TD Bridge
Technical Reference Guide
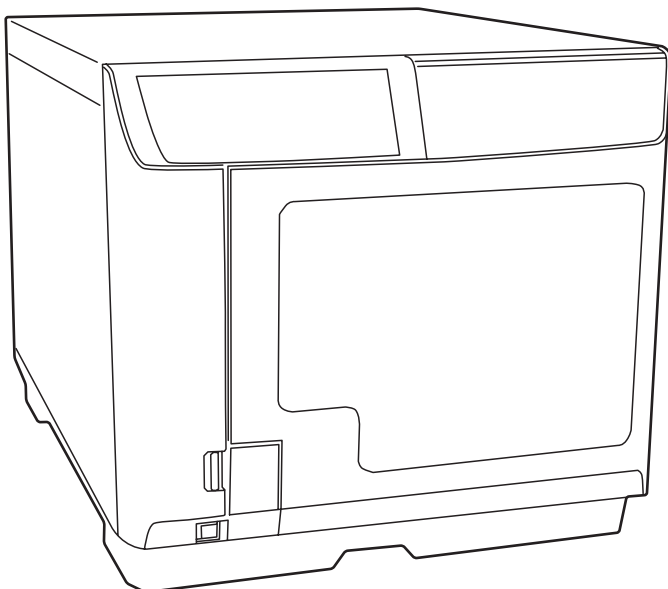
TD Bridge Overview

Install

Setting

Development Guide for a Cooperative Application

Disc producer ™

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About This Guide

Purpose

This guide is aimed to provide necessary information for development engineers who take charge of developing a disc publishing system using PP-100 / PP-100N / PP-100AP.

Contents

This guide consists of the following chapters.

Contents

TD Bridge Overview

This chapter provides an overview of TD Bridge and explains the functions. In addition to that, the following information is provided; system requirements, supported disc types, and system examples using TD Bridge with cooperative applications.

This manual uses "PP-100/N/AP" to collectively indicate the PP-100, PP-100N, and PP-100AP.

What is TD Bridge?

TD Bridge allows you to interface your system to PP-100/N/AP for publishing discs by means of HotFolder method.TD Bridge allows you to publish CD/DVD discs with write data/print data or print only.

You need to develop a cooperative application for controlling TD Bridge. Then you can publish CD/DVD discs directly from your system.

EPSON Total Disk Maker is required for using TD Bridge. See PP-100/N/AP User's Guide for the details of the EPSON Total Disk Maker.

Diagram of Connection

The following shows a diagram of connection in a system that incorporates TD Bridge and a cooperative application.

In this case, the cooperative application is incorporated in an electronic accounting slip system.

Electronic Accounting System

Electronic Accounting Server

Cooperative Application
Accesses to the existing accounting system and creates a file to be burnt onto CDs.

(1) The cooperative application sends job description files (JDF).
(2) TD Bridge creates CD/DVD images and label print data (images, characters) referring to data as instructed by JDF (data volume available to be referred is limited).
(3) Discs are published.

Computer for connecting with PP-100/N/AP. TD Bridge and Total Disc Maker are installed.

Network Connection

USB Connection

Monitoring Folder

Write data and print data are sent to PP-100/N/AP according to the instructions of the JDF file moved into the monitoring folder.

System Conceptual Diagram

Your cooperative application and TD Bridge work together as shown below.

	Your Cooperative Application		
File List	Creates/Gets status	Gets status	Creates/Gets status

In the same computer

Monitoring Folder

Specifying path

Write data ← Specifies → JDF | STF | JCF

Label design

Merge

Merge print data

Reads/Updates status | Updates status | Reads/Updates status

TD Bridge

Total Disc Maker

□ Tasks of the cooperative application
□ Tasks of TD Bridge

PP-100/N/AP

JDF: Job Description File
STF: Status File
JCF: Job Cancel File

System Operation

The following shows the operation flow for publishing discs and operations of a cooperative application and TD Bridge in the case of cancel, pause, and error.

Operation flow for publishing discs

Prepare → Set data → Preprocessing → Starts writing → Check during operation → End

Preparing
Prepare write data and print data, then create JDF file using the cooperative application. (When printing data only, record data is not necessary.)
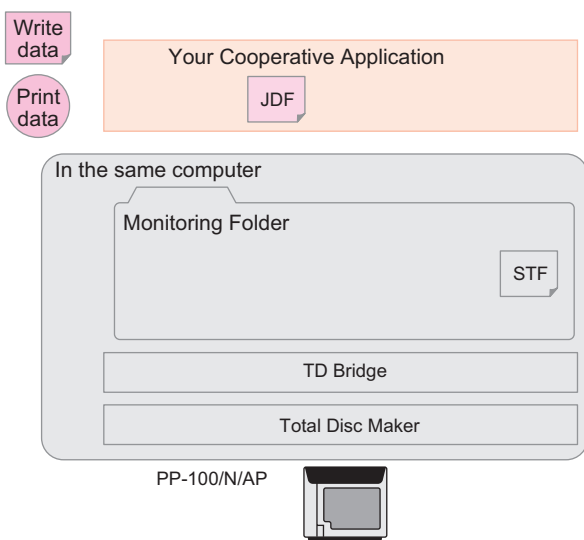
Setting data
Move the JDF file into the folder to monitor.

Write data
Print data

Your Cooperative Application
JDF

In the same computer

Monitoring Folder

STF

TD Bridge

Total Disc Maker

PP-100/N/AP

Write data
Print data

Your Cooperative Application

In the same computer

Monitoring Folder

JDF | STF

TD Bridge

Total Disc Maker

PP-100/N/AP

Prepare ➡ Set data ➡ **Preprocessing** ➡ **Starts writing** ➡ Check during operation ➡ End
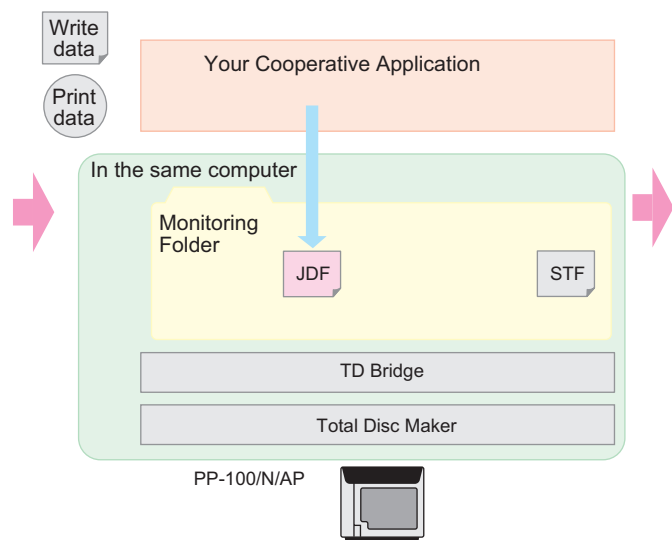
Preprocessing

This is to check if there are discrepancies in the job information, and to create the image data of the disc and send it to the server (*1). Once creating and sending the image file (*1) is completed, its RJD (Received Job Description) file is changed to the INP (IN Progress) file.

(1) TD Bridge keeps monitoring the folder to monitor.
(2) When a JDF file is found in the folder, preprocessing is started.
(3) The JDF file is read and preprocessing is started.
    At this process, the JDF file is changed to RJD (Received Job Description) file.
(4) The RJD file is changed to the INP file.

*1 PP-100N only.

Start writing/printing

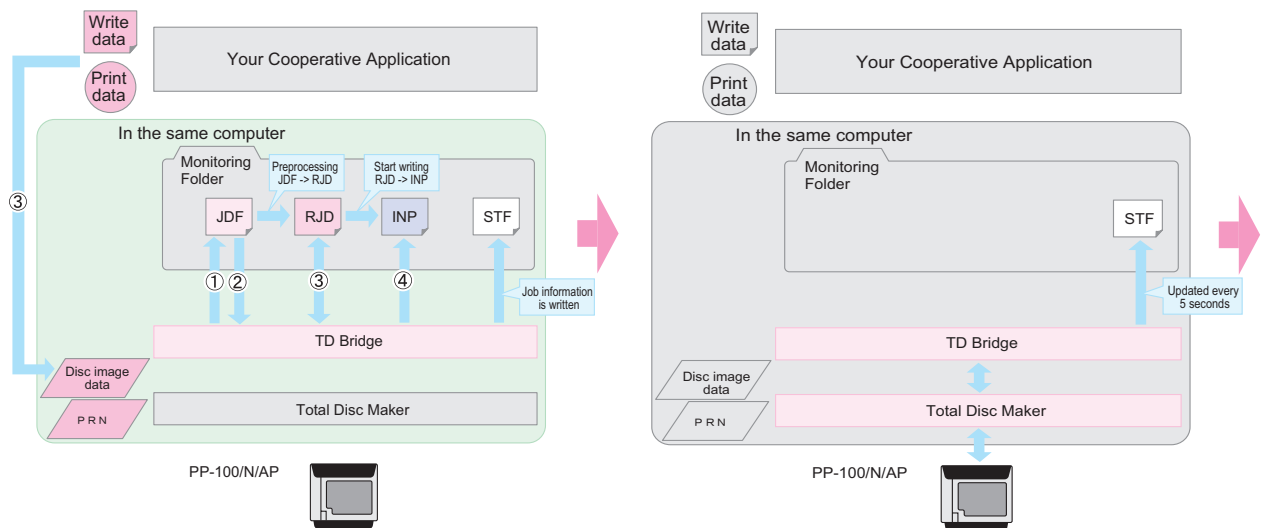After the printer gets ready, writing and printing starts. The job information is written to a STF (STatus File) file.

Prepare ➡ Set data ➡ Preprocessing ➡ Starts writing ➡ **Check during operation** ➡ End
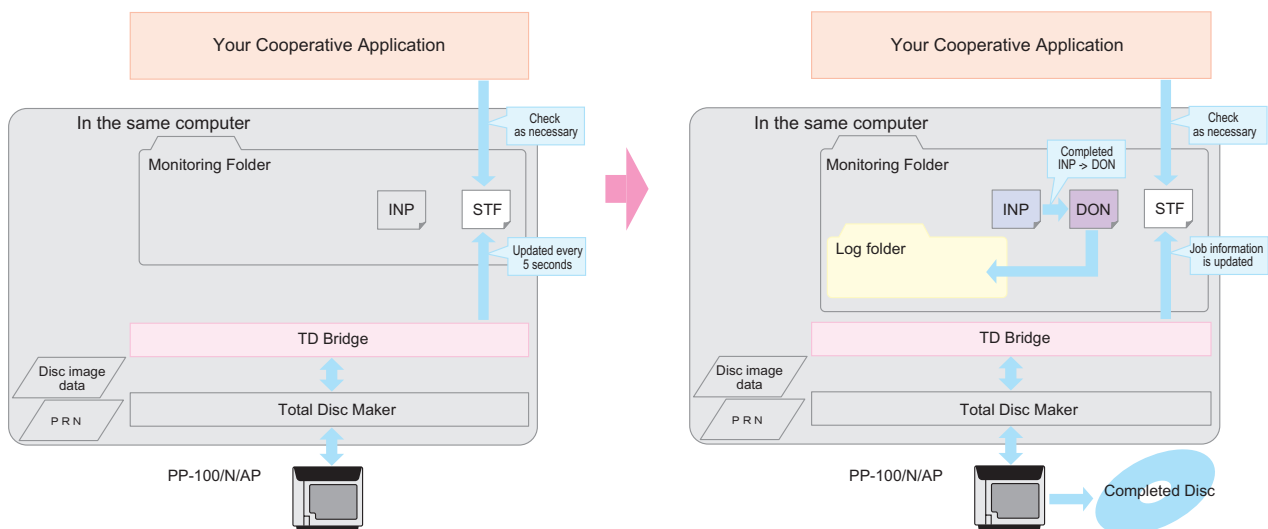
Check during the operation

The STF file is updated every five seconds. The cooperative application checks the STF file as necessary.

Completion of the job

When the disc is published and the job is finished, its INP file is changed to the DON (DONe) file within five seconds. DON file moves to a log folder after one or two hours.

Canceling the job

The following diagram shows the operation sequence when the JCF file is moved to the monitoring folder and then canceled by the cooperative application.
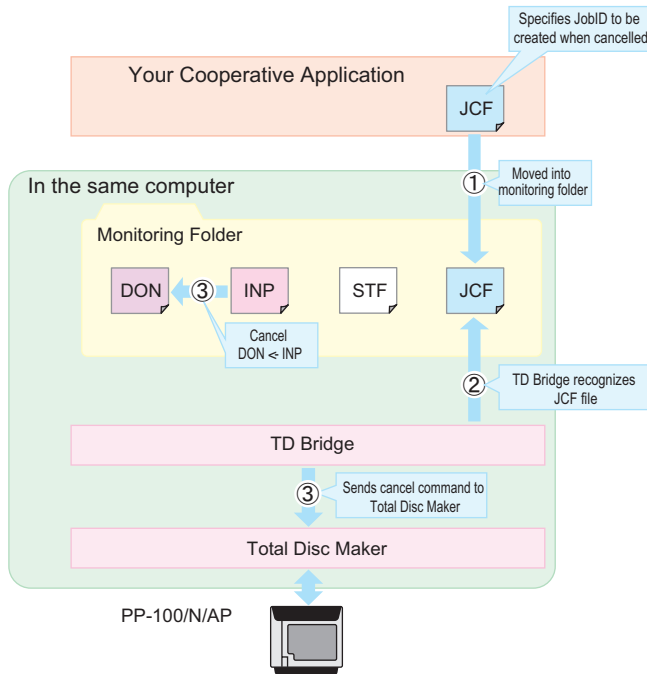
(1) The cooperative application creates a JCF file and moves it to the monitoring folder.
(2) When a JDF file is found in the folder, cancel processing is started.
(3) A cancel command is sent to EPSON Total Disc Maker.
    The INP file in the monitoring folder is changed to DON file.

Pausing the job

The following diagram shows the operation sequence when an event that causes a job to pause occurs, such as cover open on PP-100/N/AP and pause processing by EPSON Total Disc Monitor.
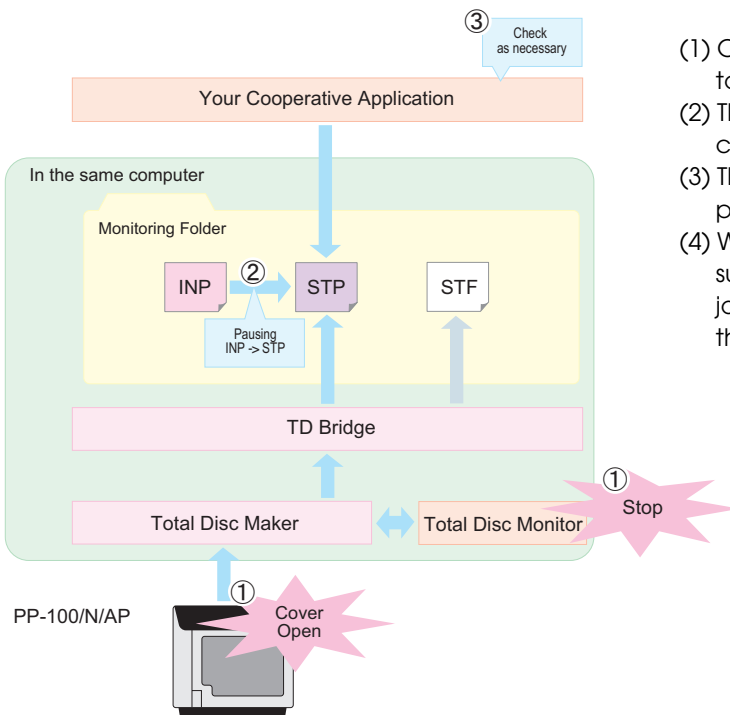
(1) Occurrence of an event that causes a job to pause.
(2) The INP file in the monitoring folder is changed to STP file.
(3) The cooperative application confirms the pause status.
(4) When the cause of the pause is removed, such as PP-100/N/AP cover is closed, or the job is restarted by EPSON Total Disc Monitor, the disc publishing operation is resumed.

Error handling

When an error occurs while checking the RJD file or writing data to a disc, the RJD file or INP file is changed to ERR (ERRor) file. The error code is written to the STF file.

When an error occurs while checking the RJD file or writing/printing data to a disc, the RJD file or INP file is changed to ERR (ERRor) file. The error code is written to the STF file.

In the case of errors during operation, job error information moves to the log folder after one or two hours, and device error information remains in the STF file unless the reason for the error is removed. (For more details on STF file, see .)
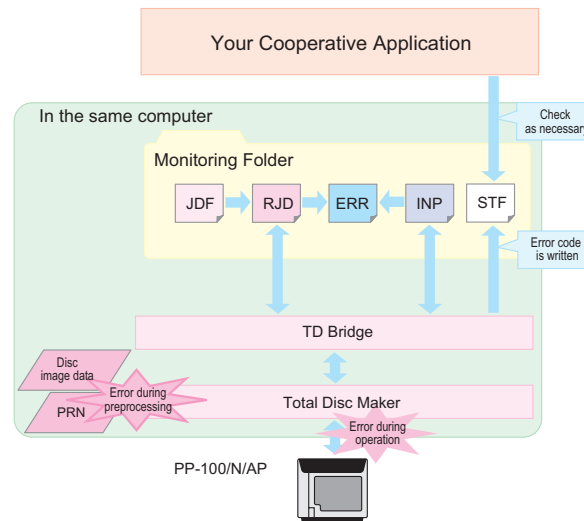
Registering another job during operation

You can register another job during operation. When a JDF file is created and moved to the monitoring folder using the cooperative application, preprocessing is performed and the JDF file is changed to RJD file. Then when the preprocessing is completed, the RJD file is changed to INP file and holds the status until the ongoing job is finished.

Upon completion of the ongoing job, the registered job is automatically started.

When multiple jobs are registered, they are processed in the order of registering. You cannot change the order after registration.
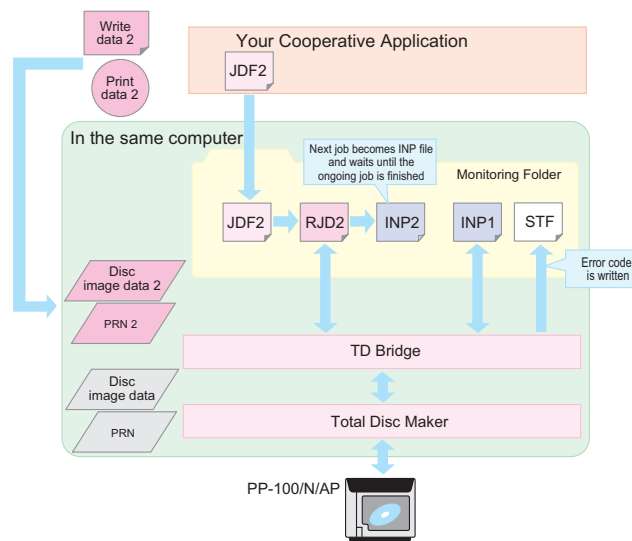
Status Check Method

There are the following three methods to check PP-100/N/AP status.
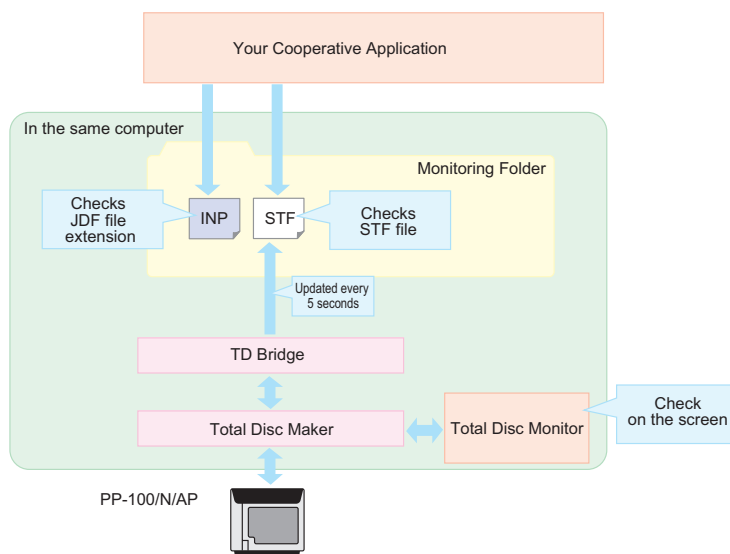
❏ Checking the STF file

- See the STF file using the cooperative application.

- This file contains status information on the job and PP-100/N/AP, and error code issued by the cooperative application. We recommend that you use this file for error handling.

❏ Checking the JDF file extension

- See the JDF file extension using the cooperative application.

- The status of each job can be checked easily.

- The extension of the JDF file changes according to the operation status. Only by checking the extension, you can know the status.

❏ Checking the EPSON Total Disc Monitor screen on the computer

- Activate EPSON Total Disc Monitor on a computer connected to PP-100/N/AP to check the status. This cannot be automated by the cooperative application.

- EPSON Total Disc Monitor allows you to check status of jobs performed directly by EPSON Total Disc Maker in addition to jobs using the cooperative application.

- You cannot see the status information over a network.

System Requirements

The following shows the minimum system requirements for TD Bridge.

Item		Specification
Minimum system requirements	OS	Windows Server 2008 R2 Standard / Enterprise Windows Server 2008 SP2 (32 bit / 64 bit) Standard / Enterprise Windows Server 2003 R2 SP2 32 bit Standard / Enterprise (Supports Windows Server 2003 R2 32bit editions only) Windows Server 2003 SP2 32 bit Standard / Enterprise (Supports Windows Server 2003 32bit editions only) Windows 7 (32 bit / 64 bit) Home Premium / Professional / Enterprise / Ultimate Windows Vista SP1 (32 bit / 64 bit) Home Basic / Home Premium / Business / Enterprise / Ultimate Windows XP SP2 Home Edition / Professional (Supports Windows XP 32bit editions only) Windows 2000 Professional SP4
	CPU	For Windows Server 2008 Pentium 4 2.0 GHz or faster, or an equivalent processor For Windows Server 2003 / Windows 7 / Vista / XP / 2000 Pentium 4 1.4 GHz or faster, or an equivalent processor
	Memory	For Windows Server 2008 / 2003 / Windows 7 (64bit) 2GB or larger For Windows 7 (32bit) / Vista 1GB or larger For Windows XP / 2000 512MB or larger
	HDD capacity	Disc space half as much again as write data size is required. The minimum requirement is 1GB. (7200rpm or faster HDD is recommended)
Software restrictions		EPSON Total Disc Maker Ver 2.00 must be installed on the same computer. The cooperative application does not need to be installed on the same computer. EPSON Total Disc Maker must be used by the user who started TD Bridge.

Number of PP-100/N/AP Units Connectable

Model	No. of units to be connected simultaneously	No. of units to which a job is issued simultaneously	Operation Mode
PP-100	Max. 6 units	Max. 6 units	Standard Mode, External Output Mode, Batch Mode
PP-100N	Max. 10 units	Max. 10 units	Standard Mode, External Output Mode, Batch Mode
PP-100AP	Max. 6 units	Max. 6 units	Standard Mode, External Output Mode, Batch Mode

* One PP-100N can receive jobs from 5 computers at the same time. When a PP-100N receives a job from a sixth computer or more, TD Bridge on each computer keeps retrying the job.

Available Disc Types

The table below shows the available disc types and formats.

Item		Specification
Disc types		CD-R 650MB/700MB
		DVD-R 4.7GB (one side, one layer)
		DVD+R 4.7GB (one side, one layer)
		DVD-R DL 8.5GB (one side, two layers)
		DVD+R DL 8.5GB (one side, two layers)
Disc format	Audio CD	Audio CD
	Data CD	ISO9660 Level 2
		Joliet
		UDF1.0.2
	VideoCD	VideoCD
	Data DVD	UDF1.0.2
		UDF1.0.2 + ISO Bridge
	DVD-Video	DVD-Video

> **NOTE**
>
> See PP-100/N/AP User's Guide for the details of the printable disc types.

System Building Examples

This section provides examples of system using TD Bridge.

System Building Example Using PP-100

Case 1: Hospital

Explanation of the system

Applications location:	The cooperative application, EPSON Total Disc Maker, and TD Bridge are installed on a computer connected to PP-100.
Write/print data location:	The write data (medical record) is stored on the medical system server. The print data (template for merge print) is stored on the computer.
Access right:	The right of access to the data on the medical system server is set on the computer.
Operation of the cooperative application:	Personnel charged with computerizing

Operation scenario

(1) The personnel charged with computerizing receives a commission to copy medical records of a patient to CD.

(2) The personnel operates the cooperative application to issue commands for publishing the CD.

(3) The cooperative application downloads the medical records including radiograph or any other medical pictures from the medical system server.

(4) The cooperative application creates JDF file and data for merge print, and copy or move them to the monitoring folder.

(5) TD Bridge publishes the CD according to instructions of the JDF file. The patient's medical record and pictures are written to CD-R. On the CD-R, the hospital special design is printed merged with the patient's name and the date of the record.

(6) The CD-R is handed to the patient at the reception desk.

Case 2: Photo studio

Explanation of the system

Applications location: EPSON Total Disc Maker and TD Bridge are installed on a computer connected to PP-100. The cooperative application is installed on another computer that controls the photo developing system.

Write/print data location: The write data (customer's photo data) is stored on the computer that controls photo developing system.
Several types of print data (multiple label designs from which the customer can choose) is stored on the computer connected to PP-100.

