you specify this option, the command cannot send in the following case. • When Compress Method in the Delivery Policy is "Standard" [#] • When the folder is specified to the -file option • When Compress Level in the Delivery Policy is specified [STRONG] or [MIDDLE] or [WEAK] # When Compress Method in the Delivery Policy is "Extended", or when Compress Method in the Delivery policy cannot be chosen, the command is able to send files. When the file transfer ended normally or the file transfer is cancelled by the demand of the cancellation from Data Highway - Server, the resumption information file is deleted.
17	-property	Refer to *7.3.1(2) Common options*.
18	-concurrenttimeout	

(c) Description

The details of the sending files command is as follows.

(i) Options which cannot be specified by the sending files command

The following options which are specified when the sending files command is executed cannot be used as arguments of executing. Delivery Rules and Delivery Policy which is determined by the sender and the address is applied as well as settings by Web.

(ii) Difference from sending files by Web

The sending files command has the following difference compared with the case of operating by Web.

• Cannot send the shortcut file.

• Cannot deliver the message only. It is necessary to send one or more files.

(iii) The user name such as Receiver's address which is described in the Delivery Notification email

When you send files without the name of address, the name which is registered in the system is applied.

(iv) When you send files to user who is not displayed in Address List

When all of the following condition is true, the sending file command ends with failure.

• You do not have the authority to send files to arbitrary email address.

• You send files to user who is not displayed in Address List.

At this time, it is recorded on the audit log as "ILLEGAL_INTERFACE_CALL".

(v) Sending files for inactivated users

You can also send files for inactivated users.

(d) The example for execution

```
DWClient.bat UPLOAD
 -to "user@mailaddress.com"
 -file "C:\send\file.txt"
 -title "title"
 -message "message"
```

```
-resumestatus "C:\DWCLient\temp"
-property "C:\DWCLient\property.xml"
```

(e) Destination File

It is used when specifying recipients by CSV form file.

Please describe one recipient in one line. The character code of the file must be described with UTF-8.

Table 7–14: Format of the Destination File

No	Items	Explanation
1	ADDRESS_TYPE(the type of recipients)	Specify the type of mail that sends to recipients. Specify one from [TO], [CC], or [BCC]. This setting item does not distinguish a capital letter and a small letter. This setting item is mandatory.
2	DESTINATION(recipients)	Specify of recipients the email address or the group name. The character which can be specified is the same as [-to][-cc][-bcc] option. This setting item is mandatory.
3	NAME(the name of recipients)	Specify the name of recipients. The character which can be specified is the same as [-toname][-ccname][-bccname] option. When you specify the group name as [DESTINATION], this option is ignored. This setting item is not mandatory.
4	DIVISION(the division of recipients)	Specify the division of recipients. The character which can be specified is the same as [-todivision][-ccdivision][-bccdivision] option. When you specify the group name as [DESTINATION], this option is ignored. This setting item is not mandatory.

The sample of Destination File is shown below.

```
TO,testuser01@hitachi.co.jp,Test user 1, the 1st designing department
CC,testuser02@hitachi.co.jp,Test user 2, the 1st designing department
BCC,group01,,
```

You can specify recipients to the maximum number of the recipients set up by Data Highway - Server side in all. For more information about settings, refer to the manual *Job Management Partner 1/Data Highway - Server Configuration and Administration Guide*.

(2) The receiving files

Receive files or folders of the delivery which are not described on the Received List File.

In addition, you cannot receive sending to the unregistered user in the system by the receiving file command.

(a) Format

```
DWClient.bat Δ DOWNLOAD
  Δ -savedir Δ the folder which is saved the download file
  Δ -receivedlist Δ file path of the Received List File
 [ Δ -makesubdir]
```

```
  [ Δ -notoverwrite]
  [ Δ -resumestatus Δ the folder which is stored the resumption information
 file]
  [ Δ -getdeliveryinfo]
  [ Δ -newarrivalexitcode]
  [ Δ -deliveryid Δ Delivery ID]
  Δ -property Δ the path of the Command Property File
  [ Δ -concurrenttimeout Δ timeout time (second)]
```

(b) Argument

Table 7–15: The argument of receiving files

No	Option	Explanation
1	-savedir	Specify the folder path which is saved the download file. Specify the existing folder. When the specified folder is not existed, the command ends with an error.
2	-receivedlist	Specify the path of the Received List File. When the specified file is not existed, it is created automatically.
3	-makesubdir	When you specify this option, the folder (Delivery ID sub-folder) is created per delivery (Delivery ID) under the folder which is specified as -savedir option, and files are divided and saved per delivery. So, if the delivery is different, you can save the same name file or folder. The folder name which is created per delivery consists of the number maximum of 19 digits like Delivery ID. When all of the following condition is true, it is overwritten and saved by the file or folder which has new File ID. • The same name file or folder exists in the same delivery. • The -notoverwrite option is not specified. When this option is omitted, the file or folder is downloaded to the specified folder as -savedir option.
4	-notoverwrite	When this option is specified, if the same name file or folder exists in the folder which is saved the download file, the download is skipped. When the download is skipped, the command outputs messages and logs. When this option is omitted, even if the same name file or folder exists in the folder which is saved the download file, it is overwritten.
5	-resumestatus	Specify the folder path which is stored the information to resume receiving. When the receiving is suspended by the demand of the suspended from Data Highway - Server, the resumption information file is saved to the path which is specified by this option. If the resumption information file is already existed in the specified folder as this option, the file is overwritten. In addition, when the file transfer ended normally or the file transfer is cancelled by the demand of the cancellation from Data Highway - Server, the resumption information file is deleted.
6	-getdeliveryinfo	When you specify this option, the metadata folder is created under the folder which is specified as -savedir option and the delivery information file which is XML format is acquired per delivery (Delivery ID) at the time of download file. The file name which is created per delivery consists of the number maximum of 19 digits like Delivery ID. Even if the download file is failure and all of the files cannot be downloaded, the status of the delivery information shows that all download are completed. In addition, when the metadata folder already exists under the folder which is specified as -savedir option, delete it or save as another name before the command execution. When the same name folder is existed, it is overwritten. And, when this option is specified that the file or folder to download do not exist, the delivery information file is not outputted.
7	-newarrivalexitcode	When this option is specified, the command outputs the return code which is added 128 when it received the delivery which is included files or folders.

No	Option	Explanation
7	-newarrivalexitcode	When files or folders are not existed and the command delivers the message only, the command outputs the normal return code. When Java VM is terminated compulsorily, the return value is not added 128.
8	-deliveryid	• This option is used when choosing and receiving only specific delivery from delivery in In-box. Specify Delivery ID of the delivery to receive. You can specify 1 Delivery ID. (You cannot appoint plural Delivery ID.) Please acquire Delivery ID of delivery in In-box using In-box list acquisition (GETINBOX) of the data transfer management command. For more information about In-box list acquisition see *8.3.2(2) In-box list acquisition*. When this option is omitted all un received deliveries are received according to the received delivery list specified as -receivedlist option. • If the version of Data Highway - Server is 10-50 or later, this option can be used. When this option to less than 10-50 Data Highway - Server version is specified, an error of "DWCO1913_E The server returned an error. Server does not support this command. " occurs.
9	-property	Refer to *7.3.1(2) Common options*.
10	-concurrenttimeout	

(c) Description

The details of the receiving files command is as follows.

(i) The disk space which is temporarily used at receiving files

When the receiving file command is executed, all files are downloaded to the temporary disk space (the "work" folder which is located under the folder installed the data transfer command) first. Next, they are moved to the folder which is specified as an argument when you execute the command. So, when the receiving file command is executed, it is required the temporary disk space to receive these files.

In addition, when the receiving file command is suspended or is failed, the imperfect files may be remained in the temporary disk space. In this case, delete files in the temporary disk space.

(ii) Overwrite at the receiving the same name files

The download file is saved to the folder which is specified as an argument when you execute the command. When the same name file is existed, it is overwritten by the delivery data whose date is new.

This is also applied for the folder.

Note that the overwritten file or folder is also counted for the amount of downloads.

(iii) Delivery to receive

When -deliveryid option is specified:

Only the delivery specified by -deliveryid is received. It is also possible to receive the delivery received in the past.

When -deliveryid option is omitted:

Receive the new-arrival delivery (the delivery which is not described in the Received List File) only. The receiving file command cannot receive files received in the past.

(iv) Files which cannot be received because of its' download restriction

When files cannot be received because its' download restriction is exceeded for a month, the delivery or files are registered to the Received List File. After that, they are not downloaded even if the receiving file command is executed again.

In order to download such files, download them by Web after the download limitation value is loosed by the representation user.

(v) When you specify -makesubdir option

When the download is suspended and some of files cannot be downloaded, the operation of the re-download is as follows.

- When the file or folder of the delivery is different from last time

  This command creates folder per delivery, and download them.

- When the file or folder of the delivery is same at last time

  If the folder is not created per delivery when the download is suspended, the command creates new folder per delivery and download them. When the folder is already created per delivery, the command downloads them to the same folder.

- When you specify the preservation folder different from first time at re-downloading

  When all of the following condition is true, the command creates new folder per delivery to the preservation folder which is specified at re-downloading and download them.

  - The download is suspended in the same delivery.

  - Specify the preservation folder different from first time at re-downloading.

  In this case, files in the same delivery are saved to different preservation folder separately.

When the file whose name is same as the Delivery ID in the preservation folder is existed, the command occur an error because the same folder cannot be created.

Specify the preservation folder path including folder which is created per delivery whose length is less than 261 characters. When the preservation folder path is over 260 characters, the download fails.

(vi) Operation when the user is inactivated during the command execution

When the user who executes the receiving file command is invalid during the command execution, the operation of receiving is continued and is received files normally. And, after that, the operation is continued and is acquired all of the delivery. When the receiving file command is executed next time, the user cannot receive all of the delivery.

