EMC FC-Series and C-Series Storage-System and EMC ControlCenter Navisphere Event Codes

REFERENCE

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Trademark Information

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Preface

This guide lists event messages that relate to EMC disk-array storage-system operation. It lists the event by ascending number.

Audience for the Manual

You should be familiar with storage-system concepts, such as storage processors (SPs), LUNs, RAID types, Storage Groups, and the software that runs in the SPs (called Base Software, Core Software, or Access Logix™ software).

Many of the events described in this manual describe error conditions that only an EMC engineer can diagnose and correct.

Organization of the Manual

Chapter 1	Explains the basic event messages. They apply to all types of storage systems. They are listed by their unique three- or four-digit (hex) numbers.
Chapter 2	Describes the event messages displayed for FC4700-2 and FC4700 storage systems only. Many of these relate to MirrorView™ and SnapView™ software. They are listed by their unique eight-digit (hex) numbers.

Conventions Used in this Manual

EMC uses the following conventions for notes, cautions, warnings, and danger notices.

This is a note. A note presents information that is important, but not hazard-related.

CAUTION

A caution contains information essential to avoid damage to the system or equipment. The caution may apply to hardware or software.

WARNING

A warning contains information essential to avoid a hazard that can cause severe personal injury, death, or substantial property damage if you ignore the warning.

DANGER

A danger notice contains information essential to avoid a hazard that will cause severe personal injury, death, or substantial property damage if you ignore the warning.

EMC uses the following type style conventions in this guide:

Boldface	◆ Specific filenames or complete paths. ◆ Specific command entries that you type. ◆ Dialog box names and menu items in text. ◆ Selections you can make from the user interface, including buttons, icons, options, and field names. ◆ Emphasis in cautions and warnings.
Italic	◆ New terms or unique word usage in text. ◆ Variable text in command line formats; for example, **ls** *switches*
`Fixed space`	Examples of displayed text, or program listings.
Fixed italic	Arguments used in examples of command line syntax.

Where to Get Help

For questions about technical support and service, contact your service provider.

If you have a valid EMC service contract, contact EMC Customer Service at:

United States:	**(800) 782-4362 (SVC-4EMC)**
Canada:	**(800) 543-4782 (543-4SVC)**
Worldwide:	**(508) 497-7901**

Follow the voice menu prompts to open a service call, then select CLARiiON Product Support.

Sales and Customer Service Contacts

For the list of EMC sales locations, please access the EMC home page at:

`http://www.emc.com/contact/`

For additional information on the EMC products and services available to customers and partners, refer to the EMC Powerlink Web site at:

`http://powerlink.emc.com`

Your Comments

Your suggestions will help us continue to improve the accuracy, organization, and overall quality of the user publications. Please e-mail us at **techpub_comments@emc.com** to let us know your opinion or any errors concerning this manual.

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Basic Event Codes and Messages

This chapter lists the basic messages — those that can occur with any type of storage system. These codes include three or four digits (hexadecimal) and they are listed in this chapter by ascending number. Other codes — that is, those for FC4700 storage systems — are explained in the next chapter.

Topics include

Event Severity and Code

There are four severity levels of codes, as follows.

- Informational codes — Require no action by you. Informational codes are valuable to engineering in helping to establish history. Generally, the Informational codes are three-digit hexadecimal numbers that begin with 6 or 7; for example, 60B and 734.

  The Event Monitor Informational codes are four-digit hex numbers that begin with 2, 4, 3 or 6; for example, 2001 and 6001.

  Of the four-digit codes that start with 4, the Informational codes range from 4*n*00 to 4*n*3F, where the *n* digit identifies the software where the error occurred.

- Warning codes — Are normal and require no action by you unless they occur frequently. Generally, the Warning codes are three-digit hexadecimal numbers that begin with 8; for example, 805.

  The Event Monitor Warning codes are four-digit hex numbers that begin with 2, 4, 3 or 6; for example, 2041 and 6041.

  Of the four-digit codes that start with 4, the Warning codes range from 4*n*40 to 4*n*7F, where the *n* digit identifies the software where the error occurred.

- Error codes — Typically require action by you or a support engineer.

  Generally, the Error codes are three-digit hexadecimal numbers that begin with 9; for example, 90C.

  The Event Monitor Error codes are four-digit hex numbers that begin with 2; for example, 2101.

- Critical Error codes — Typically require action by you or a support engineer. The Critical Error codes are three-digit hexadecimal numbers that begin with the hex number a; for example, a02.

This chapter describes codes that return from all current versions of Core or Base Software or (formerly called Licensed Internal Code, LIC); that is, codes from systems with SCSI and Fibre Channel front-end interfaces. The following chapter describes codes from Base Software in FC4700 storage systems only.

Origins of Events

An event that evokes a code may occur in any of the following places.

- Storage System — These events occur within the storage system and are reported by the storage processor (SP).
- Storage Processor (SP) — These events pertain to the storage system fault status.
- Network Events — These events occur while the monitor service is attempting to monitor a remote agent.
- EMC ControlCenter™ Navisphere® Application — These events are detected by the EMC ControlCenter Navisphere Agent or application software.
- JBOD — These events pertain to a JBOD storage system. A JBOD is just a box of disks, without an SP.
- HBA — These events occur when the connection path from the server to the storage system is faulty.
- Integrator — These events keep the state of storage systems up to date.
- Multipath/ATF status — These events indicate status change sin ATF.

Informational Codes

Code	Meaning
0x601	SP powerup. The SP has completed its powerup initialization sequence.
0x602	Specified disk module has been enabled and is ready for use. This message appears after you rebuild or register the LUN to which the module belongs.
0x603	Storage system started rebuilding the RAID 5, RAID 3, RAID 1, or RAID 1/0 LUN to which the disk module belongs, or the disk module is a hot spare.
0x604	Storage system has finished rebuilding a RAID 5, RAID 3, RAID 1, or RAID 1/0 LUN.
0x605	Rebuild Halted. The rebuild process was halted on this drive.
0x606	Unit shut down for trespass. The SP has shut down the LUN containing this drive module at the request of the peer SP because of a trespass operation.
0x607	Unit shut down for change bind. The SP has shut down the LUN containing this drive to change the unit's operating parameters. This error appears only if the SP is operating in Target Addressing Mode.
0x608	Specified drive module is powered up and ready for binding or registering the LUN to which it belongs.
0x609	Disk module is being formatted as required to operate as an SP disk.
0x610	Disk module could not be physically formatted, and thus cannot be used in the storage system. Make sure the disk module is a valid model. If the model is valid, then consult your service provider for recovery steps.
0x611	The specified PROM revision was loaded into the SP as the SP powered up. The SP SCSI ID is in the extended status of the field. Logged at each SP powerup.
0x612	Not enough Database drives. There are not enough database drives in the system to complete the requested operation. Chapter 3 names the database disk drives.
0x613	CRU equalize started. The SP has started a rebuild/equalize operation.
0x614	CRU equalize completed. The SP has completed a rebuild/equalize operation.
0x615	CRU equalize aborted. The SP has aborted a rebuild/equalize operation. 66Bh Single bit error detected. The SP has detected a recoverable single bit error.
0x616	Core or Base Software (Flare) revision installed. The revision information is in the extended status. Logged once after a new revision of Core or Base Software is installed.
0x617	Disk module controller code installed. The disk module controller code shown in the extended status was installed on this drive. The revision information is the ASCII value of each digit; for example, 0123 displays as 0x30313233.
0x618	CM expected SP restart. The SP expected its peer to reboot, but the peer did not.
0x619	Uncorrectable Verify Error.