Access right: The right of access to the photo data on the photo developing control computer is set on the computer connected to PP-100.

Operation of
the cooperative application: Photo studio clerk

Operation scenario

(1) A customer inserts his/her storage medium into the photo print order machine and select photos to be printed and/or copied to a CD.

(2) The clerk operates the photo developing control computer to print the specified photos.

(3) The customer selects a CD label design from the multiple options using the photo print order machine. The machine sends commands to the cooperative application to make a CD.

(4) The cooperative application obtains the paths to the specified photo data, and creates a JDF file.

(5) The cooperative application creates the CD label print data using the selected label design merged with the selected photo.

(6) PP-100 writes selected photo data to a CD.

(7) The created label print image is printed on the CD.

(8) The completed CD is handed to the customer from the clerk.

Case 3: Backup / Archive
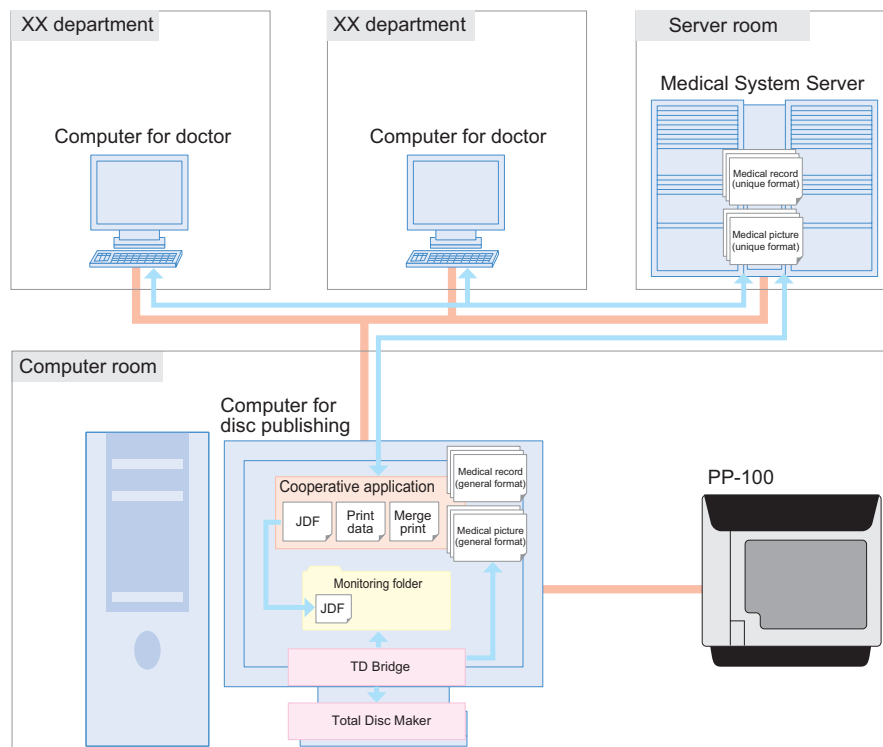
Explanation of the system

Applications location: The cooperative application, EPSON Total Disc Maker, and TD Bridge are
                                  installed on a backup computer connected to PP-100.

Write/print data location: The write data is stored on servers.
                                  The print data is stored on the backup computer.

Access right: The right of access to the data on the server 1, 2, and 3 is set on the backup
                                  computer connected to PP-100.

Operation of
the cooperative application: Automatic operation using the task scheduler (administrator of the servers)

Operation scenario

(1) The cooperative application is activated by the task scheduler and starts backup operation.

(2) The cooperative application calculates the data size and creates a JDF file considering the disc
    configuration.

(3) PP-100 writes the backup data to discs.

(4) The backup date and disc number given in the order of the creation are printed on the CD label.

System Building Example Using PP-100N

Case 4: Hospital

Explanation of the system

Applications location:	The cooperative application, EPSON Total Disc Maker, and TD Bridge are installed on a computer.
Write/print data location:	The write data (medical record) is stored on the medical system server. The print data (template for merge print) is stored on the computer.
Access right:	The right of access to the data on the medical system server is set on the computer.
Operation of the cooperative application:	Personnel charged with computerizing

Operation scenario

(1) The personnel charged with computerizing receives a commission to copy medical records of a patient to CD.

(2) The personnel operates the cooperative application to issue commands for publishing the CD.

(3) The cooperative application downloads the medical records including radiograph or any other medical pictures from the medical system server.

(4) The cooperative application creates JDF file and data for merge print, and copy or move them to the monitoring folder.

(5) TD Bridge publishes the CD according to instructions of the JDF file. The patient's medical record and pictures are written to CD-R. On the CD-R, the hospital special design is printed merged with the patient's name and the date of the record.

(6) The CD-R is handed to the patient at the reception desk.
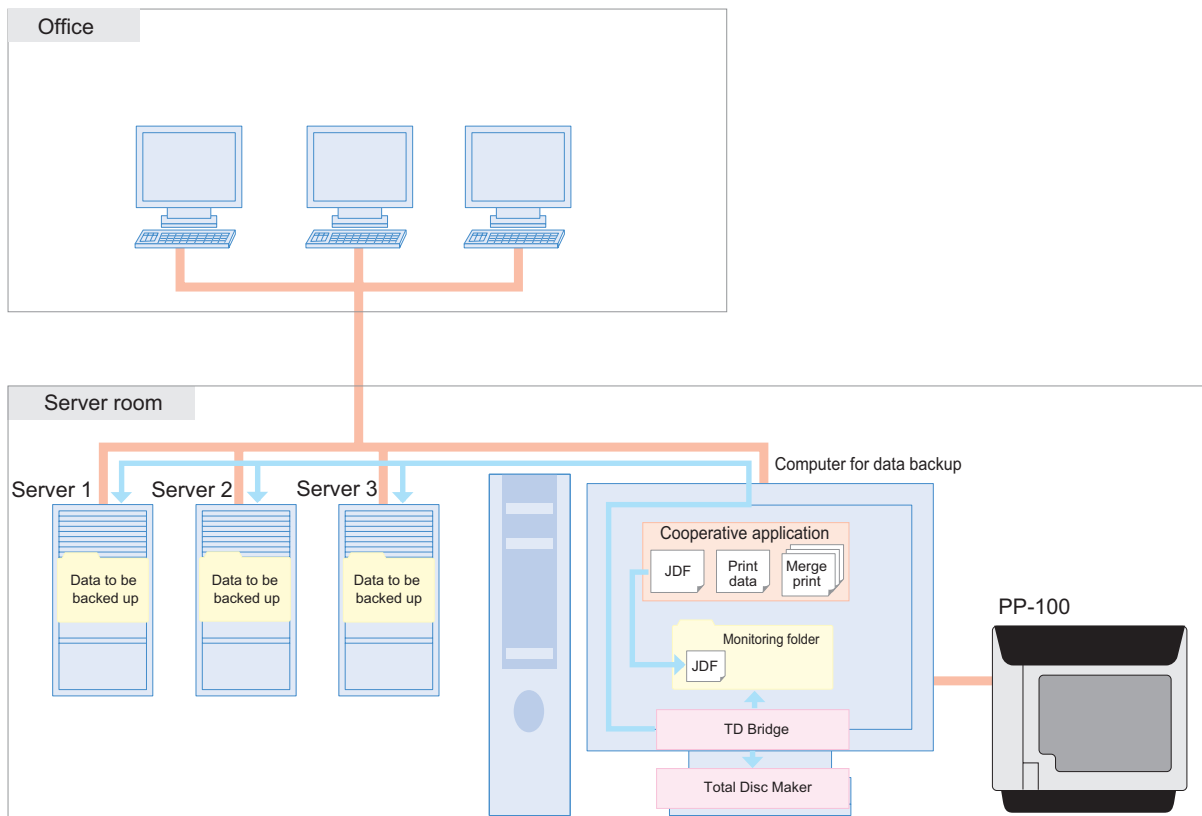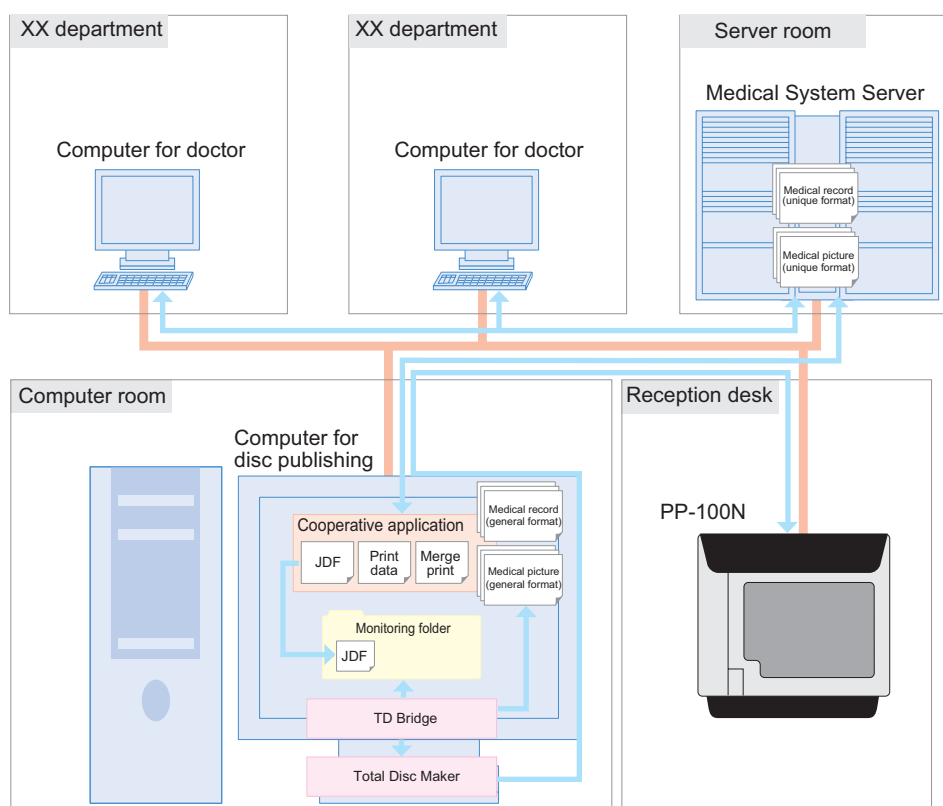
Case 5: Photo studio

Explanation of the system

Applications location:	The cooperative application, EPSON Total Disc Maker, and TD Bridge are installed on a computer. The cooperative application is installed on another computer that controls the photo developing system.
Write/print data location:	The write data (customer's photo data) is stored on the computer that controls photo developing system. Several types of print data (multiple label designs from which the customer can choose) is stored on the computer connected to PP-100N.
Access right:	The right of access to the photo data on the photo developing control computer is set on the computer connected to PP-100N.
Operation of the cooperative application:	Photo studio clerk

Operation scenario

(1) A customer inserts his/her storage medium into the photo print order machine and select photos to be printed and/or copied to a CD.

(2) The clerk operates the photo developing control computer to print the specified photos.

(3) The customer selects a CD label design from the multiple options using the photo print order machine. The machine sends commands to the cooperative application to make a CD.

(4) The cooperative application obtains the paths to the specified photo data, and creates a JDF file.

(5) The cooperative application creates the CD label print data using the selected label design merged with the selected photo.

(6) PP-100N writes selected photo data to a CD.

(7) The created label print image is printed on the CD.

(8) The completed CD is handed to the customer from the clerk.

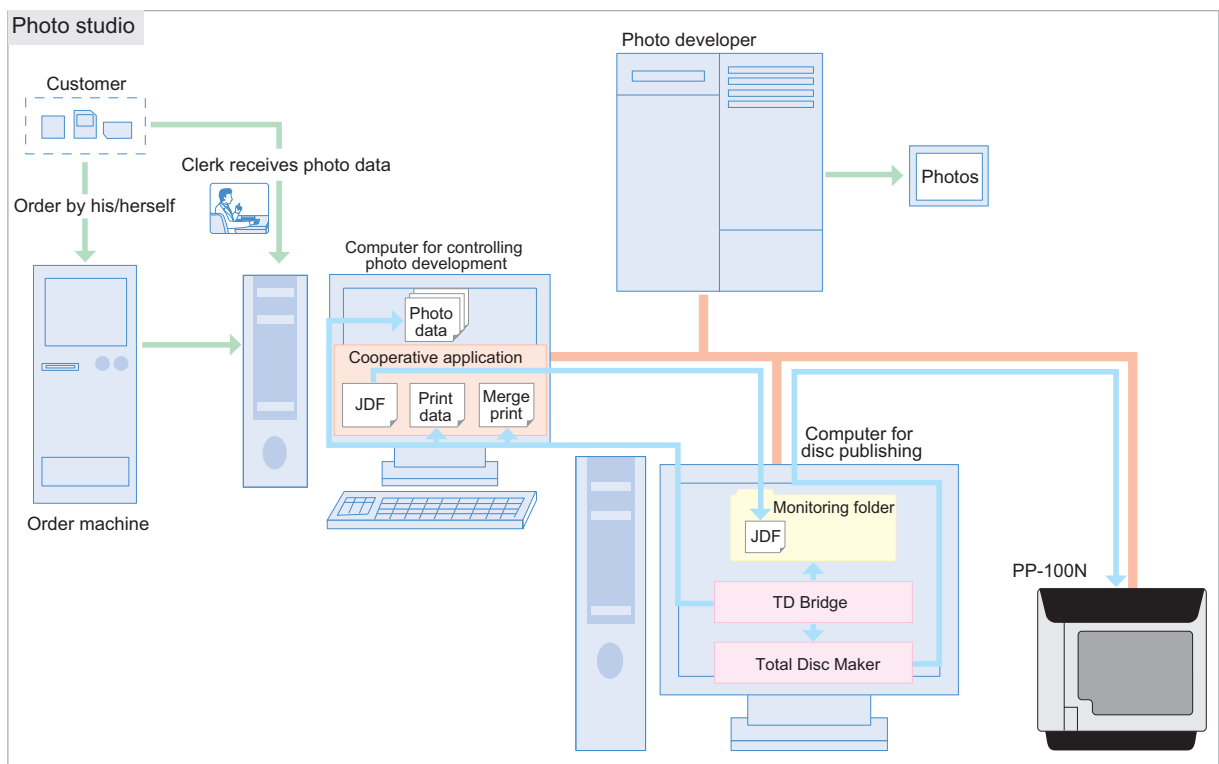## Case 6: Backup / Archive

Explanation of the system

Applications location:	The cooperative application, EPSON Total Disc Maker, and TD Bridge are installed on a computer.
Write/print data location:	The write data is stored on servers. The print data is stored on the backup computer.
Access right:	The right of access to the data on the server 1, 2, and 3 is set on the backup computer connected to PP-100N.
Operation of the cooperative application:	Automatic operation using the task scheduler (administrator of the servers)

Operation scenario

(1) The cooperative application is activated by the task scheduler and starts backup operation.

(2) The cooperative application calculates the data size and creates a JDF file considering the disc configuration.

(3) PP-100N writes the backup data to discs.

(4) The backup date and disc number given in the order of the creation are printed on the CD label.

Added Functions of TD Bridge Ver3.00

Functions that have been added to TD Bridge Ver 3.00 are described below.

If you are using TD Bridge Ver 2.5x or earlier, it is recommended that you upgrade.

❏ Support for PP-100AP has been added.

❏ The program can be started automatically when you start your computer.

❏ High-priority jobs can be specified.

❏ The MCN (Media Catalog Number) and ISRC (International Standard Recording Code) of a music CD can be written to the disk.

❏ Stacker 3 can be used in External Output Mode.

❏ The label type and print mode can be specified in the JDF file.

❏ A line break can be included in text for merge print.

❏ Merge print of images is available.

❏ Detailed maintenance, device and other information can be acquired from the STF file.

1

Restrictions

❏ Pausing a job cannot be made by the cooperative application. Use EPSON Total Disc Monitor to interrupt the job.

❏ While a job is processed, another job cannot interrupt the ongoing job, and publishing discs directly from EPSON Total Disc Maker cannot be made.

❏ Status of progress of writing or printing cannot be obtained. A writing complete status also cannot be obtained when both writing data and printing label jobs are performed.

❏ When confirming the job information of the STF file right after the job is issued, the status may be shown as STATUS=99 and ERROR=OTH000. In this case, wait for 5 seconds or more, and then reconfirm the STF file.

❏ TD Bridge does not have a function to obtain job and error logs. Include the function in your cooperative application if necessary.

❏ Create the JDF file, JCF file, file list file, and text item file in ANSI text format. Other than ANSI such as Unicode, UTF-8 cannot be used.

❏ The supported versions of EPSON Total Disc Maker and TD Bridge are as follows.

		TD Bridge				
		1.0X	1.5X	2.0X	2.5X	3.0X
Epson Total Disc Maker	1.0X	●	▲	▲	▲	▲
	1.5X	▲	●	▲	▲	▲
	2.0X	▲	▲	●	▲	▲
	2.5X	▲	▲	▲	●	▲
	3.0X	▲	▲	▲	▲	●

●: Supported, ▲: Not supported

❏ PIN Controlled Mode and Security Mode for PP-100N is not supported.

Install

This chapter explains how to install TD Bridge.

Install Procedure

TD Bridge must be installed on the computer on which EPSON Total Disc Maker has already been installed.

Installing TD Bridge

Follow the procedure below to install TD Bridge.

CAUTION	Close all running applications before the installation.

1 Double-click on the (setup.exe) icon.

2 Click (Next).
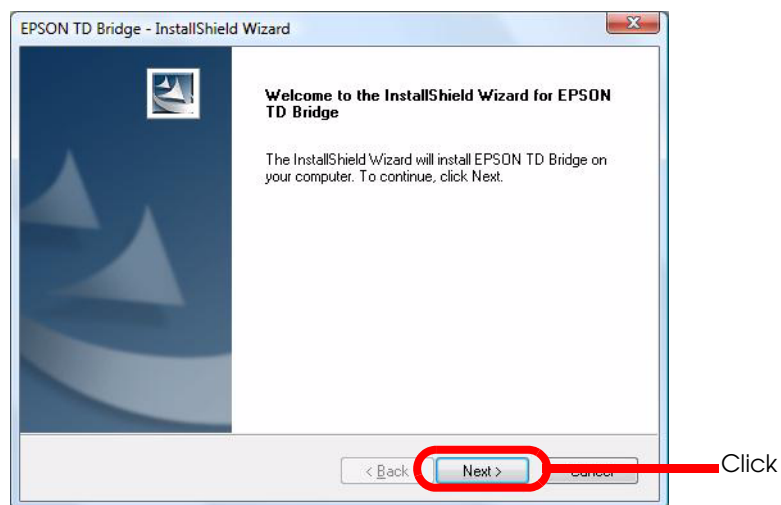
Click

3   Tick the checkbox for "I accept the terms of the license agreement", and click (Next).

Check
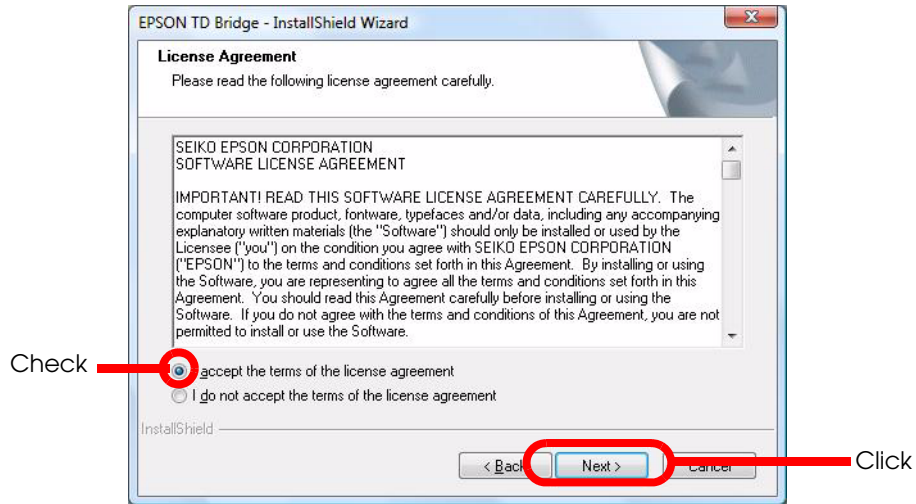
Click

4   Confirm the destination folder and click (Next).

If you need to change the destination folder, click (Change) to browse and specify the target folder, and click (Next).
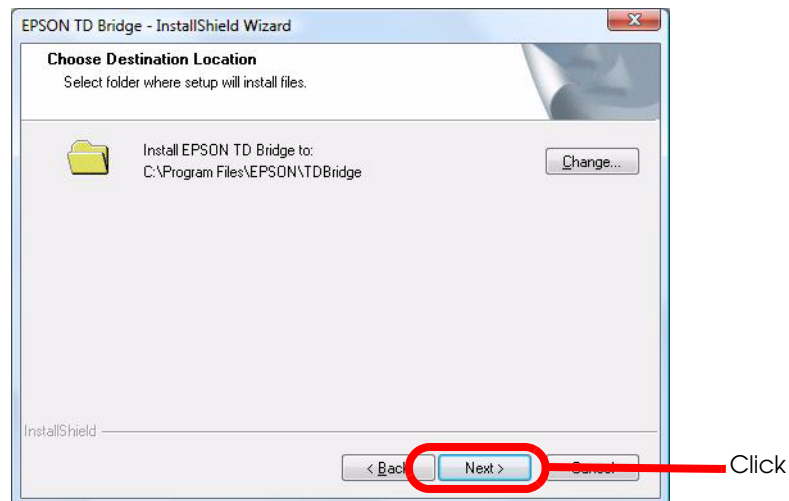
Click

5 Confirm the location of folder to be monitored by TD Bridge and click (Next).

If you need to change the folder, click (Change) to browse and specify the target folder, and click (Next).

The system folder cannot be selected as a monitoring folder.
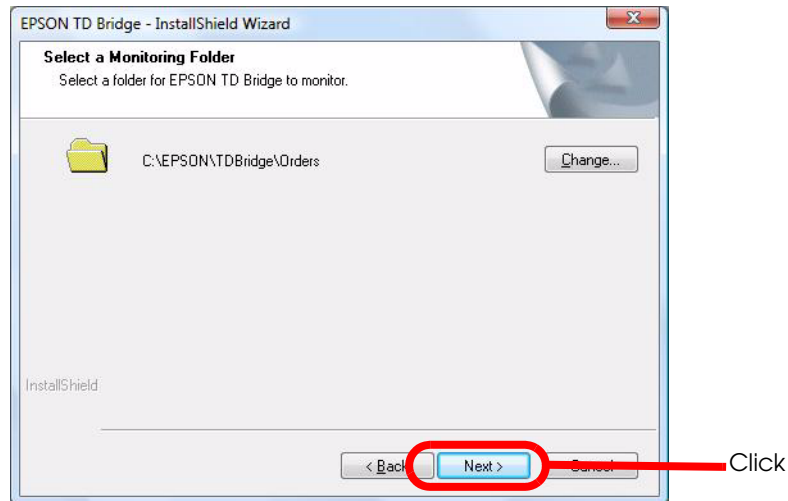
Click

6 Click (Install).
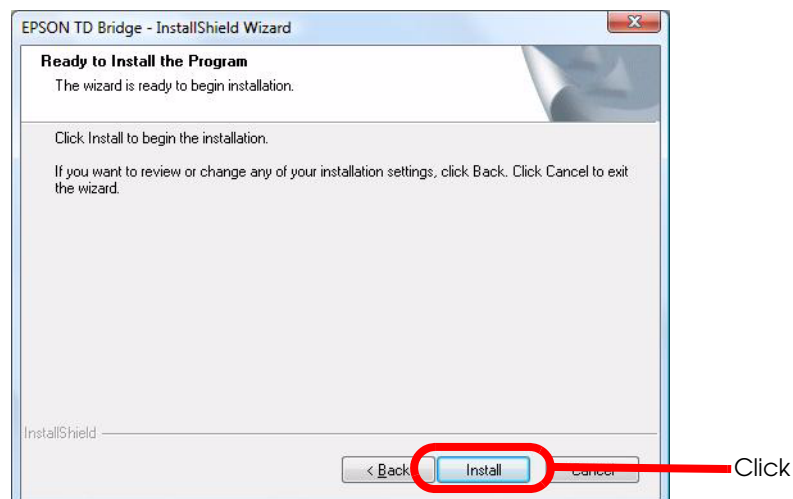
Click

7 Click (Finish).

When you do not use TD Bridge immediately after the installation, uncheck the checkbox for "Starts EPSON TD Bridge", and click (Finish).

Click

23
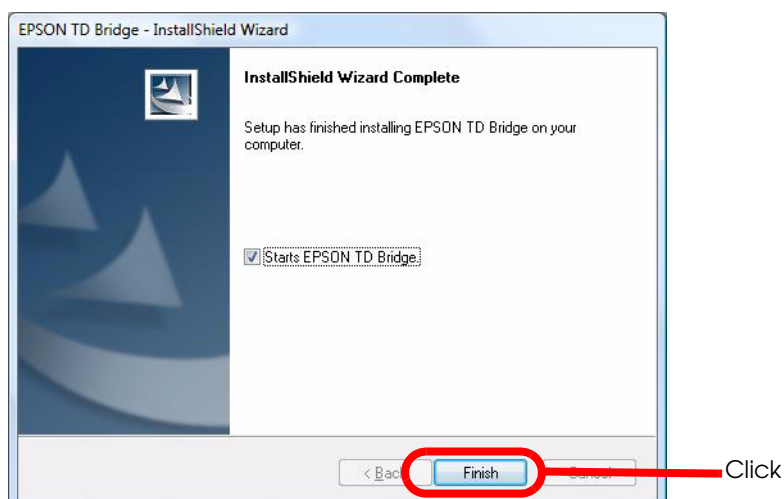
Upgrade installation

You can install a new version of TD Bridge without uninstalling the current TD Bridge.