(vii) Warning log about delivery which is described on the Received List File

When the delivery which was successfully received before and is described on the Received List File is changed to the following status, the warning log is outputted when the receiving file command is executed again.

- When the sender of the delivery is deleted or inactivated

- There is no valid the Delivery Rules.

- The delivery is deleted during the receiving file command executing

- The approver who approves the delivery is deleted.

(viii) When you specify -getdeliveryinfo option

The format of the delivery information file which is outputted when you specify -getdeliveryinfo option is specified is as follows.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<data>
    <delivery id="123" send-date=" 2012/11/20 02:25" subject="About
meeting">
        <sender email="user1@domain1.co.jp">
            <files>
                <file id="27" type="file" name="Meeting materials.txt"
size="1024524"/>
                <file id="28" type=" file " name="ResearchResult.doc"
size="3134562"/>
            </files>
        </sender>
        <message>the sender's message</message>
```

```
        </delivery>
</data>
```

> **Note:**
> - The information at the time of the sending is outputted to the delivery information file. So, when the sender changes the email address after the sending was completed, the email address before being changed is outputted.
> - When the sender is deleted after the sending was completed, files which were sent are deleted together. So, the delivery information file is not outputted.
> - When you are going to receive the delivery in which the storage expiry date has expired, the receiving file is ended and return code 4 (end with warning). And then, the error message "DWCO1065_W Cannot receive the delivery because it expired." is displayed.

The meanings of the elements which are outputted to the delivery information file are as follows.

Table 7–16: The meanings of the elements of the delivery information file

Element/Attribute		Number	Explanation
data Element		1	It is always outputted.
delivery Element		1	The delivery information tag.
	id Attribute	1	Delivery ID is outputted.
	send-date Attribute	1	Date -time when the delivery (the sending) has completed is displayed.
	subject Attribute	1	The subject of the delivery is outputted.
sender Element		1	The sender information tag.
	email Attribute	1	The sender's email address is outputted.
files Element		1	The delivery file/folder list tag.
file Element		1 or more	The delivery file/folder information tag.
	id Attribute	1	ID of the delivery file/folder is outputted.
	type Attribute	1	The type of the delivery file/folder is outputted. - File : "file" - Folder : "folder"
	name Attribute	1	The name of the delivery file/folder is outputted.
	size Attribute	1	The size of the delivery file/folder is outputted with a number of bytes. In folder, the total number of bytes before archiving the contents of the folder is outputted.
message Element		1	The input message of the sender.

(d) The example for execution

```
DWClient.bat DOWNLOAD
  -savedir "C:\receive"
  -receivedlist "C:\DWCLient\receivedlist.txt"
  -makesubdir
  -getdeliveryinfo
  -resumestatus "C:\DWCLient\temp"
  -newarrivalexitcode
  -property "C:\DWCLient\property.xml"
```

(3) Resumption of the file transfer which is under suspending

Resume the file transfer which is under suspending.

(a) Format

```
DWClient.bat △ RESUME
    △ -property △ the path of the Command Property File
    △ -resumestatus △ the folder which is stored the resumption information
file
```

(b) Argument

Table 7–17: The argument of resumption of the file transfer which is under suspending

No	Option	Explanation
1	-resumestatus	Specify the folder path which is stored the information to resume the file transfer.
2	-property	Refer to *7.3.1(2) Common options*.

(c) Description

(i) When the suspended cannot be resumed

- When the Compress Method of Delivery Policy is "Standard", the delivery cannot be resumed. When the Compress Method of Delivery Policy is "Extended", or when the Compress Method of Delivery Policy cannot be chosen, the delivery can be delivered.

- When you specify the file which has setting that the Compress Level of Delivery Policy is except "No compression", the delivery cannot be resumed.

- When the state of the reception of the file transfer function for Data Highway - Server is "Refusal state of the reception", the command outputs the return code 3 (Refusal state of the reception is ended) and ends.

(ii) When you resume the sending files

- When the file which is resumed the sending was deleted from the Client PC after suspending, the resumption command of the file transfer which is under suspending ends abnormally.

- When the Compress Method of Delivery Policy is "Standard", the sending cannot be resumed. When the Compress Method of Delivery Policy is "Extended", or when the Compress Method of Delivery Policy cannot be chosen, the delivery can be sent.

- When you specify the file and folder which has setting that the Compress Level of Delivery Policy is except "No compression", the sending cannot be resumed.

- When the file name or file size or updated date-time of the sending file is changed, the command cannot send.

- When the file transfer of un-transmitted file is resumed, if the file name or file size is changed, the command cannot send.

(iii) When you resume the receiving files

- When the specified file is deleted on the Data Highway - Server because the expiration date of the delivery which is specified by the representation user expires, the receiving file is skipped. And, the file which is being received and the resumption information file are deleted. The command outputs the return code 4 (end with warning) and ends.

- When the specified delivery has already deleted on the Data Highway - Server and has already received, the receiving file is skipped. The command outputs the return code 4 (end with warning) and ends.

- For the options which are not specified to receive, the options which were specified by the receiving file command last time are applied.

- When [-deliveryid] option is being omitted by the reception to resume and when the file which is received newly after the suspended is existed, the command downloads them together.

- When the resumption of the suspended is failure, the download of the file transfer which is delivered after the suspended is not executed. In this case, the resumption information file is not overwritten.

- When the Compress Method of Delivery Policy is "Standard"

  - When you resume the receiving file which has setting that the Compress Level of Delivery Policy is "No compression", the receiving is resumed from the continuation of the last receiving.

  - When you specify the file and folder which has setting that the Compress Level of Delivery Policy is except "No compression", start to receive newly as well as the receiving command because the delivery which is being receiving cannot be resumed.

- When the Compress Method of Delivery Policy is "Extended", or when the Compress Method of Delivery Policy cannot be chosen.

  - When the receiving file or folder is resumed with the settings that the Compress Level of Delivery Policy is "STRONG" or "MIDDLE" or "WEAK", the receiving is resumed from the start of the last receiving file.

(d) The example for execution