Code	Meaning
0x620	Degraded nonvol verify data loss. Data loss was detected on a degraded verify of a unit.
0x621	Storage system has begun the background checkpoint verification of the accuracy and completeness of the disk module parity check data. This message may appear after you replace an SP or transfer control of LUNs from one SP to another.
0x622	Storage system has completed background checkpoint verification of the accuracy and completeness of the parity check data in a RAID 5, RAID 3, RAID 1/0 or RAID 1 LUN.
0x623	Fan pack disable/door open. The SP in the storage system has detected that the fan module is open or has been disconnected. The storage system will shut down if the fan module is not operational within 2 minutes.
0x624	Fan pack enable/door close. The SP in the storage system has detected that the fan module is now closed or has been reconnected.
0x625	Host unit released. A LUN was released so that a trespass operation could occur.
0x626	Unit shutdown for unbind. The unit has been shutdown in preparation for an unbind operation.
0x627	FRU bad expansion checkpoint. A checkpoint error occurred during a RAID Group expansion. The expansion was abandoned and the RAID Group retains its original size.
0x628	FRU expansion revision mismatch. A Core or Base Software revision incompatibility error occurred during a RAID Group expansion. The expansion was abandoned and the RAID Group retains its original size.
0x629	FRU expansion checkpoint rebuild failed. A checkpoint error occurred during a RAID Group expansion and could not be corrected. The expansion was abandoned and the RAID Group retains its original size.
0x630	Storage system has detected that a fan module has been installed or replaced.
0x631	Storage system has detected that a VSC (Voltage Semi-regulated Converter) has been installed or replaced.
0x632	An AC box has been installed.
0x633	Storage system has detected an increase in a fan's speed, perhaps because the temperature rose or another fan failed.
0x634	Speed of a fan has returned to normal.
0x635	Logical sector data error. The storage system has detected data inconsistency in a disk sector.
0x636	SPS or BBU was removed from the storage system.
0x637	SPS or BBU in this storage system is recharging.
0x638	SPS or BBU has become ready.
0x639	Storage system cache has become ready.
0x640	Storage system has finished reconstructing the disk mirror.

Code	Meaning
0x641	Background rebuild operation has aborted before it was complete.
0x642	Background verify aborted. A background verify operation has been terminated due to an abnormal event, such as the failure of one of the disks in the LUN.
0x643	SP initializing. The SP just detected the presence of its peer SP after a period of time when it was not present.
0x644	SP inserted. The SP was informed by its peer SP that the peer SP completed its power initialization sequence.
0x645	A disk module was bound. The extended status is the unit number. This is logged once for each disk module at the completion of a bind operation.
0x646	A disk module was unbound. The extended status is the unit number. This is logged once for each disk module at the completion of an unbind operation.
0x647	Fuse bad. The extended status is the fuse number. This is logged at each powerup for each bad fuse detected by an SP.
0x648	Termpower low. The extended status is the SCSI bus number. This is logged at each powerup for each SCSI bus that the SP detects with a low Termpower level.
0x649	BBU not ready. The SPS is not in the ready state, but status information from the SPS does not match any known failure state.
0x650	CRU signature error occurred.
0x654	Storage system started dumping the write cache to the vault disks.
0x657	Storage system finished dumping the write cache to the vault disks.
0x658	Storage system caching was enabled by the storage system or system operator.
0x659	Storage system caching was disabled by the storage system or system operator. The storage system disables write caching if the SPS or BBU is not fully charged or an SP, vault disk, or fan fails; see error 0x908.
0x660	Power removed. After ac power is turned off or an ac power failure occurs, the storage system dumps the write cache to the vault and turns off power to the SPS or BBU (it does this to minimize drain on the SPS or BBU).
0x661	SPS or BBU sniffing enabled. This storage system is now allowed to shut down the SPS or BBU in order to test the SPS or BBU.
0x662	SPS or BBU sniffing disabled. SPS or BBU shutdown testing is now disabled on this storage system.
0x663	SPS or BBU self-test started.
0x664	In preparation for its weekly SPS or BBU test, the storage system disabled write caching. This message is followed by a 0x663 message.
0x665	Configured for single SP. The storage system has just been configured for non-mirrored write caching.
0x666	Configured for dual SP. The storage system has just been configured for mirrored write caching.