When upgrading the current TD Bridge, just follow the same procedure for normal installation.

Starting TD Bridge

When the installation is completed, start TD Bridge.

1 Click (Start)-(All Programs)-(EPSON TD Bridge)-(EPSON TD Bridge) to start TD Bridge.
When TD Bridge starts to run, its icon appears on the Task Tray.

TD Bridge

| NOTE | TD Bridge executes various checkings when it starts. If some problem is detected, an error indication is displayed, and TD Bridge closes itself. See "Checks after starting TD Bridge" for the details. |

Checks after starting TD Bridge

TD Bridge executes the following checks soon after it starts. If some problem is detected, an error message is displayed.

- Version check for EPSON Total Disc Maker
  Checks the version of EPSON Total Disc Maker, and if it is not supported, the message is displayed accordingly.
  In such a case, install EPSON Total Disc Maker Ver 3.0X or later again.

- Check for the default output equipment
  Checks if the default output equipment on the environment settings is (enabled) or not. If it is set to (disabled), the message is displayed accordingly.
  Configure the default output equipment on the environment settings. (See "TD Bridge Settings" on page 3-25 for the environment settings.)

- Check the monitoring folder
  Check if the monitoring folder is accessible or not. If not, the message is displayed accordingly.
  If the system folder should be set as a monitoring folder, make sure to select a folder other than the system folder.
  If the monitoring folder can not be found, set a monitoring folder on the environment settings again. (See "TD Bridge Settings" on page 3-25 for environmental settings.)

Setting

This chapter explains each of the setting items of TD Bridge, and the other applications settings related to the cooperative application.

TD Bridge Settings

Make the settings of TD Bridge referring to the following explanations.

CAUTION	Make sure to install TD Bridge as an administrator. Otherwise, the settings can be checked but can not be changed.

When TD Bridge has not been started, click (Start) - (All Programs) - (EPSON TD Bridge) - (EPSON TD Bridge) to start TD Bridge. Double-click on the TD Bridge icon on the Task Tray to display "EPSON TD Bridge Environment Settings" window.

Click (Start) - (All Programs) - (EPSON TD Bridge) - (EPSON TD Bridge) - (EPSON TD Bridge Environment Settings) to open the (EPSON TD Bridge Environment Settings) window.

When TD Bridge is already running, the window can be opened by double-clicking the TD Bridge icon on the Task Tray.

For Windows 7 / Vista / Windows Server 2008, the (User Account Control) screen is displayed. Then, click (Continue).

TD Bridge

TD Bridge Environment Settings allows you to make the following settings.

❏ General

Setting Item		Explanation
Monitoring Folder		Specify a folder to be monitored by TD Bridge. (when a JDF file is moved into this folder, TD Bridge starts disc publishing operation.) When you want to change the default monitoring folder, click (Browse) to select a desired folder on the local computer.
Start TD Bridge automatically when logging on		This allows you to select whether to start TD Bridge automatically or not.
Start EPSON Total Disc Monitor minimized		This allows you to select whether to minimize the EPSON Total Disc Monitor window that is displayed when a job is issued. Tick the checkbox for this option to run EPSON Total Disc Monitor with its window minimized.
Default output device		When you connecting multiple PP-100/N/AP duplicators, this allows you to specify the default one. If a PP-100/N/AP other than the default one is specified by the JDF file, the JDF setting is given priority over the TD Bridge setting.
Default output stacker in standard mode		This allows you to specify the default stacker to be used for stacking ejected discs when the PP-100/N/AP is used in the standard mode. The stackers available for ejected discs are Stacker 2 and Stacker 4. If a stacker other than the default one is specified by the JDF file, the JDF setting is given priority over the TD Bridge setting.
Print Setting	Label Type	Select label type from the following three options; "CD/DVD Label", "CD/DVD Premium Label", and "EPSON Specified CD/DVD Label".

❏ PP-100/PP-100N
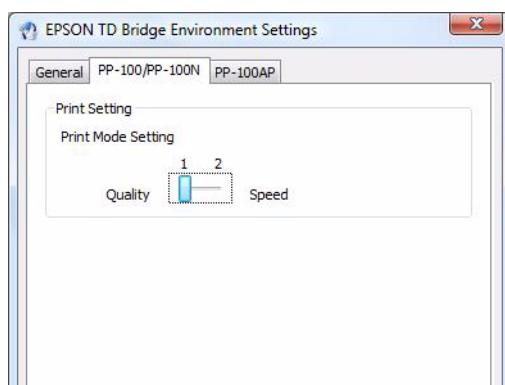
Setting Item		Explanation
Print Setting	Print Mode Setting	Select the print quality from the following two options; "Quality" (for the best print quality) and "Speed" (for the highest print speed).

❏ PP-100AP
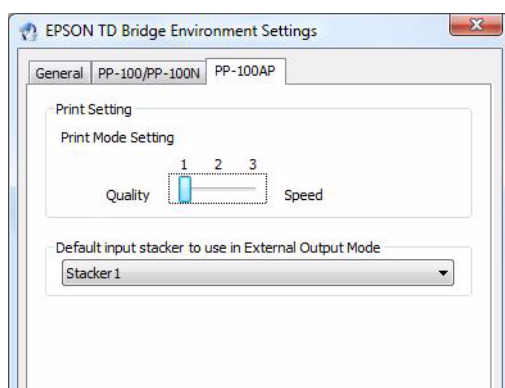
Setting Item		Explanation
Print Setting	Print Mode Setting	This sets the print quality. To give priority to print quality, specify "1". To give priority to printing speed, specify "2" or "3" (specify "3" for the fastest printing speed).
Default input stacker to use in External Output Mode		This sets the input stacker that is normally used in External Output Mode. Specify "Stacker1" for Stacker 1, "Stacker2" for Stacker 2, or "Auto" for both stackers.

Setting Items List

In order to operate PP-100/N/AP from the cooperative application, some settings must be made on the related applications as shown in the table below.

Category	Setting Item	JDF	TD Bridge Environment Settings	Total Disc Setup / Total Disc Net Administrator	Printer Driver	EPSON TotalDisc Maker	Remarks
Settings related to PP-100/PP-100N operations	Publishing mode	--	--	●	--	--	
	PP-100/PP-100N disc type	--	--	●	--	--	
	Disc type to be published	●	--	--	--	--	The disc type in the stacker of Total Disc Setup / Total Disc Net Administrator must be the same as the disc type created in the JDF file.
	Drive setting	--	--	●	--	--	
	Number of retries	--	--	●	--	--	
	Prints an error mark or not	--	--	●	--	--	
	Source	--	--	--	▲	--	TD Bridge automatically detects the disc type according to that specified by the JDF file.
	Output stacker	●	●	--	▲	--	The JDF setting is given priority over the TD Bridge setting. If the stacker is not specified in the JDF file, the TD Bridge setting is applied.
Settings related to PP-100AP operations	Publishing mode	--	--	●	--	--	
	Source	●	--	--	●	--	
	Output stacker	●	●	--	▲	--	The JDF setting is given priority over the TD Bridge setting. If the stacker is not specified in the JDF file, the TD Bridge setting is applied.

Category	Setting Item	JDF	TD Bridge Environment Settings	Total Disc Setup / Total Disc Net Administrator	Printer Driver	EPSON TotalDisc Maker	Remarks
Settings related to printing	Label type	●	●	--	▲	--	
	Color / Black	--	--	--	●	--	
	Quality / Speed	●	●	--	▲	--	
	Bi-directional printing	--	--	--	●	--	
	Color setting	--	--	--	●	--	
	Label size	--	--	--	●	--	
	Number of copies	●	--	--	▲	--	One copy is made when the number of copies has not been specified in the JDF file.
	Drying time	--	--	--	●	--	
Settings related to terminal computers	Working folder	--	--	●	--	--	

● : The setting is required
▲ : Making the setting is possible (not related to the cooperative application)
-- : Making the setting is impossible

NOTE	The setting items listed above are those available on the listed applications. The JDF file includes more setting items, but those are omitted here. For explanation on the working folder, see "Setting EPSON Total Disc Maker".

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Setting EPSON Total Disc Setup

EPSON Total Disc Setup allows you to configure major setting for publishing discs, such as PP-100 / PP-100AP operation mode selection, source/output stackers selection.

CAUTION	• For PP-100N, settings other than the name cannot be changed. • To change the settings of PP-100N, use EPSON Total Disc Net Administrator. (See "Setting EPSON Total Disc Net Administrator" on page 3-33.)

This section explains only about the required settings to be used by the cooperative application.

Click (Start)-(All Programs)-(EPSON Total Disc Maker)-(EPSON Total Disc Setup) to start EPSON Total Disc Setup.

For Windows 7 / Vista / Windows Server 2008, the (User Account Control) screen is displayed. Then, click (Continue).

Select the PP-100 / PP-100AP to be used, and click (Properties).

PP-100

EPSON Total Disc Setup Properties window is displayed. In the window, the following settings can be made.

Setting Item		Explanation
Name		You can change the name of PP-100/PP-100N. The name is used to be specified in the JDF file using Publisher key. Up to 64 characters can be used for the name. You cannot register multiple PP-100/PP-100N with the same name.
Stacker Settings	Publish Mode	Select the publishing mode from the following three options; "Standard Mode", "External Output Mode", and "Batch Mode". See the PP-100 User's Guide for more information on the publishing mode.
Stacker Settings	Stacker 1,2	**When "Standard Mode" is selected:** Select disc type for Stacker 1 that is used for blank discs. Stacker 2 is used for ejected (published) discs. **When "External Output Mode" is selected:** Select disc type for both Stacker 1 and 2 that are used for blank discs. **When "Batch Mode" is selected:** Select disc type for both Stacker 1 and 2 that are used for blank discs. An error occurs if the disc type specified for Stacker 1 and 2 is different from that specified in the JDF file.
	Stacker 3	**When "Standard Mode" is selected:** "Do not use" **When "External Output Mode" is selected:** "Output Stacker" or "Do not use" can be selected: **When "Batch Mode" is selected:** "Output Stacker"

Setting Item		Explanation
Drive Settings	Drive to Use	Select the drive to be used for writing data to the blank discs. Select one from the following three options; "Use Both", "Use Drive 1 Only", and "Use Drive 2 Only".
	Number of write retries	Specify the number of retries in the case of writing errors. The number can be entered in the range of 0 to 9.
Printer Settings	Show error mark on discs that experience error	Tick the checkbox when you want to print an error mark on published discs that may have been improperly burnt (an error occurs during writing). This helps you to separate the failed discs from the normal ones.

PP-100AP

EPSON Total Disc Setup Properties window is displayed. In the window, the following settings can be made.

Setting Item		Explanation
Name		You can change the name of PP-100AP. The name is used to be specified in the JDF file using Publisher key. Up to 64 characters can be used for the name. You cannot register multiple PP-100AP with the same name.
Stacker Settings	Stacker 1,2	**When "Standard Mode" is selected:** Select disc type for Stacker 1 that is used for blank discs. Stacker 2 is used for ejected (published) discs. **When "External Output Mode" is selected:** Select disc type for both Stacker 1 and 2 that are used for blank discs. **When "Batch Mode" is selected:** Select disc type for both Stacker 1 and 2 that are used for blank discs. An error occurs if the disc type specified for Stacker 1 and 2 is different from that specified in the JDF file.
	Stacker 3	**When "Standard Mode" is selected:** "Do not use" **When "External Output Mode" is selected:** "Output Stacker" or "Do not use" can be selected: **When "Batch Mode" is selected:** "Output Stacker"

Setting EPSON Total Disc Net Administrator

EPSON Total Disc Net Administrator allows you to configure major setting for publishing discs, such as PP-100N operation mode selection, source/output stackers selection.
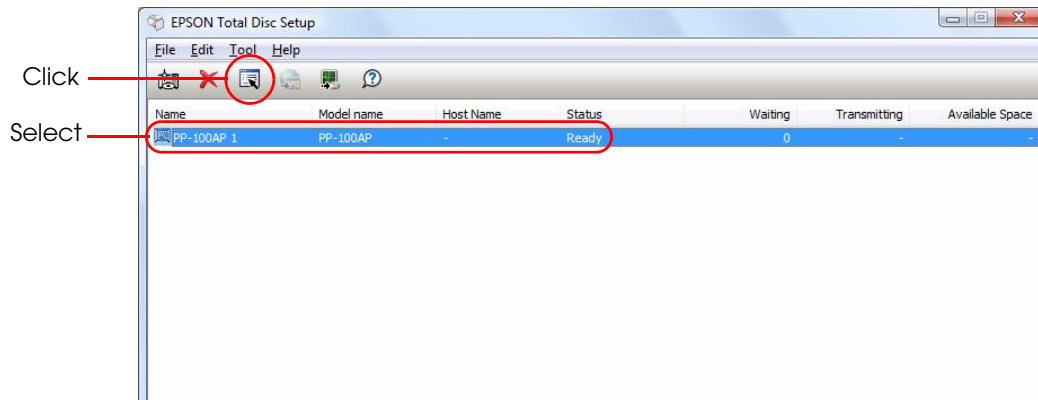
CAUTION	• EPSON Total Disc Net Administrator is not available for PP-100 / PP-100AP.
	• For more details of EPSON Total Disc Net Administrator, See PP-100N User's Guide.

This section explains only about the required settings to be used by the cooperative application.

The following procedures should be executed by a user who has the role of administrator.

Click (Start)-(All Programs)-(EPSON Total Disc Maker)-(EPSON Total Disc Setup) to start EPSON Total Disc Setup.

For Windows 7 / Vista / Windows Server 2008, the (User Account Control) screen is displayed. Then, click (Continue).

Select the PP-100N(CD/DVD Publisher) to be used, and click (Stat EPSON Total Disc Net Administrator).
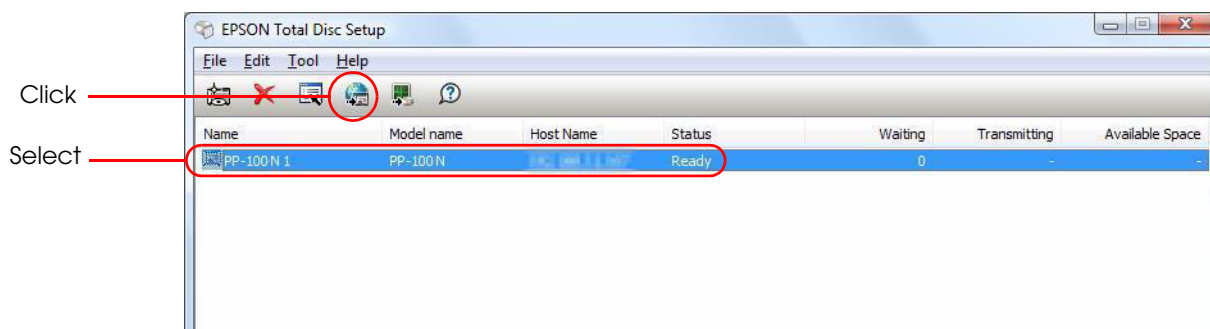
Login screen of EPSON Total Disc Net Administrator is displayed. Input your user name and password, and click (Login).

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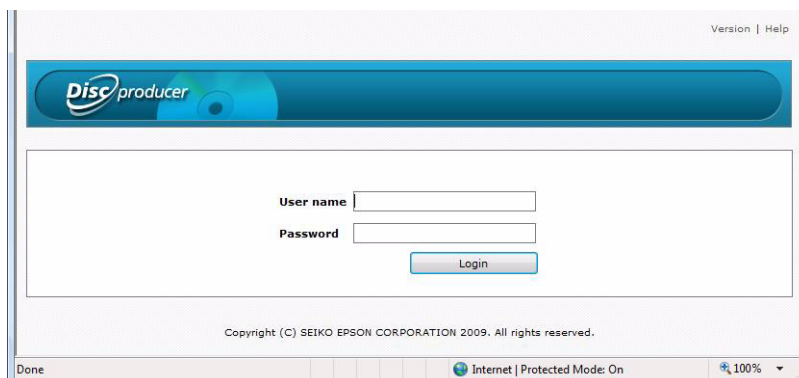
Select [System settings] - [Output device]. Following settings can be made.

Setting Item		Explanation
Device name		You can change the name of PP-100N.
Stacker Settings	Stacker 1,2	**When "Standard Mode" is selected:** Select disc type for Stacker 1 that is used for blank discs. Stacker 2 is used for ejected (published) discs. **When "External Output Mode" is selected:** Select disc type for both Stacker 1 and 2 that are used for blank discs. **When "Batch Mode" is selected:** Select disc type for both Stacker 1 and 2 that are used for blank discs. An error occurs if the disc type specified for Stacker 1 and 2 is different from that specified in the JDF file.
	Stacker 3	**When "Standard Mode" is selected:** "Do not use" **When "External Output Mode" is selected:** "Output Stacker" or "Do not use" can be selected: **When "Batch Mode" is selected:** "Output Stacker"
Drive Settings	Drive used	Select the drive to be used for writing data to the blank discs. Select one from the following three options; "Use Both", "Use Drive 1 Only", and "Use Drive 2 Only".
	Number of write retries	Specify the number of retries in the case of writing errors. The number can be entered in the range of 0 to 9.
Printer Settings	Show error mark on discs that experience errors	Tick the checkbox when you want to print an error mark on published discs that may have been improperly burnt (an error occurs during writing). This helps you to separate the failed discs from the normal ones.

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Setting the Work Folder

This section explains how to set the work folder of the computer to which the PP-100/N/AP is connected in "Common Setting for Publishing" of Total Disc Setup. Written data and print data are applied to the image file in this folder. Make sure there is enough free space.

Click (Start)-(All Programs)-(EPSON Total Disc Maker)-(EPSON Total Disc Setup) to start EPSON Total Disc Setup.

For Windows 7 / Vista / Windows Server 2008, the (User Account Control) screen is displayed. Then, click (Continue).

Click (Tool) - (Common Setting for Publishing).
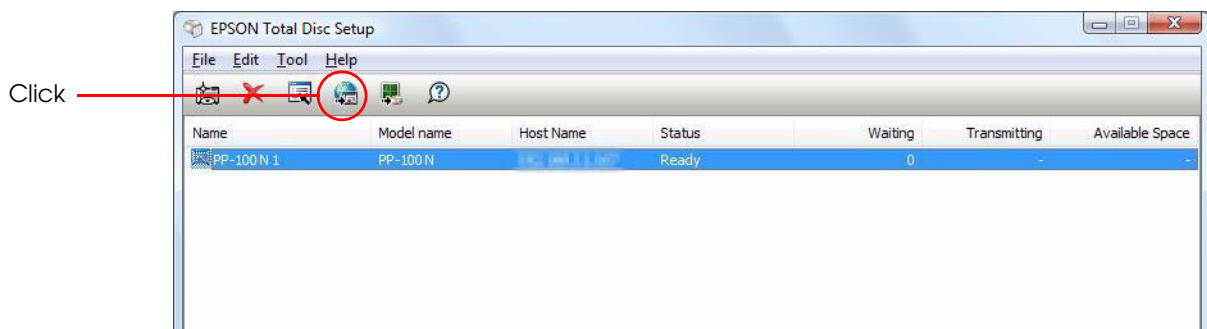
Click

The "Common Setting for Publishing" window appears. Click the (Browse) button and specify the work folder.
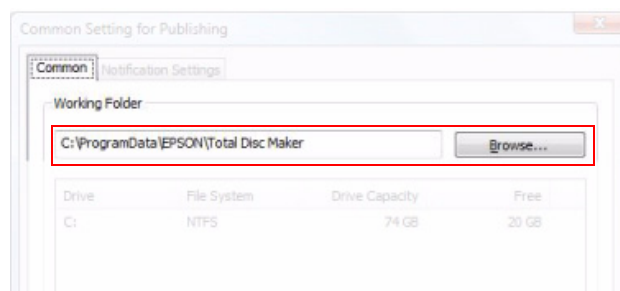
Setting the Printer Driver

The printer driver allows you to configure various print settings. This section explains only about the required settings to be used by the cooperative application.

Click (Start)-(All Programs)-(EPSON Total Disc Maker)-(EPSON Total Disc Maker) to start EPSON Total Disc Maker.

When EPSON Total Disc Maker is started, click (Publish) - (Tool) - (Print Setting).

Printer driver setting window is displayed. In the window, the following settings can be made. (The window shown is for the PP-100.)
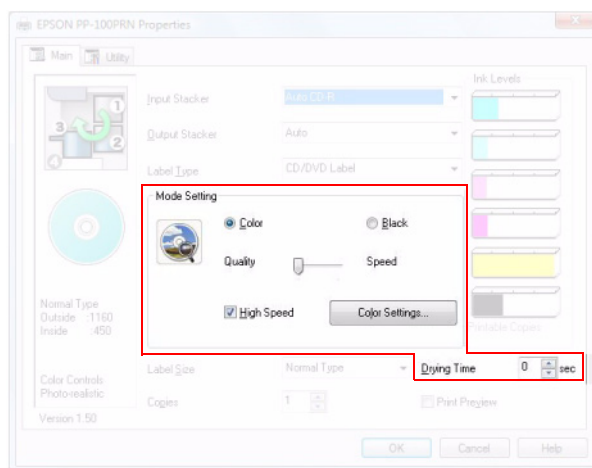
Setting Item		Explanation
Mode Setting	Color/Black	Select color print or black (monochrome) print.
	High Speed	When this is selected, the bi-directional printing method is applied.
	Color Settings	Color tone applied to the printing can be configured.
Drying Time		Specify the time for drying ink (from when label print is finished until when the disc is moved toward the output stacker). Selectable up to 600 seconds in increments of one second.

Development Guide for a Cooperative Application

This chapter describes necessary information on how to create a cooperative application.

Functions of a Cooperative Application

Incorporate the following functions to the cooperative application.

Functions	Description
Creating a JDF file/Copying to the Monitoring Folder	Used to print/write to discs. These are necessary functions.
Monitoring a JDF file (Changing extensions)	You can monitor the job status. This is not a necessary item since the same information is obtained from STF files.
Monitoring an STF file/Handling errors	You can acquire information on such as job status/error code/ the remaining of disc/ink level from STF files. Create and display necessary messages using the information above.
Creating a JCF file/Copying to the Monitoring Folder/Monitoring when cancelling a job	Used when cancelling a job in the middle. The status of cancelling can be judged with the file's extension. These are recommended functions.

NOTE It is selectable whether to incorporate your cooperative application in your system side computer or the computer connected to PP-100/N/AP. In each case, make sure to include all required functions in the cooperative application to ensure proper operation.

4

JDF File

The JDF file is an instruction file to publish discs. This file needs to be created by your cooperative application. When the JDF file is moved into the monitoring folder, disc publishing operation specified by the file is started.

❏ Specify the job ID (not indispensable), disc type, number of copies, write data file, and label print data file.

❏ The JDF file must be created in ANSI text format with extension "JDF". Save the file under desired name.

❏ To specify the path, the UNC (Universal Naming Convention) can be used.

❏ Do not delete or change the name of the JDF file which is copied or moved to the monitoring folder. The extension of those files changes according to the operation status. See the transition diagram of JDF files below.

❏ The JDF file moves from the monitoring folder to the log folder one or two hours after the job is completed/cancelled/finished abnormally. (See "Log Function" on page 4-89.)

CAUTION	Do not delete the JDF files using your cooperative application.

JDF File Transition

The extension of the JDF file changes according to the job status. Checking on the progress of the job can be made by monitoring the extension. If you need to grasp more detailed status of a job, monitor the STF file using your cooperative application. The job status and PP-100/N/AP status also can be checked on the EPSON Total Disc Monitor screen.
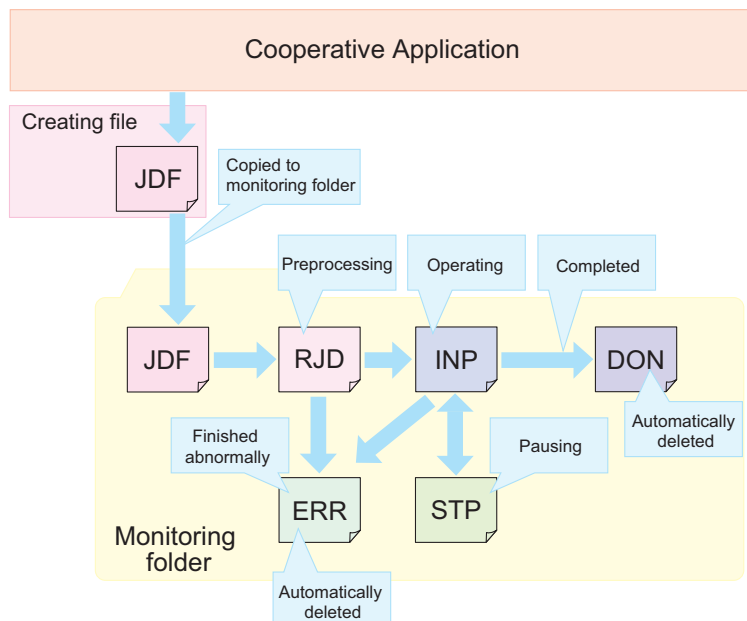
Cancelling the job can be made from JDF, RJD, INP, and STP.