```
DWClient.bat RESUME
 -property "C:\DWCLient\property.xml"
 -resumestatus "C:\DWCLient\temp"
```

7.4 Troubleshooting of the data transfer command

The solution of troubles which are occurred when the data transfer command is used is as follows.

7.4.1 FAQ of the data transfer command

FAQ of the data transfer command is as follows.

Table 7–18: FAQ

No	Question	Answer
1	Are there any ways that the progress of the data transfer command is displayed.	The data transfer command does not have the way of displaying its' progress. The time concerning the file sending/receiving is almost the same as the case where it is operated from Web. Note that the sending/receiving a mass file is needed for the long time.

7.4.2 Messages of the data transfer command

The list of messages of the data transfer command is as follows.

Table 7–19: The list of messages

Message ID	Message contents	Explanation
DWCO1001_I	Command start.	Notify that the data transfer command has been started.
DWCO1002_I	Command finished.	Notify that the data transfer command was finished.
DWCO1031_I	Ready to sending is started.(Command Line Arguments:{0})	Notify that the ready to sending is started. Command Line Arguments is outputted to {0} parameter.
DWCO1032_I	Ready to sending is ended. (Delivery ID:{0})	Notify that the ready to sending is ended. Delivery ID is outputted to {0} parameter.
DWCO1036_I	Sending a file to the server is started. (File/Folder path:{0}, File/Folder size:{1}Byte, Last modified time:{2})	Notify that the sending a file to the server is started. {0} : File/Folder path {1} : File/Folder size {2} : Last modified time
DWCO1037_I	Sending a file to the server is ended. (File ID:{0}, File/Folder size:{1}Byte, Last modified time: {2})	Notify that the sending a file to the server is ended. {0} : File ID {1} : File/Folder size {2} : Last modified time
DWCO1041_I	Sending files completed.	Notify that sending files was completed.
DWCO1042_I	Calculation of the file digest was skipped.	Notify that calculation of the file digest was skipped.
DWCO1043_I	Calculation of the file digest is started. (File/Folder path:{0}, File/Folder size:{1}Byte, Last modified time:{2})	Notify that the calculation of the file digest is started. {0} : File/Folder path {1} : File/Folder size {2} : Last modified time
DWCO1044_I	Calculation of the file digest is ended. (Digest: {0}, File/Folder size:{1}Byte, Last modified time:{2})	Notify that the calculation of the file digest is ended. {0} : Digest

Message ID	Message contents	Explanation
DWCO1044_I	Calculation of the file digest is ended. (Digest:{0}, File/Folder size:{1}Byte, Last modified time:{2})	{1} : File/Folder size {2} : Last modified time
DWCO1051_I	Ready to receiving is started.(Command Line Arguments:{0})	Notify that the ready to receiving is started. Command Line Arguments is outputted to {0} parameter.
DWCO1052_I	Ready to receiving is ended. (Number of new file:{0})	Notify that the ready to receiving is ended. Number of new file is outputted to {0} parameter.
DWCO1056_I	Receiving a file from the server is started. (Delivery ID:{0}, File ID:{1}, File/Folder path:{2}, File/Folder size:{3})	Notify that the receiving a file from the server is started. {0} : Delivery ID {1} : File ID {2} : File/Folder path {3} : File/Folder size
DWCO1057_I	Receiving a file from the server is ended. (Delivery ID:{0}, File ID:{1}, File/Folder path:{2}, File/Folder size:{3}, Last modified time:{4})	Notify that the receiving a file from the server is ended. {0} : Delivery ID {1} : File ID {2} : File/Folder path {3} : File/Folder size {4} : Last modified time
DWCO1059_I	Moving a file is started. (Source path:{0}, Destination path:{1}, File/Folder size:{2}, Last modified time:{3})	Notify that the moving a file is started. {0} : Source path {1} : Destination path {2} : File/Folder size {3} : Last modified time
DWCO1060_I	Moving a file is ended. (Source path:{0}, Destination path:{1}, File/Folder size:{2}, Last modified time:{3})	Notify that the moving a file is ended. {0} : Source path {1} : Destination path {2} : File/Folder size {3} : Last modified time
DWCO1061_I	Received a file/folder. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	Notify that the delivery was received. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : File/Folder name
DWCO1062_I	A file/folder was overwritten because a file/folder with the same name already exists. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	Notify that the file/folder was overwritten because the same name file/folder was already existed in the output folder. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : File/Folder name
DWCO1063_W	Cannot receive a file/folder. It might be caused by the following reasons. The delivery expired. The number of times you download this file is limited. You exceeded your download limit. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	Cannot receive the delivery because of the following reasons. • The delivery expired. • The number of times you download this file is limited. • You exceeded your download limit. Although the download of this delivery is skipped, the delivery is added to the Received List File. If you want to receive this delivery when this limitation is cancelled, refer to Delivery ID and receive the delivery by Web.

7. The data transfer command

Message ID	Message contents	Explanation
DWCO1063_W	Cannot receive a file/folder. It might be caused by the following reasons. The delivery expired. The number of times you download this file is limited. You exceeded your download limit. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : File/Folder name
DWCO1064_W	The delivery contains only message. (Delivery ID:{0})	Although files are not downloaded because the delivery contains only message, the delivery is treated as finishing receiving. Delivery ID is outputted to {0} parameter.
DWCO1065_W	Cannot receive the delivery because it expired. (Delivery ID:{0})	Cannot receive the delivery because it expired. Although the download of this delivery is skipped, the delivery is added to the Received List File. Delivery ID is outputted to {0} parameter.
DWCO1066_W	Cannot receive the delivery because the sender was deleted or inactivated or there is no available delivery rule. (Delivery ID:{0})	Cannot receive the delivery because the sender was inactivated or deleted or there is no available delivery rule. Although the download of this delivery is skipped, the delivery is added to the Received List File. Delivery ID is outputted to {0} parameter.
DWCO1067_W	Cannot receive the delivery because the delivery was deleted just before you started downloading or the approver of the delivery was deleted. (Delivery ID:{0})	Cannot receive the delivery because the delivery was deleted just before you started downloading or the approver of the delivery was deleted. Although the download of this delivery is skipped, the delivery is added to the Received List File. Delivery ID is outputted to {0} parameter.
DWCO1068_W	Failed to verify the file/folder. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	Failed to verify the file/folder which was downloaded. The downloaded file is deleted. (The file on the Server is not deleted.) The download of this delivery is skipped. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : File/Folder name
DWCO1069_W	Cannot receive a file/folder because the file/folder was deleted. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	Cannot download because the file was deleted. Although the download of this delivery is skipped, the delivery is added to the Received List File. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : File/Folder name
DWC01070_W	Cannot receive the delivery because a file/folder with the same name already exists. (Delivery ID:{0}, File ID:{1}, File/Folder name:{2})	Notify that the download was skipped because the same name file/folder was already existed in the output folder. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : File/Folder name
DWCO1071_I	Verification of the file digest was skipped.	Notify that verification of the file digest was skipped.
DWCO1101_E	An option [{0}] must be specified only once.	Do not specify two or more same options. Two or more specified options are outputted to {0} parameter.

Message ID	Message contents	Explanation
DWCO1102_E	Arguments must be a pair of an option key and its value.	The option key only or value only was specified to argument of the date transfer command. Specify the pair of the option key and its value.
DWCO1103_E	Option [{0}] is invalid.	Specify the valid option. The invalid option is outputted to {0} parameter.
DWCO1104_E	Please Specify option [{1}].	The indispensable option is not specified. Specify the indispensable option. The indispensable option is outputted to {1} parameter.
DWCO1105_E	Please specify option [{1}] within [{0}] characters.	The number of characters of the value which is specified to the option is over the maximum number of characters of the option.
DWCO1106_E	The maximum number of email addresses you can specify to [-to|-cc|-bcc] is [{0}].	Specify the email address or group name within the maximum number of them. The maximum number of the email address which can be specified is outputted to {0} parameter.
DWCO1107_E	An email address must be between [{1}] and [{2}] characters.	Check the number of characters of the email address. The following contents are outputted for each parameter. {1} : The minimum number of characters of the email address {2} : The maximum number of characters of the email address
DWCO1108_E	The number of files you can specify to [-file] must be between [{1}] and [{2}].	Check the number of specified files. The following contents are outputted for each parameter. {1} : The minimum number of files which can be specified to [-file] option {2} : The maximum number of files which can be specified to [-file] option
DWCO1109_E	The specified files/folders do not exist or cannot be read. (Path:{0})	Check the following condition. • The certificate file is existed in the specified file/folder. • The command has the permission to read the certificate file. • The character code of the certificate file is suitable. The path of the specified file/folder is outputted to {0} parameter.
DWCO1110_E	Please specify an integer number between [{1}] to [{2}] for option [{3}].	Specify the integer number which is in the suitable range for the option. The following contents are outputted for each parameter. {1} : The minimum number of integer of the option which can be specified {2} : The maximum number of integer of the option which can be specified {3} : Option
DWCO1112_E	The settings of Command Property File is wrong. (Setting:{0}, Value:{1})	The setting of the Command Property File (property.xml) is wrong. Check the following setting. • "PASSWORD" or "CERTIFICATION" is specified for Authentication method. • When "Login by Certification" is specified for Authentication method, the path of the certificate file is specified. • When "Login by Certification" is specified for Authentication method, the password of the certificate file is specified.

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Message ID	Message contents	Explanation
DWCO1112_E	The settings of Command Property File is wrong. (Setting:{0}, Value:{1})	Execute again after modifying the setting. The following contents are outputted for each parameter. {0}：The item name of the setting {1}：The value of the setting
DWCO1113_E	The selected files/folders do not exist or cannot be read. (Path:{0})	Check the following condition. • The specified file/folder is existed. • The command has the permission to write the specified file/folder. The path of the specified file/folder is outputted to {0} parameter.
DWCO1114_E	Failed to write to a received list. (Path:{0})	Check the command has the permission to write the specified Received List File. The path of the specified Received List File is outputted to {0} parameter.
DWCO1115_E	Failed to read a received list. (Path:{0})	Check the command has the permission to read the specified Received List File. The path of the specified Received List File is outputted to {0} parameter.
DWCO1116_E	Failed to create a received list. (Path:{0})	Check the command has the permission to write the path of the specified Received List File. The path of the specified Received List File is outputted to {0} parameter.
DWCO1117_E	Please specify option either [{0}] or [{1}].	Specify option either -message or -messagefile. The following contents are outputted for each parameter. {0}：The message (-message option) {1}：The message file (-messagefile option)
DWC01118_E	Cannot specify an unnecessary parameter. (parameter:{0})	Cannot appoint an unnecessary value. The unnecessary parameter is outputted to {0} parameter.
DWCO1121_E	Please specify message in a file within [{2}] characters.	Specify the message in the file within 4096 characters. 4096 is outputted to {2} parameter.
DWCO1122_E	An open password must be between [{1}] and [{2}] characters.	Check the number of characters of the open password. The following contents are outputted for each parameter. {1}：The minimum number of characters of the open password {2}：The maximum number of characters of the open password
DWCO1123_E	An open password must be between [{1}] and [{2}] characters and must contain two or more types of characters.	Check the number of characters and the type of the open password. The following contents are outputted for each parameter. {1}：The minimum number of characters of the open password {2}：The maximum number of characters of the open password
DWCO1124_E	An open password includes restricted strings.	The open password includes restricted strings.
DWCO1130_E	Please specify a name between [{0}] and [{1}] characters.	Check the number of characters of the name. The following contents are outputted for each parameter. {0}：The minimum number of characters of the name {1}：The maximum number of characters of the name

7. The data transfer command

Message ID	Message contents	Explanation
DWCO1131_E	A name includes restricted strings.	Specify the string which can be used for the name again. Cannot use the following symbol for the name. / \ ? * : | " < > @ ^ In addition, the name which consists of only blanks or only period (.) cannot be used.
DWCO1132_E	You can specify options[-toname|-ccname|-bccname] up to a number of email addresses specifies in [-to|-cc|-bcc].	The number of the name which is specified to [-toname|-ccname|-bccname] option is over the number of the email address or group name which is specified to [-to|-cc|-bcc] option. Specify the name whose number is within the number of the specified email address or group name.
DWCO1133_E	Please specify a between [{0}] and [{1}] characters.	Check the number of characters of the division. The following contents are outputted for each parameter. {0} : The minimum number of characters of the division {1} : The maximum number of characters of the division
DWCO1134_E	You can specify options[-todivision|-ccdivision|-bccdivision] up to a number of email addresses specifies in [-to|-cc|-bcc].	The number of the division which is specified to [-todivision|-ccdivision|-bccdivision] option is over the number of the email address which is specified to [-to|-cc|-bcc] option. Specify the division whose number is within the number of the specified email address.
DWCO1135_E	A group name must be between [{0}] and [{1}] characters.	Check the number of characters of the group name. The following contents are outputted for each parameter. {0} : The minimum number of characters of the group name {1} : The maximum number of characters of the group name
DWCO1142_E	Please specify a address type [TO|CC|BCC]. (Path:{0}, line:{1}, Value:{2})	The address type which was appointed in the destination file is not [TO|CC|BCC]. The following contents are outputted for each parameter. {0} : The destination file path {1} : Line {2} : The value specified as the address type
DWCO1143_E	Number of columns in the destination file is missing. (Path:{0}, line:{1}, Value:{2})	Number of columns of address which was appointed in the destination file is missing. The following contents are outputted for each parameter. {0} : The destination file path {1} : Line {2} : Number of columns
DWCO1144_E	An email address must be between [{0}] and [{1}] characters. (Path:{2}, line:{3}, Value:{4})	Check the number of characters of the email address which was appointed in the destination file. The following contents are outputted for each parameter. {0} : The minimum number of characters of the email address {1} : The maximum number of characters of the email address {2} : The destination file path {3} : Line {4} : The specified value
DWCO1145_E	A group name must be between [{0}] and [{1}] characters. (Path:{2}, line:{3}, Value:{4})	Check the number of characters of the group name which was appointed in the destination file. The following contents are outputted for each parameter. {0} : The minimum number of characters of the group name {1} : The maximum number of characters of the group name

Message ID	Message contents	Explanation
DWCO1145_E	A group name must be between [{0}] and [{1}] characters. (Path:{2}, line:{3}, Value:{4})	{2} : The destination file path {3} : Line {4} : The specified value
DWCO1146_E	Please specify a name between [{0}] and [{1}] characters. (Path:{2}, line:{3}, Value:{4})	Check the number of characters of the name which was appointed in the destination file. The following contents are outputted for each parameter. {0} : The minimum number of characters of the name {1} : The maximum number of characters of the name {2} : The destination file path {3} : Line {4} : The specified value
DWCO1147_E	A name includes restricted strings. (Path:{0}, line:{1}, Value:{2})	Specify the string which can be used for the name which was appointed in the destination file again. Cannot use the following symbol for the name. /\?*:|"<>@^ In addition, the name which consists of only blanks or only period (.) cannot be used. The following contents are outputted for each parameter. {0} : The destination file path {1} : Line {2} : The specified value
DWCO1148_E	Please specify a division between [{0}] and [{1}] characters. (Path:{2}, line:{3}, Value:{4})	Check the number of characters of the division which was appointed in the destination file. The following contents are outputted for each parameter. {0} : The minimum number of characters of the division {1} : The maximum number of characters of the division {2} : The destination file path {3} : Line {4} : The specified value
DWCO1149_E	The maximum number of email addresses/group names you can specify to [-destinationfile] is [{0}].	The address which was appointed in the destination file is over the maximum number of the address which can be specified. The maximum number of the address which can be specified is outputted to {0} parameter.
DWCO1201_E	User authentication failed.	The user authentication for Data Highway - Server was failed. Check the User ID or Password which is defined in the Command Property File.
DWCO1203_E	Failed to delete log files which expires.	The data transfer command cannot be executed because the password expires. Specify the new password.
DWCO1207_E	LDAP authentication system error occurred.	An error occurred by the connection to a directory server by LDAP authentication system.