Code	Meaning
0x667	Cache recovering. The SP, which is operating in non-mirrored write caching mode, is recovering the contents of the write cache following a reboot.
0x668	Cache recovered. The SP, which is operating in non-mirrored write caching mode, has successfully recovered the contents of the write cache following a reboot.
0x66A	Soft Vault Load Failure. The vault load failed when no cache dirty pages existed. This situation occurs most often when you change both the RAID 3 memory size and the write cache size at the same time.
0x66B	Meaning depends on whether the storage system has a SCSI or Fibre Channel front-end. Single bit error detected (storage system with SCSI front-end). The SP has detected a recoverable single bit error. Front-end fibre link up (storage system with Fibre Channel front-end). The front-end Fibre Channel interface started running.
0x66C	Meaning depends on whether the storage system has a SCSI or Fibre Channel front-end. Fan fault detected (storage system with SCSI front-end). The SP detected a single fan fault. General front-end fibre link unsolicited (storage system with Fibre Channel front-end). This message is intended for development personnel. If you receive it, contact your service provider.
0x66D	Peer SP timed out. The Host SP has timed out waiting for the peer SP to reply to a request.
0x66E	Dual-SP communications error. The Core or Base Software detected a failure in the normal Ultra SCSI communications channel between SPs. As a result, the Core or Base Software tries to coordinate cache management using the back-end fibre loop.
0x66F	Too much cache configured. There are too many cache pages to manage in the available cache memory. This can happen when the cache page size is small (2 Kbytes) and you have a very large read and write cache configured. You must either set the cache sizes smaller or set the cache page size larger. This error can also occur when the vault image is larger than the configured or available cache memory. If so, you must add memory modules or replace the faulty modules to increase available cache size.
0x670	If the system is not a 7-slot system, code 670H is Memory Dump, which means that the SP wrote a copy of its data space to disk after a microcode panic event. The information written to disk may help storage-system developers analyze the cause of the error.
0x675	Single-bit ECC error in write cache. A single-bit ECC error was detected and corrected in the write cache. The extended status reports the module (SIMM or DIMM) in which the error occurred.
0x676	Single-bit ECC error in read cache. A single-bit ECC error was detected and corrected in the read cache. The extended status reports the module (SIMM or DIMM) in which the error occurred.
0x677	Cannot use invalid disk type in RAID Group. A disk has been inserted that is not supported with multiple LUN RAID groups. The Core or Base Software turns power off to the disk.
0x678	Diskmail SP Link Up, SP will reboot. The email communication mechanism has become active and the SP will reboot to start using it.
0x679	CRU Database Reconstructed. The CRU database was reconstructed on powerup.

Code	Meaning
0x67A	RAID Group Database Reconstructed. The RAID Group database was reconstructed on powerup.
0x680	Invalid data sector read. The hardware found a bad checksum on a data sector.
0x681	Invalid parity sector read. The hardware found a bad checksum on a parity sector.
0x682	Invalid sector read. The hardware found a bad checksum on a sector. There is not enough information to tell whether the sector holds data or parity information.
0x683	Data sector reconstructed. The hardware reconstructed a data sector that had a checksum or write stamp error.
0x684	Parity sector reconstructed. The hardware reconstructed a parity sector that had a checksum or write stamp error.
0x685	Hard error. The hardware detected an error other than a parity or write stamp error.
0x686	Command complete. A command completed after a soft error was corrected.
0x687	Stripe reconstructed. Inconsistent write/time stamps in a RAID group were corrected.
0x688	Command dropped. An optional command was dropped.
0x689	Sector reconstructed. On a read from a RAID 1 mirrored pair, a corrupted sector was reconstructed.
0x68A	Uncorrectable parity sector. A hard error on a parity sector could not be corrected.
0x68B	Uncorrectable data sector. A hard error on a data sector could not be corrected.
0x68C	Hard read checksum error. A hard checksum error was detected on a data transfer from the host.
0x68D	Soft read checksum error. A soft checksum error was detected on a data transfer from the host.
0x68E	Inconsistent stripe. Inconsistent write or time stamps were detected in a RAID group.
0x68F	Inconsistent time stamps. Inconsistent time stamps were detected in a RAID group on a verify.
0x690	Drive failed. A drive was shut down.
0x691	Checksum error on device read. A checksum error was detected on a read from an individual disk. There was no data transfer involved.
0x692	Incoherent stripe. Data and parity were not consistent in a RAID group.
0x693	Uncorrectable stripe. Inconsistent write or time stamps could not be corrected in a RAID group.
0x694	Parity invalidated. Parity has been invalidated in a RAID group.
0x695	Uncorrectable Sector. An uncorrectable sector was detected on a RAID 1 mirrored pair.
0x696	Mirror sector invalidated. A sector on a RAID 1 mirrored pair was invalidated on a rebuild.
0x697	XOR failed on read. A device read request failed as part of a RAID operation.

Code	Meaning
0x698	SPS Testing in progress. The SPS is being tested.
0x699	Raid-3 Memory Size Reduced. The amount of memory reserved for RAID-3 operation support has been reduced.
0x69A	SP-A Read Cache Size Reduced. The amount of memory reserved for SP-A's read cache has been reduced.
0x69B	SP-B Read Cache Size Reduced. The amount of memory reserved for SP-B's read cache has been reduced.
0x69D	A bad disk drive or LCC is causing hardware problems. The storage system will soon remove the bad drive or LCC from service, and the storage system will then generate an 0x9-level or 0xA-level "xxx removed" message.
0x69E	The storage system has finished removing the bad disk or LCC noted in message 0x69D from service. This is an informational message that follows the 0x9-level or 0xA-level "xxx removed" message.
0x6C0	Back-end fibre loop failure. This SP's back-end fibre loop is off line due to an NPORT primitive.
0x6C1	Back-end fibre loop failure. This SP's back-end fibre loop is off line due to a loop initialization primitive.
0x6C2	Back-end fibre loop failure. The SP determined that the fibre loop is hung.
0x6C3	Back-end fibre loop discovery ok. The SP determined that the fibre loop is operational following the discovery phase.
0x6C4	Back-end fibre loop error. A loop node detected a failure condition.
0x6C5	Back-end fibre loop error. The SP did not discover a node on its first try and will try again. A drive did not log in as expected.
0x6C6	Back-end fibre-loop error. The SP did not discover a node on its second try. A drive did not log in as expected.
0x6C7	Fibre Channel unknown event. This message indicates an undefined error condition.
0x6D0	Back-end fibre loop event. The SP has initiated a loop failover.
0x6D1	Back-end fibre loop event. Loop failover administratively denied.
0x6D2	Back-end fibre loop event. Peer SP is no longer using this SP's loop.
0x6D3	Back-end fibre loop event. This SP is no longer using remote loop.
0x6D4	Back-end fibre loop event. The peer SP has completed failover to this SP's loop.
0x6D5	Back-end fibre loop event. This SP has completed failover to remote loop.
0x6D6	SP Failback Failed. The peer SP was unable to complete failover to this SP's loop.
0x6D7	Front-end Fibre Reinit Loop. First step in attempt to clear a potential command timeout.
0x6D8	Front-end Fibre Invalid Topology. A valid connection has not been established on the front-end port.
0x6D9	Front-end Fibre Loss of Sync. The frame manager has lost synchronization with the incoming data.