JDF File Contents Example

The JDF file shown below is for burning 10 CDs, making merge print on each of them, and ejecting them to the Stacker 2.

```
#  Making data CD                          ──────── Comment line

 JOB_ID=001

 PUBLISHER=Publisher 0

 COPIES=10

 OUT_STACKER=2

 DISC_TYPE=CD

 FORMAT=ISO9660L2

 DATA=C:\Datafile\patient1                 ──────── Instructions for burning data

 VOLUME_LABEL=PCdatadisc

 LABEL=C:\Datafile\image1.tdd             ──────── Instructions for merge print

 REPLACE_FIELD=C:\Datafile\print.dat
```

The JDF file shown below is for burning one Video CD, printing the label, and ejecting the CD to the Stacker 4. Merge print is not specified.

```
 JOB_ID=002

 PUBLISHER=Publisher 0

 COPIES=1

 OUT_STACKER=4

 DISC_TYPE=CD

 VIDEO=C:\videofile\video.mpg             ──────── Instructions for burning video files

 VIDEO_TITLE=Educational_video

 LABEL=C:\videofile\videoimage1.tdd       ──────── Instructions for printing the label
```

The JDF file shown below is for burning one Video CD, printing the label, and ejecting the CD to the Stacker 4. Merge print is not specified.
The job priority is specified as high, and thus it can be executed ahead of any previously published jobs.

```
 JOB_ID=003

 PUBLISHER=Publisher 0

 COPIES=1

 OUT_STACKER=4

 DISC_TYPE=CD

 VIDEO=C:\videofile\video.mpg             ──────── Instructions for burning video files

 VIDEO_TITLE=Educational_video

 LABEL=C:\videofile\videoimage1.tdd       ──────── Instructions for printing the label

 PRIORITY=HIGH                            ──────── Job priority instruction
```

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The JDF file shown below is for burning one Audio CD, printing the label, and ejecting the CD to the Stacker 4. Merge print is not specified.

```
JOB_ID=004

PUBLISHER=Publisher 0

COPIES=1

OUT_STACKER=4

DISC_TYPE=CD

AUDIO_TRACK=PATH:C:\audiodata\musicfile1.wav (TAB) TITLE:music1

(TAB) PERFORMER:Singer (TAB) PREGAP:150

AUDIO_TRACK=PATH:C:\audiodata\musicfile2.wav (TAB) TITLE:music2

(TAB) PERFORMER:Singer (TAB) PREGAP:150

AUDIO_TITLE=Best_music
```
— Instructions for burning audio files

```
LABEL=C:\audiodata\audioimage1.tdd
```
— Instructions for printing the label

The JDF file shown below is for printing the label, and ejecting the CD to the Stacker 4.

```
JOB_ID=005

PUBLISHER=Publisher 0

COPIES=1

OUT_STACKER=4

DISC_TYPE=CD
```

```
LABEL=C:\labelfile\labelimage1.tdd
```
— Instructions for printing the label

NOTE
An image file created by another application and converted to PRN file using the PP-100/N/AP printer driver also can be specified as the label file.

About comment lines

When writing the JDF file, lines which starts with "#" are regarded as comment lines, and ignored. Lines which starts with other than "#" are not regarded as comment lines.

Example 1:   #DATA=C:¥Data¥test1.dat   ← Regarded as a comment line.
Example 2:   ##DATA=C:¥Data¥test1.dat   ← Regarded as a comment line.
Example 3:   #   ← Regarded as a comment line.
              DATA=C:¥Data¥test1.dat   ← Not regarded as a comment line.
              #   ← Regarded as a comment line.

Setting Item List

The table below lists the available setting items in a JDF file. You may not need some of the settings.
Referring to each explanation, include the settings only required for your system.
Key name: Case sensitive. A key name including lowercase characters is ignored as an invalid command. Spaces before and/or after a key name also make the key name invalid.
Setting: Characters written from immediately after "=" to a linefeed code or EOF are regarded as the setting.
End of instruction: The instructions written on the file are processed from the top and continued until a linefeed or EOF is found.

Key name	Explanation	How to specify the setting	Maximum characters	Available characters (strings)	Necessary /Arbitrary	PP-100/ PP-100N Key available Yes/No	PP-100AP Key available Yes/No
JOB_ID	Specify a job ID for identification.	Specify a job ID that has not been used for existing jobs. (this ID is used in a STF file as hereinafter described, and for canceling the job using a JCF file.) When no job ID is specified, TD Bridge will automatically create the ID.	40 characters	One byte alphanumeric, "-", "_"	Arbitrary	●	●
PUBLISHER	Specify a name of disc publishing machine to be used for the job.	Use the name registered by EPSON Total Disc Setup. When not specified, the publishing machine specified in the Environment Setting of TD Bridge will be used. If the Environment Setting also has not specified the machine, the machine registered by EPSON Total Disc Setup will be used as long as only one machine has been registered. (When multiple machines have been registered, an error will occur)	64 characters	Machine names registered by EPSON Total Disc Setup.	Arbitrary	●	●
COPIES	Specify the number of discs to be published.	(Common to the all modes) Selectable from 1 to 1,000. When not specified, only one disc will be published.	Four characters	One bite numbers	Arbitrary	●	●
OUT_STAC KER	Specify an output stacker.	(When the publisher is in Standard Mode) When selecting the stacker 2 as the output stacker, specify "2". When selecting the stacker 4 as the output stacker, specify "4". When not specified, the stacker specified in the Environment Setting of TD Bridge is used. If the Environment setting also has not specified the output stacker, the stacker 2 will be used. (When the publisher is Not in Standard Mode) Invalid (ignored if a stacker is specified)	One character	"2" or "4"	Arbitrary	●	●
DISC_TYPE	Specify the type of disc to be published.	To publish a CD, specify "CD". To publish a single-layer DVD, specify "DVD". To publish a dual-layer DVD, specify "DVD-DL".	Six characters	Any of "CD", "DVD", "DVD-DL"	Necessary	●	--

Key name	Explanation	How to specify the setting	Maximum characters	Available characters (strings)	Necessary /Arbitrary	PP-100/ PP-100N Key available Yes/No	PP-100AP Key available Yes/No
WRITING_ SPEED	Specify the writing speed depending on the specified disc type.	Specify the write speed (N) (_X write). (When CD-Rs are set in the source stacker) Any of "40", "32", "24", "16", "10", "4". (When DVD-Rs are set in the source stacker) Any of "12", "8", "6", "4", "2", "1". (When DVD+Rs are set in the source stacker) Any of "12", "8", "6", "4", "2.4". (When DVD-R DLs are set in the source stacker) Any of "8", "6", "4", "2". (When DVD+R DLs are set in the source stacker) Any of "8", "6", "4", "2.4". (Common to the all disc types) When a write speed other than listed above is specified, the next slower speed in the available settings is applied. When not specified, the highest speed is applied.	Three characters * Periods are included.	Any of "40", "32", "24", "16", "12", "10", "8", "6", "4", "2.4", "2", "1".	Arbitrary	●	--
COMPARE	Specify whether to compare the written data with the source data.	Specify "YES" when carrying it out. Specify "NO" when not carrying it out. The data are not compared if "YES" is not specified. In the case of Audio CDs, the data are not compared even if "YES" is specified.	Three characters	"YES" or "NO"	Arbitrary	●	--
CLOSE_DISC	Specify whether to close (finalize) the burnt disc.	Specify "YES" when closing the disc after burning. Specify "NO" when not closing the disc after burning. If not specified, the disc will be closed. This setting cannot be applied to DVD+R DL and DVD-R DL (ignored when any of the disc types has been selected).	Three characters	"YES" or "NO"	Arbitrary	●	--
FORMAT(*1)	Specify a disc format when creating a data disc.	(When the disc type is CD) Specify "ISO9660L2" when creating the CD in ISO9660 Level 2 format. Specify "JOLIET" when creating the CD in Joliet format. Specify "UDF102" when creating the CD in UDF1.0.2 format. When not specified, the CD is burnt in ISO9660 Level 2 format. (When the disc type is DVD) Specify "UDF102" when creating the DVD in UDF1.0.2 format. Specify "UDF102_BRIDGE" when creating the DVD in UDF1.0.2 + UDF Bridge format. When not specified, the DVD is burnt in UDF1.0.2 + UDF Bridge format.	13 characters	Any of "ISO9660L2","JOLIET","UDF102","UDF102_BRIDGE"	Arbitrary	●	--
DATA (*1)	Specify folders and files to be written to the data disc.	When creating data discs, specify the directory path to the source file and that to the destination. The directory path to the source file must be the path from the computer on which TD Bridge installed. (For explanation on the directory path to the destination, see "Creating Data Discs - Specifying write data file/ folder".)	511 characters	See "Recording Formats and Restrictions" on page 4-46 for the details.	Arbitrary	●	--

Key name	Explanation	How to specify the setting	Maximum characters	Available characters (strings)	Necessary /Arbitrary	PP-100/ PP-100N Key available Yes/No	PP-100AP Key available Yes/No
DATA_LIST (*1)	When specifying write data using a file list, specify the directory path to the file list file.	The directory path must be the path from the computer on which TD Bridge is installed. (For explanation on the directory path to a source file specified in the file list file, see "Creating Data Discs - Specifying write data file/folder".)	255 characters	Characters valid as a directory path	Arbitrary	●	--
VOLUME_ LABEL (*1)	Specify a Volume Label of the data disc.	Specify a Volume Label to set the volume label to the data disc.	*4	*4	Arbitrary	●	--
VIDEO (*2)	When burning Video CDs, specify the directory path to the video file to be set as video track. When burning DVD-Video, specify the directory path to the VIDEO_TS folder.	The directory path must be the Video file path or the VIDEO_TS folder path from the computer on which TD Bridge is installed. When burning Video CDs, specify "CD" for "DISC_TYPE," and when burning DVD-Video, specify "DVD" or "DVD-DL" for it. When "DATA" or "DATA_LIST" has been specified, this setting becomes invalid. (ignored if the setting is made)	255 characters	Characters valid as a directory path	Arbitrary	●	--
VIDEO_TIT LE (*2)	Specify a video title to configure the video title for a Video-CD or a DVD-Video.	Specify a character string for the video title of the Video-CD or the DVD-Video. When "DATA" or "DATA_LIST" has been specified, this setting becomes invalid. (ignored if the setting is made)	32 characters	Video-CD: English one-byte uppercases, one byte numerical characters, " " DVD-Video: One-byte numerical characters, " "	Arbitrary	●	--
IMAGE (*3)	Specify a directory path to an image file when burning discs using the image file.	The image file directory path must be the path from the computer on which TD Bridge is installed. When any of "DATA", "DATA_LIST", or "VIDEO" has been specified, this setting becomes invalid (ignored if the setting is made)	255 characters	Characters valid as a directory path	Arbitrary	●	--
AUDIO_TR ACK	When burning Audio CDs, specify the track information.	Specify the track information for all the tracks. When "DATA", "DATA_LIST", "VIDEO" or "IMAGE" has been specified, this setting becomes invalid. (ignored if the setting is made) See "Specifying Track Information on Audio CD" on page 4-47 for the details.	520 characters	Music file path: Not limited Track title: Characters changeable into multi-byte characters. Track artist name: Characters changeable into multi-byte characters. Pregap: Half size values	Arbitrary	●	--
AUDIO_TIT LE	Specify an album title to set the title to the Audio CD.	Specify a character string as the Audio CD title. When "DATA","DATA_LIST","VIDEO" or "IMAGE" has been specified, this setting becomes invalid. (ignored if the setting is made)	128 characters	Characters changeable into multi-byte characters.	Arbitrary	●	--

4

Key name	Explanation	How to specify the setting	Maximum characters	Available characters (strings)	Necessary /Arbitrary	PP-100/ PP-100N Key available Yes/No	PP-100AP Key available Yes/No
AUDIO_C ATALOG_ CODE	Specify an MCN (Media Catalog Number) to set MCN information in an audio CD.	Specify the character string that you want to set as the MCN of the audio CD.	13 characters	One bite numbers	Arbitrary	●	--
AUDIO_PE RFORMER	Specify an artist name to set the name to the Audio CD.	Specify a character string as the Audio CD artist. When "DATA","DATA_LIST","VIDEO" or "IMAGE" has been specified, this setting becomes invalid. (ignored if the setting is made)	128 characters	Characters changeable into multi-byte characters.	Arbitrary	●	--
LABEL	When making a label print, specify the directory path to the label data file.	The label file directory path must be the path from the computer on which TD Bridge is installed. A file made with EPSON Total Disc Maker (.tdd), or a PRN/ BMP/JPEG/TIFF/ PNG file is specified for a label file.	255 characters	Characters valid as a directory path	Arbitrary	●	●
REPLACE_ FIELD	When making a merge print, specify the directory path to the text item file.	The text item file directory path must be the path from the computer on which TD Bridge is installed. (When a PRN file is specified as the label data file, merge print cannot be made. For more details on the merge print, see "Merge Print Settings".)	255 characters	Characters valid as a directory path	Arbitrary	●	●
LABEL_AR EA	Specify the printing area for the label image.	Specify the outside and inside diameters Unless one of these file types: BMP/ JPEG/TIFF/PNG has been specified for the LABEL key, this setting becomes invalid. (ignored if the setting is made) For more details, see "Specifying the print area" on page 4-53.	Four characters	One bite numbers	Arbitrary	●	●
PRIORITY	Specify the job priority.	To give a job high priority, specify "HIGH". Not available if your device is the PP-100N and the server system software is Ver. 1.01 or earlier. (ignored if the setting is made)	Four characters	"HIGH"	Arbitrary	●	●

Key name	Explanation	How to specify the setting	Maximum characters	Available characters (strings)	Necessary /Arbitrary	PP-100/ PP-100N Key available Yes/No	PP-100AP Key available Yes/No
LABEL_TYPE	Specify the label type.	To specify "CD/DVD label", specify "1". To specify "High-quality CD/DVD label", specify "2". To specify "EPSON -certified CD/DVD label", specify "3". If not specified, the label type in the environment settings will be used.	One character	One bite numbers	Arbitrary	●	●
PRINT_MODE	Specify the print mode.	To give priority to print quality, specify "1". To give priority to print speed, specify "2" or "3". (Specify "3" for the fastest speed.) If not specified, the print mode in the environment settings will be used. "3" can only be specified if you have the PP-100AP. Invalid if "EPSON-certified CD/DVD label" is specified for the label type (the print mode is fixed at "Quality").	One character	One bite numbers	Arbitrary	●	●
IN_STACKER	Specify the stacker to be used as the input stacker.	(When the output device is External Output Mode) Specify "1" to set stacker 1 as the input stacker. Specify "2" to set stacker 2 as the input stacker. Specify "AUTO" to used both stacker 1 and stacker 2 as the input stackers. If not specified, the default source in the environment settings will be used. (When the output device is not External Output Mode) Invalid (will be disregarded if specified).	Four characters	Any of "1", "2", "AUTO"	Arbitrary	--	●

*1Specify this item when creating data discs.
*2Specify only when creating video CDs.
*3Specify only when burning discs using image files.
*4In the case of ISO9660L2 format, the number of characters is limited to up to 32. Characters other than English one byte uppercase/numerical characters and "_" cannot be used.
In the case of Joliet format, the number of characters is limited to up to 16. Characters other than English one byte uppercase/numerical characters and "_" cannot be used.
In the case of UDF format, up to 62 characters can be used.
In the case of UDF Bridge format, the same limitation as ISO9660L2 is applied.

4

Recording Formats and Restrictions

Recording Formats	Unusable characters (strings) for a file/folder name	Maximum characters		Maximum folder hierarchies
		File name	Folder name	
ISO9660L2	"a to z" ( ) \ ^ ' { } Ñ† @ # $ ~ / : * ? " < > ;	31 characters (including periods, and three characters of its file extension) (62 Byte)	31 characters (62 Byte)	8
Joliet	\ / : * ? " < > Ñ† ;	64 characters (including periods, and three characters of its file extension) (128 Byte)	64 characters (128 Byte)	128
UDF102	\ / : * ? " < > Ñ†	126 characters (including periods, and three characters of its file extension) (252 Byte)	126 characters (252 Byte)	128
UDF102_BRIDGE	"a to z" ( ) \ ^ ' { } Ñ† @ # $ ~ / : * ? " < > ;	31 characters (including periods, and three characters of its file extension) (62 Byte)	31 characters (62 Byte)	8

Specifying Track Information on Audio CD

The following explains how to specify the track information on Audio CDs. If you want to write more than one piece of track information, repeat specification and line feed for the number of tracks you want.
AUDIO_TRACK=PATH:musicfile(TAB)TITLE:tracktitle(TAB)PERFORMER:trackartist(TAB)PREGAP

- Music file path (necessary)
  Specify the file to be set for the Audio CD track as a path from the computer on which TD Bridge is installed. The extension of settable files is either WAV, MP3 or WMA.
  Specify one after keyword "PATH:".

- Track title (arbitrary)
  Enter the title you want to specify for the Audio CD track.
  Specify one after keyword "TITLE:".
  The tab character can not be used for a title character.

- Track artist name (arbitrary)
  Enter the artist name you want to specify for the Audio CD track.
  Specify one after keyword "PERFORMER:".
  The tab character can not be used for a track artist name.

- Pregap (arbitrary)
  Enter the pregap you want to specify for the Audio CD track by frame.
  The range of settable values is from 0 to 269999. (00:00:00 frame to 59:59:74 fame)
  Specify one after keyword "PREGAP:".

- ISRC (arbitrary)
  Enter the ISRC you want to specify for the Audio CD track.
  After keyword "ISRC:" specify 12 characters with no hyphens (-).
  Characters that can be specified are one byte numerals (0 to 9) and one byte uppercase alphabetical letters (A to Z).

Examples

When specifying a music file only
      AUDIO_TRACK=PATH:C:\Audiodata\musicfile1.wav
When specifying all of them
      AUDIO_TRACK=PATH:C:\Audiodata\musicfile1.wav(TAB)TITLE:music1(TAB)PER-
      FORMER:Singer(TAB) PREGAP:150(TAB)ISRC:USAA00123456
When specifying only the music file paths to more than one music files
      AUDIO_TRACK=PATH:C:\Audiodata\musicfile1.wav
      AUDIO_TRACK=PATH:C:\Audiodata\musicfile2.wav
      AUDIO_TRACK=PATH:C:\Audiodata\musicfile3.wav

4

Creating Data Discs - Specifying write data file/folder

The following explains how to specify source write data file/folder and the destination.

Style: DATA=source file/folder(TAB)destination

Source: Specify a directory path to the desired source file/folder from the computer on which TD Bridge installed. When a folder is specified, all files and sub folders under the specified folder are regarded as the source to be written to a disc. The specified folder itself is not included.

Destination: Specify an absolute path to the destination file/folder from the root directory of a disc.The "\" symbol that represents the root directory of a disc is not necessary. And when writing data directly under the disc root directory, you do not need to specify the destination including the TAB characters.

Specifying multiple files/folders:When you want to write multiple files/folders at a time, specify the source and destination for each file/folder separating each instruction with a linefeed.

Directly specifying write data in a JDF file

```
JOB_ID=XXX

            :

  DATA=C:\abc\aaa.txt(TAB)abc\aaa.txt

  DATA=C:\abc\bbb.txt(TAB)abc\bbb.txt

  DATA=C:\xyz\ccc.pdf(TAB)xyz\ccc.pdf

            :
```

In the JDF file, you can directly write the directory path to the write data, or specify a file list file.

Specifying file list file (list.dat) in a JDF file

```
JOB_ID=XXX

            :

  DATA_LIST=C:\abc\list.dat

            :
```

list.dat file

```
DATA=C:\abc\aaa.txt(TAB)abc\aaa.txt

DATA=C:\abc\bbb.txt(TAB)abc\bbb.txt

DATA=C:\xyz\ccc.pdf(TAB)xyz\ccc.pdf
```
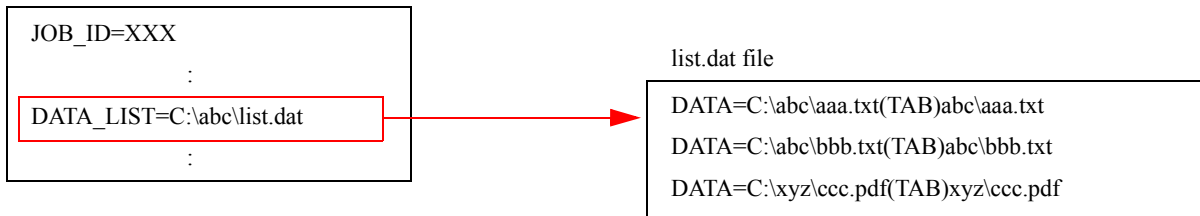
File list file

The file list file is a file to be used for writing directory paths to write data.

Creating the file list file allows you to minimize changes of JDF file for specifying write data. The file list file must be written in ANSI text format.

(The following extensions cannot be specified; CDN, CER, DON, ERR, INP, JCF, JDF, and RJD. See above "Specifying file list file (list.dat) in a JDF file" for how to write the directory paths in the file.)

Examples

❏ Case 1: When writing a file (C:\abc\data.txt) into a folder (abc) located directly under the disc root directory.

Style: DATA=C:\abc\data.txt(TAB)abc\data.txt
The folder (abc) in the destination does not need to be specified. It is automatically created.

❏ Case 2: When writing a file (C:\abc\data.txt) directly under the disc root directory.

Style: DATA=C:\abc\data.txt

❏ Case 3: When creating a folder (abc) directly under the disc root directory without specifying source write data.

Style: DATA=abc

❏ Case 4: When creating a folder (abc) directly under the disc root directory without specifying source write data, and creating sub folder (def) under the abc folder.

Style: DATA=abc\def
You do not need to specify a folder (abc) and folder (abc\def) separately.

❏ Case 5: When writing files and sub folders in the specified folder (C:\data) directly under the disc root directory.

Style: DATA=C:\data
The specified folder (C:\data) itself is not written to the disc.

❏ Case 6: When writing files and sub folders in the specified folder (C:\data) into a folder (abc) located directly under the disc root directory.

Style: DATA=C:\data(TAB)abc
The specified folder (C:\data) itself is not written to the disc.The folder (abc) in the destination does not need to be specified. It is automatically created.

Error cases

An error occurs when the specified file or folder has the same name with a file or folder that is already existing in the destination.

DATA=C:\abc. (*"abc.txt" is existing in the folder.)

DATA=C:\def. (*"abc.txt" is existing in the folder.)

When a folder is specified, files and sub folders in the folder are written with their names unchanged. However, the specified folder is not written to the disc. The above example will cause an error because the file (abc.txt) exit both in the folder (C:\abc) and the folder (C:\def).

Creating a Label File

Label file is an image file to print on the disc surface. You can create a label file in the following ways.

❏ Creating with EPSON Total Disc Maker

❏ Creating with another application

Creating with EPSON Total Disc Maker

1 Click (Start) - (All Programs) - (EPSON Total Disc Maker) - (EPSON Total Disc Maker) to start EPSON Total Disc Maker.

2 Click (Label) and select (Background) tab. Select (Image) in the (Type) box, and specify a folder in where label image files are stored in the (Source) box.

When the folder is specified, all available images in the folder are displayed. Select a desired image and click (Apply) to apply the selected image as the background.
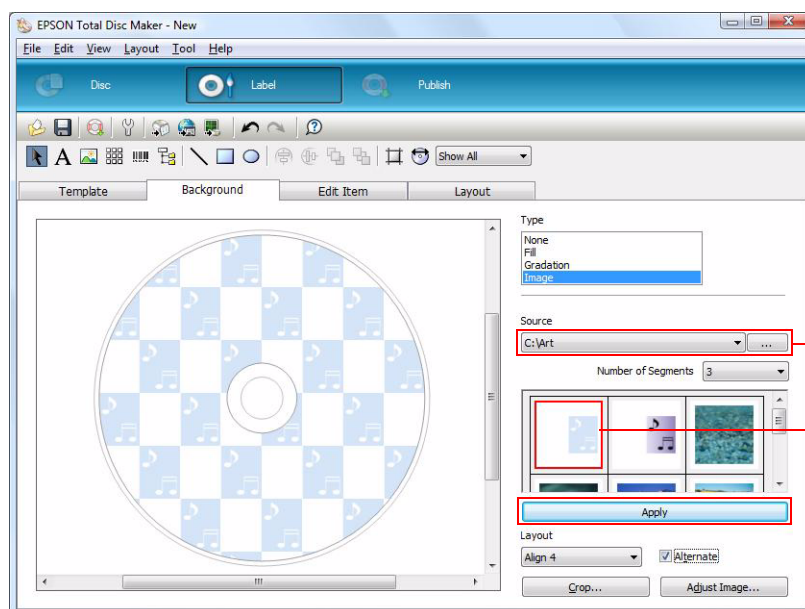
Directory path to the folder that contains images

Select a desired image

3   To enter text, click (Edit Item) tab. Text can be entered and edited.

Select the text icon and drag in the edit box to edit text you entered.