DWCO1301_E	Failed to receive a file/folder. A file/folder with the same name already exists in the destination folder and cannot be rewritten. (Delivery ID:{0}, File ID:{1}, Path:{2})	Cannot overwrite this file or folder because the same name file or folder is already existed in the specified destination folder. Check the file or folder. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : Path
DWCO1302_E	Failed to receive a file/folder. The saved file/ folder in a temporary folder cannot be moved to	Cannot move the file which was saved in the temporary disk space to the specified destination folder.

Message ID	Message contents	Explanation
DWCO1302_E	the destination folder. (Delivery ID:{0}, File ID:{1}, Path:{2})	Check the permission of the destination folder to access. The file is saved in the temporary disk space, so move it to the destination folder. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : Path
DWCO1303_E	Failed to receive a file/folder. (Delivery ID:{0}, File ID:{1}, Details:{2})	The following reasons are considered. • The delivery was deleted just before receiving files. • The user who was executing receiving was deleted. • The other reason. The following contents are outputted for each parameter. {0} : Delivery ID {1} : File ID {2} : Details of reason
DWCO1304_E	Failed to create a folder.(Path:{0})	Check the command has the permission to create the folder, and execute the command with the user who has the permission to create the folder. The file path is outputted to {0} parameter.
DWCO1305_E	Failed to create a folder because a file with the same name already exists in the destination folder.(Path:{0})	There is the file whose name is the same as the name of folder the command creates. Execute the command again after deleting the file. The folder path is outputted to {0} parameter.
DWCO1401_E	Failed to send files. (Details:{0})	Failed to send files. Refer to the Details reason, and improve the setting of Users, Groups and Delivery Rules. The Details reason is outputted to {0} parameter.
DWCO1402_E	Failed to get delivery rules. Please check the destinations.	Failed to get the Delivery Rules which is applied all of the specified addresses. Improve the settings of the address.
DWCO1403_E	The capacity of selected files was over the limitation. (File path:{0}, File size:{1}Byte)	Make the size of the sending file within the limitation of file size. The following contents are outputted for each parameter. {0} : File path of the sending file {1} : File size of the sending file
DWCO1404_E	The total size of specified files is over the maximum size of the delivery policy. (Total size of specified files:{0}, Maximum total size:{1})	Make the total size of the sending file within the limitation of total file size. The following contents are outputted for each parameter. {0} : Total size of the specified sending file {1} : Maximum total size
DWCO1405_E	The number of receivers is over the maximum number of the delivery policy. (Specified receivers:{0}, Maximum number of receivers:{1})	Make the number of the specified address within the maximum number of address. The following contents are outputted for each parameter. {0} : The number of the specified address {1} : Maximum number of address
DWCO1406_E	The number of files is over the maximum number of the delivery policy. (Specified files:{0}, Maximum number of files:{1})	Make the number of the specified sending file within the maximum number of files. The following contents are outputted for each parameter. {0} : The number of the specified sending file {1} : Maximum number of files

Message ID	Message contents	Explanation
DWCO1407_E	Failed to send files. If the sender is a guest user,	Check the execution parameter is correct. If the sender is a guest, check the Limit Number of Uses.
DWCO1408_E	The capacity of selected files was over the limitation.You can send each file up to 3.96 bytes when you use compress options. (File path:{0}, File size:{1}Byte)	The capacity of selected files was over the limitation. When you use compress options, make each file size within 3.96 GB. The following contents are outputted for each parameter. {0} : File path {1} : File size
DWCO1409_E	Open password (-openpassword option) is needed to send to unregistered addresses.	The open password (-openpassword option) is not specified. Execute the command again after specifying the open password (-openpassword option).
DWCO1410_E	The capacity of selected folder was over the limitation.You can send each folder up to 3.96 bytes. (Folder path:{0}, Folder size:{1}Byte)	The capacity of selected folder was over the limitation. Make each folder size within 3.96 GB. The following contents are outputted for each parameter. {0} : Folder path {1} : Folder size
DWCO1411_E	A number of files and folders in a folder were over the limitation. You can send the number of files and folders in each folder up to {0}. (Folder path:{1}, Folder/File num:{2}).	A number of files and folders in a folder were over the limitation. {0} : Maximum number of Folder/File {1} : Folder/File path {2} : Folder/File num
DWCO1412_E	The specified group does not exist or is not a group that can be sent.(Group name:{0})	Check the address group. The group name is outputted to {0} parameter.
DWCO1501_I	Log files which expires have been deleted.	Notify that log files were deleted.
DWCO1502_I	Failed to delete log files which expires.	Notify that the deletion of log files was failed.
DWCO1705_E	Failed to parse a XML.(Details:{0})	The format of the Server Parameter File is invalid. Improve the format of the file. Details reason is outputted to {0} parameter.
DWCO1706_E	Failed to generate a XML.(Details:{0})	Contact a system administrator. Details reason is outputted to {0} parameter.
DWCO1803_E	Failed to output information of deliveries to a XML file. (Path:{0})	Check the command has the permission to write the specified file. The path of XML file is outputted to {0} parameter.
DWCO1901_E	An unexpected error occurred.	An unexpected error occurred. The server may be busy. Execute the command again later. If the same error occurs when you execute the command again and again, contact a technical support. And, the execution user may be deleted on executing the command. Contact a representation user or a group administrator.
DWCO1902_E	Unable to start the application because initialization of logs failed.	The contents of the Log Setting File have errors. If you re-install this application, this error may be resolved.
DWCO1903_E	Unable to start the application because reading message files failed.	The contents of the Setting File have errors. If you re-install this application, this error may be resolved.
DWCO1904_E	Unable to start the application because reading setting files failed.	The contents of the Setting File have errors. If you re-install this application, this error may be resolved.

Message ID	Message contents	Explanation
DWCO1905_E	Cannot use a temporary folder. (Path: {0})	The data transfer command uses the temporary folder. Check the command has the permission to write files in the temporary disk space which was described in the log. The path of the temporary folder is outputted to {0} parameter.
DWCO1906_E	An error occurred in connection with the server. (Details: {0})	Refer to the Details reason, and improve the network settings. The Details reason is outputted to {0} parameter.
DWCO1907_E	The server is busy. Please try again later.	The server is busy and it returns the HTTP status code 503 (Service Unavailable). Execute the command again later.
DWCO1908_E	The session have been time-out. Please try again.	The session has been timed-out. Login again.
DWCO1909_E	The server returned an error. (Details: {0})	Refer to the Details reason, and improve the setting of Users, Groups and Delivery Rules. The Details reason is outputted to {0} parameter.
DWCO1911_E	The operation of getting a lock for concurrent control timed out.	The data transfer command has already been executed in the same PC. Since the data transfer command cannot be executed at the same time, execute it again after the executing data transfer command is finished. And, the command may have not the permission to write to temporary folders. Check the suitable temporary folder is specified. When the command is cooperated with JP1/DH - AJE, check the existence and writing permission of the folder which is specified at SendRecvTemp tag in the Environment Setting File (config.xml).
DWCO1912_E	The connection with the server for communication of a file/folder failed. The server is busy. Please try again later.	Since the server is busy, the connection with the server for communication is failed. Execute the command again later.
DWCO1913_E	The server returned an error. Server does not support this command.	The command or command option that the server does not support is used. Check support of the server.
DWCO1999_E	Unable to start the application.	Failed in start of The data transfer command. Contact a system administrator.
DWCO2201_W	The file transfer was suspended by the server command. When the [-resumestatus] option is specified, it may be able to resume by a [RESUME] command.	The command was suspended by the server command. When you resume the file transfer, execute the RESUME command.
DWCO2202_E	The file transfer was canceled by the server command.	The command was canceled by the server command. Cannot resume the file transfer. When you want to send/receive files again, send/receive newly.
DWCO2203_E	The file transfer was canceled because the function of file transfer is invalid.	Contact a system administrator, and request the permission to transfer files.
DWCO2206_E	Cannot specify [-resumestatus] option because the compress method is set to delivery policy.	When the command is not cooperated with JP1/DH - AJE, specify "No compression" to Compress Level of Delivery Policy. When the command is cooperated with JP1/DH - AJE and when Compress Method of Delivery Policy can be chosen, specify "Extended" to Compress Method of Delivery Policy.
DWCO2207_E	Cannot specify [-resumestatus] option because of including folders. (Path: {0})	When the command is not cooperated with JP1/DH - AJE, specify the sending files except for folders again.

Message ID	Message contents	Explanation
DWCO2207_E	Cannot specify [-resumestatus] option because of including folders. (Path:{0})	When the command is cooperated with JP1/DH - AJE and when Compress Method of Delivery Policy can be chosen, specify "Extended" to Compress Method of Delivery Policy. The file path is outputted to {0} parameter.
DWCO2221_E	Failed to read a resuming status file. (Path:{0})	Check whether the resumption information file is existed and readable. The file path is outputted to {0} parameter.
DWCO2222_E	Failed to write a resuming status file. (Path:{0})	Check whether the resumption information file is existed and writable. In the case, the command may be unable to resume the sending/receiving. When the command cannot resume, send/receive newly. The file path is outputted to {0} parameter.
DWCO2301_I	Resuming sending files was completed.	Resuming sending files was completed.
DWCO2302_E	Failed to resume sending. (Details:{0})	Correspond according to the Details reason. In the case, the command may be unable to resume the sending. When the command cannot resume the sending, send with the UPLOAD command newly. The Details reason is outputted to {0} parameter.
DWCO2303_E	Failed to resume sending because of changing the file. (Path:{0})	Cannot resume the sending because the file has been changed. When you want to send again, send with the UPLOAD command newly. The file path is outputted to {0} parameter.
DWCO2304_E	Failed to resume sending because the delivery is not exist. (Delivery ID:{0})	Cannot resume the sending because the delivery is not existed. Send with the UPLOAD command newly. The Delivery ID is outputted to {0} parameter.
DWCO2305_E	Failed to resume sending because the delivery is not send by command. (Delivery ID:{0})	Cannot resume the delivery which is not sent with the sending command. Send with the UPLOAD command newly. The Delivery ID is outputted to {0} parameter.
DWCO2306_E	Failed to resume sending.It may be that the delivery has been cancelled or the sending has already been completed. (Delivery ID:{0})	The sending has been canceled or completed. When you want to send again, send with the UPLOAD command newly. The Delivery ID is outputted to {0} parameter.
DWCO2307_E	Failed to resume sending. It may be that the delivery rule or the delivery policy is changed / deleted.	Delivery Rules, Delivery Policy and Address User which were used at sending newly may be changed or deleted. Execute again after returning the setting of them.
DWCO2308_E	Failed to resume sending because the compress method is set to delivery policy.	Specify "No compression" to Compress Level of Delivery Policy.
DWCO2309_W	Failed to resume sending because the previous sending process is ongoing. Please try again later. (Delivery ID:{0})	Cannot resume the sending because the previous sending process is ongoing on the server. Execute the command again later. The Delivery ID is outputted to {0} parameter.
DWCO2310_E	Failed to resume sending because the delivery was expired. (Delivery ID:{0})	Cannot resume the sending because the delivery was expired. When you want to send again, send with the UPLOAD command newly. The Delivery ID is outputted to {0} parameter.
DWCO2321_I	Resuming a receiving file was completed.	Resuming a receiving file was completed.
DWCO2322_E	Failed to resume receiving. (Details:{0})	Correspond according to the Details reason. In the case, the command may be unable to resume the receiving. When the

Message ID	Message contents	Explanation
DWCO2322_E	Failed to resume receiving. (Details:{0})	command cannot resume the sending, send with the UPLOAD command newly. The Details reason is outputted to {0} parameter.
DWCO2401_E	This operation is not permitted. Please check that a user is right. (Details:{0})	Execute again by a suitable user. The Details reason is outputted to {0} parameter.

7. The data transfer command

8

The data transfer management command

This chapter describes how to use the data transfer management command.

8.1 Overview of the data transfer management command

Overview of the data transfer management command is as follows.

8.1.1 The data transfer management command

The data transfer management command provides method which executes the file transfer management facility of Data Highway - Server by a command line interface. Thereby, using the data transfer management command, you can control file transfer.

By using it combining the data transfer command which performs sending and receiving files, a flexible file transfer becomes possible.

For more information about the data transfer command which performs sending and receiving files see *7.The data transfer command*.

Functions which the data transfer management command provides is as follows.

- Out-box list acquisition
- In-box list acquisition
- Delivery cancellation
- Delivery deletion

8.1.2 Precondition for installation

A precondition required for client PC when using the data transfer management command is the same as the data transfer command. Refer to *7.1.2 Precondition for installation*.

8.2 Installation of the data transfer management command

Installation of the data transfer management command is as follows.

8.2.1 Installation of the data transfer management command

The data transfer management command is enclosed by JP1/DH - AJE (Job Execution) together with the data transfer command. For more information about the installation see *7.2.1 Installation of the data transfer command*.

8.2.2 Environment configuration for the data transfer management command

The procedure of environment configuration for the data transfer management command is the same as the data transfer command. Refer to *7.2.2 Environment configuration for the data transfer command*.

8.2.3 Uninstalling of the data transfer management command

The procedure of uninstalling of the data transfer management command is the same as the data transfer command. Refer to *7.2.3 Uninstalling of the data transfer command*.

8.2.4 Cancelation for the environment configuration of the data transfer management command

The procedure of cancelation for the environment configuration of the data transfer management command is the same as the data transfer command. Refer to *7.2.4 Cancelation for the environment configuration of the data transfer command*.

8.3 Reference

This section describes commands which are provided by the data transfer management command and settings.

8.3.1 Common specifications

Describe common specifications of the data transfer management command. The contents are as follows.

- Command format and the grammatical rule
- Common options
- Return code
- Log outputting
- File path
- Configuration files
- The execution at the same time on the same PC

> **Note:**
> - The part becoming same as specifications of the data transfer command is description which refers to *7. The data transfer command*. When you refer to it, read "the data transfer command" as "the data transfer management command" and read "DWClient.bat" as "DWClientUtil.bat" in the command line.

(1) Command format and the grammatical rule

This is the same as the data transfer command. Refer to *7.3.1(1) Command format and the grammatical rule*.

(2) Common options

This is the same as the data transfer command. Refer to *7.3.1(2) Common options*.

(3) Return code

This is the same as the data transfer command. Refer to *7.3.1(3) Return code*.

(4) Log outputting

This is the same as the data transfer command. Refer to *7.3.1(4) Log outputting*.

(5) File path

This is the same as the data transfer command. Refer to *7.3.1(5) File path*.

(6) Configuration files

This is the same as the data transfer command. Refer to *7.3.1(6) Configuration files*.

(7) The execution at the same time on the same PC

The data transfer management command can be executed at the same time on the same PC. Also, the data transfer management command and the data transfer command can be executed at the same time on the same PC.

8.3.2 The list of the data transfer management command

The list of the data transfer management command is as follows. In addition, in the case of Linux, read the extension "bat" of a command name as "sh".

Table 8–1: The list of the data transfer management command

No	Function	Command	Explanation	Refer to
1	Message Box list acquisition	DWClientUtil.bat △ GETOUTBOX	Acquire the list of delivery of Out-box.	*8.3.2(1) Out-box list acquisition*
2		DWClientUtil.bat △ GETINBOX	Acquire the list of delivery of In-box.	*8.3.2(2) In-box list acquisition*
3	Delivery cancellation	DWClientUtil.bat △ CANCEL	Cancel the executing transmission and reception.	*8.3.2(3) Delivery cancellation*
4	Delivery deletion	DWClientUtil.bat △ DELETEDELIVERY	Specify specific delivery which transmission completed and delete it.	*8.3.2(4) Delivery deletion*

> **Note:**
>
> When you carry out the data transfer management command (DWClientUtil.bat) to 10-10-03 or less Japanese version Data Highway - Server, the command becomes an error.

(1) Out-box list acquisition

Acquire the list of delivery of Out-box and output it to the execution result file. In the following cases etc, this is used.

1. When you confirm the situation of delivery (transmitting) with status of delivery.

2. When you identify delivery ID to appoint in "delivery cancellation" command or "delivery deletion" command.

(a) Format

