
Configuration Information CSV File Output Tool (V83)

Rev.5

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– Document Revision Level –

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*mm = model number. (20 = “S” model, 40 = “M” model, 60 = “H” model)

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1. Outline

The CSV File Output Tool explained in this manual outputs configuration information set for the storage system in the format of the CSV file that can be processed easily.

To directly see the CSV file, use the text editor or spreadsheet software. Depending on the spreadsheet software you use, data in the CSV file may be converted to an unintended format. In such a case, check how to use the spreadsheet software and open it by using a character string as the data format.

Caution: Please use the same version of CSV File Output Tool and configuration information.

2. Procedure for Installing/Uninstalling Configuration Information CSV File Output Tool

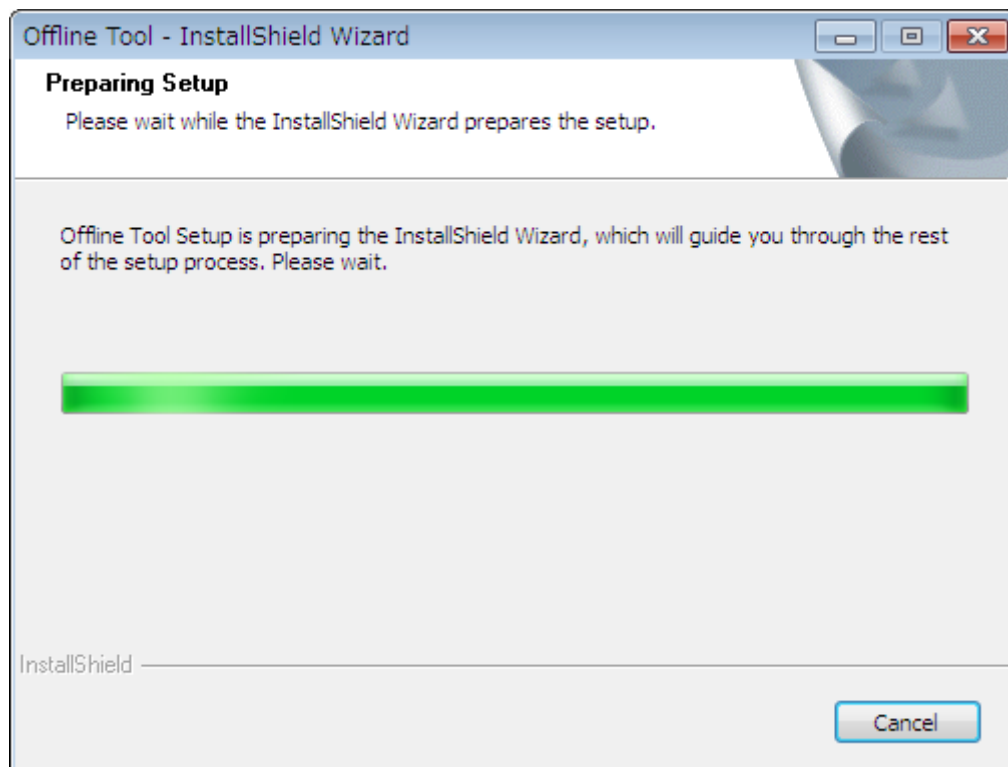
2.1. Installing the tool

- (1) The installation method of the configuration information CSV file output tool depends on the SVP/MPC version. You can check the SVP/MPC version in Storage Navigator. In the storage system window displayed immediately after logging into Storage Navigator, table of summary is displayed in the upper right. Table of summary has “Software Version” and “Storage Navigator” on the right. The value displayed on the right of “Storage Navigator” shows the SVP/MPC version.

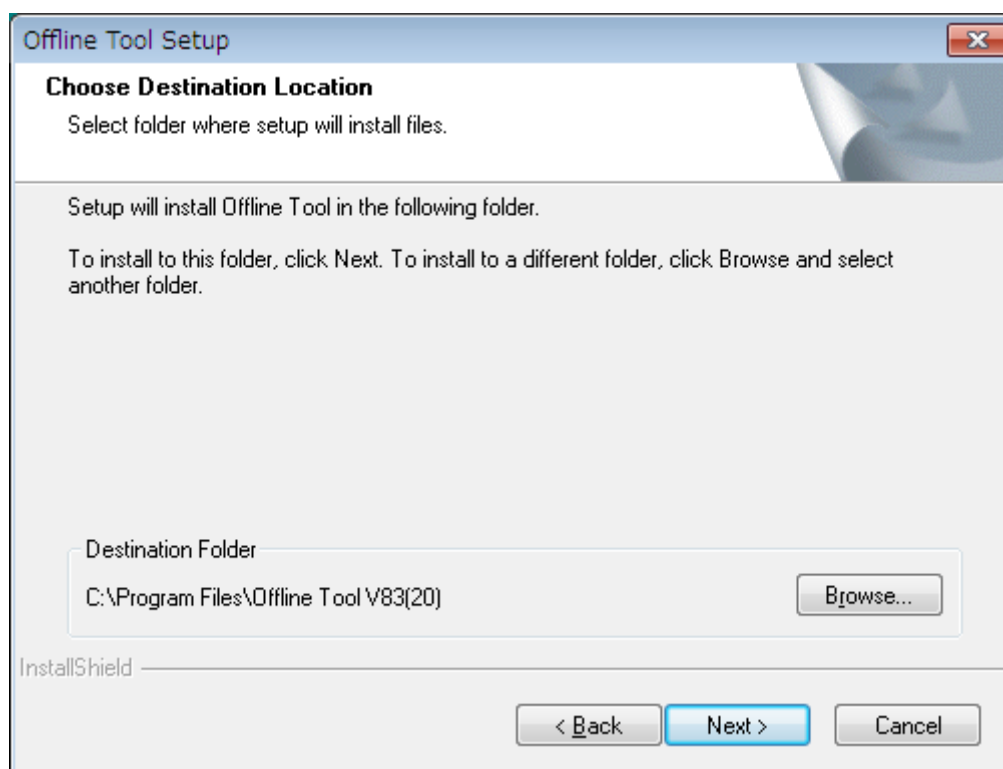


Edit Storage System				
Storage System Name	Storage	Software Version	Main	83-00-00-00/20
Contact			Storage Navigator	83-00-00/20
Location			RMI Server	08_01_01
Storage System Type	VSP G1000	IPv4 Address	CTL1	10.213.55.189
Serial Number	491031		CTL2	10.213.55.189
Total Cache Size	3.05 GB	IPv6 Address	CTL1	-
			CTL2	-

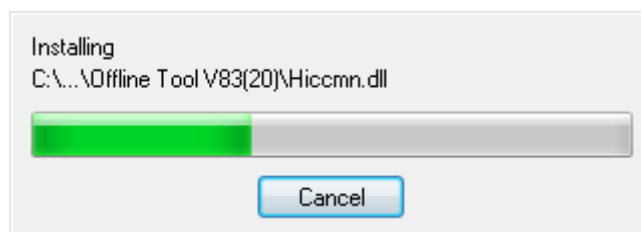
- (2) Start the Setup.exe of Configuration Information CSV File Output Tool. The window for initializing the installer is displayed. (See Note 1, and Note 2.)
When the version is 83-xx-xx-20/xx, start Setup.exe of the following path.
(CDR : Program\CNF_TOOL\off_tool\S\SETUP.EXE)
When the version is 83-xx-xx-40/xx, start Setup.exe of the following path.
(CDR : Program\CNF_TOOL\off_tool\M\SETUP.EXE)
When the version is 83-xx-xx-60/xx, start Setup.exe of the following path.
(CDR : Program\CNF_TOOL\off_tool\H\SETUP.EXE)



- (3) Select the target directory of the installation
Select the directory onto which the application will be installed. (See Note 3.)



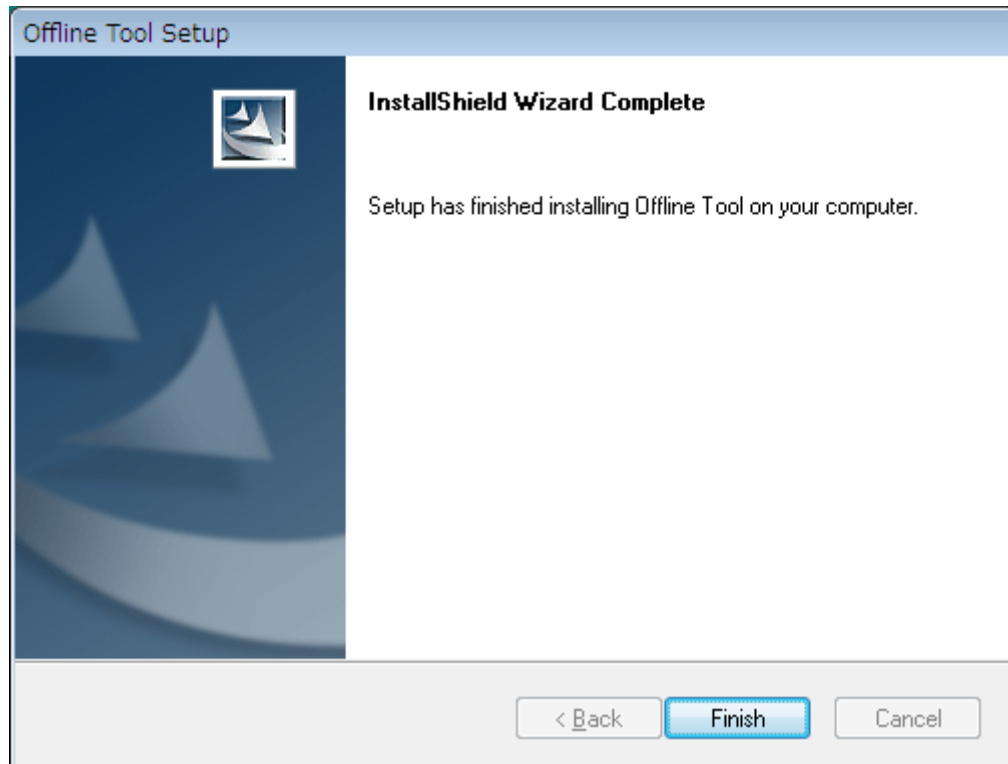
- (4) Installation executed
Installation activity executes (file copying). (See Note 3.)



(5) Installation terminated

The installation termination screen is displayed.

When you click the [Finish] button, the Installation will be terminated.



Note 1: This manual is written in conformity with the operation environment of Windows 7®. The operation in Windows 7®/Windows Vista® is guaranteed, but in the case of an OS other than Windows 7®/Windows Vista®, the operation cannot be guaranteed.

Note 2: In the case of Windows 7®/Windows Vista®, this works only on an administrator authority.

Note 3: When the version is 83-xx-xx-20/xx, the tool is installed in "Offline Tool V83(20)" by default.

When the version is 83-xx-xx-40/xx, the tool is installed in "Offline Tool V83(40)" by default.

When the version is 83-xx-xx-60/xx, the tool is installed in "Offline Tool V83(60)" by default.

2.2. Uninstalling the tool

- (1) Start up the Add or Remove Programs function of applications
Select [Start]-[Control Panel]-[Add or Remove Programs] and start up the Add or Remove Programs. (See Note 1, and Note 2.)
- (2) Remove the tool
Select "Offline Tool V83(mm)" in the Add or Remove Programs, click the [Change/Remove] button, and the tool program will be normally removed. (See Note 3.)

Note 1: This manual is written in conformity with the operation environment of Windows 7[®].
The operation in Windows 7[®]/Windows Vista[®] is guaranteed, but in the case of an OS other than Windows 7[®]/Windows Vista[®], the operation cannot be guaranteed.

Note 2: In the case of Windows 7[®]/Windows Vista[®], this works only on an administrator authority.

Note 3: mm = model number. (Case of "S" model is 20. / Case of "M" model is 40. / Case of "H" model is 60.)

3. Procedure for Using Configuration Information CSV File Output Tool (with Windows Program)

3.1. Start-up method

From the start menu, select [Configuration Print Out].

Configuration Information CSV File Output Tool is started. (See Note 1, and Note 2.)

The program to start depends on the version.

When the version is "83-xx-xx-20/xx", start "Offline Tool V83(20)".

Select [Start]-[All Programs]-[Offline Tool V83(20)]-[Configuration Print Out].

When the version is "83-xx-xx-40/xx", start "Offline Tool V83(40)".

Select [Start]-[All Programs]-[Offline Tool V83(40)]-[Configuration Print Out].

When the version is "83-xx-xx-60/xx", start "Offline Tool V83(60)".