Text icon

Font type, size and color can be selected

The layout can be adjusted
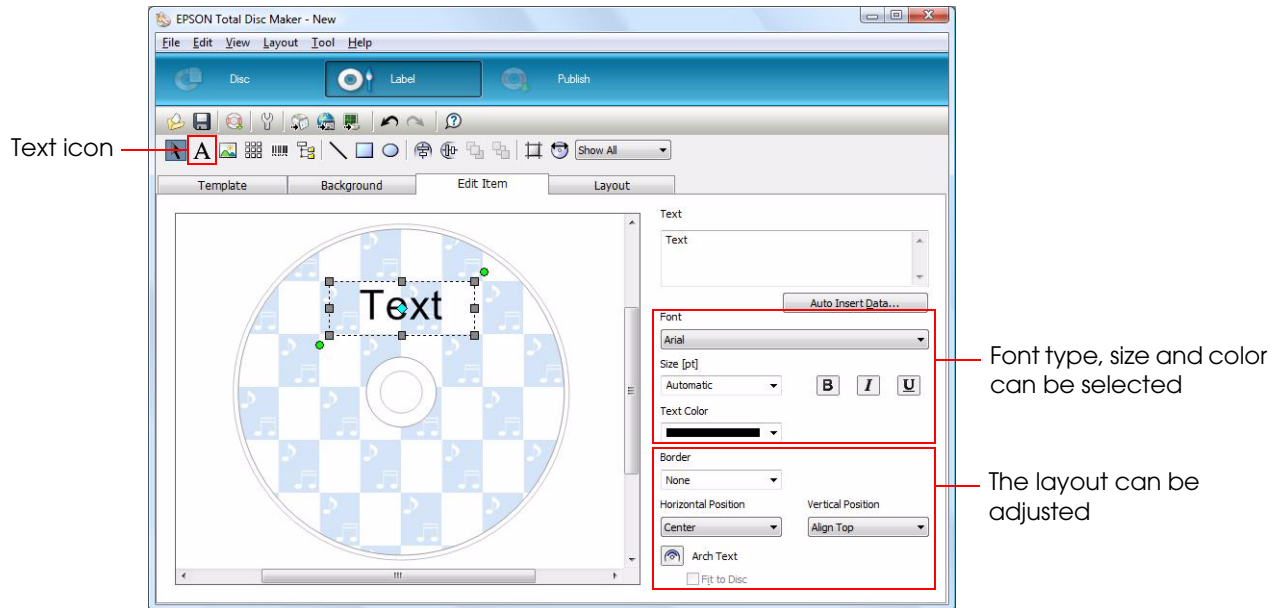
4   Click (File) - (Save). Save the completed label image under a desired name.

The extension of the saved label file is "TDD". Printing the created label image on discs can be made by specifying the TTD file using the JDF file.

Creating with another application

Create a label file using your other applications than EPSON Total Disc Maker.
Create a file as BMP/JPEG/TIFF/PNG.

Print image

When a created label file size is the same as the print area of the disc (1700 × 1700), the print image is as shown below.

Image before printing
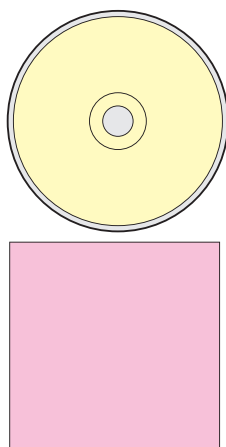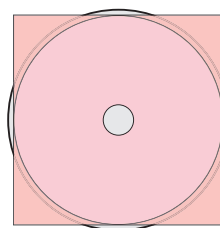
Image after printing

Print area of the disc

Outside of the print area of the disc

Label file

Cut area of the label file

When the label file size is different from the print area of the disc (1700 × 1700), it is enlarged or reduced.

Larger than the print area of the disc

Image after printing
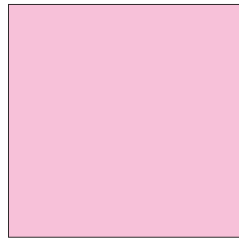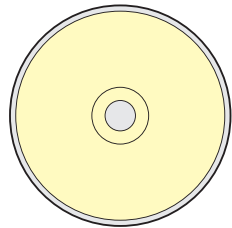
Smaller than the print area of the disc
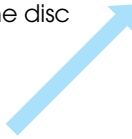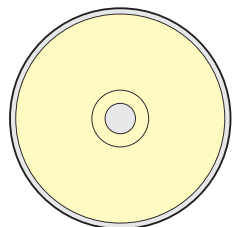
- Print area of the disc
- Outside of the print area of the disc
- Label file
- Cut area of the label file

CAUTION   If a label file is enlarged/reduced, its image quality becomes worse.

When the label file is a rectangle, it is enlarged/reduced keeping the aspect ratio, so that the long side becomes the same as the diameter of the disc print area (1700 × 1700). Also, margins appear on the left, right, top or bottom of the print area.

Image before printing
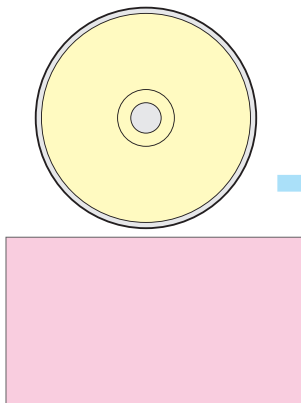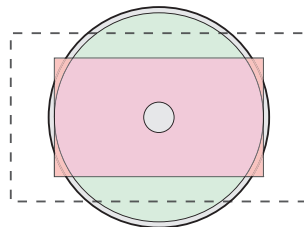
Image after printing

- Print area of the disc
- Outside of the print area of the disc
- Label file
- Cut area of the label file
- Margin

When the label file has margins or trim marks, they are printed as they are.

Image before printing   Image after printing

  ☐ Print area of the disc
  ☐ Outside of the print area of the disc
  ☐ Label file
  ☐ Margin
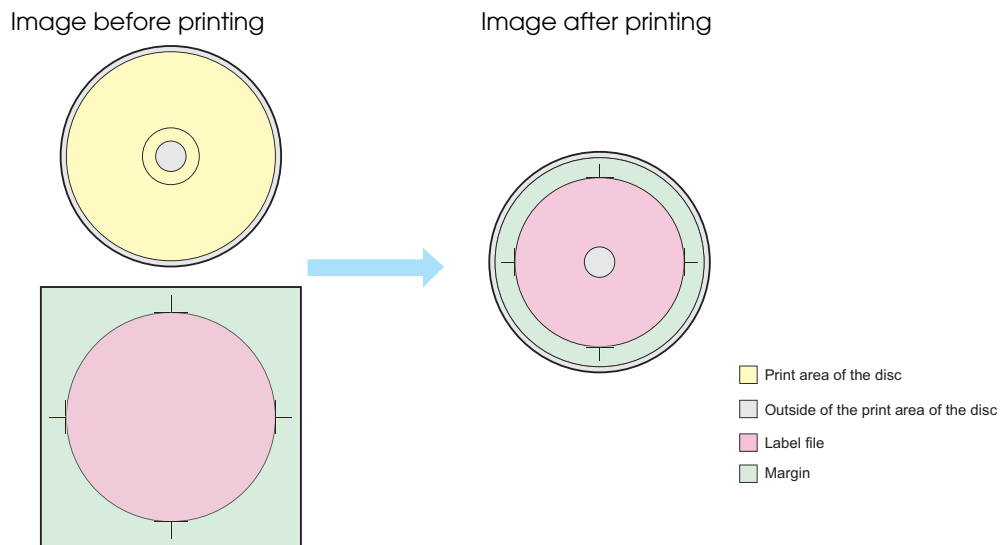
Specifying the print area

If the file type of the label file is any one of BMP/JPEG/TIFF/PNG, the outside/Inside diameter of the print area can be specified. This setting is optional.

CAUTION	Specify the print area within the area of disc label printing.If the outside of the label printing area is specified, ink may contaminate the surroundings.

LABEL_AREA=DiscDiamOut: Outside diameter (tab character) **DiscDiamIn:** Inside diameter

- Outside diameter (optional)
  Specify the outside diameter of the disc print area in units of 1/10 mm. Available area is 700 to 1194. When it is not specified, the outside diameter is set to 116 mm.

- Inside diameter (optional)
  Specify the inside diameter of the disc print area in units of 1/10 mm. Available area is 180 to 500. When it is not specified, the outside diameter is set to 45 mm.

Outside/inside diameter image

  ☐ Print area
  ☐ Outside of print area
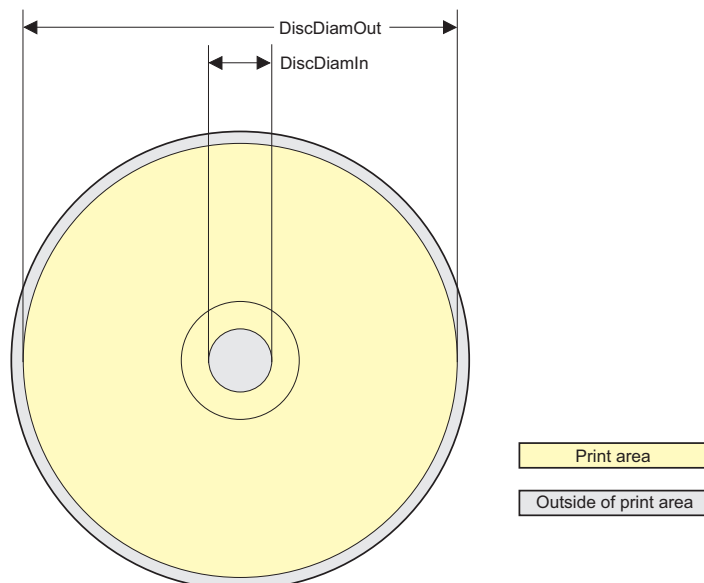
Merge Print of Text

What is merge print?

Text items of a label file are printed by being replaced with texts written in a text item file.

Label file
（image1.tdd）

Print result with merged text

Text item

{Title}

Sample Disc

{User ID}

[AD001]

Text item file
（print.dat）

Title=Sample Disc
User ID=[AD001]
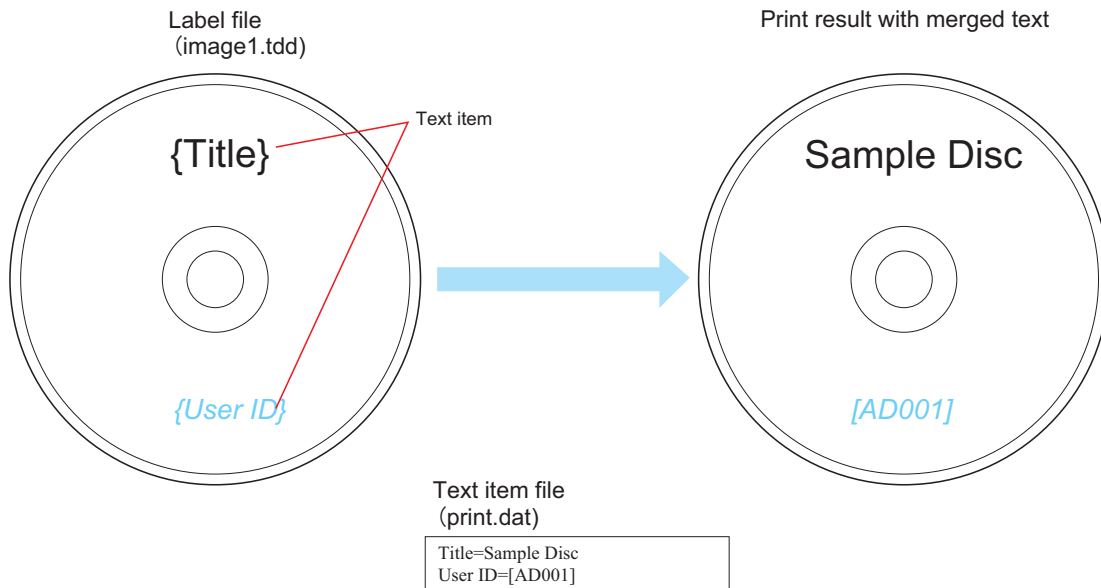
Setting Procedure

Follow the procedure below to make the merge print.

Editing text items
Edit text items in the label file and set them to be replaced.

Creating a text item file
Write character strings to be merged into the label file.

Specifying the merge print in a JDF file
Write the full directory path of the label image file and the text item file.
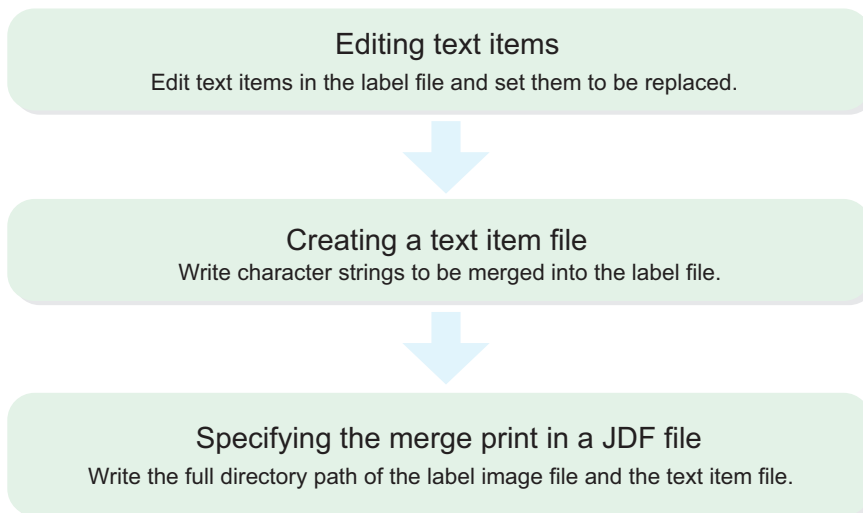
Editing of text item

Edit text item in the label file using EPSON Total Disc Maker.

1 Click (Start) - (All Programs) - (EPSON Total Disc Maker) - (EPSON Total Disc Maker) to start EPSON Total Disc Maker. Open a label file to be used as the background, and click (Label) and select (Edit Item) tab.

NOTE	It is also available to create a new label file or use template file.

2 Select a text item to be edited.

When no text item has been created, add a text item. Click the text icon and put text item you entered in a desired position.
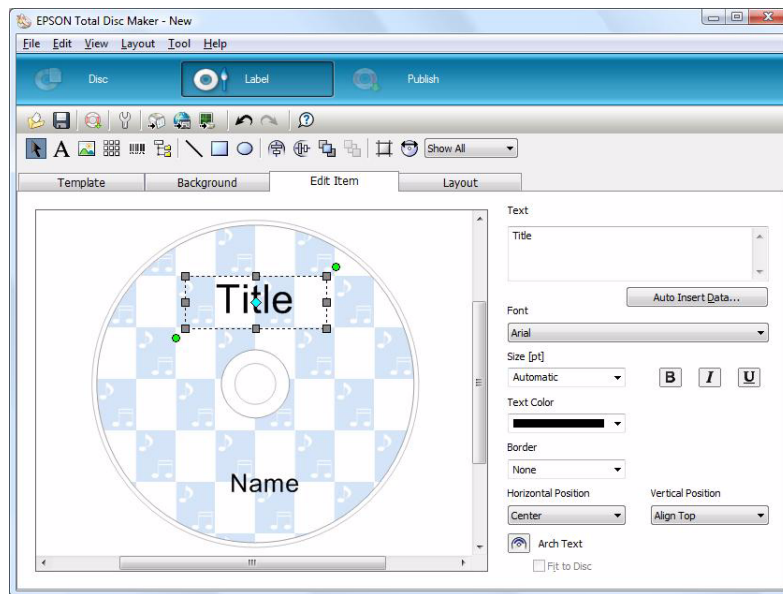
CAUTION	Determine the text item box size considering the size and number of characters to be put into the box by merge print. When the merged characters exceed the text item box, the characters that run off the box cannot be printed.

3 Enclose the character string with "{ }" (example: Title ➜ {Title}). The character string enclosed with "{ }" is regarded as a text item to be replaced with text data for merge print.

Edit the font size, type and color. These settings will be applied to the characters merged at the text item position. When "Automatic" is selected for "size", the merged characters size will be automatically reduced/enlarged so that they fit into the text item box.

Font type, size and color can be selected

The layout can be adjusted
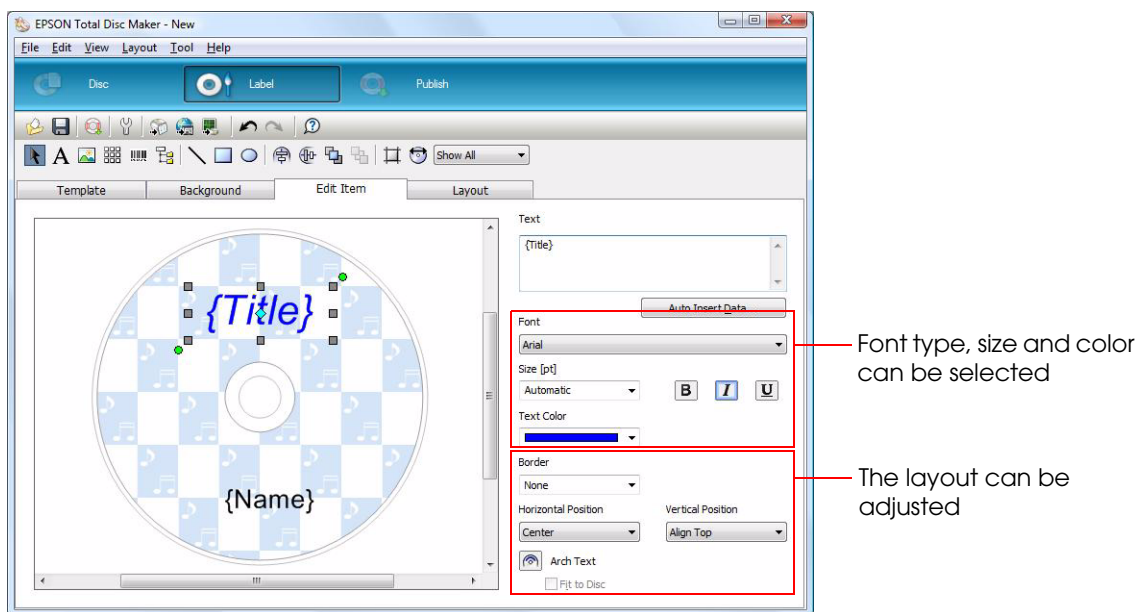
> **NOTE** Character strings that are not enclosed with "{ }" will be printed as they are.

Merge Print Rules

Text item example	Character strings to be merged	Print result	Explanation
{Title}	Title=Sample	Sample	This is a basic text item. The character string to be merged is printed at the text item position.
{ID} : KEN	ID=001	001 : KEN	The character string that is not enclosed with "{ }" remains as it is without being replaced.
{{Memo}	Memo=Text memo	{Memo}	The first "{{" is replaced with "{", however, the character string is not regarded as a text item to be replaced.
{Address}	-	Blank	When no character string is specified for the text item, the text item is replaced with blank.

When carrying out multiple merge print jobs, perform Step 2 and 3 for each job.

4 Click (File) - (Save as) to save the label file under a desired name.

The extension of the saved label file is "TDD". For merge print, specify the TDD file in the JDF file.

Creating a Text Item File

A text item file is a file of character data to be printed. Arrange the file by following the steps below.

Item	Content
File type	Text (ANSI) format
File name	Optional
File extensions that are not available	CDN, CER, DON, ERR, INP, JCF, JDF, RJD, STP

How to write a Text Item File

Enter a text item that is exactly same as that entered in the label file, and enter =, then enter a character string to be replaced with the text item.
(You do not need to enclose the text item with "{ }".)

Text item file example (print.dat)

```
Title=Sample Disc

User ID=[AD001]
```

When you want to input a line feed code, specify "\n". If you want to specify "\n" itself, specify "\\n".
Tab characters cannot be used. Using them will cause an error.
The number of characters to be merged must be within 1024. Exceeding the limit will cause an error.
("<" is counted as two characters because it is converted into "<<" by the internal processing.)
When no character string is specified for the text item, the text item is replaced with blank.

Setting the JDF File

Specify the directory path of the label file and text item file using the JDF file.
The following is an example of JDF file in which a label file (image.tdd) and text item file (print.dat) are specified.

JDF File (demo.jdf)

```
JOB_ID=PATIENT00120071100

PUBLISHER=Publisher 0

COPIES=1

OUT_STACKER=4

DISC_TYPE=CD

FORMAT=ISO9660L2

DATA=C:\TDBridgeDemoFolder\hospital\ServerRoom\patient1

LABEL=C:\TDBridgeDemoFolder\hospital\uketsuke\LabelImage\image1.tdd

REPLACE_FIELD=C:\TDBridgeDemoFolder\hospital\uketsuke\ReplaceFieldData\print.dat
```

Specifying the text item file

Specifying the label file

Merge Print of Barcodes

What is merge print of barcodes?

Barcode items in a label file are printed by being replaced with barcode values written in a text item file.

Label file
(image2.tdd)

Input text
{BARCODE}
Barcode type : ITF

Barcode item

Input text
{BARCODEFILE}
Barcode type : QR CODE

Print result with merged text

0 1 2 3 4 5 6 7

Text item file
（print2.dat）

BARCODE=01234567
BARCODEFILE=FILE（TAB）C:\data\test.dat
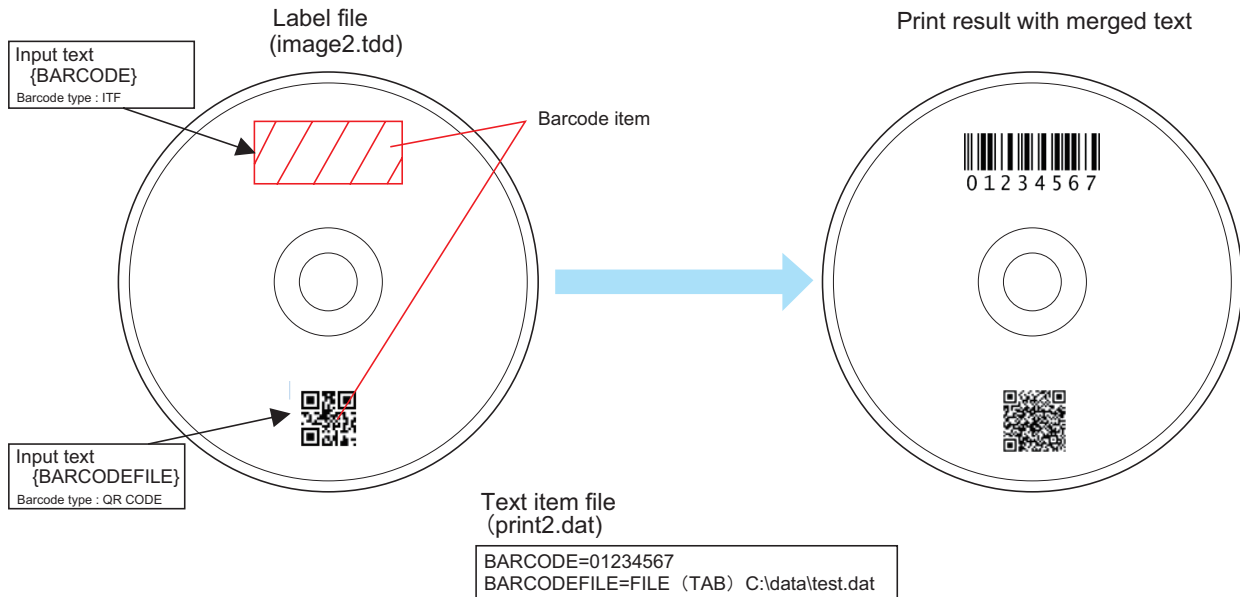
Setting Procedure

Follow the procedure below to make the merge print of barcodes.

> **Editing barcode items**
> Edit barcode items in the label file and set them to be replaced.

> **Creating a text item file**
> Write barcode values and file path.

> **Specifying the merge print in a JDF file**
> Write the full directory path of the label image file and the text item file.

Editing of barcode item

Edit barcode item in the label file using EPSON Total Disc Maker.

1 Click (Start) - (All Programs) - (EPSON Total Disc Maker) - (EPSON Total Disc Maker) to start EPSON Total Disc Maker. Open a label file to be used as the background, and click (Label) and select (Edit Item) tab.

NOTE	It is also available to create a new label file or use template file.

2 Select the barcode item you want to edit.
If there is no barcode item, add a barcode. Click the barcode icon, and add the barcode item.
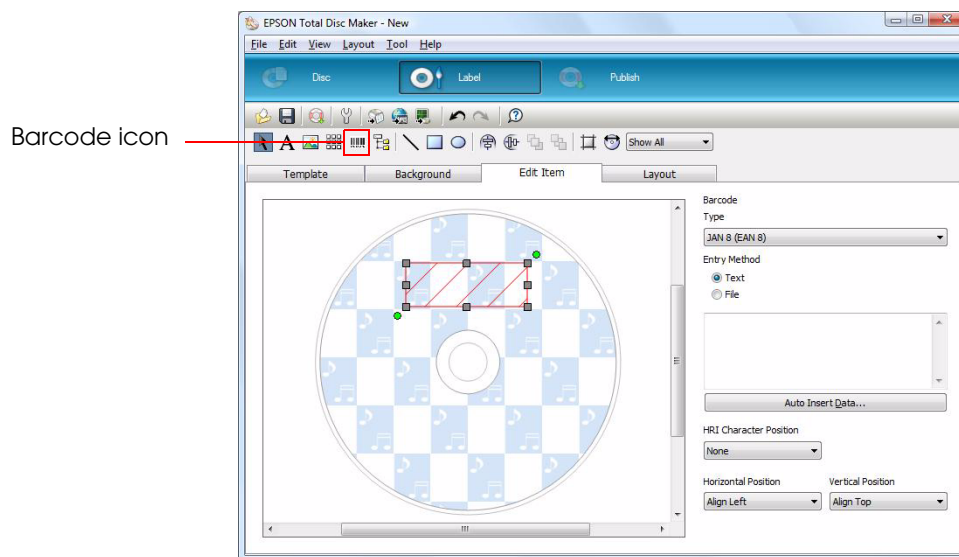
Barcode icon

CAUTION	Make sure the frame of the barcode item is large enough to input the longest data available, so it can be printed with no problem. If data to be input is larger than the frame of the barcode, it cannot be printed.