```
DWClientUtil.bat △ GETOUTBOX
   [ △ -recieverid △ the user ID of the address for delivery | -receivermail △
the email address of the user of the address for delivery]
   [ △ -detail]
   [ △ -inprogress]
   △ -fromdate △ the start date to acquire information of deliveries
   △ -todate △ the end date to acquire information of deliveries
   △ -result △ the path of the execution result file
   △ -property △ the path of the Command Property File
```

(b) Argument

Table 8–2: The argument of Out-box list acquisition

No	Option	Explanation
1	-receiverid	When you acquire delivery in Out-box, you appoint the user ID of the address for delivery that you want to limit. When you specify an unregistered user, you specify "anonymous".
		When this option is omitted, all delivery that the execution user (the user who was listed in the property file which you appointed with -property option) of this command delivered becomes a target of the acquisition. This includes the delivery to unregistered address.
		-receivermail options and this can't be specified at the same time.

No	Option	Explanation
2	-receivermail	When you acquire delivery in Out-box, you appoint the email address of the user of the address for delivery that you want to limit. You can also specify an unregistered user. When this option is omitted, all delivery that the execution user (the user who was listed in the property file which you appointed with -property option) of this command delivered becomes a target of the acquisition. This includes the delivery to unregistered address. -receiverid options and this can't be specified at the same time.
3	-detail	You acquire detailed information. File information is included in detailed information in addition to the delivery information. When this option is omitted, you acquire the information that does not contain the file information.
4	-inprogress	Acquire only delivery of "The transfer is proceeding". "The transfer is proceeding" is "being forwarded" and "suspended", and "not approved" does not include it. When this option is omitted, all delivery that the execution user (the user who was listed in the property file which you appointed with -property option) of this command delivered becomes a target of the acquisition.
5	-fromdate	When you acquire delivery, you appoint the creation date of delivery (create-date) [#] that you limit. You specify the starting date of the period when you want to acquire delivery, in the form of Data Highway - Server local thyme and YYYY/MM/DD.
6	-todate	When you acquire delivery, you appoint the creation date of delivery (create-date) [#] that you limit. You specify the ending date of the period when you want to acquire delivery, in the form of Data Highway - Server local thyme and YYYY/MM/DD. The delivery information outputted contains the specified date.
7	-result	Specify the path of the execution result file. The file is outputted in XML format.
8	-property	Refer to *8.3.1(2) Common options*.

\#

The creation date of delivery is the day when the user started transmission.

(c) Description

(i) When you specify -detail option

The format of the execution result file which is outputted when you specify -detail option is specified is as follows.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<data>
    <deliveries>
        <delivery id="154" send-status="on-approving" create-
date="2014/07/29 11:40" send-date="" shelf-life-time="2014/08/29 23:59"
subject="XX development project" message="I send the documents." total-
size="2364662">
            <sender id="user1@domain1" email="user1@domain1.co.jp">
                <files>
                    <file id="130" type="file" name="XX_Report.doc"
size="266752"/>
                    <file id="131" type="file"
name="set_of_XX_development_documents.zip" size="2097910"/>
                </files>
            </sender>
            <receivers>
                <receiver id="user2@domain1" to-type="TO" url="https://
jp1dhserver.co.jp/receipt.jspx?servlet-
```

```
action=receipt&amp;id=389&amp;cc=8014d12f457e410b09bffdfbd629dcc821d2896e"
 email="user2@domain1.co.jp">
                            <files>
                                <file id="130" download-date=""/>
                                <file id="131" download-date=""/>
                            </files>
                    </receiver>
                </receivers>
                <approvers>
                    <approver email="approver01@domain1.co.jp"
id="approver01@domain1"/>
                </approvers>
            </delivery>
        </deliveries>
</data>
```