Select [Start]-[All Programs]-[Offline Tool V83(60)]-[Configuration Print Out].

3.2. Procedure for using the tool

When the operation is performed following the starting procedure explained in Section 3.1, the Main window shown in Figure 1 is displayed. A procedure for using it is shown below.

(1) Specifying the configuration information directory

Specify the configuration information directory. You can also specify the configuration information directory through the window for specifying it (shown in Figure 2), which appears when the [Browse] button shown in Step (1) is pressed. (See Note 3, Note 4, Note 5, Note 6, and Note 7.)

(2) Specifying the CSV file output directory

Specify a directory for storing the configuration information specified in Step (1) in the CSV file format. You can also specify the output through the window for specifying it (shown in Figure 3), which appears when the [Browse] button shown in Step (2) is pressed. (See Note 3.)

(3) CSV file output button

When the [Create] button in Step (3) is pressed, the version confirmation window shown in Figure 4 is displayed. (See Note 8.)

Confirm that the version of the Configuration Information CSV File Output Tool can apply a version of the configuration information, and press the [OK] button.

The window of which the CSV file is being output shown in Figure 5 is displayed, and the CSV file is output in the directory specified in Step (2) after completing the processing.

The configuration information list window shown in Figure 6 is displayed after outputting the CSV file. Figure 6 shows the output CSV file in the list format.

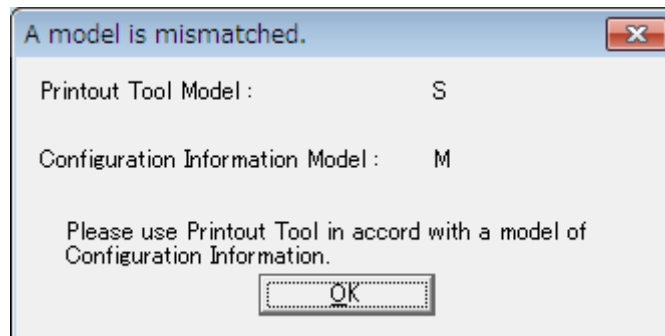
(4) Displaying the CSV file list

When the [View] button is pressed, the configuration information list window shown in Figure 6 is displayed. Figure 6 displays the CSV file that has been specified in Step (2) in the list format.

(5) Exit button

When the [Exit] button is pressed, Configuration Information CSV File Output Tool is quit.

- Note 1: This manual is written in conformity with the operation environment of Windows 7®. The operation in Windows 7®/Windows Vista® is guaranteed, but in the case of an OS other than Windows 7®/Windows Vista®, the operation cannot be guaranteed.
- Note 2: In the case of Windows 7®/Windows Vista®, this works only on an administrator authority.
Select [Run as administrator] of right click and start or [Properties] of right click-[Compatibility]-Turn on check box of [Run this program as administrator] of [Privilege Level] and start.
- Note 3: Number of characters that can be entered is 127.
- Note 4: The version of the Configuration Information CSV File Output Tool accords with a version of SVP/MPC. Please use a version of the configuration information that can apply to a version of the SVP/MPC. You can confirm the version by the Storage Navigator. The operation is not guaranteed if the version is unjust.
- Note 5: De-compress the dumped data, which was collected using the dump tool of Storage Navigator, in PC etc. Use the configuration information in the de-compressed dumped data. For how to use the dump tool, see the user guide of Storage Navigator.
- Note 6: Store the de-compressed dumped data directly under the C drive of the PC as "C:\DKC200\config". Specify the configuration information directory shown in Figure 1 as "C:\DKC200\config".
- Note 7: When the dumped data is de-compressed, "\DKC200\others" is also extracted. This is used when creating the CVS file, so store them directly under the C drive as "C:\DKC200\others".
- Note 8: When a model of the configuration information is mismatched with this tool, the following check screen of the model is displayed. Please use the tool in accord with a model of configuration information. Press the [OK] button, and return to the main screen of Figure 1.



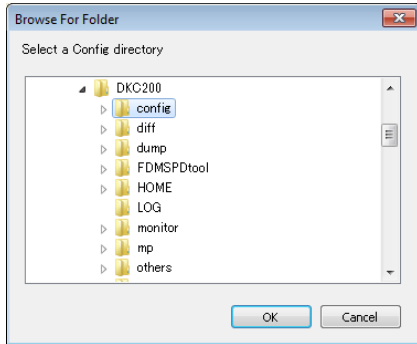


Figure 2 Configuration Information Directory Specification Window

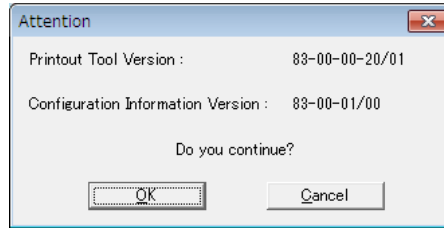


Figure 4 Version confirmation Window

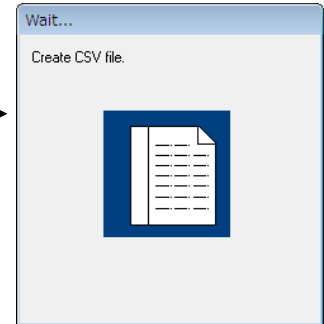


Figure 5 CSV File Outputting Window

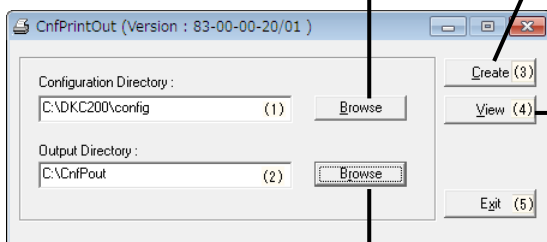


Figure 1 Main Window

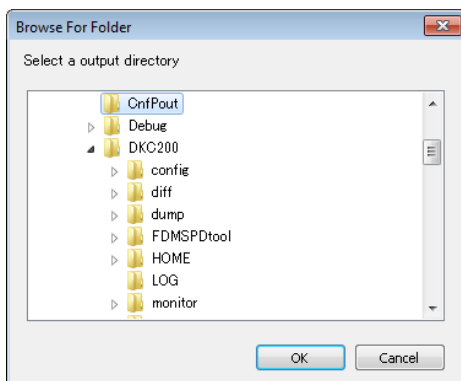


Figure 3 CSV File Output Directory Specification Window

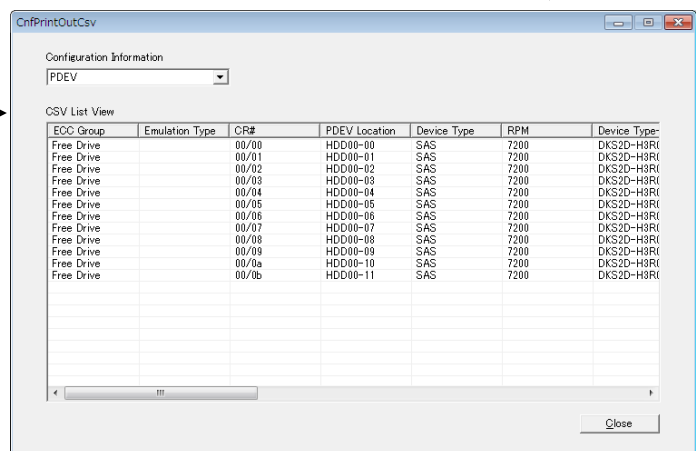


Figure 6 Configuration Information List Window

3.3. Error messages and actions to cope with them (Message boxes displayed by the Windows program)

A list of error messages is shown below.

No.	Error message	Description	Action to be taken
1	There is no output folder. Do you want the folder to be created?	No output folder exists. Do you want to create it?	When you want to create the folder, press the OK button. The pressing of the OK button creates the CSV file. When you do not want to create the folder, press the Cancel button. The pressing of the Cancel button displays Figure 1.
2	The system could not make the CSV File. "Name of the CSV file in which an error occurred"	The creation of the CSV file failed.	Check whether or not the environment allows the file and folder to be created.
3	The Csv File does not exist.	No CSV file exists.	Create the CSV file once again. Use the CSV file that is to be created.
4	File Open Error.	The CSV file cannot be opened.	Create the CSV file once again. Use the CSV file that is to be created.
5	The Csv File is invalid.	The CSV file is illegal.	Create the CSV file once again. Use the CSV file that is to be created.
6	The "CSV displayed items" has an Error on the Line x.	An error occurred in the line x in the displayed items of the CSV.	Create the CSV file once again. Use the CSV file that is to be created.
7	Error: Non file is "DAT file name."	The DAT file cannot be opened.	Get valid configuration information and use it. (See Note 1.)
8	Error: Error file is "DAT file name."	The DAT file cannot be read.	Get valid configuration information and use it. (See Note 1.)
9	Specified the directory is not the directory containing the target Configuration Information.	The specified directory does not include the configuration information.	Get valid configuration information and use it. (See Note 1.)
10	The output directory making failed.	The creation of the directory for outputting the CSV file failed.	Check whether or not the environment allows the file and folder to be created.
11	Please defrost compressed composition Configuration Information.	The compressed configuration information was specified.	De-compress the configuration information that is compressed.

Note 1: De-compress the dumped data, which was collected using the dump tool of Storage Navigator, in PC etc. Use the configuration information in the de-compressed dumped data. For how to use the dump tool, see the user guide of Storage Navigator.

4. Procedure for Using Configuration Information CSV File Output Tool (Starting the Tool with Command Line)

Configuration Information CSV File Output Tool can also be started using the command line. The procedure for the operation is explained below.

4.1. Procedure for using the tool

When [Start], [All Programs], [Accessory], and [Command Prompt] are selected in this order, the command prompt is started. (See Note 1, and Note 2.) Then describe the command parameter as shown below.

Example:

```
cnfpout /cmd c:\dkc200\config c:\tmp [>c:\Error\Err.txt]
```

The allowable length of the character string between cnfpout and c:\tmp is limited to 253 characters (including spaces) because of the entry limit set on the command prompt. If the length of the character string is longer than that prescribed, the program is not started.

- **cnfpout (Starter AP)**
The starter program, “cnfpout,” is to be executed in a directory in which it is installed or in a directory specified as the full path.
- **/cmd (Option for the start with command line)**
To start the command line, specify “/cmd.” When no specification is made or an illegal character is specified, the Windows program of Configuration Information CSV File Output Tool is started.
- **c:\dkc200\config (Specification of the configuration information directory)**
This specifies the configuration information directory as the full path. When no specification is made or an illegal directory is specified, an error is caused. (See Note 3, Note 4, Note 5, Note 6, and Note 7.)
- **c:\tmp (Specification of the CSV file output directory)**
This specifies a directory for storing the output result (CSV file) as the full path. When no specification is made or an illegal directory is specified, an error is caused. (See Note 3.)
- **[>c:\Error\Err.txt] (Name of a file for error message outputs)**
When this specification is made, an error file, which is used for analyzing a cause of an error that occurs in the start made with the command line, is created. The tool can also be started by the command line without making this specification.

- Note 1: This manual is written in conformity with the operation environment of Windows 7®. The operation in Windows 7®/Windows Vista® is guaranteed, but in the case of an OS other than Windows 7®/Windows Vista®, the operation cannot be guaranteed.
- Note 2: In the case of Windows 7®/Windows Vista®, this works only on an administrator authority.
Select [Run as administrator] of right click and start.
- Note 3: Number of characters that can be entered is 127.
- Note 4: The version of the Configuration Information CSV File Output Tool accords with a version of SVP/MPC. Please use a version of the configuration information that can apply to a version of the SVP/MPC.
You can confirm the version by the Storage Navigator. The operation is not guaranteed if the version is unjust.
- Note 5: De-compress the dumped data, which was collected using the dump tool of Storage Navigator, in PC etc. Use the configuration information in the de-compressed dumped data. For how to use the dump tool, see the user guide of Storage Navigator.
- Note 6: Store the de-compressed dumped data directly under the C drive of the PC as "C:\DKC200\config". Specify the configuration information directory shown in Figure 1 as "C:\DKC200\config".
- Note 7: When the dumped data is de-compressed, "\DKC200\others" is also extracted. These are used when creating the CVS file, so store them directly under the C drive as "C:\DKC200\others".

4.2. Error messages and actions to cope with them (Entries in the error file in the case of the start with command line)

A list of error information is shown below.