3 Edit the barcode item.

Edit the barcode type, entry method, and HRI character position. (See "Text" for how to input)

Select the barcode type.

Select the entry method.

Select the HRI character position.
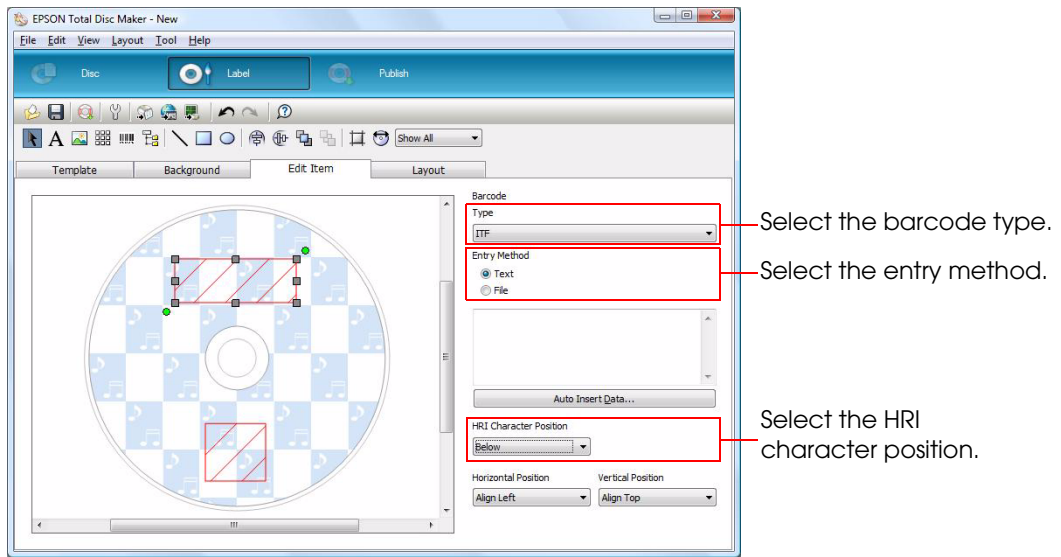
4 Enclose the input text with "{}". (Example: {BARCODE})
Barcode item in "{}" is for the merge print.

The barcodes are printed on the disc, though they are displayed as diagonal lines.

Edit input text.
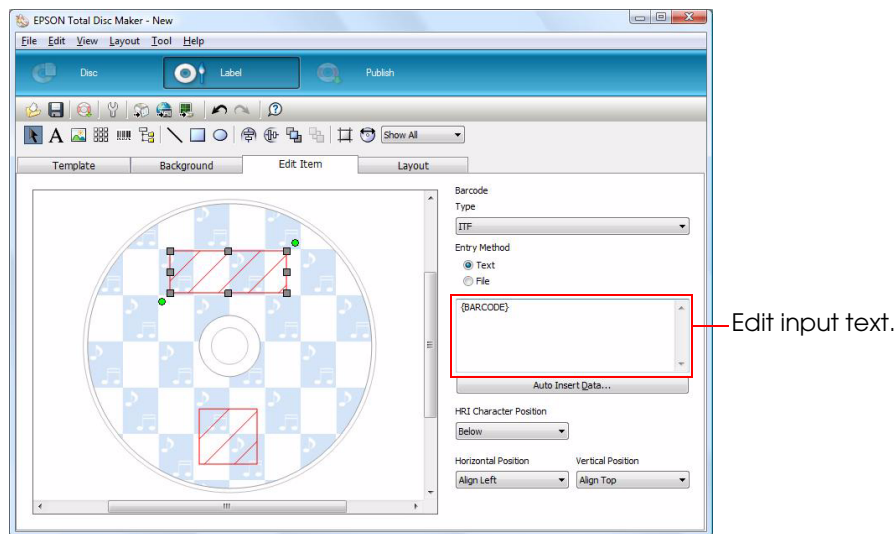
NOTE	• Barcode items without setting the merge print are printed as they are.
	• The following message is displayed depending on the barcode type. Click (OK) to continue.
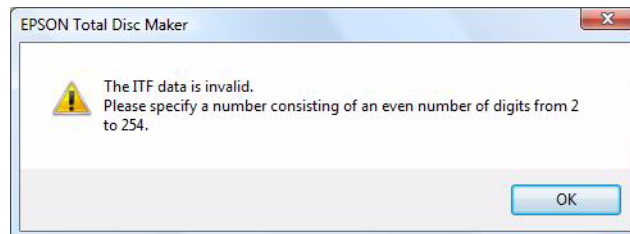
• You cannot make multiple merge print settings for one barcode item.
(Example: (BARCODE)(BARCODE_2)

If you want to make multiple merge print settings, repeat Steps 2 to 4.

5 Click (File) - (Save as) to save the label file under a desired name.

The extension of the saved label file is "TDD". For merge print, specify the TDD file in the JDF file.

Creating a Text Item File

A text item file is a file of character data to be printed. Arrange the file by following the steps below.

Item	Content
File type	Text (ANSI) format
File name	Optional
File extensions that are not available	CDN, CER, DON, ERR, INP, JCF, JDF, RJD, STP

How to write a Text Item File

There are two ways to write a text item file. One is by writing a barcode value, and the other is by writing a file path.

To write a barcode value

- Barcode item = Barcode value

  Do not write "{}" before and after the barcode item.

  Alphanumeric character, "-," and "_" are available (case-independent). If you input other characters than those, an error occurs.

  For the barcode value, specify the value that is the base of the barcode to be replaced.

  Tab characters are not available for the barcode value. If you use them, an error occurs.

  When you want to input a line feed code, specify "\n". If you want to specify "\n" itself, specify "\\n".

To write a file path

- Barcode item = FILE(TAB) Barcode file path

  Do not write "{}" before and after the barcode item.

  Alphanumeric character, "-," and "_" are available (case-independent). If you input other characters than those, an error occurs.

  For the file path, write a file path of the file in which binary data to be replaced is written.

Text Item File example (print2.dat)

```
BARCODE=01234567
BARCODEFILE=FILE (TAB) C:\data\test.dat
```

Setting the JDF file

Setting the JDF file is the same as the merge print for text. See .
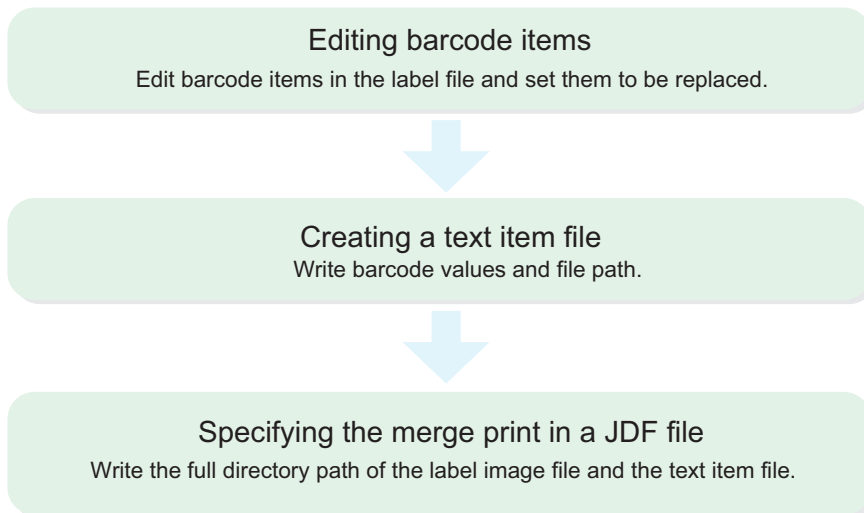
Merge Print of Images

What is merge print of images?

Image items in a label file are printed by being replaced with barcode values written in a text item file.

Label file
(image3.tdd)

Item ID
IMAGE

Image item

Print result with merged text

Text item file
（print3.dat）

IMAGE=FILE（TAB）C:\data\cat.bmp
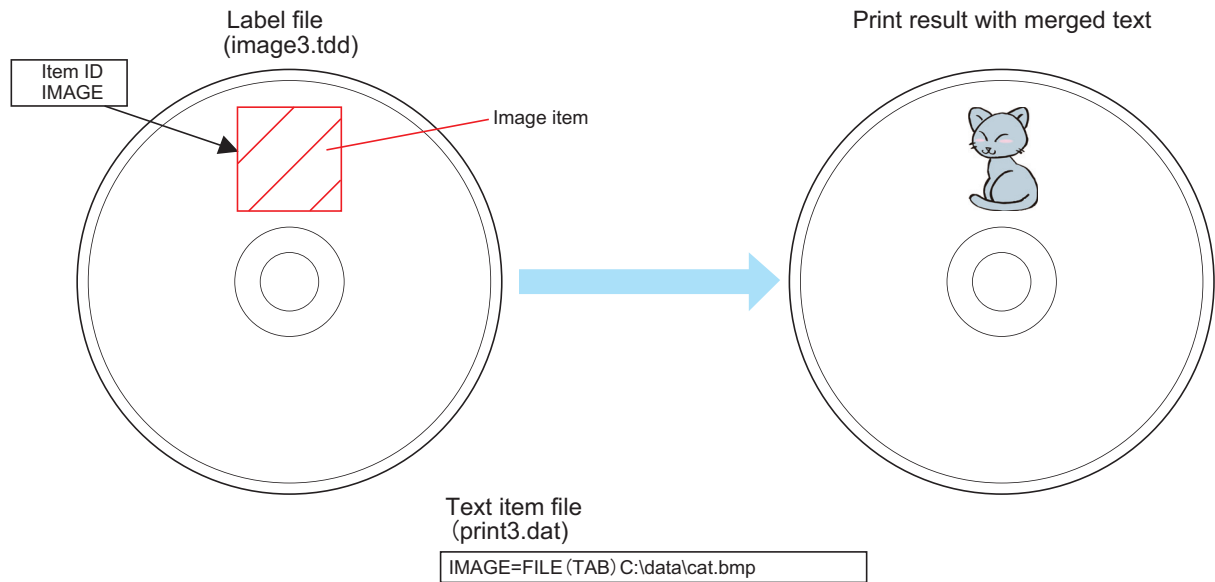
Setting Procedure

Follow the procedure below to make the merge print of image.

Editing image items
Edit image items in the label file and set them to be replaced.

Creating a text item file
Write image file path.

Specifying the merge print in a JDF file
Write the full directory path of the label image file and the text item file.
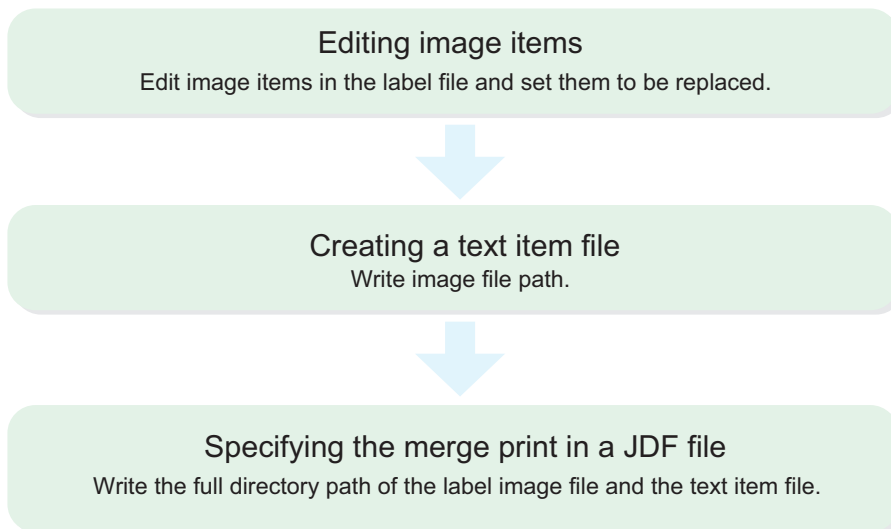
Editing of image item

Edit image item in the label file using EPSON Total Disc Maker.

1 Click (Start) - (All Programs) - (EPSON Total Disc Maker) - (EPSON Total Disc Maker) to start EPSON Total Disc Maker. Open a label file to be used as the background, and click (Label) and select (Edit Item) tab.

**NOTE** It is also available to create a new label file or use template file.

---

2 Select the image item you want to edit.
If there is no image item, add an image. Click the image icon, and add the image item.

Image icon ⟶
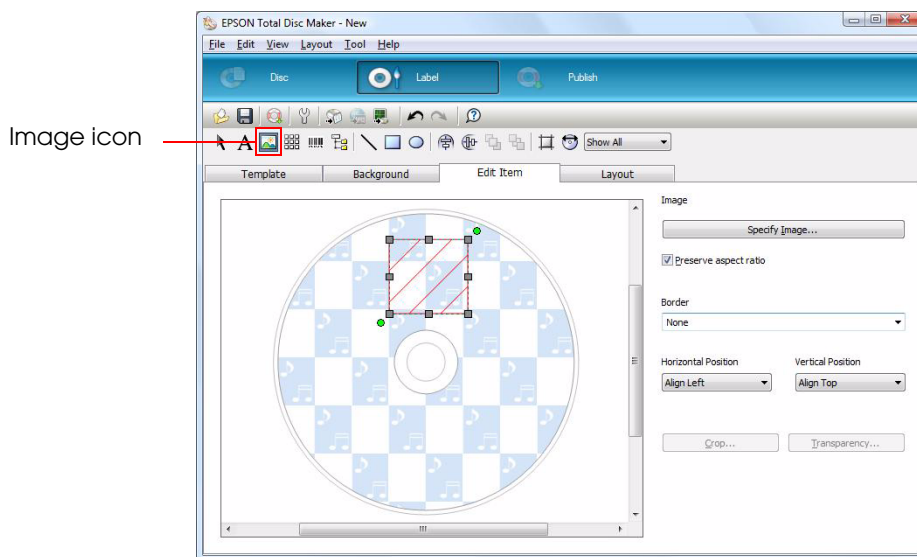
3 Right-click the selected image item and select (Set Item ID) from the menu that appears.
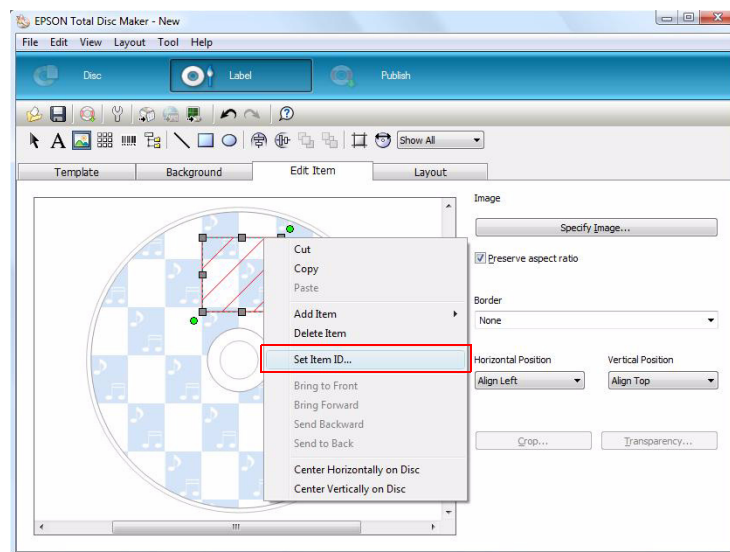
4 The item ID dialog box appears. Enter any item ID (example: IMAGE) and then click the (OK) button.

Use only one-byte alphanumeric characters, "-", and "_" for the item ID. The item ID is not case-sensitive.

The image item will appear as slanted lines, but the image will be printed on the disk. To merge-print multiple images, repeat steps 2 to 4.

Enter Item ID
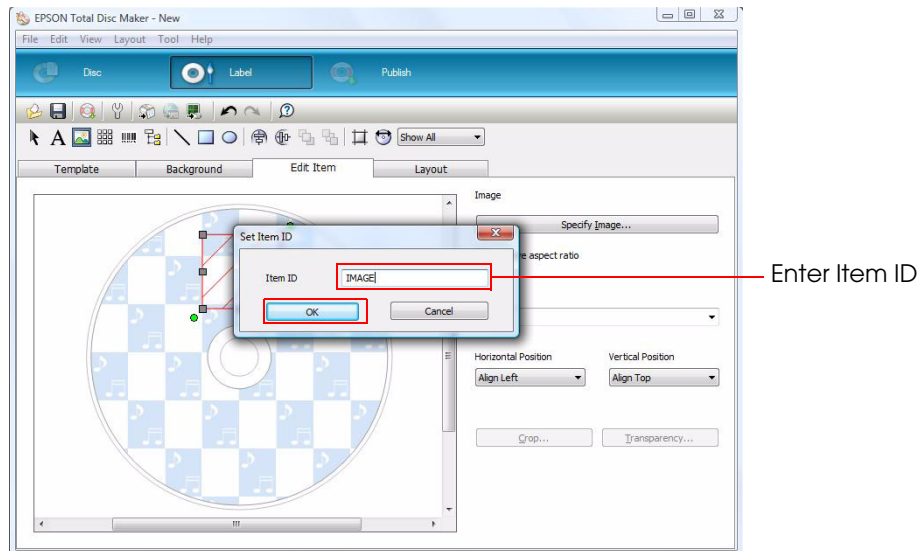
5 Click the (Layout) tab. Make sure that the item ID is set for the image item.

6 Click (File) - (Save as) to save the label file under a desired name.

The extension of the saved label file is "TDD". For merge print, specify the TDD file in the JDF file.

Creating a Text Item File

A text item file is a file of character data to be printed. Arrange the file by following the steps below.

Item	Content
File type	Text (ANSI) format
File name	Optional
File extensions that are not available	CDN, CER, DON, ERR, INP, JCF, JDF, RJD, STP

How to write a Text Item File

Item ID = FILE(TAB) Image file path
Alphanumeric character, "-," and "_" are available (case-independent). If you input other characters than those, an error occurs.
For the file path, write a file path of the file in which binary data to be replaced is written.
A BMP, JPEG, TIFF, PNG file is specified for a image file.

Text Item File example (print3.dat)

```
IMAGE=FILE(TAB)C:\data\cat.bmp
```

Setting the JDF file

Setting the JDF file is the same as the merge print for text. See .

Merge print of text / barcode / image item

Merge print of text, barcode and image items is available in one label file.
In this case, a text item file is written in together with a barcode item.

Label file
(image4.tdd)

Print result with merged text

Text item

{Title}

Image item

Sample Disc

Item ID
IMAGE

Barcode item

Input text
{BARCODEFILE}
Barcode type : QR CODE

Text item file
(print4.dat)

```
Title=Sample Disc
BARCODEFILE=FILE（TAB）C:\data\test.dat
IMAGE=FILE（TAB）C:\data\art01.bmp
```
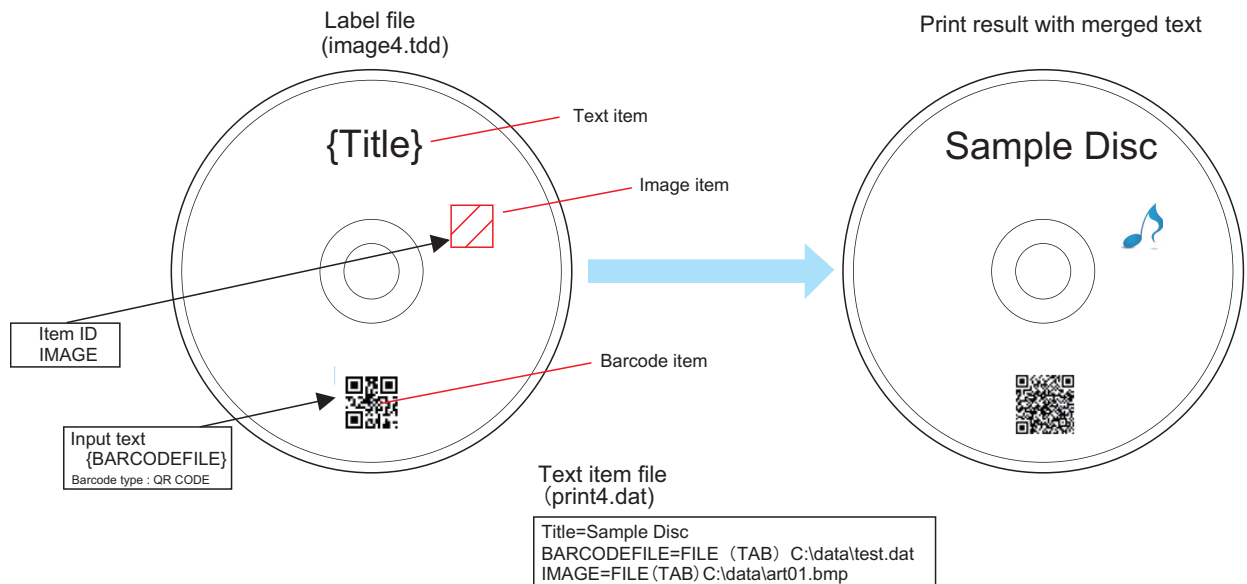
STF File

The STF file (TDBStatus.txt) is a file for sending PP-100/N/AP status to your cooperative application.
The STF file includes the following information; job ID, the number of published discs, job status, error code, the number of discs in the stacker, ink level, and so on.

❏ When a publishing machine has been registered using EPSON Total Disc Setup, TD Bridge creates the STF file automatically.

❏ The STF file is updated every five seconds while TD Bridge is activating. The update has no relation to whether your cooperative application is started or not.

❏ Once the STF file is created, the file is not deleted even after exiting TD Bridge.

❏ The STF file cannot be updated while it is opened by another application. Therefore, the STF file must be closed as soon as the application finished to read the file.

❏ Jobs created from EPSON Total Disc Maker without using TD Bridge are not written in the STF file.

❏ The ink level information is not suitable for calculating the number of sheets that are printable with the remaining ink because the information changes each time ink is consumed by automatic cleaning.

STF File Status Transition

The contents of a STF file changes four times with the progress of the job; before accepting a job, preprocessing the job, processing the job, and after completion of the job. Some statuses will not appear with some models. For the details, see .

(1) Before accepting a job	(2) Preprocessing the job	(3) Processing/Waiting for processing	(4) After completion of a job

(1) Before accepting a job
```
[ACTIVE_JOB]
[COMPLETE_JOB]
[PUBLISHER1]
NAME=Publisher 0
STACKER1=16
STACKER2=12
STACKER3=-1
STACKER4=0
INK_C=76
INK_M=76
INK_Y=75
INK_LC=75
INK_LM=76
INK_B=76
INFO1=
ID={EPPUB11111111_1}
STACKER1_SETTING=1
STACKER1_SETTING=0
STACKER3_SETTING=0
STACKER4_SETTING=99
PRINTER_STATUS=1
PRINTED_COPIES=60
PRINTABLE_COPIES=1
DRIVE1_STATUS=1
DRIVE1_PLUG_IN=
DRIVE1_LIFE=50
DRIVE2_STATUS=1
DRIVE2_PLUG_IN=
DRIVE2_LIFE=50
MODE=1
SERIAL_NUMBER=KHU
F000000
[TDB_INFO]
TDB_ID=360F62E8551
```

(2) Preprocessing the job
```
[ACTIVE_JOB]
JOB1=003
[COMPLETE_JOB]
[003]
STATUS=1
ERROR=
DETAIL_STATUS=1
[PUBLISHER1]
NAME=Publisher 0
STACKER1=16
STACKER2=12
STACKER3=-1
STACKER4=0
INK_C=76
INK_M=76
INK_Y=75
INK_LC=75
INK_LM=76
INK_B=76
INFO1=
.
.
.
```

(3) Processing/Waiting for processing
```
[ACTIVE_JOB]
JOB1=003
[COMPLETE_JOB]
[003]
PUBLISHER=Publisher 0
STATUS=2
PUBLICATION_NUMBER=10
COMPLETION_NUMBER=5
ERRORDISC_NUMBER=0
TYPE=3
IN_STACKER=1
OUT_STACKER=4
ESTIMATION_TIME=133
ERROR=
DETAIL_STATUS=3
[PUBLISHER1]
NAME=Publisher 0
STACKER1=16
STACKER2=12
STACKER3=-1
STACKER4=0
INK_C=76
INK_M=76
INK_Y=75
INK_LC=75
INK_LM=76
INK_B=76
INFO1=
.
.
.
```

(4) After completion of a job
```
[ACTIVE_JOB]
[COMPLETE_JOB]
JOB1=003
[003]
PUBLISHER=Publisher 0
STATUS=4
PUBLICATION_NUMBER=10
COMPLETION_NUMBER=10
ERRORDISC_NUMBER=0
TYPE=3
IN_STACKER=1
OUT_STACKER=4
ESTIMATION_TIME=133
ERROR=
DETAIL_STATUS=9
[PUBLISHER1]
NAME=Publisher 0
STACKER1=15
STACKER2=12
STACKER3=-1
STACKER4=1
INK_C=76
INK_M=76
INK_Y=75
INK_LC=75
INK_LM=76
INK_B=76
INFO1=
.
.
.
```

(1) The status of the connected PP-100/N/AP is written under (PUBLISHER1).