Code	Meaning
0x6DA	Front-end Fibre Loss of Signal. Hardware detected a loss of signal. Usually indicates that the port is not connected to a remote port. It could also indicate a large disparity between the received frequency and the transmit frequency.
0x6DB	Front-end Fibre Link Fault. Hardware detected a link fault. Usually indicates a problem with the transmit laser.
0x6DC	Front-end Directed Reset. A reset occurred as a result on conditions on the host or switch.
0x6DH	Front-end Retries Exceeded. A reset occurred because of a host/switch error condition that was not corrected after the maximum number of retries.
0x6DE	Front-end Fibre LPE Received. A Loop Port Enable (LPE) primitive sequence was received.
0x6DF	Front-end Fibre LPB Received. A Loop Port Bypass (LPB)
0x6E0	Front-end fibre loop event. A front-end hub port has been closed.
0x6E1	Front-end fibre loop event. A front-end hub port has been opened.
0x6E2	Front-end fibre loop error. The SP's fibre loop failed to initialize.
0x6E3	Fibre Channel initiator gone. The SP tried to communicate with an initiator that is no longer responding.
0x6E4	Fibre Channel loop down. A loop down was detected. This is a normal occurrence followed by a loop up during loop initialization.
0x6E5	Fibre Channel loop up. The fibre loop is up and ready for communication.
0x6E6	Fibre Channel loop timeout. An internal timeout has occurred in the Fibre Channel interface. The SP will wait for the condition to clear and then resume operation.
0x6E7	Fibre Channel LIP timeout. The Fibre Channel interface timed out during loop initialization. The SP will continue taking action to bring the link completely up.
0x6E8	Fibre Channel link up timeout. The Fibre Channel interface timed out waiting for the link to come up. The SP will continue taking action to bring the link completely up.
0x6E9	Front-end fibre loop event. Front-end fibre loop SP threshold exceeded.
0x6EA	Fibre loop initiated. The SP started the loop initialization protocol (LIP) procedure.
0x6EB	Fibre chip reset. The SP reset its Fibre Channel interface chip.
0x6EC	Overlapped command detected. Two commands with the same ID (OX_ID) were received. The SP logs the originator out.
0x6ED	FE fibre inbound frames dropped. One or more inbound frames were dropped due to extraordinary internal conditions - typically excessive front-end traffic directed to the storage system.
0x6EE	FE fibre soft ALPA. Some event caused reinitialization of the loop and during the reinitialization the SP received a new soft ALPA that differed from the previously held soft ALPA. This does not occur in a hard addressing environment.

Code	Meaning
0x6EF	Front-end Fibre Hammer FED. Second step in attempt to clear a potential command timeout.
0x6F0	Expansion Driver Started. The Core or Base Software started expanding the LUN or RAID Group.
0x6F1	Expansion Driver Finished. The Core or Base Software finished expanding the LUN or RAID Group.
0x6F2	Expansion Driver Halted. The Core or Base Software expand operation on a LUN or RAID Group was halted.
0x6F3	Expansion Driver Restarted. The Core or Base Software expand operation on a LUN or RAID Group was restarted after being halted.
0x6F4	Expansion Driver Read Failed. An error occurred while the Core or Base Software was trying to execute an expansion read operation.
0x6F5	Expansion Driver Write Failed. An error occurred while the Core or Base Software was trying to execute an expansion write operation.
0x6F6	Expansion Driver Checkpoint Failed. An error occurred while the Core or Base Software was trying to update the expansion checkpoints.
0x6F7	Expansion Stopped. The expansion process was stopped.
0x6F8	Log Hardware Error. Additional information is logged regarding a hardware failure on the SP.
0x6F9	Soft Peer Bus Error. The SP encountered a recoverable error on the SP-to-SP communication channel.
0x6FA	Zero Disk Command Started. A zero disk operation was started on this disk CRU.
0x6FB	Zero Disk Command Cancelled. The zero disk operation was cancelled on this disk CRU.
0x6FC	Zero Disk Command Completed. The zero disk operation completed on this disk CRU.
0x6FD	Expansion Failed. The expansion failed while zeroing the remaining portion of the disk, after expanding the existing LUN in the RAID Group. The capacity for this LUN will not increase.
0x6FE	Host-SP Resynchronization Fatal Error. During startup, the two SPs were out of SP database synchronization.
0x730	The Ethernet service port has been initialized.
0x731	The Ethernet service port has been configured.
0x732	The Ethernet service port has been started.
0x733	The Ethernet service port has been stopped.
0x734	The Ethernet service port has been restored to the factory-default state (unconfigured).
0x735	A telnet session has been established.

Code	Meaning
0x736	A telnet session has been disconnected.
0x737	Access to FCLI is not permitted.
0x738	FCLI login retries exhausted.
0x739	FCLI login successful.
0x73A	FCLI service level login successful.
0x73B	Too many telnet connections to FCLI.
0x73C	Unicast IP configuration packet received.
0x73D	Error configuring from a Unicast IP configuration packet.
0x73E	UDP broadcast configuration packet received.
0x73F	Error configuring from a UDP broadcast configuration packet.
0x740	Response to ICMP subnet mask request received.
0x741	Timed out waiting for a response to ICMP subnet mask request.
0x742	Duplicate IP address detected by the TCP/IP protocol stack.
0x743	Source route attempted by the TCP/IP protocol stack.
0x744	Timeout during telnet option negotiation.
0x745	Too many telnet connections have not completed option negotiation.
0x746	Socket allocation failure.
0x747	The Ethernet interface port initialization failed.
0x748	The Ethernet interface port could not be started.
0x749	Failed to add a new default route.
0x74A	Failed to set the new IP address, broadcast address and subnet mask.
0x74B	Failed to remove the current IP address, broadcast address and subnet mask.
0x74C	Failed to bring the TCP/IP protocol stack's network interface up.
0x74D	Failed to bring the TCP/IP protocol stack's network interface down.
0x74E	Internal exception detected by the TCP/IP protocol stack.
0x770 (was 0x806)	Informational code. The Core Software has adjusted its parameters appropriately for the current disks.

Code	Meaning
Event Monitor Informational Codes	
0x2000	From Event Monitor, Navisphere Integrator. Application starting up.
0x2002	From Event Monitor. Response Test Request (from CLI **responsetest** command).
0x2200	From Event Monitor, Navisphere Integrator. Communication now successful with host (a network event).
0x2240	Event Monitor Warning codes. See page 1-16. Event Monitor Error codes. See page 1-23. Event Monitor Critical codes. See page 1-25.
0x2500	From Event Monitor. Navisphere Integrator. Storage system is not faulted.
0x2600	From Event Monitor. an IP4700 NAS event. The information includes an event description, product name, IP address, up time, and source.
0x2700	From Event Monitor. a multipath event. Path to a storage system is up.
0x4000	From Event Monitor. Specified user is not logged in.
0x4001	From Event Monitor. Profile already exists.
0x4010	From Event Monitor. Security Initialized.
0x4011	From Event Monitor. User has logged in.
0x4012	From Event Monitor. User's password has been changed.
0x4013	From Event Monitor. New user added.
0x4014	From Event Monitor. User's role or password was modified.
0x4015	From Event Monitor. User was deleted.
0x4100	From Event Monitor. Profile already exists.
0x4300	From Event Monitor. Directory database was created.
0x4301	From Event Monitor. Local directory will be destroyed because the node was removed from the domain.
0x4302	From Event Monitor. Local directory will be destroyed because the domain was destroyed by removing the master node.
0x4303	From Event Monitor. Nodes added to the domain.
0x4304	From Event Monitor. Nodes removed from the domain.