No.	Error information	Description	Action to be taken
1	Error : Invalid Parameter.	The parameter is invalid.	As the parameters necessary for the start with the command line, describe the starter AP, option for the start with command line, specification of the configuration information directory, and specification of the CSV file output directory.
2	Error : Invalid Configuration Directory.	The directory for storing the configuration information is invalid.	Get the valid configuration information and use it. (See Note 1.)
3	Error : Invalid CSV Output Directory.	The CSV file output directory is invalid.	Create a valid directory and specify it.
4	Error : These CSV Files making Failed.	The creation of the CSV file failed.	Check whether or not the environment allows the file and folder to be created.
5	Error: Non file is "DAT file name."	The DAT file cannot be opened.	Get the valid configuration information and use it. (See Note 1.)
6	Error: Error file is "DAT file name."	The DAT file cannot be read.	Get the valid configuration information and use it. (See Note 1.)
7	Error : Unknown Error.	A cause of the error is unknown.	Contact the Technical Support Division
8	Finished.	The execution of the program is finished.	-

Note 1: De-compress the dumped data, which was collected using the dump tool of Storage Navigator, in PC etc. Use the configuration information in the de-compressed dumped data. For how to use the dump tool, see the user guide of Storage Navigator.

5. Output format

5.1. Output

Printout Tool outputs the following files. The output CSV files are as follows.

#	File Name	Contents
0	AllConf.csv	All information
1	MicroVersion.csv	Software Version
2	SsidInfo.csv	Subsystem ID
3	DkclInfo.csv	DKC information
4	CachelInfo.csv	Cache Memory information
5	SysoptInfo.csv	System Option information
6	PplInfo.csv	Program Products information
7	PkInfo.csv	Channel Blade information
8	LunInfo.csv	LUN information
9	WwnInfo.csv	World Wide Name information
10	LdevInfo.csv	LDEV information
11	PdevInfo.csv	PDEV information
12	ChaStatus.csv	CHB status
13	DkaStatus.csv	DKB status
14	MpPathStatus.csv	Mp Path status
15	PdevStatus.csv	PDEV status
16	LdevStatus.csv	LDEV status
17	LunPortInfo.csv	LUN Port information
18	ELunInfo.csv	External LUN information
19	LPartition.csv	Logical Partitioning
20	SMfundat.csv	SM Install function
21	ModePerLpr.csv	System Option Mode Per LPR
22	FcSpNameInfo.csv	Fibre Chap Name information
23	FcSpPortInfo.csv	Fibre Chap Port information
24	DeviceEquipInfo.csv	Device Equipment information
25	LdevCapaInfo.csv	LDEV Capacity information
26	LdevCountInfo.csv	LDEV Count information
27	PdevCapaInfo.csv	PDEV Capacity information
28	PcbRevInfo.csv	PCB Revision information
29	DkaInfo.csv	DKB information
30	MpPcbStatus.csv	MP PCB status
31	HduInfo.csv	DB information
32	JnlInfo.csv	JNL information
33	SsdDriveInfo.csv	SSD information
34	MlcEnduranceInfo.csv	MLC Endurance information
35	IscsiTargetInfo.csv	iSCSI Target information
36	IscsiHostInfo.csv	iSCSI Host information
37	ChapUserInfo.csv	CHAP User information
38	IscsiPortInfo.csv	iSCSI Port information
39	EnvMonInfo.csv	Electric power and temperature Information
40	PECBInfo.csv	PECB information
41	DkuTemplInfo.csv	DB temperature information
42	DkuTempAveInfo.csv	DB temperature average information

#	File Name	Contents
43	DkuTempMaxInfo.csv	DB temperature maximum value information
44	DkuTempMinInfo.csv	DB temperature minimum value information

5.2. CSV file format

Contents of the CSV file are as follows.

“-” means invalid Information. Blank means un-mounting or no information.

Items in csv files may be changed or added in a later version.

(0) AllConf.csv

This is the concatenated file of all the 44 csv files (from (1) to (44) below)

(1) MicroVersion.csv

Information: Software versions

Title: <<Software Version>>

The number of the columns of the "MicroVersion.csv" is different every model of the storage system.

Case of "S" model:

Item	Content
DKCMAIN	The version of the firmware for the RAID storage system (10-digit hex)
ROM BOOT	ROM BOOT firmware version (6-digit hex)
RAM BOOT	RAM BOOT firmware version (6-digit hex)
Config	Config version (8-digit hex)
HDD	HDD firmware version (xxxxx-xxxxxx : yyyy) x: character string , y: 4-digit hex * HDD firmware version in the format of "(HDD device type-code) : (version)". * If an HDD is not installed, only a colon (:) is displayed.
Expander	Expander firmware version (6-digit hex)
CFM	CFM firmware version (xxxxxx : yyyyyyyy) x: character string , y: 8-digit hex
DKB	SAS-CTL (in disk board) firmware version (6-digit hex)
Printout Tool	Printout Tool version (xx-yy-zz-mm/aa) * mm : 20="S" model
CHB(FC16G)	Fibre channel board firmware version (8-digit hex)
CHB(iSCSI)	iSCSI channel board firmware version (8-digit hex)
GUM	GUM board firmware version (8-digit hex)

Case of "M" or "H" model:

Item	Content
DKCMAIN	The version of the firmware for the RAID storage system (10-digit hex)
ROM BOOT	ROM BOOT firmware version (6-digit hex)
RAM BOOT	RAM BOOT firmware version (6-digit hex)
Config	Config version (8-digit hex)
HDD	HDD firmware version (xxxxx-xxxxxx : yyyy) x: character string , y: 4-digit hex * HDD firmware version in the format of "(HDD device type-code) : (version)". * If an HDD is not installed, only a colon (:) is displayed.
Expander	Expander firmware version (6-digit hex)
CFM	CFM firmware version (xxxxxx : yyyyyyyy) x: character string , y: 8-digit hex
DKB	SAS-CTL (in disk board) firmware version (6-digit hex)
Printout Tool	Printout Tool version (xx-yy-zz-mm/aa) * mm : 40="M" model , 60="H" model
CHB(FC16G)	Fibre channel board firmware version (8-digit hex)
CHB(iSCSI)	iSCSI channel board firmware version (8-digit hex)
GUM	GUM board firmware version (8-digit hex)
Unified Hypervisor	Unified Hypervisor version (CLx : yyyyyyyy) x: Cluster number(1, 2), y: 8-digit hex
NASFWINST	NASFWINST version (CLx : yyyyyyyy) x: Cluster number(1, 2), y: 9-digit hex
NASFW	NASFW version (CLx : yyyyyyyy) x: Cluster number(1, 2), y: 9-digit hex

(2) SsidInfo.csv

Information: Subsystem ID

Title: <<Subsystem ID>>

Item	Content
DEV# Start	Starting LDEV number of the Subsystem ID - Case of "S" model : (00:00:00~00:07:c0) - Case of "M" model : (00:00:00~00:0f:c0) - Case of "H" model : (00:00:00~00:3f:c0)
DEV# End	Last LDEV number of the Subsystem ID - Case of "S" model : (00:00:3f~00:07:ff) - Case of "M" model : (00:00:3f~00:0f:ff) - Case of "H" model : (00:00:3f~00:3f:ff)
SSID	Sub System ID (0004~fffe: 4-digit hex)

(3) DkclInfo.csv

Information: DKC

Title: <<DKC Information>>

The number of the columns of the "DkclInfo.csv" is different every model of the storage system.

Case of "S" model:

Item	Content
Storage System Type	Type name of the storage system - Case of "S" model : (VSP G200)
Serial Number#	Serial product number of the storage system (400001~499999)
IP Address	IP address (XXX.XXX.XXX.XXX) XXX: 0~255
Subnet Mask	Subnet mask (XXX.XXX.XXX.XXX) XXX: 0~255
Number of CUs	Number of CUs - Case of "S" model : (0~8)
Number of DKBs	Number of DKBs - Case of "S" model : (0~2)
Configuration Type	Configuration Type (Desired character string) ex. "PCM"
Model	Model name of the storage system (S)

Case of "M" or "H" model:

Item	Content
Storage System Type	Type name of the storage system (Note1) (Note 2) - Case of "M" model : (VSP G400/G600 and VSP F400/F600) - Case of "H" model : (VSP G800 and VSP F800)
Serial Number#	Serial product number of the storage system (400001~499999)
IP Address	IP address (XXX.XXX.XXX.XXX) XXX: 0~255
Subnet Mask	Subnet mask (XXX.XXX.XXX.XXX) XXX: 0~255
Number of CUs	Number of CUs - Case of "M" model : (0~16) - Case of "H" model : (0~64)
Number of DKBs	Number of DKBs - Case of "M" model : (0~2) - Case of "H" model : (0~8)
Configuration Type	Configuration Type (Desired character string) ex. "PCM"
Model	Model name of the storage system (M/H)
Unified Mode	Whether storage system is used as the unified mode - On : Unified mode - Off : Not unified mode

Note 1: "M" has four models. When you judge it, please confirm which model it is in PpInfo.csv.

If "Install" of "Model upgrade license" is "Enabled" and "Install" of "All Flash Array" is "Enabled", it is VSP F600.

If "Install" of "Model upgrade license" is "Enabled" and "Install" of "All Flash Array" is "Disabled", it is VSP G600.

If "Install" of "Model upgrade license" is "Disabled" and "Install" of "All Flash Array" is "Enabled", it is VSP F400.

If "Install" of "Model upgrade license" is "Disabled" and "Install" of "All Flash Array" is "Disabled", it is VSP G400.

Note 2: "H" has two models. When you judge it, please confirm which model it is in PpInfo.csv.

If "Install" of "All Flash Array" is "Enabled", it is VSP F800.

If "Install" of "All Flash Array" is "Disabled", it is VSP G800.

(4) CacheInfo.csv

Information: Cache Memory

Title: <<Cache>>

The number of the columns of the "CacheInfo.csv" is different every model of the storage system.

Case of "S" model:

Item	Content
Location	Location name of the controller board (CTL1/CTL2)
CMG#0 Size(GB)	CMG (#0) capacity of the controller board (in GB) (16/32)
Cache Size(GB)	Total cache capacity of the controller board (in GB) (Decimal)
SM Size(MB)	The sum of the following capacities (in MB) - Shared memory capacity - Cache directory capacity - Fixed capacity * "Fixed Capacity" is used by CTL to control the storage system. (Decimal) (Note1)
CFM#0 Type	CFM (#0) Type of the controller board in conjunction with this package (BM10)

Case of "M" or "H" model:

Item	Content
Location	Location name of the controller board (CTL1/CTL2)
CMG#0 Size(GB)	CMG (#0) capacity of the controller board (in GB) (32/64/128)
CMG#1 Size(GB)	CMG (#1) capacity of the controller board (in GB) (blank/32/64/128)
Cache Size(GB)	Total cache capacity of the controller board (in GB) (Decimal)
SM Size(MB)	The sum of the following capacities (in MB) - Shared memory capacity - Cache directory capacity - Fixed capacity * "Fixed Capacity" is used by CTL to control the storage system. (Decimal) (Note1)
CFM#0 Type	CFM (#0) Type of the controller board in conjunction with this package (BM20/BM30)
CFM#1 Type	CFM (#1) Type of the controller board in conjunction with this package (blank/BM20/BM30)
Unified Hypervisor Cache Size(GB)	Used by NAS module to control the storage system (in GB) (Decimal) * When the "Unified Mode" in DkcInfo.csv is "Off", this is blank.

Note 1: For the correlation of the capacity, refer to "6. Total Cache Memory Capacity" in "3.1.1 Cache Capacity and the Number of Required Options" in INSTALLATION SECTION in the Maintenance Manual.

