

Table of corrections in PRIMEQUEST 580A/540A/580/540/480/440 System Design Guide (C122-B001-10EN)

2009/10/23

Erroneous descriptions that were found in the manual have been corrected as shown below.

No.	Page	Item	Description													
1	2-14	2.3.4 Compatible PCI cards	Addition	Table 2.5 Compatible PCI cards												
				Type				Function								
				SCSI card				Ultra320 SCSI (dual channel)								
				SAS card				SAS card (*)								
				Fibre Channel card				Fibre Channel (2 Gbps x 1 port)								
								Fibre Channel (4 Gbps x 1 port)								
								Fibre Channel (4 Gbps x 2 ports)								
								Fibre Channel (8 Gbps x 1 port) (*2)								
								Fibre Channel (8 Gbps x 2 ports) (*2)								
				Network-related PCI card				Gigabit Ethernet 1000Base-T (dual channel)								
								Gigabit Ethernet 1000Base-SX (single channel)								
								Gigabit Ethernet 1000Base-SX (dual channel)								
								10Gigabit Ethernet 10GBase-SR (single channel) (*1)								
				*1: Supported only in the PRIMEQUEST 580A/540A/580/540.												
				*2: Supported only in the PRIMEQUEST 580A/540A.												
2	2-15	2.3.5.1 Mounting conditions of PCI cards	Incorrect	Table 2.6 PCI card mounting conditions												
								PCI slots in an IO Unit				PCI slots in a PCI unit of a PCI_Box			PCI slots in a PCI Express unit of a PCI_Box (*4)	
				Slot#	0	1	2	3	1 (*3)	2	0 (*3)	0	1			
				PCI Clock [MHz]	100	133	100	133	100	100	133					
				Ultra320 SCSI Card (dual channel)		Y (*1)		Y (*1)								
				(Omitted)												
				*1: A SCSI card can be mounted only in PCI Slot #1 or PCI Slot #3 of an IO Unit with a priority rank of 1 or 2 (see Table 2.7). If two or more partitions are defined and operated, these priority ranks apply to each partition.												

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2	2-15	2.3.5.1 Mounting conditions of PCI cards	Correct	Table 2.6 PCI card mounting conditions									
					PCI slots in an IO Unit				PCI slots in a PCI unit of a PCI_Box			PCI slots in a PCI Express unit of a PCI_Box (*4)	
				Slot#	0	1	2	3	1 (*3)	2	0 (*3)	0	1
				PCI Clock [MHz]	10 0	133	100	133	100	100	133		
				Ultra320 SCSI Card (dual channel)		Y (*1)		Y (*1)					
				SAS card		Y (*1)		Y (*1)					
				(Omitted)									
				[PCI Express card -FC] Fibre Channel card (4 Gbps x 2 ports)								Y	Y
				[PCI Express card -FC] Fibre Channel card (8 Gbps x 1 port)								Y (*5)	Y (*5)
				[PCI Express card -FC] Fibre Channel card (8 Gbps x 2 ports)								Y (*5)	Y (*5)
				*1: The card can be mounted only in PCI Slot #1 or PCI Slot #3 of an IO Unit with a priority rank of 1 or 2 (see Table 2.7). If two or more partitions are defined and operated, these priority ranks apply to each partition. (Omitted) *5: Available for the PRIMEQUEST 580A/540A. Up to four Fibre Channel cards per partition can be mounted.									
3	2-22	2.3.5.2 Usable built-in I/Os	Addition	Table 2.9 Number of interrupt vectors required for each type of PCI card									
				PCI card type					Required number of interrupt vectors				
				SCSI card (dual channel)					2				
				SAS card					1				
				Fibre Channel card (1 port)					1				
				Fibre Channel card (2 ports)					2				
				LAN card (single channel)					1				
				LAM card (dual channel)					2				