(ii)When you do not specify -detail option

The format of the execution result file which is outputted when you do not specify -detail option is specified is as follows. Unlike the case where -detail option is specified, file Element, approvers Element, and message Attribute are not outputted. In addition, the receiver information outputs only the email address.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<data>
    <deliveries>
        <delivery id="154" send-status="on-approving" create-
date="2014/07/29 11:40" send-date="" shelf-life-time="2014/08/29 23:59"
subject="XX development project" total-size="2364662">
            <sender id="user1@domain1" email="user1@domain1.co.jp"/>
            <receivers>
                <receiver email="user2@domain1.co.jp"/>
            </receivers>
        </delivery>
    </deliveries>
</data>
```

(iii)Details of the execution result file format

The meanings of the elements which are outputted to the delivery information file are as follows. In addition, the special symbol in XML is transposed to the entity reference (escape character) and outputted.

Table 8–3: The meanings of the elements of the execution result file

Element/Attribute			Number	Explanation
data/deliveries Element			1	It is always outputted.
	delivery Element		n	The delivery information tag.
		id Attribute	1	Delivery ID is outputted. It is used to identify delivery.
		send-status Attribute	1	The status of the delivery is outputted. in-progress : The transfer is proceeding failed : The transfer is failed suspended : The transfer is suspended on-approving : The transfer is not approved rejected : The transfer is not denied completed : The transfer is already sent

Element/Attribute				Number	Explanation
		create-date Attribute		1	The creation date-time of delivery is outputted.
		send-date Attribute		1	The sending date-time of delivery is outputted. In the case of unapproved, it is not output.
		subject Attribute		1	The subject of the delivery is outputted.
		message Attribute		1	The input message of the sender outputted.
		shelf-life-time Attribute		1	The storage expiry date is outputted.
		total-size Attribute		1	Total data size is outputted with a number of bytes.
		sender Element		1	The sender information tag.
			id Attribute	1	The sender's user ID is outputted.
			email Attribute	1	The sender's email address is outputted.
			files Element	1	The send file/folder information tag.
			file Element	n	The send file/folder information tag of the send file/folder unit.
			id Attribute	1	ID of the send file/folder is outputted.
			type Attribute	1	The type of the file/folder is outputted. • File : "file" • Folder : "folder"
			name Attribute	1	The name of the file/folder is outputted.
			size Attribute	1	The size of the file/folder is outputted with a number of bytes.
		receivers Element		1	The receiver information tag.
			receiver Element	n	The receiver is outputted. When two or more receivers exist in delivery, all the receivers that exist in delivery are outputted. Also when -receiverid option is used, all the receivers are outputted.
			id Attribute	1	The receiver's user ID is outputted.
			url Attribute	1	"URL for opening delivery" of the recipient outputs it.
			to-type Attribute	1	The receiver's address type (TO|CC|BCC) is outputted.
			email Attribute	1	The receiver's email address is outputted.
			files Element	1	The receive file/folder information tag.
			file Element	n	The receive file/folder information tag of the receive file/folder unit.
			id Attribute	1	ID of the file/folder is outputted.
			download-date Attribute	1	The date which downloaded the file/folder is outputted.
		approvers Element		1	The approver information tag (when there is no approver this tag is not outputted).
			approver Element	n	The approver information tag of the approver unit.
			id Attribute	1	The approver's user ID is outputted.
			email Attribute	1	The approver's email address is outputted.

(d) The example for execution

```
DWClientUtil.bat GETOUTBOX
 -fromdate "2014/06/01"
 -todate "2014/06/30"
 -result "C:\DWCLient\OUTBOX-result.xml"
 -property "C:\DWCLient\property.xml"
```

(2) In-box list acquisition

Acquire the list of delivery of In-box and output it to the execution result file. In the following cases etc, this is used.

1. When you confirm the situation of delivery (reception) with status of delivery.

2. When you identify delivery ID to appoint in "the receiving files".

(a) Format

```
DWClientUtil.bat △ GETINBOX
   [ △ - senderid △ the user ID of the sender | - sendermail △  the email
address of the user of the sender]
   [ △ -detail]
   [ △ -inprogress]
   △ -fromdate △ the start date to acquire information of deliveries
   △ -todate △ the end date to acquire information of deliveries
   △ -result △ the path of the execution result file
   △ -property △ the path of the Command Property File
```

(b) Argument

Table 8–4: The argument of In-box list acquisition

No	Option	Explanation
1	-senderid	When you acquire delivery in In-box, you appoint the user ID of the sender user that you want to limit. When this option is omitted, all send user becomes a target of the acquisition. -sendermail options and this can't be specified at the same time.
2	-sendermail	When you acquire delivery in In-box, you appoint the email address of the sender user that you want to limit. When this option is omitted, all sender user becomes a target of the acquisition. -senderid options and this can't be specified at the same time.
3	-detail	You acquire detailed information. File information is included in detailed information in addition to the delivery information. When this option is omitted, you acquire the information that does not contain the file information.
4	-inprogress	You acquire unreceived delivery. When this option is omitted, you acquire all delivery to the execution user. Unreceived delivery here points out not delivery which is not written in the Received List File, but delivery to which the reception record of the applicable user does not exist in Data Highway - Server side.
5	-fromdate	When you acquire delivery, you appoint the send date of delivery (send-date) that you limit. You specify the starting date of the period when you want to acquire delivery, in the form of Data Highway - Server local thyme and YYYY/MM/DD.

No	Option	Explanation
6	-todate	When you acquire delivery, you appoint the send date of delivery (send-date) that you limit. You specify the ending date of the period when you want to acquire delivery, in the form of Data Highway - Server local thyme and YYYY/MM/DD. The delivery information outputted contains the specified date.
7	-result	Specify the path of the execution result file. The file is outputted in XML format.
8	-property	Refer to *8.3.1(2) Common options*.

(c) Description

(i) When you specify -detail option

The format of the execution result file which is outputted when you specify -detail option is specified is as follows.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<data>
    <deliveries>
        <delivery id="154" download-status="downloaded" send-
date="2014/07/29 11:43" shelf-life-time="2014/08/29 23:59" subject="XX
development project" total-size="2364662">
            <sender id="user1@domain1" email="user1@domain1.co.jp">
                <files>
                    <file id="130" type="file" name="XX_Report.doc"
size="266752"/>
                    <file id="131" type="file"
name="set_of_XX_development_documents.zip" size="2097910"/>
                </files>
            </sender>
            <message>I send the documents.</message>
        </delivery>
    </deliveries>
</data>
```

(ii) When you do not specify -detail option

The format of the execution result file which is outputted when you do not specify -detail option is specified is as follows. Unlike the case where -detail option is specified, file Element, message Attribute, and total-size Attribute are not outputted.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<data>
    <deliveries>
        <delivery id="154" download-status="downloaded" send-
date="2014/07/29 11:43" shelf-life-time="2014/08/29 23:59" subject="XX
development project">
            <sender id="user1@domain1" email="user1@domain1.co.jp"/>
        </delivery>
    </deliveries>
</data>
```

(iii) Details of the execution result file format

The meanings of the elements which are outputted to the delivery information file are as follows. In addition, the special symbol in XML is transposed to the entity reference (escape character) and outputted.

Table 8–5: The meanings of the elements of the execution result file

Element/Attribute	Number	Explanation
data Element	n	It is always outputted.
delivery Element	n	Delivery information tag of delivery unit.
id Attribute	1	Delivery ID is outputted. It is used to identify delivery.
download-status Attribute	1	The status of the delivery is outputted. not-opened : The delivery is not opened opened : The delivery is opened downloaded : The delivery is downloaded files
send-date Attribute	1	The sending date-time is outputted.
shelf-life-time Attribute	1	The storage expiry date is outputted.
subject Attribute	1	The subject of the delivery is outputted.
total-size Attribute	1	Total data size is outputted with a number of bytes.
sender Element	1	The sender information tag.
id Attribute	1	The sender's user ID is outputted.
email Attribute	1	The sender's email address is outputted.
files Element	1	The send file/folder information tag.
file Element	n	The send file/folder information tag of the send file/folder unit.
id Attribute	1	ID of the file/folder is outputted.
type Attribute	1	The type of the file/folder is outputted. • File : "file" • Folder : "folder"
name Attribute	1	The name of the file/folder is outputted.
size Attribute	1	The size of the file/folder is outputted with a number of bytes.
message Attribute	1	The input message of the sender outputted.

Note:
- When the sender's user is deleted, the attribute which shows an applicable user's information may not be outputted.

(d) The example for execution