(5) SysoptInfo.csv

Information: System Option

Title: <<System Option Information>>

Item	Content
Spare Disk Recover	Speed of copying data to the spare drive - Interleave mode - Full Speed mode
Dynamic Sparing	Information about whether to perform automatic copy to a spare drive if the occurrences of drive failures exceed the threshold - On - Off
Correction Copy	Information about whether to perform correction copy to a spare drive if a drive is blocked - On - Off
Disk Copy pace	Speed of copying the spare drive in the Interleave mode - Faster - Medium - Slower
System Option On	System options that are set to ON (modeXXXX) XXXX: 0~2047
Link Failure Threshold	Threshold to notify the link failure (0~255)

(6) PplInfo.csv

Information: Program Products

Title: <<PP Information>>

Item	Content
Program Product Name	Software name (Desired character string)
Install	Information about whether the installed license key is enabled or not - Enabled : Installed and the software can be used - Disabled : Installed but the software cannot be used
Key Type	Installed license key type - Permanent - Temporary - Emergency - Term - Not Installed * If no license key is installed, "Not Installed" is output.
Permitted Volumes(TB)	Permitted volume capacity for this software (in TB) (XX.0TB) X: Decimal or (Unlimited) * The used capacity is not outputted. * If no upper limit value is set for the capacity, "Unlimited" is output.
Expiration Date	Expiration date of the software (mm/dd/yyyy) * The format is mm/dd/yyyy (Month/Day/Year).
Status	License key status of the software - Installed - Not Enough License - Grace Period - Expired - Not Installed - Installed (Disabled)

(7) PkInfo.csv

Information: Channel Package

Title: <<PK>>

Item	Content
CHB Location	CHB location name - Case of "S" model : (CHB-1A/CHB-1B/CHB-2A/CHB-2B) - Case of "M" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1H/CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2H) - Case of "H" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1E/CHB-1F/CHB-1G/CHB-1H/CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2E/CHB-2F/CHB-2G/CHB-2H) * When the "Package Type" is "NAS module(CHB)", this location name is concatenated. ("CHB-1A/1B/1C/1D", "CHB-2A/2B/2C/2D")
Port#	Number of ports installed on the CHB (00~ff)
Port	Location name of ports installed on the CHB (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R)
Package Type	CHB package type - Fibre package : "8FC4 (CHB)", "16FC2(CHB)" - iSCSI package : "10iSCSI2o(CHB)", "10iSCSI2c(CHB)" - NAS module: "NAS module(CHB)"
SFP Kind	SFP (Small Form factor Pluggable) kind - Short Wave - Long Wave * When the "Package Type" is "10iSCSI2c(CHB)" or "NAS module(CHB)", this is blank.
SFP Status	SFP status - Normal - Failed - Not Fix * When the "Package Type" is "10iSCSI2c(CHB)" or "NAS module(CHB)", this is blank.
Fabric	One of the Fibre topology settings indicating the setting status of the Fabric switch - On - Off * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Connection	One of the Fibre topology - Point to Point - FC-AL * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Port Address	Port address (2-digit hex) * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Resource Group ID (Port)	Resource Group ID of Port (0~1023)
Resource Group Name (Port)	Name of Resource Group for "Resource Group ID (Port)". (Desired character string of max 32 digits)
Port Internal WWN	WWN of this port (16-digit hex) * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
T10 PI Mode	T10 PI Mode (Enabled/Disabled/blank) * When the "Package Type" is other than "16FC2(CHB)", this is blank.

(8) LunInfo.csv (Note 1)

Information: LUN

Title: <<LUN Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
Host Group	Host group name (Desired character string of max 64 digits) * When the Package Type is iSCSI, this is "iSCSI Target Alias".
Host Mode	Host mode specified for this host group (2-digit hex)
Host Mode Option	Host mode option set for this host group (0~127) * If more than one option is specified, the options are separated with semicolons (;).
LUN#	LUN number for this LU path definition (0000~07ff: 4-digit hex)
LDEV#	LDEV number for this LU path definition - Case of "S" model : (00:00:00~00:07:ff) - Case of "M" model : (00:00:00~00:0f:ff) - Case of "H" model : (00:00:00~00:3f:ff)
Command Device	Information about whether the LDEV is a command device or not - On : Command device - On* : Remote Command device - Off : Others
Command Security	Information about whether the command device is secured - On - Off
CVS	Information about whether the LDEV is a custom-sized volume or not - On : Custom-sized volume - Off : Others
CHB Location	Location name of CHB on which this port is installed - Case of "S" model : (CHB-1A/CHB-1B/CHB-2A/CHB-2B) - Case of "M" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1H/CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2H) - Case of "H" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1E/CHB-1F/CHB-1G/CHB-1H/CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2E/CHB-2F/CHB-2G/CHB-2H) * When the "Package Type" is "NAS module(CHB)", this location name is concatenated. ("CHB-1A/1B/1C/1D", "CHB-2A/2B/2C/2D")
Package Type	CHB package type - Fibre package : "8FC4 (CHB)", "16FC2(CHB)" - iSCSI package : "10iSCSI2o(CHB)", "10iSCSI2c(CHB)" - NAS module: "NAS module(CHB)"
Resource Group ID (Host Group)	Resource Group ID of Host Group (0~1023)
Resource Group Name (Host Group)	Name of Resource Group for "Resource Group ID (Host Group)" (Desired character string of max 32 digits)
T10 PI Mode	T10 PI Mode (Enabled/Disabled/blank) * When the "Package Type" is other than "16FC2(CHB)", this is blank.
T10 PI	T10 PI (Enabled/Disabled/blank) * When the "LDEV#" is blank, this is blank.
Asymmetric Access State	Asymmetric Access State - Active/Optimized - Active/Non-Optimized * When the Package Type is iSCSI, this is blank.

Note 1: For details of the iSCSI target information, see "IscsiTargetInfo.csv".

(9) WwnInfo.csv (Note 1) (Note 2)

Information: World Wide Name

Title: <<World Wide Name Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
Host Group	Host group name (Desired character string of max 64 digits) * When the Package Type is iSCSI, this is "iSCSI Target Alias".
Host Mode	Host mode which is set for the host group (2-digit hex)
Host Mode Option	Host mode option which is set for the host group (0~127) * Multiple options are separated by semicolons (;).
WWN	World Wide Name of the host bus adapter registered to the host group (16-digit hex) * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Nickname	Nickname of the host (Desired character string of max 64 digits) * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Host Group#	Host Group Number (00~fe) * When the Package Type is iSCSI, this is "iSCSI Target ID".
CHB Location	Location name of CHB on which this port is installed - Case of "S" model : (CHB-1A/CHB-1B/CHB-2A/CHB-2B) - Case of "M" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1H /CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2H) - Case of "H" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D /CHB-1E/CHB-1F/CHB-1G/CHB-1H /CHB-2A/CHB-2B/CHB-2C/CHB-2D /CHB-2E/CHB-2F/CHB-2G/CHB-2H) * When the "Package Type" is "NAS module(CHB)", this location name is concatenated. ("CHB-1A/1B/1C/1D","CHB-2A/2B/2C/2D")
Package Type	CHB package type - Fibre package : "8FC4 (CHB)","16FC2(CHB)" - iSCSI package : "10iSCSI2o(CHB)" , "10iSCSI2c(CHB)" - NAS module: "NAS module(CHB)"
T10 PI Mode	T10 PI Mode (Enabled/Disabled/blank) * When the "Package Type" is other than "16FC2(CHB)", this is blank.

Note 1: For details of the iSCSI host information, see "IscsiHostInfo.csv".

Note 2: For details of the iSCSI target information, see "IscsiTargetInfo.csv".

(10) LdevInfo.csv
Information: LDEV
Title: <<LDEV>>

Item	Content
ECC Group	Number of parity group where the LDEV belongs - (X-Y) X,Y: Decimal * The parity group contains Internal volumes. - (EX-Y) X,Y: Decimal * If the number starts with "E" (for example, E1-1), the parity group contains external volumes (Universal Volume Manager). - (-) * If "LDEV Type" is Dynamic Provisioning, Thin Image, or ALU, a hyphen (-) is output.
LDEV#	LDEV number - Case of "S" model : (00:00:00~00:07:ff) - Case of "M" model : (00:00:00~00:0f:ff) - Case of "H" model : (00:00:00~00:3f:ff)
LDEV Name	LDEV Name (Desired character string, max 32 characters) (Note1)
LDEV Emulation	LDEV Emulation type (xxxxx-yy) x y : character string
LDEV Type	LDEV type - Basic - Dynamic Provisioning - External - Thin Image - ALU
LDEV Attribute	LDEV Attribute - CMDDEV : Command device - CMDDEV* : Remote command device - Journal : Journal volume - Pool : Pool volume - ALU - SLU - Regular : Others
Volume Size(Cyl)	LDEV capacity (in cylinders) (1~1118481)
Volume Size(MB)	LDEV capacity (in MB) (0.70~4194304)
Volume Size(Blocks)	LDEV capacity (in blocks) (1440~8589934592)
CVS	Information about whether the LDEV is a custom-sized volume or not - On : Custom-sized volume - Off : Others
Pool ID	Pool number (0~127 or blank) * This is blank except for the following cases. - If "LDEV Type" is Dynamic Provisioning - If "LDEV Attribute" is Pool
RAID Concatenation#0	Number of parity group to be concatenated to parity group (#0) identified by ECC Group - Case of "S" model : (1-1~3-32) - Case of "M" model : (1-1~8-32) - Case of "H" model : (1-1~15-32) * Blank if the parity group is not concatenated to another parity group.
RAID Concatenation#1	Number of parity group to be concatenated to parity group (#1) identified by ECC Group - Case of "S" model : (1-1~3-32) - Case of "M" model : (1-1~8-32) - Case of "H" model : (1-1~15-32) * Blank if the parity group is not concatenated to another parity group.

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Item	Content
RAID Concatenation#2	Number of parity group to be concatenated to parity group (#2) identified by ECC Group - Case of "S" model : (1-1~3-32) - Case of "M" model : (1-1~8-32) - Case of "H" model : (1-1~15-32) * Blank if the parity group is not concatenated to another parity group.
ORACLE CHECK SUM	Information about whether this LDEV is Oracle check sum target or not - On - Off - Blank * For other volumes: blank
Current MPU	Current MP Unit name owning this LDEV (MPU-10/MPU-11/MPU-20/MPU-21)
Setting MPU	Setting MP Unit name owning this LDEV (MPU-10/MPU-11/MPU-20/MPU-21)
Allocated	Information about whether this LDEV is allocated to a host or not - Y : allocated - N : unallocated * "Y" is output for volumes accessible to host.
Pool Name	Name of Pool for "Pool ID". (Desired character string) (Note1)
CmdDevSecurity	Indicates whether Security is specified as the attribute for the command device - Enabled : It is set - Disabled : It is not set - Blank : This LDEV is not CMDDEV
CmdDevUserAuth	Indicates whether User Authentication is specified as the attribute for the command device - Enabled : It is set - Disabled : It is not set - Blank : This LDEV is not CMDDEV
CmdDevDevGrpDef	Indicates whether Device Group Definition is specified as the attribute for the command device - Enabled : It is defined - Disabled : It is not defined - Blank : This LDEV is not CMDDEV
Resource Group ID (LDEV)	Resource Group ID of LDEV (0-1023 : Decimal)
Resource Group Name (LDEV)	Name of Resource Group for "Resource Group ID (LDEV)" (Desired character string of max 32 digits)
Encryption	Information about whether the parity group identified by ECC Group is encrypted or not (Enabled/Disabled/blank) - For Internal volumes : Enabled (encrypted) or Disabled - For other volumes : blank
T10 PI	T10 PI (Enabled/Disabled/blank) * When the "LDEV Emulation" is other than "OPEN-V", this is blank.
ALUA Mode	ALUA Mode - Enabled - Disabled
Accelerated Compression	Accelerated Compression (Enabled/Disabled/blank) - For Internal volumes : Enabled or Disabled or blank * When the parity group containing the LDEV does not support the accelerated compression, this is blank. - For other volumes : blank

Note 1: If the character string has a COMMA (","), the COMMA (",") is converted into TAB.

(11) PdevInfo.csv
Information: PDEV
Title: <<PDEV>>

Item	Content
ECC Group	Number of parity group of which this PDEV is a component - (X-Y) X,Y: Decimal - Spare Drive * If it is a spare drive, "Spare Drive" is output. - Free Drive * If it is a free drive, "Free Drive" is output.
Emulation Type	Emulation type for the parity group indicated by "ECC Group" (Desired character string) * Blank if the "ECC Group" is Spare Drive or Free Drive.
CR#	C# and R#, which identify the PDEV (xx/yy) xx: 2-digit hex, yy: 2-digit hex * C# and R# range. - Case of "S" model : C#:(00~07),R#:(00~3b) - Case of "M" model : C#:(00~17),R#:(00~3b) - Case of "H" model : C#:(00~2f),R#:(00~3b)
PDEV Location	PDEV location name (Desired character string)
Device Type	Device type - SAS - SSD
RPM	Rotations per minute (Desired character string) * When the "Device Type" is SSD, this is blank.
Device Type-Code	Device Type-Code of this PDEV (Desired character string) ex: "DKR5D-J900SS"
Device Size	Device size (in inches) - 2.5 - 3.5 - blank * In the case of DBF (FMD, FMC) and DBF2 (FMD, FMC), it is blank.
Device Capacity	Device capacity (in GB or TB) (xxxGB) or (xTB) or (x.xTB) x:Decimal
Drive Version	Drive firmware version (xxxx: 4-digit hex)
DKB1	Location name of the DKB (1) controlling the PDEV - Case of "S" model : (DKB-1C/DKB-2C) - Case of "M" model : (DKB-1H/DKB-2H) - Case of "H" model : (DKB-1G/DKB-1H/DKB-1E/DKB-1F/DKB-2G/DKB-2H/DKB-2E/DKB-2F)
DKB2	Location name of the DKB (2) controlling the PDEV - Case of "S" model : (DKB-1C/DKB-2C) - Case of "M" model : (DKB-1H/DKB-2H) - Case of "H" model : (DKB-1G/DKB-1H/DKB-1E/DKB-1F/DKB-2G/DKB-2H/DKB-2E/DKB-2F)
Serial Number#	Serial number of this PDEV (25 digits)
RAID Level	RAID level of the parity group indicated by "ECC Group" (Desired character string) * Blank if the "ECC Group" indicates Spare Drive or Free Drive.