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4	2-26	2.4 Management Board (MMB)	Addition	<p>In this case, the MMB is carrying out important functions such as hardware monitoring, but is no longer able to access the MMB Web-UI. To implement recovery, the failure location must be identified, and the faulty unit must be replaced. Moreover, in the case of an MMB internal hub failure, switching from the active MMB must be done manually.</p> <p>The effects of this failure on system operation are as follows:</p> <table><tr><th><div>Failure mode</div><div>Impact on system operation</div></th><th>Single MMB failure</th><th>Management LAN failure of single MMB</th></tr><tr><td>Customer operation</td><td>No effect</td><td>No effect</td></tr><tr><td>PRIMECLUSTER linkage function</td><td>No effect</td><td>No effect</td></tr><tr><td>Hardware monitoring</td><td>No effect</td><td>No effect</td></tr><tr><td>Time synchronization (NTP server/client)</td><td>No effect</td><td>No effect (2)</td></tr><tr><td>Remote operation (Web-UI)</td><td>Manual operation required (1)</td><td>Manual operation required (3)</td></tr><tr><td>Remote notification/SNMP trap (REMCS/Systemwalker linkage)</td><td>No effect</td><td>Manual operation required (4)</td></tr><tr><td>Operation management server linkage (SNMP)</td><td>No effect</td><td>Manual operation required (5)</td></tr><tr><td>PSA linkage (REMCS/SNMP)</td><td>No effect</td><td>Manual operation required (6)</td></tr><tr><td>MMB switching</td><td>No effect</td><td>Manual operation required (7)</td></tr><tr><td>Hot swapping of failed MMB</td><td>No effect</td><td>No effect</td></tr></table>	<div>Failure mode</div> <div>Impact on system operation</div>	Single MMB failure	Management LAN failure of single MMB	Customer operation	No effect	No effect	PRIMECLUSTER linkage function	No effect	No effect	Hardware monitoring	No effect	No effect	Time synchronization (NTP server/client)	No effect	No effect (2)	Remote operation (Web-UI)	Manual operation required (1)	Manual operation required (3)	Remote notification/SNMP trap (REMCS/Systemwalker linkage)	No effect	Manual operation required (4)	Operation management server linkage (SNMP)	No effect	Manual operation required (5)	PSA linkage (REMCS/SNMP)	No effect	Manual operation required (6)	MMB switching	No effect	Manual operation required (7)	Hot swapping of failed MMB	No effect	No effect
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4	2-26	2.4 Management Board (MMB)	Addition	The effects of individual events (1) to (7) and corrective actions are as follows:																								
				<table><tr><th>No.</th><th>Effect</th><th>Corrective action</th></tr><tr><td>(1)</td><td>The Web-UI session is disconnected.</td><td>Log in again.</td></tr><tr><td>(2)</td><td>If a LAN failure occurs while the NTP client on the partition OS side is time-synchronized with the NTP server function (primary) on the MMB, the time synchronization is disabled. In this case, an external NTP server can be set as a secondary NTP server to allow the NTP client on the partition to continue time synchronization with the secondary NTP server. For this purpose, the path of the management LAN on the partition OS side needs to have been duplicated with redundancy software.</td><td>No action is required.</td></tr><tr><td>(3)</td><td>The Web-UI session results in a timeout.</td><td>Log in to the standby MMB through telnet/ssh or after connecting the serial cable to the COM port on the standby MMB, and then execute the MMB forced switching command (set active mmb). Alternatively, when a LAN error is detected by the high-order monitoring device, issue the IPMI command (set active MMB) to switch from the standby MMB to the active MMB.</td></tr><tr><td>(4)</td><td>When a connection to REMCS is implemented using a user port, notification is not performed. A regular connection timeout occurs in the REMCS center.</td><td>The corrective action in (3) is required.</td></tr><tr><td>(5)</td><td>The management server detects an MMB failure. SNMP-MIB information cannot be obtained from the management server.</td><td>The corrective action in (3) is required.</td></tr><tr><td>(6)</td><td>Events that are monitored by PSA are retained until the LAN failure is recovered and communication between the MMB and PSA restarts; no notification events will be lost.</td><td>The corrective action in (3) is required.</td></tr><tr><td>(7)</td><td>In the case of a management LAN failure, automatic switching between MMBs is disabled.</td><td>The corrective action in (3) is required.</td></tr></table>	No.	Effect	Corrective action	(1)	The Web-UI session is disconnected.	Log in again.	(2)	If a LAN failure occurs while the NTP client on the partition OS side is time-synchronized with the NTP server function (primary) on the MMB, the time synchronization is disabled. In this case, an external NTP server can be set as a secondary NTP server to allow the NTP client on the partition to continue time synchronization with the secondary NTP server. For this purpose, the path of the management LAN on the partition OS side needs to have been duplicated with redundancy software.	No action is required.	(3)	The Web-UI session results in a timeout.	Log in to the standby MMB through telnet/ssh or after connecting the serial cable to the COM port on the standby MMB, and then execute the MMB forced switching command (set active mmb). Alternatively, when a LAN error is detected by the high-order monitoring device, issue the IPMI command (set active MMB) to switch from the standby MMB to the active MMB.	(4)	When a connection to REMCS is implemented using a user port, notification is not performed. A regular connection timeout occurs in the REMCS center.	The corrective action in (3) is required.	(5)	The management server detects an MMB failure. SNMP-MIB information cannot be obtained from the management server.	The corrective action in (3) is required.	(6)	Events that are monitored by PSA are retained until the LAN failure is recovered and communication between the MMB and PSA restarts; no notification events will be lost.	The corrective action in (3) is required.	(7)	In the case of a management LAN failure, automatic switching between MMBs is disabled.	The corrective action in (3) is required.
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5	4-5	4.1.1.1 Management LAN	Incorrect	- Communication between the MMB and each partition Sends and receives information about Web linkage, SNMP linkage, and REMCS linkage between the MMB and the PSA managing each partition.
			Correct	- Communication between the MMB and each partition Sends and receives information about Web linkage, SNMP linkage, REMCS linkage, and PRIMECLUSTER linkage between the MMB and the PSA managing each partition.
6	4-28	4.2.11 Setting information save and restore	Addition	<p>Reasons to perform save and restore operations</p> <p>MMB:</p> <p>(1) Reasons for a save</p> <ul style="list-style-type: none"> - When MMB settings have been changed - Before updating MMB firmware (To be safe, Fujitsu recommends saving the setting information before updating the firmware.) - Immediately after MMB firmware is updated <p>(2) Reasons for a restore</p> <ul style="list-style-type: none"> - When two MMBs and OP Panels have been replaced at the same time - To restore MMB settings to their initial values <p>Notes:</p> <ul style="list-style-type: none"> - Saved settings cannot be restored to a unit in another cabinet. - After a restore, it is not necessary to change settings, such as OS settings, for individual partitions. <p>PAL/SAL/EFI:</p> <p>(1) Reasons for a save</p> <ul style="list-style-type: none"> - Immediately after OS installation - Immediately after sadump installation or setup (PQ-Linux) - Immediately after system volume mirroring with GDS is set or canceled - Immediately after the boot processing path is manually changed - Immediately after a Boot Option is added or deleted, or the Boot Timeout value changed <p>(2) Reasons for a restore</p> <ul style="list-style-type: none"> - To restore EFI settings to their initial values - When two failed MMBs have been replaced at the same time <p>Note:</p> <ul style="list-style-type: none"> - After a restore, it is not necessary to change settings, such as OS settings, for individual partitions.