Code	Meaning
0x4305	From Event Monitor. Directory versions did not match. The domain information was retrieved from the master.
0x4306	From Event Monitor. A change in the local system information has been detected and was reported to the master.
0x4307	From Event Monitor. A new domain has been created.
0x4308	From Event Monitor. Local node was assigned to be the Master.
0x4309	From Event Monitor. Local node was demoted from the Master role because a new Master has been assigned.
0x430A	From Event Monitor. New node was assigned to the Master role. The IP Address of the new Master is *ip_addr*.
0x430B	From Event Monitor. The following node has been removed from the domain since it is participating in another domain.
0x4400	From Event Monitor. Legacy Agent managed successfully.
0x4401	From Event Monitor. Legacy Agent managed unsuccessfully.
0x4402	From Event Monitor. Legacy Agent unmanaged successfully.
0x4403	From Event Monitor. Legacy Agent unmanaged unsuccessfully.
0x4600	From Event Monitor. Informational Audit Log entry.
0x4700	From Event Monitor. *ip_addr* was managed successfully.
0x4900	From Event Monitor. Persistence Provider operation success. Internal information only.
0x4901	From Event Monitor. Retrieved file success. Internal information only.
0x4A00	From Event Monitor. NAS File Server managed successfully.
0x4A01	From Event Monitor. NAS File Server managed unsuccessfully.
0x4A02	From Event Monitor. NAS File Server unmanaged successfully.
0x4A03	From Event Monitor. NAS File Server unmanaged unsuccessfully.

Warning Codes

Warning codes are also known as threshold or soft codes

Code	Meaning
0x801	Soft SCSI error. This code indicates that an abnormal SCSI bus or disk drive event was detected. A retry of the operation cleared the condition.
0x802	Illegal SCSI bus interrupt. An inconsistent interrupt situation has been detected on the SP.
0x803	Recommend disk replacement. This disk CRU has sent status to the SP indicating that it believes it may be susceptible to a fault in the near future. We recommend replacing the drive.
0x804	Single bit Error. The SP's tolerance level for single bit errors in the write cache has been exceeded.
0x805	Single bit Error. The SP's tolerance level for single bit errors in the read cache has been exceeded.
0x820	Soft media Error. This disk CRU has reported a media defect that was successfully cleared by the SP.
0x840	Disk sector invalidated. The LUN that owns this disk CRU encountered a condition which required the firmware to invalidate a sector on the unit. The firmware did this to ensure that incorrect data is not returned to the host in the future.
0x850	Enclosure state change. The SP detected that a DPE enclosure changed state.
0x851	Enclosure address error. The SP detected that a DPE enclosure has an invalid address. Enclosure chain shunted prior to failing enclosure.
0x852	Enclosure duplicate address error. The SP detected that two or more DPE enclosures have the same address. Enclosure chain shunted prior to failing enclosure.
0x860	From Event Monitor. Recoverable Reset Event.
0x861 (was 66B)	Meaning depends on whether the storage system has a SCSI or Fibre Channel front-end. With SCSI front end: Single bit error detected. The SP has detected a recoverable single bit error. With Fibre Channel front end. The front-end Fibre Channel interface started running.
0x862 (was 0x675)	Single-bit ECC error in write cache. A single-bit ECC error was detected and corrected in the write cache. The extended status reports the module (SIMM or DIMM) in which the error occurred.
0x863 (was 0x676)	Single-bit ECC error in read cache. A single-bit ECC error was detected and corrected in the read cache. The extended status reports the module (SIMM or DIMM) in which the error occurred.
0x864 (was 0x696)	Mirror sector invalidated. A sector on a RAID 1 mirrored pair was invalidated on a rebuild.
0x865 (was 0x6F8)	Log Hardware Error. Additional information is logged regarding a hardware failure on the SP.

Code	Meaning
Event Monitor Warning Codes	
0x2040	From Event Monitor. Event Monitor log was backed up and cleared.
0x2140	From Event Monitor. SP slot is empty on host
0x2240	Communication failed with host (Navisphere Integrator event)
0x2640	From Event Monitor, an IP4700 NAS event. The information includes an event description, product name, IP address, up time, and source.
0x4040	From Event Monitor. User was denied access.
0x4041	From Event Monitor. Password is invalid.
0x4042	From Event Monitor. No user roles defined.
0x4043	From Event Monitor. Specified user already exists.
0x4044	From Event Monitor. Role value specified is invalid.
0x4045	From Event Monitor. List type specified is invalid.Valid types are NAV_LIST_GLOBAL, NAV_LIST_LOCAL, or NAV_LIST_ALL. Internal information only.
0x4046	From Event Monitor. The update of the accounts file has encountered an error.
0x4047	From Event Monitor. The selected user is the only global administrator.
0x4048	From Event Monitor. The scope value specified is invalid.
0x4049	From Event Monitor. The username is invalid.
0x404A	From Event Monitor. User does not exist.
0x404	From Event Monitor. Update of the local user information has failed.
0x404C	From Event Monitor. Credentials do not match.
0x404D	From Event Monitor. Error encountered during the deletion of the user account.
0x404E	From Event Monitor. Security initialization failed.
0x404F	From Event Monitor. Unable to write data to persistent storage - file not updated.
0x4050	From Event Monitor. Mandatory authentication security component not initialized. Internal information only.
0x4051	From Event Monitor. Mandatory administration security component not initialized. Internal information only.
0x4052	From Event Monitor. Change user request failed.