(To be continued)

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Item	Content
RAID Concatenation#0	Number of parity group to be concatenated to parity group (#0) identified by "ECC Group" - Case of "S" model : (1-1~3-32) - Case of "M" model : (1-1~8-32) - Case of "H" model : (1-1~15-32) * Blank if the parity group is not concatenated to another parity group or is Spare Drive or is Free Drive.
RAID Concatenation#1	Number of parity group to be concatenated to parity group (#1) identified by "ECC Group" - Case of "S" model : (1-1~3-32) - Case of "M" model : (1-1~8-32) - Case of "H" model : (1-1~15-32) * Blank if the parity group is not concatenated to another parity group or is Spare Drive or is Free Drive.
RAID Concatenation#2	Number of parity group to be concatenated to parity group (#2) identified by "ECC Group" - Case of "S" model : (1-1~3-32) - Case of "M" model : (1-1~8-32) - Case of "H" model : (1-1~15-32) * Blank if the parity group is not concatenated to another parity group or is Spare Drive or is Free Drive.
Resource Group ID (ECC Group)	Resource Group ID of parity group(ECC Group) (0~1023)
Resource Group Name (ECC Group)	Name of Resource Group for "Resource Group ID (ECC Group)" (Desired character string of max 32 digits)
Encryption	Information about whether the parity group identified by ECC Group is encrypted or not - Enabled - Disabled
Accelerated Compression	Accelerated Compression (Enabled/Disabled/blank) * Blank if the parity group containing the PDEV does not support the accelerated compression. * Blank if the "ECC Group" indicates Spare Drive or Free Drive.

(12) ChaStatus.csv
Information: CHB Status
Title: <<CHB Status>>

Item	Content
CHB Location	CHB location name - Case of "S" model : (CHB-1A/CHB-1B/CHB-2A/CHB-2B) - Case of "M" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1H /CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2H) - Case of "H" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D /CHB-1E/CHB-1F/CHB-1G/CHB-1H /CHB-2A/CHB-2B/CHB-2C/CHB-2D /CHB-2E/CHB-2F/CHB-2G/CHB-2H) * When the "Package Type" is "NAS module(CHB)", this location name is concatenated. ("CHB-1A/1B/1C/1D", "CHB-2A/2B/2C/2D")
PCB Status	Status of this CHB (1/0) *1: Normal, 0: Abnormal * When the "CHB Location" is NAS module ("CHB-1A/1B/1C/1D" or "CHB-2A/2B/2C/2D"), this is blank.
Port#00~03	Status of Port on this CHB (1/0) *1: Normal, 0: Abnormal * When the "CHB Location" is NAS module ("CHB-1A/1B/1C/1D" or "CHB-2A/2B/2C/2D"), this is blank.

(13) DkaStatus.csv
Information: DKB Status
Title: <<DKB Status>>

Item	Content
DKB Location	DKB location name - Case of "S" model : (DKB-1C/DKB-2C) - Case of "M" model : (DKB-1H/DKB-2H) - Case of "H" model : (DKB-1G/DKB-1H/DKB-1E/DKB-1F/DKB-2G/DKB-2H/DKB- 2E/DKB-2F)
PCB Status	Status of this DKB (1/0) *1: Normal, 0: Abnormal
BECON#00	Status of BECON on this DKB (1/0) *1: Normal, 0: Abnormal
BEPORT#0000~0001	Status of BEPORT on this DKB (1/0) *1: Normal, 0: Abnormal

(14) MpPathStatus.csv
Information: MP Path Status
Title: <<MP Path Status>>

The number of the columns of the "MpPathStatus.csv" is different every model of the storage system.

Case of "S" model:

Item	Content
MPU#/CTL#	MP unit number or controller board number - For MP unit number (MPU#00~MPU#03) - For controller board number (CTL#00~CTL#01)
CMG#00-00,CMG#00-01	MP unit path status for Cache number in the format of "CMG#xx-yy" (1/0) *1: Normal, 0: Abnormal (CMG#xx-yy) xx: I-path number(00), yy: Cache number(00,01)
MPU#00-00,...,MPU#00-03	MP unit path status for MP unit number in the format of "MPU#xx-yy" (1/0) *1: Normal, 0: Abnormal (MPU#xx-yy) xx: I-path number(00), yy: MP unit number(00~03)
CMG#00-00, CMG#00-01	Controller board path status for Cache number in the format of "CMG#xx-yy" (1/0) *1: Normal, 0: Abnormal (CMG#xx-yy) xx: I-path number(00), yy: Cache number(00,01)
MPU#00-00,..., MPU#00-03	Controller board path status for MP unit number in the format of "MPU#xx-yy" (1/0) *1: Normal, 0: Abnormal (MPU#xx-yy) xx: I-path number(00), yy: MP unit number(00~03)

Case of "M" or "H" model:

Item	Content
MPU#/CTL#	MP unit number or controller board number - For MP unit number (MPU#00~MPU#03) - For controller board number (CTL#00~CTL#01) * When the "Unified Mode" in DkcInfo.csv is "On", the record of "MPU#01" and "MPU#03" becomes the blank.
CMG#00-00,CMG#00-01 CMG#01-00,CMG#01-01	MP unit path status for Cache number in the format of "CMG#xx-yy" (1/0) *1: Normal, 0: Abnormal (CMG#xx-yy) xx: I-path number(00,01), yy: Cache number(00,01)
MPU#00-00,...,MPU#00-03 MPU#01-00,...,MPU#01-03	MP unit path status for MP unit number in the format of "MPU#xx-yy" (1/0) *1: Normal, 0: Abnormal (MPU#xx-yy) xx: I-path number(00,01), yy: MP unit number(00~03) * When the "Unified Mode" in DkcInfo.csv is "On", the record in the next item becomes the blank. (MPU#00-01, MPU#00-03, MPU#01-01,MPU#01-03)
CMG#00-00,CMG#00-01 CMG#01-00,CMG#01-01	Controller board path status for Cache number in the format of "CMG#xx-yy" (1/0) *1: Normal, 0: Abnormal (CMG#xx-yy) xx: I-path number(00,01), yy: Cache number(00,01)
MPU#00-00,..., MPU#00-03 MPU#01-00,..., MPU#01-03	Controller board path status for MP unit number in the format of "MPU#xx-yy" (1/0) *1: Normal, 0: Abnormal (MPU#xx-yy) xx: I-path number(00,01), yy: MP unit number(00~03) * When the "Unified Mode" in DkcInfo.csv is "On", the record in the next item becomes the blank. (MPU#00-01, MPU#00-03, MPU#01-01,MPU#01-03)

(15) PdevStatus.csv
Information: PDEV Status
Title: <<PDEV Status>>

Item	Content
CR#	C# and R#, which identify the PDEV (xx/yy) xx: 2-digit hex, yy: 2-digit hex * C# and R# range. - Case of "S" model : C#:(00~07),R#:(00~3b) - Case of "M" model : C#:(00~17),R#:(00~3b) - Case of "H" model : C#:(00~2f),R#:(00~3b)
Pdev Status	PDEV status (1/0) *1: Normal, 0: Abnormal
Port0 Status	Status of Port 0 on this PDEV (1/0) *1: Normal, 0: Abnormal
Port1 Status	Status of Port 1 on this PDEV (1/0) *1: Normal, 0: Abnormal
Pdev Location	Location name of this PDEV (Desired character string)

(16) LdevStatus.csv
Information: LDEV Status
Title: <<LDEV Status>>

Item	Content
VDEV#	Virtual device number in which the LDEV is defined (0000~ffff: 4-digit hex)
VDEV Status	VDEV status of "VDEV#" (1/0) *1: Normal, 0: Abnormal
HDEV#	LDEV number - Case of "S" model : (00:00:00~00:07:ff) - Case of "M" model : (00:00:00~00:0f:ff) - Case of "H" model : (00:00:00~00:3f:ff)
HDEV Status	LDEV status (1/0) *1: Normal, 0: Abnormal
LDEV Emulation	LDEV emulation type (xxxxx-yy) x,y: Desired character string
ECC Group	Number of parity group where the LDEV belongs - (X-Y) X,Y: Decimal * The parity group contains Internal volumes. - (EX-Y) X,Y: Decimal * If the number starts with "E" (for example, E1-1), the parity group contains external volumes (Universal Volume Manager). - (-) * If "LDEV Type" is Dynamic Provisioning, Thin Image, or ALU, a hyphen (-) is output. Refer to "LdevInfo.csv" for information about the LDEV type.

(17) LunPortInfo.csv

Information: Lun Port

Title: <<LUN Port Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
Security Switch	The setting status of the security switch - On - Off * When the "Package Type" is "NAS module(CHB)", this is blank.
Port Address	Fibre Port address (2-digit hex) * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Loop ID	Loop ID (number in the decimal format) * When the Package Type is iSCSI, this is blank. * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Fabric	One of the Fibre topology settings indicating the setting status of the Fabric switch - On - Off * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Connection	One of the Fibre topology settings - Point to Point - FC-AL * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
Channel Speed	Channel Speed of this port - 1G - 2G - 4G - 8G - 10G - 16G - Auto * When the "Package Type" is "NAS module(CHB)", this is blank.
WWN	WWN of this port (16-digit hex) * When the "Package Type" is iSCSI or "NAS module(CHB)", this is blank.
CHB Location	Location name of CHB on which this port is installed - Case of "S" model : (CHB-1A/CHB-1B/CHB-2A/CHB-2B) - Case of "M" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D/CHB-1H /CHB-2A/CHB-2B/CHB-2C/CHB-2D/CHB-2H) - Case of "H" model : (CHB-1A/CHB-1B/CHB-1C/CHB-1D /CHB-1E/CHB-1F/CHB-1G/CHB-1H /CHB-2A/CHB-2B/CHB-2C/CHB-2D /CHB-2E/CHB-2F/CHB-2G/CHB-2H) * When the "Package Type" is "NAS module(CHB)", this location name is concatenated. ("CHB-1A/1B/1C/1D", "CHB-2A/2B/2C/2D")
Package Type	CHB package type - Fibre package : "8FC4 (CHB)", "16FC2(CHB)" - iSCSI package : "10iSCSI2o(CHB)", "10iSCSI2c(CHB)" - NAS module : "NAS module(CHB)"
T10 PI Mode	T10 PI Mode (Enabled/Disabled/blank) * When the "Package Type" is other than "16FC2(CHB)", this is blank.

Note 1: For details of the iSCSI port information, see "IscsiPortInfo.csv".