(2) When a job is received, a JOB_ID is generated in (ACTIVE JOB). (If a JOB_ID is not specified in the linked application, TD Bridge will automatically assign a number. The automatically assigned number will be the system date (yyyymmddhhmmssSSS) at the time the JDF file extension is converted to RJD.) A (JOB_ID) will also be generated (003 in this example), and "STATUS=1", "ERROR=", and "DETAIL STATUS=1" will appear during job preprocessing. "PUBLISHER1" always appears below the job.

(3) While the job is being processed or being put in standby, all of the job statuses are added under the job ID.

(4) The job ID under the (ACTIVE_JOB) is deleted, and then the job ID is added under the (COMPLETE_JOB). The job ID information is deleted when the job is deleted.

4

STF File Status

The table below lists the contents (job statuses) written in the STF file.

Section name	Key name	Explanation	Output values that indicate status	Change timing
ACTIVE_JOB	JOB(N) * (N) stands for a number that starts from 1.	Among the jobs that TD Bride has received, job IDs being processed or waiting to be processed are output. The job ID being processed is output first, followed by the job IDs waiting for processing in the order of execution.	Job IDs of jobs being processed or being put in standby When publishing a job from another TD Bridge, the value which has a unique identification for the job ID and TD Bridge.	When a job is accepted/ completed
COMPLETE_JOB	JOB(N) * (N) stands for a number that starts from 1.	Job ID is written from a job completed most recently.	Job IDs of completed jobs (including jobs finished abnormally) Job IDs for jobs published from other TD Bridge are not written.	When a job is completed
(JOB_ID) A job ID becomes the section name. This section is added for each registered job. When publishing from another TD Bridge, completed jobs are not written.	PUBLISHER (*1)	The specified publishing machine name is written.	Publishing machine name. This key is not written to the file when the machine name is unknown.	When a job is started
	STATUS	An ID that represents the job status is written.	Being registered or put in standby: "1" Being processed: "2" Being paused: "3" Completed: "4" Completed abnormally: "5" Being not accepted: "6" Unknown: "99"	Each time the job status changes
	PUBLICATION_NUMBER (*1)	The specified number of discs to be published is written.	The number of discs to be published Unknown: "-1"	When a job is started
	COMPLETION_NUMBER (*1)	The number of published discs is written.	The number of published discs Unknown: "-1"	When a job is started Each time a disc is published
	ERRORDISC_NUMBER (*1)	The number of published discs that are completed abnormally is written.	The number of published discs that are completed abnormally Unknown: "-1"	Each time an error disc is published
	TYPE (*1)	An ID that represents the job type is written.	Only burning data: "1" Only printing data: "2" Burning and printing: "3"	When a job is started
	IN_STACKER (*1)	The specified source stacker is written.	Stacker 1: "1" Stacker 2: "2" Stacker 1 and 2: "1,2" Unknown: "-1"	When a job is started
	OUT_STACKER (*1)	The specified output stacker is written.	Stacker 2: "2" Stacker 4: "4" Stacker 2,3: "2,3" Unknown: "-1"	When a job is started
	ESTIMATION_TIME (*1)	An estimated operating time for completing the job. This is not the estimated time of completion.	An estimated time period from when starting the job to when finishing it is written in increments of one second. (This key is not written for completed jobs and when the time is unknown.)	When a job is started
	ERROR	This indicates a code of error that is occurring with the ongoing job. When the error is cleared, the error code is deleted when the STF file is updated. The "ERROR" always appears even when no error is occurring.	See "Error Codes and Remedies".	Each time an error occurs

Section name	Key name	Explanation	Output values that indicate status	Change timing
(JOB_ID)	DETAIL_STATUS	An ID showing the detailed status of the job is output. For changes of the status of the DETAIL_STATUS key, see "Values Output to DETAIL_STATUS Key and Transition Diagram" on page 4-72.	Reception processing: "1" Waiting for publishing: "2" Publishing: "3" Pause processing: "4" Waiting for return processing: "5" Canceling processing: "6" Paused: "7" Waiting for return: "8" Done (no alarm, no error disk): "9" Done (alarm, no error disk): "10" *5 Done (alarm, error disk): "11" *5 User cancel done: "12" Error cancel done: "13" Reception refused: "14" Unknown: "99"	When the job status changes
PUBLISHER(N) This is an information of each PUBLISHER. * (N) stands for a machine number that starts from 1.	NAME	The publishing machine names registered by EPSON Total Disc Setup are written.	Publishing machine name	Always appears as long as registered machine exists
	STACKER1	The remaining amount of discs in the stacker 1 of the specified publisher is expressed in percentage. Note that this is not the number of remaining discs.	The percentage ("0" to "100") Unknown: "-1"	Each time the remaining amount of discs changes
	STACKER2	The remaining amount of discs in the stacker 2 of the specified publisher is expressed in percentage. Note that this is not the number of remaining discs.	The percentage ("0" to "100") Unknown: "-1"	Each time the remaining amount of discs changes
	STACKER3	The status of the stacker 3 (full or not full) of the specified publisher is written.	When the stacker is full: "100" When the stacker is not full: "0" Unknown: "-1"	When the stacker full status or not-full status is detected.
	STACKER4	The status of the stacker 4 (full or not full) of the specified publisher is written.	When the stacker is full: "100" When the stacker is not full: "0" Unknown: "-1"	When the stacker full status or not-full status is detected.
	INK_C	The cyan ink level of the specified publisher is written.	The percentage ("0" to "100") (*2) Unknown: "-1"	Each time the ink is consumed
	INK_M	The magenta ink level of the specified publisher is written.	The percentage ("0" to "100") (*2) Unknown: "-1"	Each time the ink is consumed
	INK_Y	The yellow ink level of the specified publisher is written.	The percentage ("0" to "100") (*2) Unknown: "-1"	Each time the ink is consumed
	INK_LC	The light cyan ink level of the specified publisher is written.	The percentage ("0" to "100") (*2) Unknown: "-1"	Each time the ink is consumed
	INK_LM	The light magenta ink level of the specified publisher is written.	The percentage ("0" to "100") (*2) Unknown: "-1"	Each time the ink is consumed
	INK_B	The black ink level of the specified publisher is written.	The percentage ("0" to "100") (*2) Unknown: "-1"	Each time the ink is consumed
	INFO(M) * (M) stands for a number that starts from 1.	The hardware status is written by INFORMATION code. If multiple INFORMATION codes exist, the corresponding multiple codes are written. When the hardware recovers from the status, the INFORMATION code is deleted when the STF file is updated. The "INFOR(M)=" always appear even while the hardware is operating normally.	See "INFORMATION Code List".	

4

Section name	Key name	Explanation	Output values that indicate status	Change timing
PUBLISHER(N)	ID * PP-100 / PP-100AP only	The ID of the device is output.	Registration ID The format is "{EPPUBYYYYMMDD_XXX}" * YYYYMMDD is the date of registration (4-digit year, 2-digit month, 2-digit day) *XXX is the serial number.	
	URL * PP-100N only	The IP address or host name of the device is output.	IP address or host name	
	STACKER1_SETTING * PP-100 / PP-100N only	An ID indicating the setting of stacker 1 of the device is output.	When the server system software of the PP-100 or PP-100N is Ver 1.10 or later CD-R: "1" DVD: "4" DVD DL: "7" Unknown: "-1" When the server system software of the PP-100N is Ver 1.01 or later CD-R: "1" DVD-R 4.7 GB: "2" DVD+R 4.7 GB: "3" DVD-R DL 8.5 GB: "5" DVD+R DL 8.5 GB: "6" Unknown: "-1"	
	STACKER2_SETTING * PP-100 / PP-100N only	An ID indicating the setting of stacker 2 of the device is output.	When the server system software of the PP-100 or PP-100N is Ver 1.10 or later Output Stacker: "0" CD-R: "1" DVD: "4" DVD DL: "7" Unknown: "-1" When the server system software of the PP-100N is Ver 1.01 or later Output Stacker: "0" CD-R: "1" DVD-R 4.7 GB: "2" DVD+R 4.7 GB: "3" DVD-R DL 8.5 GB: "5" DVD+R DL 8.5 GB: "6" Unknown: "-1"	
	STACKER3_SETTING	An ID indicating the setting of stacker 3 of the device is output.	Output Stacker: "0" Do not use: "99" Unknown: "-1"	
	STACKER4_SETTING	An ID indicating the setting of stacker 4 of the device is output.	Output Stacker: "0" Do not use: "99" Unknown: "-1"	
	PRINTER_STATUS	The registration ID of the device is output.	Standby: "1" Printing: "2" Drying Ink: "3" Cleaning: "4" Error: "5" Transferring: "6" Stopping: "7" Unknown: "-1"	
	PRINTED_COPIES	The number of pages printed by the device is output.	Number of printed copies Unknown: "-1"	
	PRINTABLE_COPIES	The minimum number that the device can print is output.	When the number of printable pages is 1000 or more, "1000" is output. When the number of printable pages is 0, "0" is output. When the number of printable pages is unknown, "-1" is output. If no jobs that include printing have been published since the device was started, "-1" is output.	
	MAINTENANCE_BOX_FREE_SPACE * PP-100AP only	The free space of the maintenance box of the device is output.	"0" to "100" is output. If unknown, "-1" is output.	
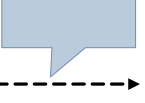
Section name	Key name	Explanation	Output values that indicate status	Change timing
PUBLISHER(N)	DRIVE1_STATUS * PP-100 / PP-100N only	An ID indicating the status of drive 1 of the device is output.	Standby: "1" Writing: "2" Verifying write: "3" Unused: "4" Error: "5" Transferring: "6" Stopping: "7" Unknown: "-1"	
	DRIVE1_PLUG_IN * PP-100 only	The plug-in name when drive 1 of the device is in use. [6]	Plug-in name	
	DRIVE1_LIFE * PP-100 / PP-100N only	The life (%) of drive 1 of the device is output.	"0" to "100" is output. If unknown, "-1" is output. If you are using the PP-100N and the server system software is Ver 1.01 or earlier, "-1" is output.	
	DRIVE2_STATUS * PP-100 / PP-100N only	An ID indicating the status of drive 2 of the device is output.	Standby: "1" Writing: "2" Verifying write: "3" Unused: "4" Error: "5" Transferring: "6" Stopping: "7" Unknown: "-1"	
	DRIVE2_PLUG_IN * PP-100 only	The plug-in name when drive 2 of the device is in use. [6]	Plug-in name	
	DRIVE2_LIFE * PP-100 / PP-100N only	The life (%) of drive 2 of the device is output.	"0" to "100" is output. If unknown, "-1" is output. If you are using the PP-100N and the server system software is Ver 1.01 or earlier, "-1" is output.	
	MODE	An ID indicating the mode of the device is output.	Standard Mode: "1" External Output mode: "2" Batch mode: "3" Unknown: "-1"	
	SERIAL_NUMBER	The serial number of the device is output.	Serial number	
TDB_INFO	TDB_ID	A unique value identifying the currently used TD bridge is output.	TD Bridge identifier	

*1 These keys are not written on the lists when the JDF file was not accepted or when publishing has not been completed.

*2 "0" indicates that the ink cartridge needs to be replaced.

*3 When the user cancel a job, "4" is set even if no disc is published yet.

*4 When an error occurs, "5" is set even when discs are already published and the COMPLETION_NUMBER is more than 1.

*5 The content of a warning can be checked in Total Disc Monitor.

*6 For the details on plug-ins, see "Total Disc Maker Plug-in Technical Reference Guide".

Values Output to DETAIL_STATUS Key and Transition Diagram

The DETAIL_STATUS key provides the detailed status of a job. The timing of changes to values output to the DETAIL_STATUS key is shown below.
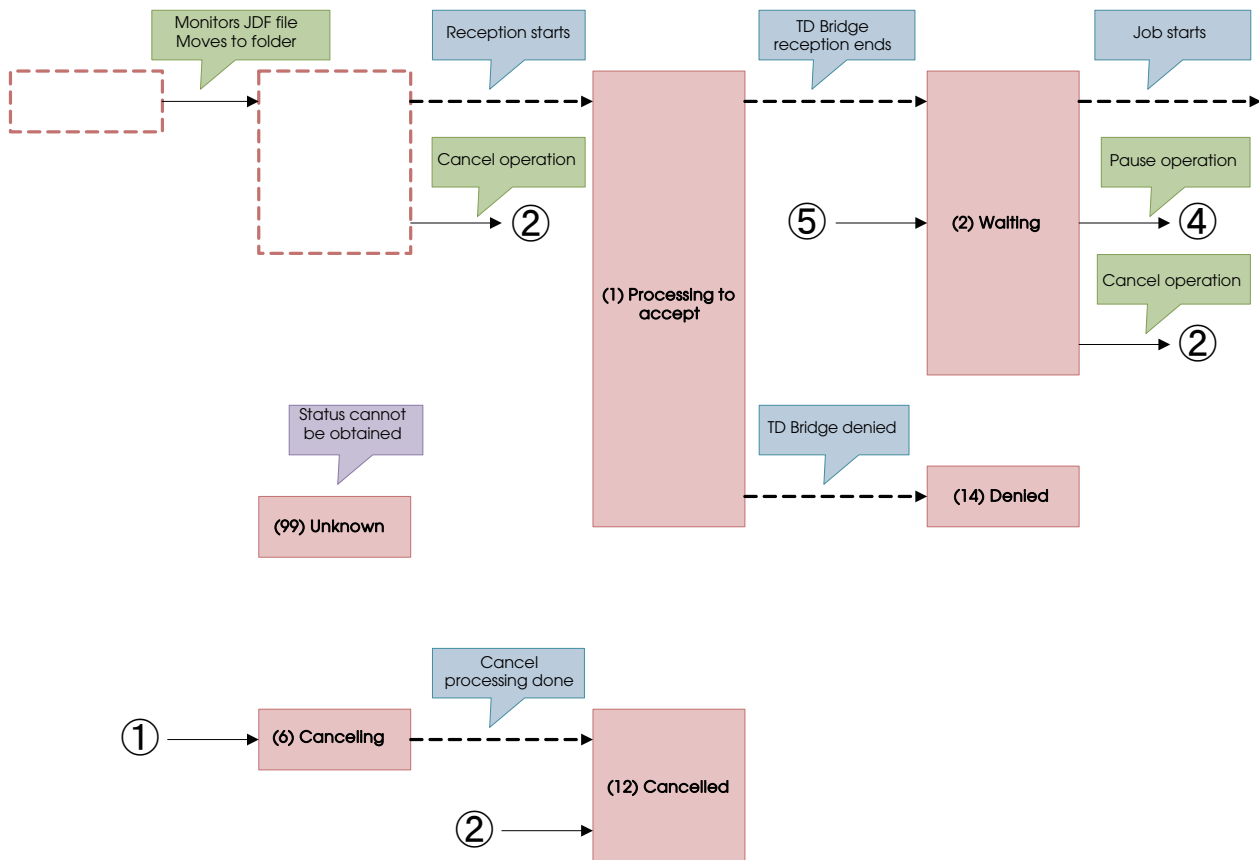
![pink box]		Job status Value of DETAIL_STATUS key in parentheses
![dashed box]		State where nothing is output to DETAIL_STATUS key
![green callout]		Transition due to operation of TD Bridge or Total Disk Monitor by linked application or user.
![blue callout]		Transition due to elapse of time
![purple callout]		Other events

Publishing done

(9) Published
No warning
No error disc

Publishing done
but warning exists

(10) Published
Warning exists
No error disc

Publishing done
but warning and
error disc exist

(11) Published
Warning exists
Error disc exists

Pause operation

Pause
processing done

Resumption of operation
from publishing => paused

Pause condition
occurs

Cancel operation

**(12) User cancel
done**

(4) Pausing

① ②

Resume
operation

Resumption of operation during
recoverable error in device

③

(7) Paused

(3) Publishing

⑥

Resumption of operation from
waiting to publish => paused

④ ⑤

Recoverable error
occurs in device

Waiting to recover
processing done

Operation to clear waiting
to recover state

(5) Recovering

Cancel operation

Cancel operation

① ①

(8) Standby

Pause operation

③ ⑥

Cancel operation

①

Non-recoverable error
occurred in device

(13) Error

4

Error Codes and Remedies

When an error occurs, the corresponding error code is recorded.

List of Error Code before Accepting Jobs

When any one of these error occurs while a job is being accepted, accepting the job is cancelled. The JDF file becomes ERR file, and the job status written in the STF file becomes "STATUS=6".

Job status	Key name	Error code	Description
System error		SYS001	Accepting the job is failed.
		SYS002	Executing the job failed due to the communication error with the publishing machine.
		SYS003	Executing the job failed because the HDD of the publishing machine does not have enough space.
Not accepted	JOB_ID key	JDF0100	The specified job ID already exists.
		JDF0101	The specified job ID contains more than 40 characters.
		JDF0102	The specified job ID contains characters other than English one byte characters/numbers, "-", and "_".
	PUBLISHER key	JDF0200	The specified publishing machine name has not been registered.
		JDF0201	Multiple publishing machines are detected, but none of them has not been specified using the PUBLISHER key. Or no publishing machine has not been specified in the Environment Setting.
		JDF0202	The publishing machine specified by the PUBLISHER key is set to an unsupported mode, or a mode cannot be acquired.
		JDF0203	There is no publishing machine that has been registered.
	COPIES key	JDF0300	The specified number of discs to be published is exceeding the upper limit of the publisher (the upper limit changes depending on the selected mode and stacker setting).
	OUT_STACKER key	JDF0400	A value other than "2" or "4" is specified.
	DISC_TYPE key	JDF0500	The specified disc type is not the same with that has been specified for the source stacker.
		JDF0501	DISC_TYPE key has not been specified.
		JDF0502	A value other than "CD", "DVD", or "DVD-DL" is specified.
	WRITING_SPEED key	JDF0600	A value other than number is specified.
	COMPARE key	JDF0700	A value other than "YES" or "NO" is specified.
	CLOSE_DISC key	JDF0800	A value other than "YES" or "NO" is specified.

Job status	Key name	Error code	Description
Not accepted	DATA key DATA_LIST key	JDF0900	When any of the followings is detected (1) The directory path for both the source and destination has not been specified using the DATA key. (2) The directory path for both the source and destination has not been specified using the DATA key in the file specified by the DATA_LIST key.
		JDF0901	A file with the same name can not be specified in the same folder.
		JDF0902	The specified directory path (including the file name) does not conform to the specified disc format.
		JDF0903	The source file size is too large for the specified disc type.
		JDF0904	The destination folder hierarchy is exceeding 128 levels.
		JDF0905	The drive that stores the specified source file is not ready.
		JDF0907	The specified source file contains a non-existing content.
		JDF0908	The specified source file contains a file to which the current user does not have read/write access.
		JDF0909	Some items of the specified source file are being used.
		JDF0910	The file specified by the DATA_LIST key does not exist. (including when a folder has been specified)
		JDF0911	The current user does not have read/write access to the file specified by the DATA_LIST key.
		JDF0912	The file specified by the DATA_LIST key is being used.
		JDF0913	The drive that stores the file specified by the DATA_LIST key is not ready.
	VOLUME_LABEL key	JDF1000	The specified Volume Label does not conform to the specified disc format.

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Job status	Key name	Error code	Description
Not accepted	VIDEO key	JDF1100	The publisher does not support the specified video file format.
		JDF1101	The video signals of the specified video file do not match with the all tracks.
		JDF1103	The source video file size is too large for the specified disc type.
		JDF1104	The specified video file does not exist.
		JDF1105	The current user does not have read/write access to the specified video file.
		JDF1106	The specified video file is being used.
		JDF1107	The drive that stores the specified video file is not ready.
		JDF1108	The duration of playing time of the specified video file is less than one second.
		JDF1150	The specified VIDEO_TS folder does not exist.
		JDF1151	The specified file path is not for the folder named "VIDEO_TS."
		JDF1152	The current user does not have read/write access to the specified VIDEO_TS folder.
		JDF1153	The drive for the specified VIDO_TS folder is not ready.
		JDF1154	The specified VIDEO_TS folder contains a file to which the current user does not have read/write access.
		JDF1155	Some files in the specified VIDEO_TS folder are being used.
		JDF1156	The file composition of the specified VIDEO_TS folder is incorrect.
		JDF1157	The source DVD-Video data size is too large for the specified disc type.
	VIDEO_TITLE key	JDF1200	The specified video title is exceeding 32 characters.
		JDF1201	The specified video title contains invalid characters.
	IMAGE key	JDF1300	The publisher does not support the specified image file format.
		JDF1301	The source image file size is too large for the specified disc type.
		JDF1302	The specified image file does not exist.
		JDF1303	The current user does not have read/write access to the specified image file.
		JDF1304	The specified image file is being used.
		JDF1305	The drive that stores the specified image file is not ready.
		JDF1306	The specified disc type for the image file is not the same with that has been specified for the source stacker.

Job status	Key name	Error code	Description
Not accepted	FORMAT key	JDF1400	Disc type CD and data file have been specified, however, a setting other than "ISO9660L2", "JOLIET", or "UDF102" has been specified in the FORMAT key.
		JDF1401	Disc type DVD or DVD-DL and data file have been specified, however setting other than "UDF102" or "UDF102_BRIDGE" has been specified using the FORMAT key.
	LABEL key	JDF1500	The publisher does not support the specified label file format.
		JDF1501	The specified label file does not exist.
		JDF1502	The current user does not have read/write access to the label file specified by the LABEL key.
		JDF1503	The specified label file is being used.
		JDF1504	The drive that stores the specified label file is not ready.
	REPLACE_FIELD key	JDF1600	The text data file specified using the REPLACE_FIELD key does not exist.
		JDF1601	The current user does not have read/write access to the data file specified by the REPLACE_FIELD key.
		JDF1602	The text data file specified using the REPLACE_FIELD key is being used.
		JDF1603	The drive that stores the file specified by the REPLACE_FIELD key is not ready.
		JDF1604	When any of the followings is detected (1) The file extension or setting itself contains invalid characters. (2) The number of characters of the specified character string to be merged is exceeding 1024 (upper limit for the text item). (3) More than 255 text items have been specified.
		JDF1610	The specified barcode value does not conform to the barcode standard for the barcode to be replaced.
		JDF1611	The specified barcode file does not exist.
		JDF1612	The current user does not have read/write access to the specified barcode file.
		JDF1613	The specified barcode file is being used.
		JDF1614	The drive for the specified barcode file is not ready.
		JDF1615	The specified keyword for the barcode item is incorrect.
		JDF1620	An image file that does not exist has been specified.
		JDF1621	The specified image file format is not supported.
		JDF1622	No access privilege for the specified image file.
		JDF1623	The specified image file is in use.

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Job status	Key name	Error code	Description
Not accepted	REPLACE_FIELD key	JDF1624	The drive of the specified image file is not ready.
		JDF1625	Specification of keyword for replacement image item is invalid.
	AUDIO_TITLE key	JDF1700	The value for AUDIO_TITLE key is exceeding 128 half-size characters (64 two-byte characters).
		JDF1701	The value for AUDIO_TITLE key contains characters that can not be changed into multi-byte characters.
	AUDIO_PERFORMER key	JDF1800	The value for AUDIO_PERFORMER key is exceeding 128 half-size characters (64 two-byte characters).
		JDF1801	The value on AUDIO_PERFORMER key contains characters that can not be changed into multi-byte characters.
	AUDIO_TRACK key	JDF1900	The total size of CD-TEXT is exceeding 3024 byte (corresponding to 3000 half-size characters).
		JDF1901	The total size of music data to be written and pregap is too large for the specified disc type.
		JDF1910	The specified music file format is not supported.
		JDF1911	No music file is specified, or the specified music file does not exist.
		JDF1912	The current user does not have the access rights to read/write the specified music file.
		JDF1913	The specified music file is being used.
		JDF1914	The drive that stores the specified music file is not ready.
		JDF1915	The specified music file is protected by copyright.
		JDF1916	The duration of playing time of the specified music file is less than four seconds.
		JDF1920	The specified track title is exceeding 128 half-size characters (64 two-byte characters).
		JDF1921	The specified track title contains characters that can not be changed into multi-byte characters.
		JDF1930	The specified track artist name is exceeding 128 half-size characters (64 two-byte characters).
		JDF1931	The specified track artist name contains characters that can not be changed into multi-byte characters.
		JDF1940	The specified pregap is out of the range from 0 to 269999 (00:00:00 frame to 59:59:74 fame).
		JDF1950	The value specified in the ISRC keyword contains characters other than one-byte uppercase characters or one-byte numerals. Or the number of characters is not 12.
	LABEL_AREA key	JDF2000	Other than a one byte character is specified for the DiscDiamOut keyword, or the value is out of the range from 700 to 1194 (70 mm to 119.4 mm).
		JDF2001	Other than a one byte character is specified for the DiscDiamin keyword, or the value is out of the range from 180 to 500 (18 mm to 50 mm).