```
DWClientUtil.bat GETINBOX
  -fromdate "2014/06/01"
  -todate "2014/06/30"
  -result "C:\DWCLient\INBOX-result.xml"
  -property "C:\DWCLient\property.xml"
```

(3) Delivery cancellation

Target specific delivery by specifying delivery ID and cancel the executing delivery (sending files/receiving files).

(a) Format

```
DWClientUtil.bat △ CANCEL
    [ △ -deliveryid △ delivery ID]
    △ -property △ the path of the Command Property File
```

(b) Argument

Table 8–6: The argument of delivery cancellation

No	Option	Explanation
1	-deliveryid	You appoint delivery ID of the delivery that you want to cancel. The number of delivery ID which can be specified is one. You cannot appoint plural delivery ID. You acquire delivery ID to appoint in this option using Out-box list acquisition (GETOUTBOX) or In-box list acquisition (GETINBOX) of the data transfer management command.
		When this option is omitted, all the sending/receiving that the execution user (the user who was listed in the property file which you appointed with -property option) of this command delivered becomes a target of the cancellation.
2	-property	Refer to *8.3.1(2) Common options*.

(c) Description

(i)Precondition

When you cancel the delivery using this function, the execution user of transfer specified by delivery ID needs to be the same user as the execution user (the user who was listed in the property file which you appointed with -property option) of this command. When it is not the same user, it becomes the error.

When the user ID is the same, the execution terminal of the sending/receiving command and the execution terminal of the delivery cancellation command do not need to be the same.

> **Note:**
> - The delivery which carried out delivery cancellation cannot be resumed.
> - If delivery cancellation which omitted delivery ID during execution of the sending/receiving command is performed, an error may occur. In this case, please perform delivery cancellation again.

(4) Delivery deletion

Target specific delivery by specifying delivery ID and delete delivery which transmission completed.

For example, when you delete the transmission data which you delivered by mistake, you use this.

(a) Format