Code	Meaning
0x4140	From Event Monitor. Profile name already in use.
0x4141	From Event Monitor. Could not update profile.
0x4142	From Event Monitor. Could not delete profile.
0x4143	From Event Monitor. Profile not found.
0x4144	From Event Monitor. Could not parse profile.
0x4145	From Event Monitor. Could not read profile.
0x4340	From Event Monitor. The directory database is not found in the PSM. An attempt will be made to read from the backup file.
0x4341	From Event Monitor. Unable to restore the directory from the backup file. The directory provider started in degraded mode.
0x4342	From Event Monitor. The directory database is invalid.
0x4343	From Event Monitor. An internal error occurred in directory.
0x4344	From Event Monitor. Failed to create the directory database. The directory provider cannot be started.
0x4640	From Event Monitor. Warning Audit Log entry.
0x4740	From Event Monitor. Could not be managed: *ip_addr.*
0x4941	From Event Monitor. File Opened failed. Internal information only.
0x4942	From Event Monitor. Object state bad. Internal information only.
0x4943	From Event Monitor. Object uninitialized. Internal information only.
0x4944	From Event Monitor. Could not communicate with Master. Internal information only.
0x4945	From Event Monitor. File being uploaded. Internal information only.
0x4946	From Event Monitor. Opening file for writing. Internal information only.
0x4947	From Event Monitor. File not open for writing. Internal information only.
0x4948	From Event Monitor. Buffer size parameter does not match. Internal information only.
0x4949	From Event Monitor. Opening File for reading. Internal information only.

Code	Meaning
0x494A	From Event Monitor. Buffer size zero. Internal information only.
0x494B	From Event Monitor. Out of sequence. Internal information only.
0x494C	From Event Monitor. OS write failed. Internal information only.
0x494D	From Event Monitor. File does not exist. Internal information only.
0x494E	From Event Monitor. File not open for reading. Internal information only.
0x494F	From Event Monitor. Deleting File. Internal information only.
0x4950	From Event Monitor. File is in use. Internal information only.
0x4951	From Event Monitor. Invalid version read in file. Internal information only.
0x4952	From Event Monitor. Unable to upload to Master. Internal information only.
0x4953	From Event Monitor. Unable to retrieve file. Internal information only.

Error Codes

Code	Meaning
0x901	Parity Invalidated. Parity has been invalidated in a RAID group.
0x903	Fan removed. The fan module shut down or was removed.
0x904	VSC removed. A VSC unit has been shut down or removed from the storage system.
0x905	Chassis over temperature. The storage system found internal temperature too high. It tries to correct an over temperature condition by increasing fan speed. Look for any obvious problems, such as obstruction of cooling vents or excessive room temperature.
0x906	Unit shutdown. A failure in a CRU (which may be a fan or disk module) has made further access to the LUN impossible. If this unit has redundant CRUs (for example, it is a RAID 5 LUN), a failure in two CRUs is needed to produce this error. The SP shut down the LUN and the server can no longer access it. If this message appears along with 0x905 and/or 0xa06 message, replacing a defective fan module may restore access to the LUN. If the problem is with disk modules, *do not* replace the disk modules; instead call your service provider.
0x907	Fatal firmware error. A fatal firmware error has occurred; as a result, the program running in the SP has reset the SP. The SP was restarted and continued normally. Consult your service provider.
0x908	Fault - cache disabling. The storage system is disabling write caching because of a system fault. The problem might be one of the following: • SPS or BBU is not ready (not present and fully charged); • One or more vault disks are missing or being rebuilt; • Fan fault occurred; or • SP failed. To recover, either identify the problem and fix it, or wait for the storage system to fix it (for example, wait for the SPS or BBU to reach full charge or for the vault disks to be rebuilt). When the fault no longer exists, the storage system automatically re-enables storage system write caching.
0x909	Vault dump failure. A fault caused the storage system to try and dump the vault. The write cache dump failed because two or more vault disks are missing or have failed. Try replacing one or more disk modules in the vault. A power failure, or double SP failure, while the vault is failed and the caching is enabled makes any LUN that has pages in the cache inaccessible; for any such LUN, you need to replace the bad modules; unbind and rebind the unit; make the unit available to the operating system; and load the lost data onto the unit from backup. At system powerup, error 0x90A occurs for the inaccessible LUNs.
0x90A	Cannot assign - cache dirty. This message follows one of messages 921 through 924; that message explains the cause. The unit is inaccessible. Look for two faulty modules or scrambled vault modules. If the error persists, you may need to unbind the unit to which the dirty pages are destined; then rebind the failed unit, make it available to the operating system, and reload data onto the unit from backup.

Code	Meaning
0x90B	Cache initialization failed. The storage system cannot define the write cache because the existing write cache contains modified unwritten (dirty) pages. This error can occur if you try to change cache parameters while the write cache is active; if so, disable the write cache; wait for the write cache to be disabled; and retry. If the problem is not corrected, check for one or more failed LUNs and if you find one, fix it. If that is not the problem, you may need to unbind the LUNs to which the unwritten pages belong; the IDs of the LUNs are part of the accompanying 0x90A error message.
0x90C	Image larger than memory. The write cache was dumped to the vault, but cannot be restored to SP memory because an SP has too little memory to accept the cache image. This can happen if an SP fails and you replace it with an SP that has less memory than the one you removed. To recover, remove the SP that has the inadequate amount of memory, insert the correct amount of memory on it, and reinsert it.
0x90D	SPS or BBU removed. SPS or BBU failed or was removed. The storage system dumped the write cache to the vault, then disabled caching and flushed the vault to disk. The write cache cannot be enabled until the problem is corrected either by replacing the SPS or BBU, if it failed, or by reinstalling it. When the fault is fixed, the write cache is re-enabled automatically.
0x90E	SPS or BBU disabled and says ready. SPS or BBU test was unable to turn off the SPS or BBU. The SPS or BBU is probably faulty. The storage system dumped the write cache to the vault, disabled the cache, and flushed the vault to disk. The write cache cannot be enabled until the problem is fixed. Replace the SPS or BBU. When the fault is fixed, the write cache is re-enabled automatically.
0x90F	Cache recovered with errors. A non-mirrored write cache recovery failed to recover the write cache pages for some, but not all, cached LUNs. It does not apply to an storage system with two SPs. Contact your service provider.
0x910	Cache recovery failed. A non-mirrored write cache failed to recover information for all cached LUNs. It does not apply to a storage system with two SPs. Contact your service provider.
0x920	Hard media error. The disk module has reported a media defect that the SP could not clear. You should replace the disk module.
0x921	Vault load failed. The SP encountered errors while trying to load the write-cache image from disk. This message may indicate multiple disk failures. Probably any LUN with write-cached pages will be inaccessible and must be unbound. To identify such a LUN, look at the SP unsolicited event log for a message that identifies a disk module in the physical unit. Usually the log message specifies the first disk module in the unit.
0x922	Vault load inconsistent. The SP found inconsistencies in the write-cache image on disk. This may indicate a failure or abort of the cache dump. Probably any LUN with write-cached pages will be inaccessible and must be unbound. To identify such a LUN, look at the SP unsolicited event log for a message that identifies a disk module in the physical unit. Usually the log message specifies the first disk module in the unit.
0x923	Vault load failed - bitmap ok. The SP successfully read the control portion of the write-cache image on disk, but found the data portion to be incomplete. This means that a failure or abort occurred during the write cache dump. Probably any LUN with write-cached pages will be inaccessible and must be unbound. To identify such a LUN, look at the SP unsolicited event log for a message that identifies a disk module in the physical unit. Usually the log message specifies the first disk module in the unit.