No.	Page	Item	Description	
6	4-28	4.2.11 Setting information save and restore	Addition	<p>GSWB:</p> <p>(1) Reasons for a save</p> <ul style="list-style-type: none"> - When GSWB settings have been changed <p>(2) Reasons for a restore</p> <ul style="list-style-type: none"> - When a failed GSWB has been replaced - To restore GSWB settings to their initial values <p>Notes:</p> <ul style="list-style-type: none"> - Before making a backup, confirm that the configuration file for the operation is correct. Choose the configuration file of either the active or standby system, depending on which one is being used, as the file to back up. <p style="padding-left: 40px;"><Checking which configuration file is being used by the active system></p> <p style="padding-left: 40px;">>Switch>GSWB#X>System>Information</p> <p>The file being used by the active system has an asterisk (*) displayed for it in the Configuration File Information column.</p> <ul style="list-style-type: none"> - Saved settings can be restored to a GSWB in another cabinet. However, in a system where an IP address or host address name is directly set for each GSWB, note that the GSWB with the restored settings will have the same IP address or host address name as that of the GSWB whose settings were backed up. - After a restore, it is not necessary to change settings, such as OS settings, for individual partitions.
7	8-11	8.4 Points to be Considered at Cluster System Installation	Incorrect	<p>In the PRIMEQUEST cluster configuration, all nodes must be connected by a dedicated LAN. The network connecting nodes is called interconnect. Multiplexing the interconnect increases the availability of the system. The PRIMEQUEST interconnect should be connected to either of the following types of NIC card:</p> <ul style="list-style-type: none"> - NIC card added to the PCI slot in an IO Unit - NIC card added to the PCI slot in the PCI_Box <p>Remark</p> <p>1: Never use the management LAN for interconnect communication because it is used only for controlling the PRIMEQUEST system.</p> <p>2: Never use a LAN connected to the GSWB through the NIC card built in an IO Unit for interconnect communication because it is used for business communication.</p>
			Correct	<p>In the PRIMEQUEST cluster configuration, all nodes must be connected by a dedicated LAN. The network connecting nodes is called interconnect. Multiplexing the interconnect increases the availability of the system.</p> <p>Note: Never use the management LAN for interconnect communication because it is used only for controlling the PRIMEQUEST system.</p>

(End of table)