

# Hard Disk Driver Update Information

## Chapter 1 New Feature

The following table 1.1 defines new features added to the software of the previous version levels.

[Table1.1]

Number	Version Level	Component	New Feature Name	Description
1	1.1	FJSVhddv	Solaris 7 support	Drivers that works on the 64-bit kernel of Solaris 7 are added.
		FJSVhddv	GP-DxCKxx,GP-DxRxxx support	Supported of GP-DxCKxx,GP-DxRxxx disk array unit.
2	1.2.1	FJSVhddv	Solaris 8 support	Drivers that works on the Solaris 8 are added.
		FJSVhddv	GR720 support	Supported of GR720 disk array unit.
3	2.0	FJSVhddv	GR730 support	Supported of GR730 disk array unit.
4	2.1	FJSVhddv	GR710/GR740/GR820/GR840 support	Supported of GR710, GR740, GR820 and GR840 disk array unit.
		FJSVhddv	PW-D500x1/PW-D5L1A1 support	Supported of PW-D500x1, PW-D5L1A1 disk array unit. [patch requirement] 911013-03 or later
5	2.2	FJSVhddv	Hot insertion support	Supported of disk array units hot insertion. Supported of host bus adapters hot insertion which uses Dynamic Reconfiguration for PRIMEPOWER 800/1000/2000 and GP7000F M1000/2000.

# Chapter 2 Modification

Bugs found in the software of the previous version levels are fixed. See the following table 2.1 for the details of the bugs and P-number.

[Table 2.1]

Number	Version Level	P-number	Bug
1	1.1	PE12431	An OS-PANIC (trap level 2) may occur in the following situations when: <ol style="list-style-type: none"><li>1. Heavy load processes are executed for the plural LUNs of the disk array unit (GR700),and</li><li>2. The recovery and switch over operation of I/O path is executed.</li></ol>
2	1.1	PE12432	A recovery of the disk array unit cannot be executed in the following situations when: <ol style="list-style-type: none"><li>1. Using the disk array unit GR700, and</li><li>2. The cable has been pulled out, or the power to the disk array unit has been turned off,and</li><li>3. The system has been rebooted.</li></ol>
3	1.1	PE12433	An OS-PANIC (FJSVscf) may occur in the following situations when: <ol style="list-style-type: none"><li>1. Using a cluster system, and</li><li>2. Heavy load processes are executed for a disk array unit, and</li><li>3. Hot system replacement of the controller is executed.</li></ol>
4	1.1	PE12581	An OS-PANIC (trap level 2) may occur in the following situations when: <ol style="list-style-type: none"><li>1. Heavy load processes are executed for the plural LUNs of a disk array unit, and</li><li>2. I/O path error occurs in the access path.</li></ol>
5	1.1.1	PE13120	The Hard Disk Driver sometimes loops in the following situation when:

			1. I/O path error has occurred, then a multipath status has been(fail,fail).
6	1.1.1	PE13014	Multipath status sometimes has been (fail,fail) in the following situation when:  1. After hot system replacement,execute FJvts.
7	1.1.1	PE13124	Panic might occur under the following condition.  1. Using the multi processor system with multipath configurations, and 2. I/O accesses are executed for multipath of condition 1.
8	1.1.1	PE13125	Hard Disk driver sometimes loops in the following situations when:  1. I/O error has occurred at the getting device information of hard disk driver.
9	1.1.2	PE13151	The default setting is minimum changed when GR700.
10	1.1.2	PE13372	An OS-PANIC may occur in the following situation when:  1. I/O path error occurs in the access path.
11	1.2	PE13561	An hungup may occur in the following situation when:  1. The System exhausted resource.
12	1.2.1	PE14414	Multipath status sometimes has been (fail,fail) in the following situation when:  1. One of the doubling power supply breaks down.
13	1.2.1	PE14415	In the following cases, the message of wrong FRU code might be output.  1. When the breakdown occurs by GR700
14	1.2.1	PE14416	In the following cases, panic is occasionally done.  1. When accessing with the power supply of the disk array provision not turned on.

15	1.2.2	PE14822	When qfull is notified from the disk array provision by the hddv driver, the matter notified mphd as nosense and unit attention is corrected.
16	1.2.2	PE14204	The special file name of the RAID provision which has been set might already change when the RAID provision is increased by the increased slot position.
17	2.0	P802138	When GR720 is increased on the system which copies /etc/vfstab file onto /etc/vfstab.org and the multipass disk control introduction/is set, the system does not stand up by the multiuser occasionally.
18	2.0	PG00621	It is likely to cut when the multipass disk control is used, and the passing breakdown occurs while operating the disk array device and not to change. Moreover, PANIC is occasionally done during the switch.
19	2.1	PG01633	1) The retry frequency when the breakdown of the GR720 and GR730 occurs is changed from 50 second to 2 times.2) It is enabled it is setting the retry frequency of the controller time-out of the GR720 and GR730.3) The block number and the retry frequency are displayed in messages when the controller time-out of GR720 and GR730 is generated.
20	2.1	PG01985	Because it takes boot time when GP-DxRxxx is used GP-DxCKxx, corrects.
21	2.1	PG01986	Because both factions on the multipass disk blockade when the format command is executed after the controller of the disk array provision breaks down by using GR720 occasionally, corrects .
22	2.1	PG01996	In the following cases, it is likely to become both faction blockage.When an abnormal system piece of the duplication power supply and the controller breakdown occurs at the same time when you use GP-DxRxxx GP-DxCKxx.
23	2.1	PG02483	Two or more the events are notified to the standby system by the breakdown's using the multipass disk control, and occurring in a main faction of the controller of RAID when GP-DxRxxx operates GP-DxCKxx, and after message of "SCSI transport failed: reason reset" is output when reset is issued to release the error event, it is likely to become both faction blockage.
24	2.2	PG04446	The switch speed-up at the I/O time-out is supported by the hddv driver.
25	2.2	PG04459	When the Multi Path Disk Control is used by the hddv driver, and the I/O path switchover is occurred, the scsi_pkts were not destroyed.