Code	Meaning
0x924	Vault disks scrambled. The SP found the vault disks containing the cache image to be in a different order than when the cache image was dumped to disk. This means the disks were swapped at power down. You must restore disks to their original order before the SP can load the cache image.
0x925	Single board cache; need PROM update. The SP, which is operating in non-mirrored write caching mode, has too low a PROM revision. Write caching cannot be enabled. Update the PROM code.
0x926	R3 (RAID 3) cannot assign, no memory. The SP does not have enough memory available for the RAID 3 LUN. This error occurs when the storage system is powered up after SP memory has been removed, or when ownership of the unit is transferred to a peer SP that does not have enough memory.
0x927	Can't assign. The revision of Core or Base Software (LIC) you are running does not support “old” (pre-Revision 9.X) RAID 3 LUNs. To use the new RAID 3, you must use the current revision of LIC to unbind the LUN and rebind it as a RAID 3 LUN with RAID 3 memory. If the old RAID 3 LUN has data you want, use an older revision of LIC to access the LUN, back up its data (to tape, for example). Then, using the newer revision of Core or Base Software, unbind and rebind the LUN as explained above. Finally, load the backed-up data onto the newly bound RAID 3 LUN.
0x928	R3 cannot initialize, no memory. The SP does not have enough memory available for the RAID 3 LUN. This error occurs when the storage system is powered up after SP memory has been removed, or when ownership of the unit is transferred to a peer SP that does not have enough memory.
0x929	Front-end fibre link down. The Fibre Channel front-end failed or is inoperable.
0x930	PCMCIA Card Write Protected While Active. The PCMCIA (write-cache memory) is write protected.
0x931	PCMCIA Card Battery Failed. The PCMCIA (write-cache) card’s battery failed. You must replace the battery.
0x932	PCMCIA Card Absent or Inserted Incorrectly. The PCMCIA (write-cache memory) card is not present or was inserted incorrectly.
0x933	PCMCIA Card POST Test Failed. The PCMCIA (write-cache memory) card failed its powerup (POST) test. The SP disabled storage system write caching. Power down the storage system, replace the card, and power up the storage system.
0x934	PCMCIA Card Doesn’t Match Subsystem, Cache Data Locked. The PCMCIA (write-cache memory) card was used in a different storage system. The SP has locked the card to prevent cache data from being overwritten. You must either remove the card and install it in the correct storage system or clear the card.
0x935	PCMCIA Card too small for currently configured write cache. The PCMCIA (write-cache memory) card’s capacity is smaller than the specified size of the SP’s write cache. The SP disabled storage system write caching. You must either respecify the write cache size to equal the card’s capacity or install a card with a capacity that equals the specified size.
0x936	PCMCIA Card Hardware Failure. The SP encountered a hardware failure while trying to write to the SP. The SP has disabled write caching.
0x937	Command failed. A command failed for the reason explained in the extended status word.
0x938	Only RAID 3 LUNs or hot spares can be assigned in a storage system optimized for RAID 3 bandwidth.

Code	Meaning
0x939	Invalid RAID Type to convert. An attempt to change the System Optimization type occurred while Non-Raid 3 LUNs were bound in the storage system.
0x940	BBU faulted. The SPS (Standby Power Supply or Battery Backup Unit) has failed. The storage system disables write caching.
0x941	BBU on line. The SPS (Standby Power Supply or Battery Backup Unit) started supplying power because line power failed to the storage system The storage system immediately writes all write cache dirty pages to the vault disks.
0x942	Excessive single-bit ECC errors on SP memory module. An unacceptable number of single-bit ECC errors were detected on an SP memory module (DIMM or SIMM).
0x944	Hard Peer Bus Error. The bus between the SPs is broken.
0x945	Diskmail SP Link Down. The primary SP-to-SP communication channel failed, and recovery is starting using the alternate channel.
0x946	Diskmail SP Link Down, will suspend peer. The primary SP-to-SP communication failed, and recovery is proceeding with the peer SP suspending operations.
0x947	Diskmail SP Link Down, will suspend self. The primary SP-to-SP communication channel failed, and recovery is proceeding with this SP suspending operations.
0x948	Diskmail SP Link Down, will reboot. The primary SP-to-SP communication channel failed, and recovery is proceeding with this SP rebooting.
0x949	Illegal UpRev Configuration. This SP attempted to reboot with an illegal upgrade configuration. All caches were not deconfigured (size set to 0) before you tried to upgrade from Core Software (LIC) 4.X to 5.X. You must reload LIC 4.X, set the read and write cache sizes to 0, and then try to upgrade to 5.X again.
0x94A	Illegal DownRev Configuration. This SP attempted to download a lower revision of LIC/Core Software (revision 4.X from revision 5.X) with the read or write cache size not set to 0 or with multiple LUNs on a RAID group. From LIC 5.X, set the cache sizes to 0 and then try the download again. If this does not work, there may be multiple LUNs on one or more RAID groups. Back up all data on such LUNs, from LIC 5.X delete all but one LUN on each RAID group, and then try the download again.
0x94B	Unsupported Unit Type, can't assign. The specified LUN is not supported by the current LIC (Core Software); this unit will not assign.
0x94C	Can't assign due to Bad Expansion Checkpoints. An error occurred during the expansion of a RAID group; all LUNs in the RAID group are inaccessible.
0x94D	Can't assign due to Expansion Checkpoints Database Mismatch. A checkpoints database error occurred during expansion of a RAID group.
0x94F (was 619)	Uncorrectable Verify Error.
0x950 (was 620)	Degraded nonvol verify data loss. Data loss was detected on a degraded verify of a unit.