Job status	Key name	Error code	Description
Not accepted	PRIORITY key	JDF2300	A setting other than "HIGH" is specified in the PRIORITY key.
	AUDIO_CATALOG_CODE key	JDF2400	Characters other than one-byte numerals are included in the AUDIO_CATALOG_CODE key, or the number of characters is not 13.
	LABEL_TYPE key	JDF2500	A value other than "1", "2", or "3" is set in the LABEL_TYPE key.
		JDF2501	"3" is specified in the LABEL_TYPE key, but the PRINT_MODE key is not specified and a value other than "1" is selected in print mode of the environment settings.
	PRINT_MODE key	JDF2600	A value other than "1", "2", or "3" is set in the PRINT_MODE key.
		JDF2601	"2" or "3" is specified in the PRINT_MODE key, but the LABEL_TYPE key is not specified and the label type in the environment settings is "EPSON-certified CD/DVD label."
		JDF2602	"2" or "3" is specified in the PRINT_MODE key, but "3" is specified in the LABEL_TYPE key.
		JDF2603	"3" is specified in the PRINT_MODE key, but the output device type is not PP-100AP.
	IN_STACKER key	JDF2700	A value other than "1", "2", or "AUTO" is specified in the IN_STACKER key.
	Others	JDF0001	(PP-100 / PP-100N) CD is specified for the disc type, but no value is specified for the data file, video file, image file, track information, or label file information.
		JDF0002	(PP-100 / PP-100N) DVD or DVD-DL is specified for the disc type, but no value is specified for the data file, video file, image file, track information, or label file information.
		JDF0002	(PP-100AP) Print data is not specified.

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List of Error Codes after Accepting Jobs

Handling of a job when an error occurs differs depending on the error type, The following explains about each error and the remedies.

Cancel: The job is cancelled. After eliminating the cause of the error, issue the job again.

Pause: The job is temporarily stopped. After eliminating the cause of the error, restart the job using EPSON Total Disc Monitor.

Automatic recover: The job is temporarily stopped. When the cause of the error is removed, the job is automatically resumed.

Job status	Job handling	Error code	Explanation and Remedies
Accepted jobs	Cancel	CAN000	Picking up a disc from the drive tray or the printer tray is failed. Remedy: Turn off PP-100/N/AP and turn it back on.

		CAN001	A disc is dropped while being picked up.
			Remedy:
			  (1) Turn PP-100/N/AP off and remove the dropped disc.
			  (2) Turn PP-100/N/AP back on.

		CAN002	Releasing a disc is failed. Remedy: Turn off PP-100/PP-100N and turn it back on.

		CAN003	Setting a disc in the drive tray or the printer tray must have been made, however, no disc is detected in the tray.
			Remedy:
			  (1) Turn PP-100/N/AP off and remove any foreign object inside the machine.
			  (2) Turn PP-100/N/AP back on.

		CAN004	In Batch mode, the stacker 3 was not empty when the job was started. Therefore, the output stacker has become full during processing the job.
			Remedy:
			  (1) Remove all discs from the stacker 3.
			  (2) Put new blank discs into the stacker 1 and stacker 2, then restart the job.

		CAN005	An error occurs while the robotic arm is moving.
			Remedy:
			  (1) Turn PP-100/N/AP off and remove any foreign object inside the machine.
			  (2) Turn PP-100/N/AP back on.

		CAN006	An auto loader fatal error has occurred. The robotic arm can not be moved due to overheating of the motor.
			Remedy:
			  (1) Turn PP-100/N/AP off and remove any foreign object inside the machine.
			  (2) Turn PP-100/N/AP back on.

		CAN007	Controlling the drive tray is failed.
			Remedy:
			  (1) Turn PP-100/N/AP off and remove any foreign object from the drive tray.
			  (2) Turn PP-100/N/AP back on.

		CAN008	Processing the job is impossible because of a fatal error of the drive. Remedy: Turn off PP-100/N/AP and turn it back on.

Job status	Job handling	Error code	Explanation and Remedies

Accepted jobs	Cancel	CAN009	Controlling the printer tray is failed.
			Remedy:
			  (1) Turn PP-100/N/AP off and remove any foreign object from the printer tray.
			  (2) Turn PP-100/N/AP back on.

		CAN010	A printer fatal error has occurred. Remedy: Turn off PP-100/N/AP and turn it back on.
		CAN011	A communication with the printer is failed. Remedy: Check if the port setting on the printer driver is correct.
		CAN012	A printer name error has occurred. The printer specified by the EPJ file can not be found. Remedy: Check the printer name.
		CAN013	A printer maintenance error has occurred. Remedy: Please contact the store where you purchased PP-100/N/AP or our customer service.
		CAN014	The waste ink pads need to be replaced. Remedy: Please contact the store where you purchased PP-100/N/AP or our customer service.

		CAN015	The status error has occurred, and any of the following has been detected.
			  (1) The disc on the drive tray disappeared.
			  (2) The disc on the printer tray disappeared.
			  (3) A disc was placed on the drive tray.
			  (4) A disc was placed on the printer tray.
			  (5) Robotic arm got a disc.
			Remedy:
			  (1) Check if there occurred an error inside the chassis.
			  (2) Turn PP-100/N/AP back on.

		CAN016	A JOB file error has occurred, and one of the following has been detected.
			  (1) The specified disc image file cannot be accessed.
			  (2) The specified label data file cannot be accessed.
			Remedy:
			  Set an access privilege for "SYSTEM" account to the shared folder in which the disc image files and label data files are saved, or specify the copied image file on the local computer.

		CAN017	A non-supported version error has occurred, and any of the following has been detected.
			  (1) Firmware version of the auto loader is not supported.
			  (2) Firmware version of the drive 1 is different from the supported version.
			  (3) Firmware version of the drive 2 is different from the supported version.
			  (4) Firmware version of the printer is not supported.
			Remedy:
			  Upgrade the firmware of the concerning device.

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Job status	Job handling	Error code	Explanation and Remedies
Accepted jobs	Cancel	CAN018	The publishing mode specified by EPSON Total Disc Setup when issuing the job and the mode selected on the device are different. Remedy: 　Reset the publishing mode using the EPSON Total Disc Setup.
		CAN019	Creating a disc image is cancelled due to an invalid source directory path. Remedy: 　Check the files and folders in the specified directory.
		CAN020	A communication error with the publisher occurs. Remedy: 　Check if the power supply cable and USB cable are securely connected.
	Pause	STP000	Due to a disc type error or some other reason, the number of write retries has reached that preset by EPSON Total Disc Setup. Remedy: 　(1) Check the blank discs in the source stacker. 　(2) Resume or cancel the paused job using EPSON Total Disc Monitor.
		STP001	Due to a write error, the number of write retries has reached that preset by EPSON Total Disc Setup. Remedy: 　(1) Check the blank discs in the source stacker. 　(2) Resume or cancel the paused job using EPSON Total Disc Monitor. 　When the error still occurs, please contact the store where you purchased 　PP-100/N/AP or our customer service.
	Automatic recover	RTN000	No disc is set in the source stacker specified for the job. Remedy: 　Set blank discs in the source stacker.
		RTN001	The output stacker specified for the job has become full. Remedy: 　Remove the discs from the output stacker.
		RTN002	The disc cover is opening. Remedy: 　Close the disc cover.
		RTN003	The ink cartridge cover is open. Remedy: 　Close the ink cartridge cover.
		RTN004	The specified label print cannot be made because the ink level is low (the cartridge needs to be replaced). Remedy: 　Replace the ink cartridge(s) with a new one(s).
		RTN005	No ink cartridge is detected. Remedy: 　Install the ink cartridges.

Job status	Job handling	Error code	Explanation and Remedies
Accepted jobs	Automatic recover	RTN006	The job cannot be made because the stacker has been removed. Remedy: Install the stacker.

		RTN007	The stacker 3 installation status does not match with the specified publishing mode.
			Remedy:
			  Remove the stacker 3 in Standard or External Output mode.
			  Install the stacker 3 in Batch mode.

		RTN008	The job cannot be made because the stacker 4 is open. Remedy: Close the stacker 4.

		RTN009	Multiple discs have been transferred to the drive.
			Remedy:
			  (1) Open the disc cover.
			  (2) Remove the disc from the drive tray, and close the disc cover.

		RTN010	Multiple discs have been transferred to the printer.
			Remedy:
			  (1) Open the disc cover.
			  (2) Remove the disc from the drive tray, and close the disc cover.

		RTN012	Picking up a disc from the source stacker is failed. Remedy: Separate any sticky discs in the source stacker from each other.
		RTN013	The number of discs in the stacker has exceeded the upper limit. Remedy: Remove discs so that the number of discs in the stacker falls within the limit.
		RTN014	The maintenance box cover is not placed correctly. Remedy: Check the status of the cover.
		RTN015	Time to replace the maintenance box. Remedy: Replace the maintenance box with a new box.
		RTN016	The maintenance box is not installed. Remedy: Install the maintenance box.
		RTN017	Cannot recognize the maintenance box. Remedy: Correctly install the maintenance box.
	Others	OTH000	The job status cannot be obtained because the job history has been deleted. But disc publishing can be continued. If this error recurs, contact our customer service.

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INFORMATION Code List

The INFORMATION code represents the status of the registered PP-100/N/AP. When multiple statuses exist, the all corresponding codes appear.

Item	INFORMATION code	Explanation and Remedies
Printer	HPR000	A printer fatal error has occurred. Remedy: Turn off PP-100/PP-100N and turn it back on.
	HPR001	A printer maintenance error has occurred. Remedy: Please contact the store where you purchased PP-100/N/AP or our customer service.
	HPR002	The waste ink pads need to be replaced. Remedy: Please contact the store where you purchased PP-100/N/AP or our customer service.
	HPR003	A communication with the printer is failed. Remedy: Check if the port setting on the printer driver is correct.
	HPR005	The ink cartridge cover is open. Remedy: Close the ink cartridge cover.
	HPR006	A printer maintenance error has occurred. Remedy: Please contact the store where you purchased PP-100/N/AP or our customer service.
	HPR007	The maintenance box is not installed. Remedy: Install the maintenance box.
	HPR008	Time to replace the maintenance box. Remedy: Replace the maintenance box with a new box.
	HPR009	Cannot recognize the maintenance box. Remedy: Correctly install the maintenance box.
	HPR010	The maintenance box cover is not placed correctly. Remedy: Check the status of the cover.
Drive	HDR000	Controlling the drive tray is failed. Remedy: (1) Turn PP-100/N/AP off and remove any foreign object from the drive tray. (2) Turn PP-100/N/AP back on.
	HDR001	Processing the job is impossible because of a fatal error of the drive. Remedy: Turn off PP-100/N/AP and turn it back on.

Item	INFORMATION code	Explanation and Remedies
Auto loader	HAR000	Picking up a disc from the drive tray or the printer tray is failed. Remedy: Turn off PP-100/N/AP and turn it back on.

	HAR001	A disc is dropped while being picked up.
		Remedy:
		  (1) Turn PP-100/N/AP off and remove the dropped disc.
		  (2) Turn PP-100/N/AP back on.

	HAR002	Releasing a disc is failed. Remedy: Turn off PP-100/N/AP and turn it back on.

	HAR003	Setting a disc in the drive tray or the printer tray must have been made, however, no disc is detected in the tray.
		Remedy:
		  (1) Turn PP-100/N/AP off and remove any foreign object inside the machine.
		  (2) Turn PP-100/N/AP back on.

	HAR004	An error occurs while the robotic arm is moving.
		Remedy:
		  (1) Turn PP-100/N/AP off and remove any foreign object inside the machine.
		  (2) Turn PP-100/N/AP back on.

	HAR005	An auto loader fatal error has occurred. The robotic arm can not be moved due to overheating of the motor.
		Remedy:
		  (1) Turn PP-100/N/AP off and remove any foreign object inside the machine.
		  (2) Turn PP-100/N/AP back on.

	HAR007	Picking up a disc from the stacker is failed.
		Remedy:
		  (1) Open the disc cover.
		  (2) Separate any sticky discs in the source stacker from each other, and close the disc cover.

	HAR008	Multiple discs have been transferred to the drive.
		Remedy:
		  (1) Open the disc cover.
		  (2) Remove the disc from the open drive tray, and close the disc cover.

	HAR009	Multiple discs have been transferred to the printer.
		Remedy:
		  (1) Open the disc cover.
		  (2) Remove the disc from the open printer tray, and close the disc cover.

Cyan ink	HIKC000	The cyan ink cartridge has been removed. Remedy: Install the cyan ink cartridge.
	HIKC001	The model number of the cyan ink cartridge is different or the model number cannot be recognized. Remedy: Replace the cyan ink cartridge with a correct one.

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Item	INFORMATION code	Explanation and Remedies
Magenta ink	HIKM000	The magenta ink cartridge has been removed. Remedy: Install the magenta ink cartridge.
	HIKM001	The model number of the magenta ink cartridge is different or the model number cannot be recognized. Remedy: Replace the magenta ink cartridge with a correct one.
Yellow ink	HIKY000	The yellow ink cartridge has been removed. Remedy: Install the yellow ink cartridge.
	HIKY001	The model number of the yellow ink cartridge is different or the model number cannot be recognized. Remedy: Replace the yellow ink cartridge with a correct one.
Light cyan ink	HIKLC000	The light cyan ink cartridge has been removed. Remedy: Install the light cyan ink cartridge.
	HIKLC001	The model number of the light cyan ink cartridge is different or the model number cannot be recognized. Remedy: Replace the light cyan ink cartridge with a correct one.
Light magenta ink	HIKLM000	The light magenta ink cartridge has been removed. Remedy: Install the light magenta ink cartridge.
	HIKLM001	The model number of the light magenta ink cartridge is different or the model number cannot be recognized. Remedy: Replace the light magenta ink cartridge with a correct one.
Black ink	HIKBK000	The black ink cartridge has been removed. Remedy: Install the black ink cartridge.
	HIKBK001	The model number of the black ink cartridge is different or the model number cannot be recognized. Remedy: Replace the black ink cartridge with a correct one.

Stacker 1	HST1000	The number of discs in the stacker 1 has exceeded the upper limit.
		Remedy:
		  Remove discs so that the number of discs in the stacker 1 falls within the
		  limit.

	HST1001	The stacker 1 has not been installed. Remedy: Install the stacker 1.

Item	INFORMATION code	Explanation and Remedies

Stacker 2	HST2000	The number of discs in the stacker 2 has exceeded the upper limit.
		Remedy:
		  Remove discs so that the number of discs in the stacker 2 falls within the
		  limit.

	HST2001	The stacker 2 has not been installed. Remedy: Install the stacker 2.

Stacker 3	HST3000	The number of discs in the stacker 3 has exceeded the upper limit.
		Remedy:
		  Remove discs so that the number of discs in the stacker 3 falls within the
		  limit.

	HST3001	The output stacker in External Output mode is set to stacker 3, but stacker 3 is not installed, or stacker 3 is not installed in Batch mode. Remedy: Install stacker 3.
	HST3002	Stacker 3 is set in Standard mode, or the output stacker in External Output mode is set to stacker 4, but stacker 3 is installed. Remedy: Remove stacker 3.
Disc cover	HDC000	The disc cover is open. Remedy: Close the disc cover

Communication	HNW000	Either one of the following communication errors occur.
		• Communication with PP-100/PP-100N is disabled.
		• The filter driver has not been attached.
		Remedy:
		(For PP-100 / PP-100AP)
		  (1) Check the power supply of the PP-100 / PP-100AP.
		  (2) Check if the USB cable is securely connected.
		  (3) Connect the publishing machine, and turn on the power.
		(For PP-100N)
		  (1) Check the power supply of the PP-100N.
		  (2) Check if the network cable is securely connected.

	HNW001	A non-supported version error has occurred, and any of the following has been detected.
		  (1) Firmware version of the auto loader is not supported.
		  (2) Firmware version of the drive 1 is different from the supported version.
		  (3) Firmware version of the drive 2 is different from the supported version.
		  (3) Firmware version of the printer is not supported.
		Remedy:
		  Upgrade the firmware of the concerning device.

4

JCF File

The JCF file is a file to give instructions for canceling an ongoing job or temporarily stopped job. This file needs to be created by your cooperative application. Specify a job ID of the job you want to cancel and move the file into the monitoring folder of TD Bridge. The specified job will be canceled.

❏ The file format is ANSI text format, however, specify JCF for the extension. Save the file under desired name.

❏ When the specified job is canceled or cannot be canceled due to an error, the file extension will change.

  • When the specified job is cancelled: CDN

  • When the specified job cannot be canceled: CER

❏ The file automatically moves from the monitoring folder to the log folder one or two hours after canceling is completed/failed. (See "Log Function" on page 4-89.)
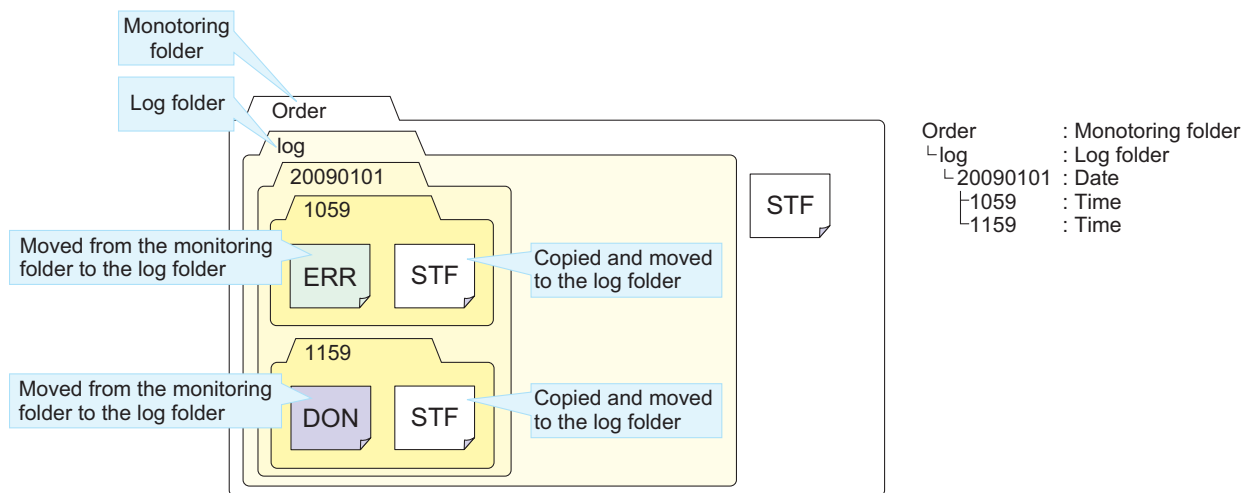
JCF File Example

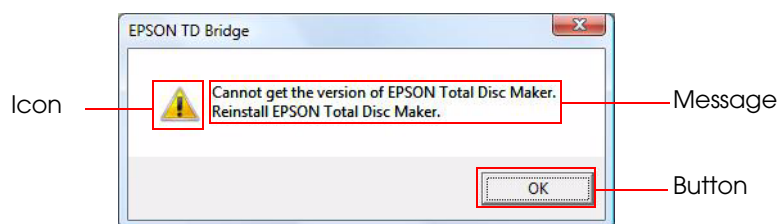### demo. jcf file

```
[CANCEL]
JOB_ID=003
```

Section name	Key name	Explanation	How to specify the job ID	Maximum number of characters	Available characters (strings)	Necessary/ Arbitrary
CANCEL	JOB_ID	ID for identifying a specific job	Specify the job ID of the job you want to cancel.	40 characters	One byte alphanumeric, "-", "_"	Necessary

Log Function

❏ When a DON/ERR/CDN/CER file is in the monitoring folder (default: "Order"), the log folder is automatically created in the monitoring folder in one of two hours, and the DON/ERR/CDN/CER file moves to the log folder.

❏ Folders of the creation date are created in the log folder, and folders of the creation time are created in the date folder automatically.

❏ The STF file is copied when the DON/ERR/CDN/CER file moves, and the copied STF file moves to the log folder.

❏ Date folder is deleted automatically after 7 days. The log folder is not deleted.

4

Pop-up Message List

Message	Icon	Button	Cause
TD Bridge is already running.	!	OK	TD Bridge was already running when it was started up.
Cannot get the supported version information. Reinstall TD Bridge.	!	OK	The supported version information for Total Disc Maker cannot be acquired when starting up TD Bridge.
The application could not start because the necessary resource file could not be found. Please reinstall the application.	!	OK	The resource file could not be found when starting up TD Bridge.
The settings of the default output device are invalid. Change the settings to a valid output device.	!	OK	The output device is invalid when starting up TD Bridge while logging on to Windows with an administrative account.
The settings of the default output device are invalid. Log on to Windows using an administrator account and change the settings to a valid output device.	!	OK	The output device is invalid when starting up TD Bridge while logging on to Windows with a limited account.
The monitoring folder is set to a folder which cannot be written to using a limited account. Change it to a folder which can be written to using a limited account.	!	OK	The monitoring folder's improper setting is detected when starting up TD Bridge while logging on to Windows with an administrative account.
The monitoring folder is set to a folder which cannot be written to using a limited account. Log on to Windows using an administrator account and change it to a folder which can be written to using a limited account.	!	OK	The monitoring folder's improper setting is detected when starting up TD Bridge while logging on to Windows with a limited account.
The monitoring folder does not exist or you do not have access to it. Set the monitoring folder.	!	OK	The monitoring folder cannot be found or you do not have access to it when handling files while logging on to Windows with an administrative account.
The monitoring folder does not exist or you do not have access to it. Log on to Windows using an administrator account and set the monitoring folder.	!	OK	The monitoring folder cannot be found or you do not have access to it when handling files while logging on to Windows with a limited account.
The TD Bridge environment setting file does not exist or you do not have access to it. TD Bridge will exit.	!	OK	The ini file does not exist or you do not have access to it when trying to open it right after TD Bridge starts up, or after opening the environment setting screen.

Message	Icon	Button	Cause
Set the monitoring folder.	!	OK	Clicked (OK) in the environment settings screen without specifying a monitoring folder.
The changed settings will be enabled when you next start the program.	!	OK	Changed the settings in the environment settings screen, and clicked (OK)
Select a folder on the local computer as the monitoring folder.	!	OK	Selected a folder outside the local computer in the folder selecting dialog in the environment settings screen, and clicked (OK).
Reboot the computer to enable the settings. TD Bridge will exit.	!	OK Cancel	Confirmation to exit TD Bridge to reflect the changed settings in the environment settings screen.
Could not write the TD Bridge Environment Settings file.	!	OK	After clicking (OK) in the environment settings screen, ini file cannot be written since you do not have access to it, though the file exists.
The path specified for the EPSON Total Disc Maker working folder does not exist. Start EPSON Total Disc Maker and specify a working folder with a correct path.	!	OK	The working folder for EPSON Total Disc Maker cannot be found when a job is issued.
There is insufficient remaining space for the EPSON Total Disc Maker working folder (working folder path). After changing the working folder or obtaining the available space, click OK. Clicking Cancel cancels publishing, and exits TD Bridge.	!	OK Cancel	Space in the working folder for EPSON Total Disc Maker is not sufficient when a job is issued.
The printer driver has not been set, or it cannot be found. Set a printer driver to use with Total Disc Setup and click OK. Clicking Cancel cancels publishing, and exits TD Bridge.	!	OK Cancel	The printer driver cannot be found when a job is issued.
The PC is running in battery mode. If the battery runs out during publishing, the disc may not be created correctly. Switch to AC mode and click OK. Clicking Cancel cancels publishing, and exits TD Bridge.	!	OK Cancel	The computer is using a battery power source when a job is issued.
The process cannot be performed because there is no XML parser, or it is not installed correctly. Install an XML parser correctly and click OK. Clicking Cancel cancels publishing, and exits TD Bridge.	!	OK Cancel	XML parser is not installed when a job is issued.
The disc cannot be published because the remaining space at the output device is insufficient. Please remove unnecessary job data to increase the remaining space.	!	OK Cancel	Space in the HDD in the output device is not sufficient when a job is issued.
The process cannot proceed because EPSON Total Disc Maker cannot be found. Install EPSON Total Disc Maker.	!	OK	The executable file for EPSON Total Disc Maker cannot be found when a job is issued.

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Message	Icon	Button	Cause
You cannot publish from TD Bridge because EPSON Total Disc Maker is already running. Exit EPSON Total Disc Maker and click OK. Clicking Cancel cancels publishing, and exits TD Bridge.	!	OK Cancel	EPSON Total Disc Maker is running when a job is issued.
Cannot publish because the file system of the drive where the EPSON Total Disc Maker working folder is does not support the file size of the write data. Specify a folder formatted with NTFS for the working folder. Clicking Cancel cancels publishing, and exits TD Bridge.	!	OK Cancel	Write data is 4GB or more; the disc format does not support 4GB-writing.
EPSON Total Disc Control Service is not running.	!	OK	Detected that the service of EPSON Total Disc Maker is not running.
Cannot get the version of EPSON Total Disc Maker. Reinstall EPSON Total Disc Maker.	!	OK	Cannot get the version information of EPSON Total Disc Maker.
This version of EPSON Total Disc Maker is not supported. Install a supported version of EPSON Total Disc Maker.	!	OK	Detected that the version of EPSON Total Disc Maker is not supported.
There is an unfinished job. Do you want to exit?	!	YES NO	There is an unfinished job in the monitoring folder when exiting TD Bridge.
Could not write the TD Bridge Environment Settings file.	!	OK	Failed to write to TD Bridge environment setting file.
The TD Bridge environment setting file does not exist or you do not have access to it. TD Bridge will exit.	!	OK	Failed to read TD Bridge environment setting file.
Reboot the computer to enable the settings.	!	OK	The environment settings was changed.
Reboot the computer to enable the settings. TD Bridge will exit.	!	OK Cancel	The environment settings was changed.