(18) ELunInfo.csv (Note2)

Information: External LUN information

Title: <<External LUN Information>>

Item	Content
VDEV#	Virtual device number to which the external volume is mapped (0000~ffff: 4-digit hex)
Characteristic1	Identification number of the external volume (characters string (max 8 characters)) (Note1)
Characteristic2	Extended information for identifying the external volume (hex string (max 32 bytes))
Device	Product name reported to the host by the external volume (Max 16-digit character string) (Note1)
Capacity(blocks)	Capacity of the external volume (in blocks) (20-digit decimal)
Cache Mode	Indicates whether the write data from the host to the external storage system is reflected synchronously or asynchronously - Enabled : Asynchronously - Disabled : Synchronously
ECC Group	Number of parity group to which the external volume is mapped (E1-1~E16384-4096) * If the number starts with "E" (for example, "E1-1"), the parity group contains external volumes.
Current MPU	Current MP unit controlling the parity group to which the external volume is mapped (MPU-10/MPU-11/MPU-20/MPU-21)
Setting MPU	MP unit configured to control the external volume indicated by the "ECC Group" (MPU-10/MPU-11/MPU-20/MPU-21)
Vendor	Vendor name of the external storage system (Max 16-digit character string)
Product Name	Product name of the external storage system (Max 16-digit character string)
Serial Number#	Serial product number of the external storage system (Max 32-digit character string)
Path Mode	Mode which indicates how the paths between local and external storage systems operate - Multi - Single - ALUA
Port	Name of a local port from which the external path is connected to the external storage system (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
WWN	Port identifier number of the external storage system (16-digit decimal) * When the Package Type is iSCSI, this is blank.
LUN	LU number set for the external volume (0000~ffff: 4-digit hex)
Priority	Priority of the paths between the storage systems to be used for connection with the external volume (1~8) * "1" indicates the path of the highest priority.
Status	Status of the path between storage systems - Normal - Blocked
IO TOV	IO timeout value for the external volume (5~240)
QDepth	The number of Read/Write commands that can be issued to the external volume at a time (2~128)

(To be continued)

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Item	Content
Resource Group ID (ECC Group)	Resource group ID for the parity group that is mapping external volumes (0~1023)
Resource Group Name (ECC Group)	Resource group name of the parity group that is mapping external volumes (Desired character string)
Load Balance Mode	I/O load balance method (Load Balance mode) set in external volumes - Normal Round-robin - Extended Round-robin - Disabled
Path Mode on Profile	Path mode in the profile information of the external storage system - Multi - Single
ALUA Settable	Whether the ALUA mode can be set as the path mode in the external storage side - Yes - No
ALUA Permitted	Whether ALUA is used as the path mode in the local storage system side - Enabled - Disabled
Target Port Asymmetric Access State	The port status in the external storage system side when the path mode is ALUA - Active/Optimized - Active/Non-Optimized
Package Type	CHB package type of a local port from which the external path is connected to the external storage system - Fibre package: "8FC4 (CHB)","16FC2(CHB)" - iSCSI package: "10iSCSI2o(CHB)","10iSCSI2c(CHB)"
IP Address	IP address of iSCSI target port in the external storage system (XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX) XX:00~FF (2-digit hex) or (XXX.XXX.XXX.XXX) XXX:0~255 (Decimal) * When the Package Type is Fibre, this is blank.
TCP Port Number	TCP port number of iSCSI target port in the external storage system (1~65535) * When the Package Type is Fibre, this is blank.
iSCSI Target Name	Name of iSCSI target in the external storage system (Desired character string of max 223 digits) * When the Package Type is Fibre, this is blank.

Note 1: If the character string has a COMMA (","), the COMMA (",") is converted into TAB.

Note 2: In this CSV file is not displayed the NAS module information.

(19) LPartition.csv

Information: Logical Partitioning

Title: <<Logical Partitioning>>

Item	Content
CLPR#	CLPR number (0~31)
CLPR Name	CLPR name (Desired character string of max 16 digits)
Cache Size(MB)	Cache size (Decimal)
ECC Group	Number of parity group allocated to this CLPR number - (X-Y) X,Y: Decimal * The parity group contains Internal volumes. - (EX-Y) X,Y: Decimal * If the number starts with "E" (for example, E1-1), the parity group contains external volumes (Universal Volume Manager). - (-) * If "LDEV Type" is Dynamic Provisioning, Thin Image, or ALU, a hyphen (-) is output. Refer to "LdevInfo.csv" for information about the LDEV type.
LDEV#(V-VOL)	LDEV number allocated to this CLPR number - Case of "S" model : (00:00:00~00:07:ff) - Case of "M" model : (00:00:00~00:0f:ff) - Case of "H" model : (00:00:00~00:3f:ff) * The type of this LDEV is Dynamic Provisioning, Thin Image, or ALU. Refer to "LdevInfo.csv" for information about the LDEV type.

(20) SMfundat.csv

Information: SM Install function

Title: <<SM Install function>>

Item	Content
SM Install function	SM Install function name Case of "S" model : - Base - Extension1 - Extension2 Case of "M" or "H" model : - Base - Extension1 - Extension2 - Extension3 - Extension4
Availability	Availability - Enabled - Disabled

(21) ModePerLpr.csv

Information: System Option Mode Per LPR

Title: <<System Option Mode Per LPR>>

Item	Content
System Option Mode#	System Option Mode# (0~2047)
LPR#0, ..., LPR#31	System option mode for LPR#0 to LPR#31 - On (If the system option mode is on) - blank (If the system option mode is not on)

(22) FcSpNameInfo.csv (Note1)

Information: Fibre Chap Name Information

Title: <<FC-SP Name Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
Host Group	Host Group name (Desired character string of max 32 digits)
Target Username	WWN information about the storage system required for authentication (16-digit number in the hexadecimal format)
Authentication of Group	Information about whether to perform authentication or not - Enabled - Disabled
Initiator Username	WWN information about the host required for authentication (16-digit number in the hexadecimal format)
Protocol	Protocol used for authentication - CHAP - blank

Note 1: In this CSV file is not displayed the NAS module information.

(23) FcSpPortInfo.csv (Note1)

Information: Fibre Chap Port Information

Title: <<FC-SP Port Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
Time out(Sec)	Time interval (in seconds) before retrying authentication in case of failure in authentication (15~60)
Refusal Intvl.(Min)	Time interval (in minutes) before starting next authentication in case of failure in authentication for the number of times displayed by "Refusal Freq.(Counts) " (1~60)
Refusal Freq.(Counts)	Number of times of authentication allowable for connection to a port (1~10)
Switch Port Username	WWN information about the Fabric switch required for authentication (16-digit number in the hexadecimal format)
Mode	Mode of authentication between ports and Fabric switches - bi-directional - unidirectional
Authentication of Fabric Switch	Information about whether to perform authentication of the Fabric switch identified by "Switch Port Username" - Enabled - Disabled

Note 1: In this CSV file is not displayed the NAS module information.

(24) DeviceEquipInfo.csv (Note 1) (Note 2)
 Information: Device Equipment Information
 Title: <<Device Equipment Information>>

Item	Content
Device Location	Device Location Name (Desired character string)
Equip Status	Equipment status of the device - Equipped - Not Equipped
Status	Status of the device - Normal - Abnormal - blank (if Equipment Status is Not Equipped)

Note 1: This is a file for members of maintenance. Therefore “-” is output when it starts according to this manual.

Note 2: The device information output with this file is DKC PS, DB PS, Battery and CHBB PS.

(25) LdevCapaInfo.csv
 Information: LDEV Capacity Information
 Title: <<LDEV Capacity Information>>

Item	Content
Volume Kind	The following three classifications are output - Internal OPEN Volumes - External OPEN Volumes - Total OPEN Volumes
Allocated LDEV Capacity(GB)	Allocated LDEV capacity (in GB) for Volume Kind
Unallocated LDEV Capacity(GB)	Unallocated LDEV capacity (in GB) for Volume Kind
Reserved Capacity(GB)	Reserved LDEV capacity (in GB) for Volume Kind
Total Volume Capacity(GB)	Total Volume Capacity (in GB) for Volume Kind * The sum of “Allocated LDEV Capacity(GB)”, “Unallocated LDEV Capacity(GB)” and “Reserved Capacity(GB)”.
Free Space(GB)	Free Space (in GB) for Volume Kind
Total Capacity(GB)	Total Capacity (GB) for Volume Kind * The sum of “Total Volume Capacity(GB)” and “Free Space(GB)”.

(26) LdevCountInfo.csv
 Information: LDEV Count Information
 Title: <<LDEV Count Information>>

Item	Content
Volume Kind	The following three classifications are output - Internal Volumes - External Volumes - Total Volumes
Allocated OPEN LDEVs	The number of allocated open-system volumes (LDEVs) for Volume Kind
Unallocated OPEN LDEVs	The number of unallocated open-system volumes (LDEVs) for Volume Kind
Reserved OPEN LDEVs	The number of reserved open-system volumes (LDEVs) for Volume Kind
V-VOL	The number of virtual volumes for Volume Kind * Output only when “Volume Kind” is Total Volumes.
Total(All LDEVs)	Total number of LDEVs for Volume Kind
ECC Groups	Total number of parity groups for Volume Kind

(27) PdevCapalInfo.csv

Information: PDEV Capacity Information

Title: <<PDEV Capacity Information>>

Item	Content
PDEV Kind	The following three classifications are output - OPEN System(TB) - Total Capacity(TB) - Number of PDEVs
SAS Drive	SAS drive capacity (TB) for "PDEV Kind" * Number of PDEVs: Number of "SAS drive".
Spare Drive	Spare drive capacity (TB) for "PDEV Kind" * Number of PDEVs: Number of "Spare drive".
SSD Drive	SSD capacity (TB) for "PDEV Kind" * Number of PDEVs: Number of "SSD drive".
Free Drive	Free drive capacity (TB) for "PDEV Kind" * Number of PDEVs: Number of "Free drive".

(28) PcbRevInfo.csv (Note 1) (Note 2) (Note 3)

Information: PCB Revision Information

Title: <<PCB Revision Information>>

Item	Content
Cluster#	Cluster number (1/2)
Location	PCB part location name (Desired character string)
FRU Number	Product name of the package or some other name (Desired character string of max 16 characters)
PK Revision	Revision of the package (Desired character string of max 16 characters)
Factory	Factory manufacturing the package (Desired character string of max 16 characters)
Number	Serial product number (Desired character string of max 16 characters)
MAC Address	MAC address of the product (xx-xx-xx-xx-xx-xx) xx: 2-digit hex

Note 1: This is a file for members of maintenance. Therefore "-" is output when it starts according to this manual.

Note 2: If the character string has a COMMA (","), the COMMA (" , ") is converted into TAB.

Note 3: Because revision of DKB does not exist in the case of S model, revision of DKB is the output by "Revision Invalid".

(29) DkaInfo.csv

Information: DKB Information

Title: <<DKB Information>>

Item	Content
DKB Location	DKB location name - Case of "S" model : (DKB-1C/DKB-2C) - Case of "M" model : (DKB-1H/DKB-2H) - Case of "H" model : (DKB-1G/DKB-1H/DKB-1E/DKB-1F/DKB-2G/DKB-2H/DKB-2E/DKB-2F)
Package Type	DKB package type - "DKB (2Port)" - "EDKB (2Port)" (The package of supporting encryption license key function.)

(30) MpPcbStatus.csv
 Information: MP Pcb Status
 Title: <<MP PCB Status>>

The number of the columns of the "MpPcbStatus.csv" is different every model of the storage system.

Case of "S" model:

Item	Content
MPU ID	MP unit ID (MPU-10/MPU-11/MPU-20/MPU-21)
Auto Assignment	Information about whether this MP unit is set to be automatically assigned to each resource or not - Enabled (Set to be automatically assigned) - Disabled (Not set to be automatically assigned)
PCB Status	MP unit status (1/0) *1: Normal, 0: Abnormal
MP#00,01	MP status on this MP unit (1/0) *1: Normal, 0: Abnormal

Case of "M" model:

Item	Content
MPU ID	MP unit ID (MPU-10/MPU-11/MPU-20/MPU-21) * When the "Unified Mode" in DkclInfo.csv is "On", MPU-10 and MPU-20 are displayed.
Auto Assignment	Information about whether this MP unit is set to be automatically assigned to each resource or not - Enabled (Set to be automatically assigned) - Disabled (Not set to be automatically assigned)
PCB Status	MP unit status (1/0) *1: Normal, 0: Abnormal
MP#00~03	MP status on this MP unit (1/0) *1: Normal, 0: Abnormal

Case of "H" model:

Item	Content
MPU ID	MP unit ID (MPU-10/MPU-11/MPU-20/MPU-21) * When the "Unified Mode" in DkclInfo.csv is "On", MPU-10 and MPU-20 are displayed.
Auto Assignment	Information about whether this MP unit is set to be automatically assigned to each resource or not - Enabled (Set to be automatically assigned) - Disabled (Not set to be automatically assigned)
PCB Status	MP unit status (1/0) *1: Normal, 0: Abnormal
MP#00~07	MP status on this MP unit (1/0) *1: Normal, 0: Abnormal

(31) HdulInfo.csv

Information: DB Information

Title: <<DB Information>>

Item	Content
DB Location	DB location name (DBXX) XX: 2-digit decimal * DB number range - Case of "S" model : (00~07) - Case of "M" model : (00~23) - Case of "H" model : (00~47)
DB Status	Information about whether this DB is installed or not - Installed - Not Installed
Slot Size	Slot size (inches) - 2.5 - 3.5 - blank * In the case of DBF (FMD, FMC) and DBF2 (FMD, FMC), it is blank.
DB Type	DB type - DBS (2.5 inch drive) - DBL (3.5 inch drive) - DBF (for FMD and FMC(2Port)) - DBF2 (for FMD and FMC(4Port)) - DB60