26	2.2	PG04626	When GP-Dxxxxx was used by the hddv driver, mode select was correctly executed. So as not to do following mode select.
27	2.2	PG06386	when there is a restoration notification in the state for the diagnosis flag to stand when the USCSI command is issued by using the multipass disk control by the hddv driver from RAID.
28	2.2	PG06555	When the system first accesses the disk array device in the state of a high load, the response the return occasionally corrects.
29	2.2	PG07618	The message which corresponds when the RAID units (PW-D500x1 and PW-D5L1A1) is used and the breakdown occurs might not be output.
30	2.2	PG07619	The message of "corrupt label - wrong magic number" might be output when the multipass disk control is being used and the passing breakdown occurs and become both faction blockage.
31	2.2	PG07646	There is a thing to do panic when the breakdown occurs while using GR series(Excluding GR700) and the trouble is corrected.
32	2.2	PG09568	"BAT TRAP" The message is output and OS does the panic. 1)MPHD is being used. 2)FJVTS is being started in the multiple compared with same LUN. 3)When the RAID units breaks down.
33	2.2	PG09569	The switch processing of MPHD stops. 1)When the error notification from the switch processing of MPHD and the RAID units processing the geometry information acquisition competes.
34	2.2	PG09884	The abort function of I/O is added. 1)To correspond to the I/O cancellation function of SafeDISK.
35	2.2	PG12302	The number of times of re-trial when a hardware error occurs in GR series (except GR700) is optimized.
36	2.2	PG13033	When system detect the path breakdown by the diskarray device composition of the mirror between SafeDisk cases, if the MPHD driver dose the path switchover, the data read before the path switchover might not be able to be correct and read, or the data after the path switchover is written at a wrong position of the disk, the data is occasionally destroyed. A hddv driver outputs the message "The disagreement of VTOC information was detected.detail=#", when the mismatching of inside information is detected at the time of a path change.
37	2.2	PG13384	If ioctl of DKIOCSVTOC is published when the load of I/O is applied in the system which is operating by the 64-bit kernel The panic of the message of "BAD TRAP:" may be outputted and carried out.
38	2.2	PG13385	When ioctl of DKIOCSVTOC carries out an error return by

			equipment failure etc., the partition information inside a HDDV driver etc. will be updated.
39	2.2	PG13733	1)When auto request sense "Illegal Request" is returned from GP-Dxxxxx, the function to output the WARNING message is added.2)The WARNING message "Queue full too long" was added . The geometry acquisition failed in the meaning in queue full.
40	2.2	PG13736	The HDDV driver outputs WARNING message "undecodable sense information: 0xXX 0xXX 0xXX 0xXX 0xXX ... 0xXX-(assumed fatal)" and OS is a panic.
41	2.2	PG14083	When senseKEY=0x4 (hard error), sense code=0x4, 0x5, 0x7, and 0x9 are generated on disk array (GP-Dxxxxx,PW-D5xxx1), detailed information is output to the message.
42	2.2	PG16827	When the signal is received in the open processing, it is likely not to become an error of EINTR.
43	2.2	PG16828	When the close processing and the I/O issue processing come in succession with the RAID device, the panic might be done.
44	2.2	PG16829	There is a possibility that the HDDV driver dead locks when the sense is notified by the hard error when using it by the SCSI connection.
45	2.2	PG16846	The number of times of re-trial when getting geometry information error occurs in GR series (except GR700) is optimized.
46	2.2	PG16848	The function to put out the message "Information: The label of hddvX was modified by Pid=X Pgid=X Sid=X" when the write system call is issued to the area of the label on the disk is added.
47	2.2	PG17696	Because SENSE information was not occasionally returned to the high rank when geometry information is gathered, it is corrected that SENSE is returned.
48	2.2	PG17697	The message is added in GR series (GR700 is excluded) at retryout.
49	2.2	PG17698	It is corrected not to have retried it when I/O of the unforwarding length comes back occasionally.
50	2.2	PG17699	When abnormal SCSI_STATUS comes back, I/O might not be returned.
51	2.2	PG17741	In GR series (GR700 is excluded), the issue of SCSI_RESET is limited.
52	2.2	PG19624	The part breakdown and the restoration message at attach are displayed. Only the breakdown message : the GR series.

53	2.2	PG19625	When "Hddvadm -m" is executed, the disk of non-hddv might not be able to be used.
54	2.2	PG20479	The display of the device name is changed from FUJITSU XXXXX to FUJTIUS GR(XXXXX).
55	2.2	PG20564	I/O stops when the access outside the area to multipath disk and the update of partition information are done at the same time occasionally.
56	2.2	PG21168	The number of times of re-trial when a error occurs in GR serise is optimized.

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