```
DWClientUtil.bat △ DELETEDELIVERY
    [ △ -deliveryid △ delivery ID]
    △ -property △ the path of the Command Property File
```

(b) Argument

Table 8–7: The argument of delivery deletion

No	Option	Explanation
1	-deliveryid	You appoint delivery ID of the delivery that you want to delete. The number of delivery ID which can be specified is one. You cannot appoint plural delivery ID. You acquire delivery ID to appoint

No	Option	Explanation
1	-deliveryid	in this option using Out-box list acquisition (GETOUTBOX) of the data transfer management command.
2	-property	Refer to *8.3.1(2) Common options*.

(c) Description

(i)Precondition

When you delete the delivery using this function, the delivery specified by delivery ID needs to be the same user as the execution user (the user who was listed in the property file which you appointed with -property option) of this command. When it is not the same user, it becomes the error.

When the user ID is the same, the execution terminal of the sending files command and the execution terminal of the delivery deletion command do not need to be the same.

> **Note:**
> - When Data Highway - Server is the Windows version, in the middle of the downloading, you can't delete the delivery. When Data Highway - Server is the Linux version, in the middle of the downloading, you can delete the delivery, but the downloading is continued.
> - When delivery ID does not exist or when there isn't authority to delete delivery of specified delivery ID, it becomes the error.

8.4 Troubleshooting of the data transfer management command

The solution of troubles which are occurred when the data transfer management command is used is as follows.

8.4.1 FAQ of the data transfer management command

FAQ of the data transfer management command is the same as the data transfer command. Refer to *7.4.1 FAQ of the data transfer command*.

8.4.2 Messages of the data transfer management command

Messages of the data transfer management command has message in common with the data transfer command, and peculiar messages of the data transfer management command. For more information about common messages see *7.4.2 Messages of the data transfer command*.

The list of peculiar messages of the data transfer management command is as follows.

Table 8–8: The list of messages

Message ID	Message contents	Explanation
DWCO1732_E	The specified date is wrong.(Date:{0})	Check that the form of the date is YYYY/MM/DD, or that the date is right. Date is outputted to {0} parameter.
DWCO1801_I	Got information of deliveries.	Notify that the acquisition of information of deliveries was successful.
DWCO1802_E	Failed to get information of deliveries. (Details: {0})	Failed to get information of deliveries. Refer to the details reason, improve the setting, and perform again. The Details reason is outputted to {0} parameter.
DWCO1803_E	Failed to output information of deliveries to a XML file. (Path:{0})	Check the command has the permission to write the specified file. Pass of a XML file is outputted to {0} parameter.
DWCO1841_I	Deleted a delivery.(Delivery ID:{0})	Notify that the deletion of a delivery was successful. Delivery ID is outputted to {0} parameter.
DWCO1843_E	Failed to delete a delivery. It might be caused by the following reasons. The delivery is sending or downloading. (Delivery ID:{0}, Details:{1})	Notify that the deletion of a delivery was failed. The following contents are outputted for each parameter. {0} : Delivery ID {1} : The Details reason
DWCO2005_W	Running transfers of files do not exist.	Notify that the running transfers of files did not exist.
DWCO2006_W	Running transfers of files do not exist. (Delivery ID:{0})	Notify that the running transfers of files did not exist with the specified delivery ID. Delivery ID is outputted to {0} parameter.
DWCO2009_E	The specified delivery was not exist. (Delivery ID:{0})	Notify that the specified delivery did not exist. Check that the specified delivery ID is right. Delivery ID is outputted to {0} parameter.
DWCO2022_I	Canceled running transfers of files. (Delivery ID: {0})	Notify that the canceled running transfers of files. Delivery ID is outputted to {0} parameter.

Message ID	Message contents	Explanation
DWCO2025_I	The specified delivery has already cancelled. (Delivery ID:{0})	Notify that the delivery that you are trying to cancel has been already cancelled. Delivery ID is outputted to {0} parameter.
DWCO2026_E	Failed to cancel the specified delivery because it has already suspended. (Delivery ID:{0})	Cannot cancel delivery that became the suspended state. Delivery ID is outputted to {0} parameter.
DWCO2027_E	The specified delivery cannot be cancelled. (Delivery ID:{0})	Cannot cancel except delivery which self transmitted. Delivery ID is outputted to {0} parameter.

8. The data transfer management command

Appendix

A. List of Files and Folders

The appendix lists the names of the files and folders for JP1/DH - AJE.

A.1 List of Files and Folders JP1/DH - AJE (Job Definition)

The following table shows list of files and folders of JP1/DH - AJE (Job Definition).

Table A–1: List of Files and Folders for JP1/DH - AJE (Job Definition)

File name/Folder name	Contents
Installation folder of JP1/DH - AJE (Job Definition)	Program installation folder
`\bin`	Storage folder of program files
dhajed.exe	Program file for starting JP1/DH - AJE (Job Definition) program
`\csmi`	Storage folder of program files that used by system.
`*`	Program files that used by system
`\custom`	Storage folder of the Custom job icon
CUSTOM_PC_DHAJEW.gif	Custom job icon for Windows
CUSTOM_PC_DHAJEL.gif	Custom job icon for Linux
`\lib`	Storage folder of library files
dhajed.jar	Program file of JP1/DH - AJE (Job Definition)
messages.properties	Message file(Japanese)
message_en.properties	Message file(English)
`\log`	Storage folder of log file[#1]
`\mmap`	Management folder for operation log files
dhajed_information[x].log	Operation log files
`\settings`	Storage folder of setting files
config.xml	Environment configuration file
config.xml.template	Template file of Environment configuration file
readme.txt	Readme file
`\patch_backup_dir`	Patch backup folder
`*`	Patch backup files
PATCHLOG.TXT	Patch log file
`%ALLUsersProfile%\Hitachi\jp1\jp1_default\JP1DH \AJE\AJED\log`	Storage folder of log file[#2]
`\mmap`	Management folder for operation log files
dhajed_information[x].log	Operation log files

#1:
　　　When you use JP1/DH - AJE (Job Definition) on Windows XP, this folder will be default of storage folder of log file.

#2:
    When you use JP1/DH - AJE (Job Definition) on other than Windows XP, this folder will be default of storage folder of log file.
    %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

A.2 List of Files and Folders JP1/DH - AJE (Job Execution) for Windows

The following table shows list of files and folders of JP1/DH - AJE (Job Execution).

Table A–2: List of Files and Folders for JP1/DH - AJE(Job Execution)

File name/Folder name	Contents
Installation folder of JP1/DH - AJE (Job Execution)	Program installation folder
\bin	Storage folder of program files
dhajee.exe	Program file for starting JP1/DH - AJE (Job Execution) program
\DWClient	Storage folder of the data transfer command files
Const.properties	The environmental configuration file of the data transfer command
Const.properties.template	The template file of the environmental configuration file of the data transfer command
DWClient.bat	The data transfer command
DWClientUtil.bat	The data transfer management command
property.xml	Sample file of command property file
*	Program files that used by system (Not publication)
\csmi	Storage folder of library files that used by system
*	Library files that used by system
\lib	Storage folder of library files
dhajee.jar	Program file of JP1/DH - AJE (Job Execution)
messages. properties	Message file(Japanese)
messages_en. properties	Message file(English)
\settings	Storage folder of setting files
config.xml	Environment configuration file
config.xml.template	Template file of Environment configuration file
\recvlist	Storage folder of program files that used by system
recvuserlist.xml	A file that used by system
recvuserlist.xml.lck	A lock file that used by system
\list	Storage folder of program files that used by system
receivedlist_<UUID>.txt	A file that used by system
\tools	Storage folder of batch file for collecting information
dhaje_log.bat	The information collection tool
dhaje_log.bat.template	Template file of the information collection tool

File name/Folder name			Contents
\work			Work folder
		*	A file that used by system
\Definition			Storage folder of the installer file of JP1/DH - AJE (Job Definition).
		setup.exe	The installer file of JP1/DH - AJE (Job Definition).
readme.txt			Readme file
\patch_backup_dir			Patch backup folder(#1)
		*	Patch backup file(#1)
PATCHLOG.TXT			Patch log file(#1)
%ALLUsersProfile%\Hitachi\jp1\jp1_default \JP1DH\AJE\AJEE\log			Storage folder of log file(#2)
		\mmap	Management folder for operation log files
		dhajee_information[x].log	Operation log files

#1
    They are files/folder made at the time of a patch program application of JP1/DH - AJE.

#2
    %AllUsersProfile% shows the environment variable of the Windows (Common data storage folder for all users).

A.3 List of Files and Folders JP1/DH - AJE (Job Execution) for Linux

The following table shows list of files and folders of JP1/DH - AJE (Job Execution).

Table A–3: List of Files and Folders for JP1/DH - AJE(Job Execution)

File name/Folder name			Contents
/opt/jp1dh/aje/ajee			Program installation folder
\bin			Storage folder of program files
		dhajee.sh	Program file for starting JP1/DH - AJE (Job Execution) program
	\DWClient		Storage folder of the data transfer command files
		Const.properties	The environmental configuration file of the data transfer command
		Const.properties.template	The template file of the environmental configuration file of the data transfer command
		DWClient.bat	The data transfer command
		DWClientUtil.sh	The data transfer management command
		property.xml	Sample file of command property file
		*	Program files that used by system (Not publication)
\csmi			Storage folder of library files that used by system
		*	Library files that used by system
\lib			Storage folder of library files
		dhajee.jar	Program file of JP1/DH - AJE (Job Execution)

File name/Folder name				Contents
		messageslin. properties		Message file(Japanese)
		messageslin_en. properties		Message file(English)
	\settings			Storage folder of setting files
		config.xml		Environment configuration file
		config.xml.template		Template file of Environment configuration file
	\recvlist			Storage folder of program files that used by system
		recvuserlist.xml		A file that used by system
		recvuserlist.xml.lck		A lock file that used by system
		\list		Storage folder of program files that used by system
			receivedlist_<UUID>.txt	A file that used by system
	\tools			Storage folder of batch file for collecting information
		dhaje_log.sh		The information collection tool
		dhaje_log.sh.template		Template file of the information collection tool
	\work			Work folder
		*		A file that used by system
	\Definition			Storage folder of the installer file of JP1/DH - AJE (Job Definition).
		setup.exe		The installer file of JP1/DH - AJE (Job Definition).
	dhajee_version.dat			Version information management file
/var/opt/jp1dh/aje/ajee				Storage folder of log/patch file
	/log			Storage folder of log file
		\mmap		Management folder for operation log files
		dhajee_information[x].log		Operation log files
	/patch_backup_dir			Patch backup folder(#1)
		*		Patch backup file(#1)
	update.log			Patch log file(#1)
	patch_history			Patch history file(#1)

#1
    They are files/folder made at the time of a patch program application of JP1/DH - AJE.

B. Version Revisions

B.1 Revisions in 10-10

- The following OSs were added to the supported OSs:
  - Windows 8
  - Windows 8.1
  - Windows Server 2012
  - Windows Server 2012 R2
  - Linux
- When you use Job execution program, the plug in (JRE6.0, JDK6.0) that was the premise product on the same device became needless.
- The data transfer command which performs Data Highway - Server and direct data transmission was supported.
- Notes for the overwrite installation was added a postscript.
- The address of the transmission came to be able to appoint a group name.
- At the time of cooperation with Data Highway - Server 10-10, when transfer stopped it for communication errors and so on, the function that can reopen halfway without starting transfer again from the beginning was supported.
- At the time of cooperation with Data Highway - Server 10-10, the function to reopen suspended data transmission was supported.

C. Related information of this manual

This appendix describes related information for reading this manual.

C.1 Related publications

This manual related to some manuals that listed below. Refer to these manuals as you need.

In addition, the systems of the manual are different by the version of related product.

Interpret it for a manual depending on a using version.

About Data Highway - Server

Job Management Partner 1 Version 10 Job Management Partner 1/Data Highway - Server Configuration and Administration Guide (3021-3-358(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Data Highway - Server System Administrator Guide (3021-3-359(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Data Highway - Server User's Guide (3021-3-361(E))

About JP1/AJS3

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Overview (3021-3-318(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide (3021-3-319(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide (3021-3-320(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1 (3021-3-321(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2 (3021-3-322(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Administration Guide (3021-3-323(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Troubleshooting (3021-3-324(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Operator's Guide (3021-3-325(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Command Reference 1 (3021-3-326(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Command Reference 2 (3021-3-327(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Linkage Guide (3021-3-328(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Messages 1 (3021-3-329(E))

Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Messages 2 (3021-3-330(E))

About JP1/Base

　　Job Management Partner 1 Version 10 Job Management Partner 1/Base User's Guide (3021-3-301(E))

　　Job Management Partner 1 Version 10 Job Management Partner 1/Base Messages (3021-3-302(E))

　　Job Management Partner 1 Version 10 Job Management Partner 1/Base Function Reference (3021-3-303(E))

C.2 Conventions: Abbreviations

This manual uses following abbreviations for product names.

But, the full name or meaning is used if necessary.

Abbreviation		Full name or meaning
JP1/AJS3	JP1/AJS3 - Agent	Job Management Partner 1/Automatic Job Management System 3 - Agent
	JP1/AJS3 - Manager	Job Management Partner 1/Automatic Job Management System 3 - Manager
	JP1/AJS3 - View	Job Management Partner 1/Automatic Job Management System 3 - View
JP1/Base		Job Management Partner 1/Base
JP1/DH		Job Management Partner 1/Data Highway
JP1/DH - AJE		Job Management Partner 1/Data Highway - Automatic Job Executor
JP1/DH - Server		Job Management Partner 1/Data Highway - Server

C.3 Conventions: Using abbreviations

This manual uses the following abbreviations:

Abbreviation	Full name or meaning
CSV	Comma Separated Values
FAQ	Frequently Asked Question
GUI	Graphical User Interface
HTTP	HyperText Transfer Protocol
HTTPS	HyperText Transfer Protocol over Secure Socket Layer
ID	Identification Data
Java VM	Java Virtual Machine
LAN	Local Area Network
OS	Operating System
PC	Personal Computer
UAC	User Account Control
UNC	Universal Naming Convention
URL	Uniform Resource Locator
WOW64	Windows On Windows 64

Abbreviation	Full name or meaning
XML	eXtensible Markup Language

C.4 Conventions: Meaning of "Administrators permissions"

In this manual, Administrators permissions refer to Administrators permissions for the local PC. The local user, domain user, or user of the Active Directory environment can perform tasks requiring Administrators permissions if granted Administrators permissions for the local PC.

C.5 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.

D. Glossary

(A)

Authentication system

A manage the information of "authentication system" to login Data Highway - Server.

There are "standard authentication system" and "LDAP authentication system" in "authentication system".

(C)

Custom job

A predefined job for executing a task with a specific purpose. JP1/AJS3 provides standard custom jobs such as file transfer and job requests to a mainframe. In addition, you can register your own frequently used jobs as custom jobs. When registering a custom job, you can represent it by creating an icon with a special shape and design, and you can create a dialog box for entering job information.

To use a custom job, the requisite program for the job must be installed.

(D)

Data Highway - Server

A product that performs high speed and large size file transfer via internet.

Delivery

In this manual, "Delivery" is used to indicate that Data Highway - Server transmits and receives messages and files.

Delivery ID

It is ID for specifying uniquely the transmission and reception data which Data Highway - Server manages. It is used when operating specific data by the data transfer command or the data transfer management command.

Delivery policy

The rule for sending files or folders on "Data Highway - Server". For example, the maximum size of file or the delivery expiration.

DH custom job

A custom job that uploads data to Data Highway - Server or receives data from Data Highway - Server.

(I)

In-box

The reception data to the user whom Data Highway - Server manages.

(J)

Job definition program
A program cooperates with JP1/AJS3 - Manager or JP1/AJS3 - Agent and defines a DH custom job.

Job execution program
A program cooperates with JP1/AJS3 - Manager or JP1/AJS3 - Agent and executes a DH custom job.

JP1/AJS macro variable
A variable defined for a succeeding job for referencing information received in an event. By defining a macro variable name in an event job, you can pass the event information to a succeeding job or jobnet.

Specify macro variables in the form ?AJS2xxxxxxxxx?:name-of-information-to-pass.

(L)

LDAP authentication system
When log in to Data Highway - Server, it is authentication system to authenticate with a directory server.

(O)

Out-box
The data which the user whom Data Highway - Server manages transmitted.

(R)

Receive
In this manual, "Receive" is used to indicate the manipulation of downloading data from "Data Highway - Server".

Receive custom job
A DH custom job that downloads data from Data Highway - Server.

(S)

Send
In this manual, "Send" is used to indicate the manipulation of uploading data to Data Highway - Server.

Send custom job
A DH custom job that uploads data to Data Highway - Server.

Standard authentication system
It is authentication system which is standard when login to Data Highway - Server.

There is two "authentic method"."Login by Password" uses a user ID and a password."Login by Certification" uses an electronic certificate.

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