(32) JnlInfo.csv

Information: JNL Information

Title: <<JNL Information>>

Item	Content
JNL#	Journal number (JNLXXXX) XXXX: 0000~00FF (4-digit hex)
Current MPU	MP unit currently controlling the journal (MPU-10/MPU-11/MPU-20/MPU-21)
Setting MPU	MP unit configured to control the journal (MPU-10/MPU-11/MPU-20/MPU-21)

(33) SsdDriveInfo.csv (Note 1)

Information: SSD Drive Information

Title: <<SSD Drive>>

Item	Content
ECC Group	Number of the parity group of which this SSD is a component - (X-Y) X,Y: Decimal - Spare Drive * If it is a spare drive, "Spare Drive" is output. - Free Drive * If it is a free drive, "Free Drive" is output.
CR#	C# and R#, which identify the PDEV (xx/yy) xx: 2-digit hex, yy: 2-digit hex * C# and R# range. - Case of "S" model : C#:(00~07),R#:(00~3b) - Case of "M" model : C#:(00~17),R#:(00~3b) - Case of "H" model : C#:(00~2f),R#:(00~3b)
PDEV Location	PDEV Location name (Desired character string)
Device Type-Code	Drive type code of this drive (Desired character string)
Device Capacity	Drive capacity in GB or TB (xxxGB) or (x.xTB) x: Decimal
SSD Device Type	SSD drive type - MLC - FMD - FMC
Used Endurance Indicator (%)	Used Endurance Indicator (%) (0~100)
Used Endurance Indicator Threshold (%)	Used Endurance Indicator Threshold (%) (0~100)
Used Endurance Indicator Warning SIM (%)	Used Endurance Indicator Warning SIM (%) (0~100)
FMD Battery Life Indicator Warning SIM (%)	FMD Battery Life Indicator Warning SIM (%) (0~100) * When the "SSD Device Type" is other than FMD, this is blank.
FMD Battery Life Indicator (%)	FMD Battery Life Indicator (%) (0~100) * When the "SSD Device Type" is other than FMD, this is blank.

Note 1: Blank is output when it starts according to this manual.

(34) MlcEnduranceInfo.csv (Note1) (Note2)
Information: MLC Endurance Information
Title: <<MLC Endurance Information>>

Item	Content
ECC Group	Number of parity group of which this MLC (including FMD and FMC) is a component - (X-Y) X,Y: Decimal - Spare Drive * If it is a spare drive, "Spare Drive" is output. - Free Drive * If it is a free drive, "Free Drive" is output.
CR#	C# and R#, which identify the PDEV (xx/yy) xx: 2-digit hex, yy: 2-digit hex * C# and R# range. - Case of "S" model : C#:(00~07),R#:(00~3b) - Case of "M" model : C#:(00~17),R#:(00~3b) - Case of "H" model : C#:(00~2f),R#:(00~3b)
Device Type-Code	Drive type code of this drive (Desired character string)
Used Endurance Indicator (%)	Latest SSD endurance (%) (0~100)
History1 (date)	Date when SSD endurance of 1 month ago was obtained (YYYY/MM/DD)
History1 (%)	SSD endurance of 1 month ago (0~100)
History2 (date)	Date when SSD endurance of 2 months ago was obtained (YYYY/MM/DD)
History2 (%)	SSD endurance of 2 months ago (0~100)
:	:
History120 (date)	Date when SSD endurance of 120 months ago was obtained (YYYY/MM/DD)
History120 (%)	SSD endurance of 120 months ago (0~100)

Note 1: If the service personnel changes the management server time by one month or more, the months for which histories were obtained would not be in order.

Note 2: Blank is output when it starts according to this manual.

(35) IscsiTargetInfo.csv (Note1)
Information: iSCSI Target Information
Title: <<iSCSI Target Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R)
iSCSI Target Alias	Alias of iSCSI target (Desired character string of max 32 digits)
iSCSI Target ID	Number of iSCSI target (00~fe)
iSCSI Target Name	Name of iSCSI target (Desired character string of max 223 digits)
Host Mode	Host mode specified for this iSCSI target (2-digit hex)
Host Mode Option	Host mode option set for this iSCSI target (0~127) * If more than one option is specified, the options are separated with semicolons (;).
Security Switch	State of the security switch set to the port of iSCSI target - On - Off
Authentication Method	Setting of the authentication method of iSCSI target - CHAP - None - Comply with Host Setting
Authentication Mutual CHAP	Setting of the mutual CHAP of iSCSI Target - Enabled - Disabled
Authentication User Name	User name of the authentication of iSCSI target (Desired character string of max 223 digits)
Resource Group ID (iSCSI Target)	Resource Group ID of iSCSI target (0~1023)
Resource Group Name (iSCSI Target)	Name of Resource Group for "Resource Group ID (iSCSI Target)" (Desired character string of max 32 digits)

Note 1: In this CSV file is not displayed the NAS module information.

(36) IscsiHostInfo.csv (Note2)

Information: iSCSI Host Information

Title: <<iSCSI Host Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
iSCSI Name	iSCSI name of the host side (Desired character string of max 223 digits)
Host Name	Nickname for iSCSI name of the host side (Desired character string of max 32 digits)
iSCSI Target ID	Number of iSCSI target side (00~fe) (Note 1)

Note 1: For details of the target information having "iSCSI Target ID", see "IscsiTargetInfo.csv".

Note 2: In this CSV file is not displayed the NAS module information.

(37) ChapUserInfo.csv (Note3)

Information: Chap User Information

Title: <<CHAP User Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
User Name	User name of the CHAP authentication (Desired character string of max 223 digits) (Note 1)
iSCSI Target ID	Number of iSCSI target side (00~fe) (Note 2)

Note 1: If the character string has a COMMA (","), the COMMA (" , ") is converted into TAB.

Note 2: For details of the target information having "iSCSI Target ID", see "IscsiTargetInfo.csv".

Note 3: In this CSV file is not displayed the NAS module information.

(38) IscsiPortInfo.csv (Note1)

Information: iSCSI Port Information

Title: <<iSCSI Port Information>>

Item	Content
Port	Port location name (Desired character string: XY) - X: Letter (1~8) - Y: Letter (A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R)
IPv4 IP Address	IPv4 address of the port (XXX.XXX.XXX.XXX) XXX:0~255
IPv4 Subnet Mask	IPv4 subnet mask address of the port (XXX.XXX.XXX.XXX) XXX:0~255
IPv4 Default Gateway	IPv4 default gateway address of the port (XXX.XXX.XXX.XXX) XXX:0~255
IPv6 Mode	IPv6 setting of the port - Enabled - Disabled
IPv6 Link Local Address	IPv6 link local address of the port (XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX) XX:00~FF (2-digit hex) or (Auto) * When the setting of the link local address is "Auto", this is displayed with "Auto". * When the "IPv6 Mode" is Disabled, this is blank.
IPv6 Global Address	IPv6 global address of the port (XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX) XX:00~FF (2-digit hex) or (Auto) * When the setting of the global address is "Auto", this is displayed with "Auto". * When the "IPv6 Mode" is Disabled, this is blank.
IPv6 Assigned Default Gateway	IPv6 assigned default gateway address of the port (XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX) XX:00~FF (2-digit hex) * When the "IPv6 Mode" is Disabled, this is blank.
Channel Speed	Channel Speed of this port - 1G - 10G - Auto
Security Switch	The setting status of the security switch - On - Off
TCP Port Number	TCP port number to use a socket in this port (1~65535)
Ethernet MTU Size(Byte) MTU	Ethernet MTU size setting of the port (in Byte) - 1500 - 4500 - 9000
Keep Alive Timer (sec.)	Keep Alive Timer setting of the port (sec.) (30~64800)
Selective ACK	Selective ACK mode setting of the port - Enabled - Disabled
Delayed ACK	Delayed ACK mode setting of the port - Enabled - Disabled

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Item	Content
Maximum Window Size(KB)	Maximum scale size which is decided by setting of window scale option (in KB) - 64KB - 128KB - 256KB - 512KB - 1024KB
iSNS Server Mode	iSNS mode setting state of the port - On - Off
iSNS Server IP Address	IP address of the iSNS server (XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX:XXXX) XX:00~FF (2-digit hex) or (XXX.XXX.XXX.XXX) XXX:0~255 (Decimal) * When the "iSNS Server Mode" is off, this is blank.
iSNS Server TCP Port Number	TCP port number of the iSNS server (1~65535) * When the "iSNS Server Mode" is off, this is blank.
VLAN Tagging Mode	VLAN Tagging mode setting state of the port - On - Off
VLAN ID	Number of the VLAN (1~4094) * When the "VLAN Tagging Mode" is off, this is blank.
Resource Group ID (Port)	Resource Group ID of Port (0~1023)
Resource Group Name (Port)	Name of Resource Group for "Resource Group ID (Port)". (Desired character string of max 32 digits)
iSCSI Name	iSCSI name of the host side (Desired character string of max 223 digits)
CHAP User Name	User name of the CHAP authentication (Desired character string of max 223 digits)

Note 1: In this CSV file is not displayed the NAS module information.

(39) EnvMonInfo.csv (Note 1) (Note 2)

Information: Information of the electric power and the temperature, acquired with an environmental monitor from the storage system.

Title: <<Electric power and temperature Information>>

Item	Content
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)
Electric power average	The electric power average [W] that was used with a storage system until the date from two hours ago (decimal)
Electric power maximum value	The electric power maximum value [W] that was used with a storage system until the date from two hours ago (decimal)
Electric power minimum value	The electric power minimum value [W] that was used with a storage system until the date from two hours ago (Note1) (decimal)
DKC0 CL1 Temperature average	The temperature average [degree C] that was measured in CL1 of the storage system until the date from two hours ago (decimal)
DKC0 CL1 Temperature maximum value	The temperature maximum value [degree C] that was measured in CL1 of the storage system until the date from two hours ago (decimal)
DKC0 CL1 Temperature minimum value	The temperature minimum value [degree C] that was measured in CL1 of the storage system until the date from two hours ago (decimal)
DKC0 CL2 Temperature average	The temperature average [degree C] that was measured in CL2 of the storage system until the date from two hours ago (decimal)
DKC0 CL2 Temperature maximum value	The temperature maximum value [degree C] that was measured in CL2 of the storage system until the date from two hours ago (decimal)
DKC0 CL2 Temperature minimum value	The temperature minimum value [degree C] that was measured in CL2 of the storage system until the date from two hours ago (decimal)

Note 1: The CSV file about data of the electric power and temperature every two hours in DKC by the storage system. One record becomes the information of the electric power and temperature of DKC acquired by an environmental monitor. When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: Immediately after the storage system start-up or replacement maintenance, the power consumption might become a low value during the firmware update or immediately after the update.

(40) PECBInfo.csv (Note 1)

Information: PECB Information

Title: <<PECB Information>>

Item	Content
Location	PECB location name (PECB-1A/PECB-1B/PECB-1C/PECB-1D/PECB-1E/PECB-1F /PECB-2A/PECB-2B/PECB-2C/PECB-2D/PECB-2E/PECB-2F)
Status	Information about whether this PECB is installed or not - Installed - Not Installed
Type	Connection module type name of PECB - CHBB
Expansion mode	Expansion mode - 1:2

Note 1: When the "Model" in DkclInfo.csv is "S" or "M", "-" is output.

(41) DkuTempInfo.csv

Information:

The CSV file about data of the temperature every two hours in DB by the storage system. One record becomes the information of the temperature of DB acquired by an environmental monitor.

The record to the output of the first data becomes the recent temperature information.

The temperature of DB displays an item to DBPS unit because temperature data of DB are measured by DBPS unit. (Note 1)

DkuTempInfo.csv displays information of the temperature average and the temperature maximum value and the temperature minimum value as DB temperature data. The number of the total items is different every model. (H model: 289, M model: 145, S model: 49)

The DB temperature data to display in DkuTempAveInfo.csv (only as for the temperature average) and DkuTempMaxInfo.csv (only as for the temperature maximum value) and DkuTempMinInfo.csv (only as for the temperature minimum value) are values same as DB temperature data of DkuTempInfo.csv.

DkuTempInfo.csv is not displayed with the dialogue screen to display when it started in Offline Printout Tool.

Title: <<DB temperature Information>>

- In the case of VSP G100/VSP G200/VSP G400/VSP G600/VSP G800 and in the case where DBF is used in VSP F400/VSP F600/VSP F800(Note 1)

Item	Content
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)
DB00 DBPS001 Temperature average	The temperature average [degree C] that was measured in DB00 DBPS001 of the storage system until the date from two hours ago (decimal)
DB00 DBPS001 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00 DBPS001 of the storage system until the date from two hours ago (decimal)
DB00 DBPS001 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00 DBPS001 of the storage system until the date from two hours ago (decimal)
:	:
DB47 DBPS472 Temperature average	The temperature average [degree C] that was measured in DB47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of M model, an item name becomes to DB23 DB232. In the case of S model, an item name becomes to DB07 DB072.
DB47 DBPS472 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of M model, an item name becomes to DB23 DB232. In the case of S model, an item name becomes to DB07 DB072.
DB47 DBPS472 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of M model, an item name becomes to DB23 DB232. In the case of S model, an item name becomes to DB07 DB072.

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

The item name displays DB location and DBPS location and displays it. The order to display becomes DB number (DB#).

■ "DBxxy", "DBPSxxy" : Value of "xx"

DB#	0	1	2	3	4	5
xx	00	01	02	03	04	05
DBxx	DB00	DB01	DB02	DB03	DB04	DB05
DBPSxxy	DBPS00y	DBPS01y	DBPS02y	DBPS03y	DBPS04y	DBPS05y

DB#	42	43	44	45	46	47
xx	42	43	44	45	46	47
DBxx	DB42	DB43	DB44	DB45	DB46	DB47
DBPSxxy	DBPS42y	DBPS43y	DBPS44y	DBPS45y	DBPS46y	DBPS47y

■ "DBPSxxy" : Value of "y" (DB# 0 only , "xx" : 00 only)

DB#	0	
y	1	2
DBPSxxy	DBPS001	DBPS002

- DBF2 is used in VSP F400/VSP F600/VSP F800 (Note 1)

Item	Content	Column Correspondence
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)	
DB00&01 DBPS001 Temperature average	The temperature average [degree C] that was measured in DB00&01 DBPS001 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS001 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00&01 DBPS001 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS001 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00&01 DBPS001 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS002 Temperature average	The temperature average [degree C] that was measured in DB00&01 DBPS002 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS002 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00&01 DBPS002 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS002 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00&01 DBPS002 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS011 Temperature average	The temperature average [degree C] that was measured in DB00&01 DBPS011 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS011 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00&01 DBPS011 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS011 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00&01 DBPS011 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS012 Temperature average	The temperature average [degree C] that was measured in DB00&01 DBPS012 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS012 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00&01 DBPS012 of the storage system until the date from two hours ago (decimal)	
DB00&01 DBPS012 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00&01 DBPS012 of the storage system until the date from two hours ago (decimal)	
:	:	
DB46&47 DBPS472 Temperature average	The temperature average [degree C] that was measured in DB46&47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP F400/VSP F600, the item is up to DB22&23 DBPS232.	
DB46&47 DBPS472 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB46&47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP F400/VSP F600, the item is up to DB22&23 DBPS232.	
DB46&47 DBPS472 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB46&47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP F400/VSP F600, the item is up to DB22&23 DBPS232.	

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

As an item name, DB and DBPS locations are specified as “DBxx&xx+1 DBPSsxy” or “DBxx&xx+1 DBPSxx+1y”.

They are displayed in the order of DB numbers.

“DBxx&yy”: The following table shows the values of “xx” (VSP F400/VSP F600: Up to 22, VSP F800: up to 46) and the values of “yy” (Value of xx+1).

■ “DBxx”, “DBPSsxy”: Value of “xx” (H model: Up to 46, M model: Up to 22)

DB#	0	1	2	3	4	5
xx	00	00	02	02	04	04
DBxx&xx+1	DB00&01	DB00&01	DB02&03	DB02&03	DB04&05	DB04&05
DBPSsxy	DBPS00z	-	DBPS02z	-	DBPS04z	-
DBPSxx+1y	-	DBPS01z	-	DBPS03z	-	DBPS05z

:

DB#	42	43	44	45	46	47
xx	42	42	44	44	46	46
DBxx&yy	DB42&43	DB42&43	DB44&45	DB44&45	DB46&47	DB46&47
DBPSsxy	DBPS42z	-	DBPS44z	-	DBPS46z	-
DBPSxx+1y	-	DBPS43z	-	DBPS45z	-	DBPS47z

■ “DBPSsxy” or “DBPSxx+1y”: The following table shows values of [y] (DB umber 0 and 1).

DB#	0		1	
y	1	2	1	2
DBPSsxy	DBPS001	DBPS002	-	-
DBPSxx+1y	-	-	DBPS011	DBPS012

Note that the temperature information of DBPS in “DBPSxx+1y” is not output.

(42) DkuTempAveInfo.csv

Information:

The CSV file about data of the temperature every two hours in DB by the storage system. One record becomes the information of the temperature of DB acquired by an environmental monitor.

The record to the output of the first data becomes the recent temperature information.

The temperature of DB displays an item to DBPS unit because temperature data of DB are measured by DBPS unit. (Note 1) (Note 2)

DkuTempAveInfo.csv displays the temperature average as DB temperature data. The number of the total items is different every model. (H model: 97, M model: 49, S model: 17) The DB temperature data to display in DkuTempAveInfo.csv (only as for the temperature average) and DkuTempMaxInfo.csv (only as for the temperature maximum value) and DkuTempMinInfo.csv (only as for the temperature minimum value) are values same as DB temperature data of DkuTempInfo.csv.

Title: <<DB temperature average Information>>

- In the case of VSP G100/VSP G200/VSP G400/VSP G600/VSP G800, and in the case where DBF is used in VSP F400/VSP F600/VSP F800 (Note 1) (Note 2)

Item	Content
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)
DB00 DBPS001 Temperature average	The temperature average [degree C] that was measured in DB00 DBPS001 of the storage system until the date from two hours ago (decimal)
:	:
DB47 DBPS472 Temperature average	The temperature average [degree C] that was measured in DB47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP G100/VSP G200, the item is up to DB07 DBPS072. In the case of VSP G400/VSP G600/VSP F400/VSP F600, the item is up to DB23 DBPS232.

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: The item name displays DB location and DBPS location and displays it. The order to display becomes DB number (DB#). Please refer to "(41) DkuTempInfo.csv" for a location and the value of "DBxxy" and "DBPSxxy".

- DBF2 is used in VSP F400/VSP F600/VSP F800 (Note 1) (Note 2)

Item	Content	Column Correspondence
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)	
DB00&01 DBPS001 Temperature average	The temperature average [degree C] that was measured in DB00&01 DBPS001 of the storage system until the date from two hours ago (decimal)	
:	:	:
DB46&47 DBPS472 Temperature average	The temperature average [degree C] that was measured in DB46&47 DBPS472 of the storage system until the date from two hours ago(decimal) In the case of VSP F400/VSP F600, the item is up to DB22&23 DBPS232.	

Note that the temperature information of DBPS in “DBPSxx+1y” is not output.

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: As an item name, DB and DBPS locations are specified as “DBxx&xx+1 DBPSsxy” or “DBxx&xx+1 DBPSxx+1y”. They are displayed in the order of DB numbers. For “DBxx&xx+1” and “DBPSsxy” or “DBPSxx+1y” location values, see “(41)DkuTemplInfo.csv”.

(43) DkuTempMaxInfo.csv

Information:

The CSV file about data of the temperature every two hours in DB by the storage system. One record becomes the information of the temperature of DB acquired by an environmental monitor.

The record to the output of the first data becomes the recent temperature information.

The temperature of DB displays an item to DBPS unit because temperature data of DB are measured by DBPS unit.

DkuTempMaxInfo.csv displays the temperature maximum value as DB temperature data.

The number of the total items is different every model. (H model: 97, M model: 49, S model: 17)

The DB temperature data to display in DkuTempAveInfo.csv (only as for the temperature average) and DkuTempMaxInfo.csv (only as for the temperature maximum value) and DkuTempMinInfo.csv (only as for the temperature minimum value) are values same as DB temperature data of DkuTempInfo.csv.

Title: <<DB temperature maximum value Information>>

- In the case of VSP G100/VSP G200/VSP G400/VSP G600/VSP G800, and in the case where DBF is used in VSP F400/VSP F600/VSP F800 (Note 1) (Note 2)

Item	Content
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)
DB00 DBPS001 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00 DBPS001 of the storage system until the date from two hours ago (decimal)
:	:
DB47 DBPS472 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP G100/VSP G200, the item is up to DB07 DBPS072. In the case of VSP G400/VSP G600/VSP F400/VSP F600, the item is up to DB23 DBPS232..

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: The item name displays DB location and DBPS location and displays it. The order to display becomes DB number (DB#). Please refer to "(41) DkuTempInfo.csv" for a location and the value of "DBxxy" and "DBPSxxy".

- DBF2 is used in VSP F400/VSP F600/VSP F800 (Note 1) (Note 2)

Item	Content	Column Correspondence
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)	
DB00&01 DBPS001 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB00&01 DBPS001 of the storage system until the date from two hours ago (decimal)	
:	:	:
DB46&47 DBPS472 Temperature maximum value	The temperature maximum value [degree C] that was measured in DB46&47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP F400/VSP F600, the item is up to DB22&23 DBPS232.	

Note that the temperature information of DBPS in “DBPSxx+1y” is not output.

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: As an item name, DB and DBPS locations are specified as “DBxx&xx+1 DBPSxy” or “DBxx&xx+1 DBPSxx+1y”. They are displayed in the order of DB numbers. For “DBxx&xx+1” and “DBPSxy” or “DBPSxx+1y” location values, see “(41)DkuTemplInfo.csv”.

(44) DkuTempMinInfo.csv

Information:

The CSV file about data of the temperature every two hours in DB by the storage system. One record becomes the information of the temperature of DB acquired by an environmental monitor.

The record to the output of the first data becomes the recent temperature information.

The temperature of DB displays an item to DBPS unit because temperature data of DB are measured by DBPS unit.

DkuTempMinInfo.csv displays the temperature minimum value as DB temperature data.

The number of the total items is different every model. (H model: 97, M model: 49, S model: 17)

The DB temperature data to display in DkuTempAveInfo.csv (only as for the temperature average) and DkuTempMaxInfo.csv (only as for the temperature maximum value) and DkuTempMinInfo.csv (only as for the temperature minimum value) are values same as DB temperature data of DkuTempInfo.csv.

Title: <<DB temperature minimum value Information>>

- In the case of VSP G100/VSP G200/VSP G400/VSP G600/VSP G800, and in the case where DBF is used in VSP F400/VSP F600/VSP F800 (Note 1) (Note 2)

Item	Content
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)
DB00 DBPS001 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00 DBPS001 of the storage system until the date from two hours ago (decimal)
:	:
DB47 DBPS472 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB47 DBPS472 of the storage system until the date from two hours ago (decimal) In the case of VSP G100/VSP G200, the item is up to DB07 DBPS072. In the case of VSP G400/VSP G600/VSP F400/VSP F600, the item is up to DB23 DBPS232..

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: The item name displays DB location and DBPS location and displays it. The order to display becomes DB number (DB#). Please refer to "(41) DkuTempInfo.csv" for a location and the value of "DBxxy" and "DBPSxxy".

- DBF2 is used in VSP F400/VSP F600/VSP F800 (Note 1) (Note 2)

Item	Content	Column Correspondence
Date	The date when the storage system acquired recorded data (YYYY/MM/DD HH:MM:SS)	
DB00&01 DBPS001 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB00&01 DBPS001 of the storage system until the date from two hours ago(decimal)	
:	:	:
DB46&47 DBPS472 Temperature minimum value	The temperature minimum value [degree C] that was measured in DB46&47 DBPS472 of the storage system until the date from two hours ago(decimal) In the case of VSP F400/VSP F600, the item is up to DB22&23 DBPS232.	

Note that the temperature information of DBPS in “DBPSxx+1y” is not output.

Note 1: When the breaker of the storage system is turned off, the report of the time is not output. In addition, a report of the time may not be output by data output every two hours when maintenance operation and reboot of SVP/MPC are carried out. While a disorder occurs, right information may not be output by a storage system.

Note 2: As an item name, DB and DBPS locations are specified as “DBxx&xx+1 DBPSxy” or “DBxx&xx+1 DBPSxx+1y”. They are displayed in the order of DB numbers. For “DBxx&xx+1” and “DBPSxy” or “DBPSxx+1y” location values, see “(41)DkuTemplInfo.csv”.