Code	Meaning
0x951 (was 651)	CRU signature error occurred.
0x952 (was 0x66C)	Meaning depends on whether the storage system has a SCSI or Fibre Channel front-end. With SCSI front end: Fan fault detected. The SP detected a single fan fault. With Fibre Channel front end: This message is intended for development personnel. If you receive it, contact your service provider.
0x953 (was 0x68A)	Uncorrectable parity sector. A hard error on a parity sector could not be corrected.
0x954 (was 0x68B)	Uncorrectable data sector. A hard error on a data sector could not be corrected.
0x955 (was 0x693)	Uncorrectable stripe. Inconsistent write or time stamps could not be corrected in a RAID group.
0x956 (was 0x694)	Parity invalidated. Parity has been invalidated in a RAID group.
0x957 (was 0x695)	Uncorrectable Sector. An uncorrectable sector was detected on a RAID 1 mirrored pair.
Event Monitor Error Codes	
0x2180	SP has been removed on host.
0x2181	SP is faulted on host.
0x2381	From HBA, poll failure. The Agent tried to contact another Agent but could not do so.
0x2480	JBOD (storage system without SPs) error - Disk failure.
0x2481	JBOD error - Fan failure.
0x2482	JBOD error - Power supply failure.
0x2483	JBOD error - LCC failure.
0x2484	JBOD error - Enclosure failure.
0x2580	Navisphere Integrator error - Storage system is faulted.
0x2680	IP4700 NAS event -The information includes an event description, product name, IP address, up time, and source.
0x2780	Multipath event. Path to a storage system is down.

Critical Error Codes

Code	Meaning
0xA02	Failed SCSI bus. An internal SCSI bus has failed. The CRU number displayed corresponds to the bus number (A0 means bus A, B0 means bus B, and so on). The failure resulted from a bad cable or cable connection, bad terminator, bad SCSI chip on an SP, or a bad device. All disk modules on that internal bus are now inaccessible by the SP. A RAID 5, RAID 3, RAID 1, or RAID 1/0 LUN, or software mirror can continue if the other disk modules are on other internal buses. It is unlikely that the other SP (if any) will be able to use the bus. Consult your service provider.
0xA05	NOVRAM uninitialized. The nonvolatile memory on the SP is not initialized. The SP has reinitialized this memory to its default state. Reboot the SP or power cycle the storage system to make the SP functional.
0xA06	Chassis shutdown. Second VSC failure or fan module inoperative for more than 2 minutes. The SP is powering down all modules in the chassis. Someone must correct the problem - perhaps by inserting a new fan module - before powering up again.
0xA07	Drive failure. The specified disk module has been powered down by the SP, has failed, or has been removed from the chassis.
0xA08	Database synchronization error. The SP cannot determine the correct virtual configuration of all LUNs in the storage system. Some LUNs may be unusable. Contact your service provider.
0xA09	Drive too small. For a RAID group, a replacement disk module was inserted, but it has a smaller capacity than the other disk modules in the LUN. The rebuild operation cannot begin until someone moves the replacement disk module and inserts a module of the correct size.
0xA0A	Drive too large. For a RAID group, redundant LUN, a replacement disk module was inserted, but it has a larger capacity than the other disk modules in the LUN. The rebuild operation cannot begin until someone moves the replacement disk module and inserts a module of the correct size.
0xA11	Peer SP removed. The other SP in this chassis has failed. You can force the working SP to take over the failed SP's LUNs via the secondary route.
0xA12	Cache memory hard error. The SP, which is operating in non-mirrored write caching mode, has detected a nonrecoverable memory fault in the cache memory area.
0xA13	CRU type unsupported. The disk module is a type that is not supported by the current SP software. You cannot bind the disk module into a LUN or use it for host I/O. Replace disk module with a type of disk module that is supported.
0xA16	Drive type firmware unsupported for <specific-vendor> type. The drive firmware on a disk is not supported by the current SP code while the code is running under the current vendor type. (Any drive running drive firmware with a revision less than SG0F is unsupported.)
0xA17	Unformatted Drive. This type of drive is not supported.
0xA18	Drive bypassed because it caused loop failure. A drive was bypassed from the loop because it was causing the loop discovery mechanism to fail.

Code	Meaning
0xA19	Virtual Array Database Reconstructed. The Virtual Database was found inconsistent, and has been reconstructed.
0xA20	Incorrect Checksum type. Drives that were bound on a Model 5600 or 5300 were somehow swapped with other drives. Restore the drives that were moved to their original slots.
Event Monitor Critical Codes	
0x26C0	IP4700 NAS event -From Event Monitor, an IP4700 NAS Critical Error Event. The information includes an event description, product name, IP address, up time, and source.

Event Monitor Codes by Severity

0x700-series	Informational codes. See page 1-11.
0x2000-2700	Informational codes from Event Monitor. See page 1-13. Warning codes from Event Monitor. See page 1-16. Error codes from Event Monitor. See page 1-23. Critical codes from Event Monitor. See page 1-25.

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FC4700-Only Event Codes and Messages

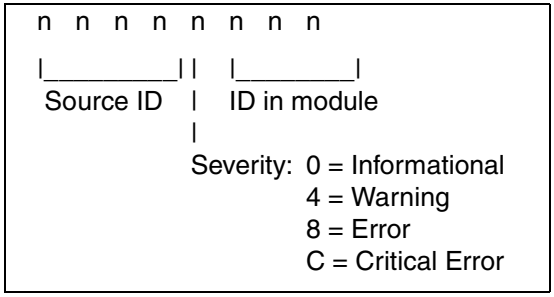
This chapter lists the FC4700-only messages — those that can occur only on an FC4700-2 or FC4700 storage system. These codes include eight digits (hexadecimal) and they are listed in this chapter by ascending number. Each grouping indicates the specific software module where the condition that provoked the message occurred.

Topics include

Code Severity

The FC4700 codes fall into four categories, one or more of which you can select as phone-home events using Navisphere Event Monitor.

Each message code is an eight-digit hexadecimal number whose meaning is as follows.



The severity levels affect storage-system operation as follows.

- Informational codes (fifth digit is 0) — Require no action by you. Informational codes are valuable to engineering in helping to establish history.
- Warning codes (fifth digit is 4) —Are normal and require no action by you unless they occur frequently.
- Error codes (fifth digit is 8) — Typically require action by you or a support engineer.
- Critical Error codes (fifth digit is C) —Typically require action by you or a support engineer.

FC4700 Event Code Summary

Code Series (hexadecimal)	Source Module Name
0x40000000	Message Manager
0x41000000	K10 Governor, Dump Manager, PSM Dumper, Lockwatch
0x41050000	Log Service
0x60000000	Flare (a Core Software component)
0x60010000	K10 Flare Admin
0x70000000	K10 Storage Centric Library
0x71000000	SnapView™ (Snapshot copy)
0x71050000	MirrorView™ (Remote mirror)
0x71100000	Message Passing Service (MPS)
0x71110000	Distributed Lock Service (DLS)
0x71120000	Distributed Lock Utilities (DLU)
0x71130000	User-Space DLS (UDLS)
0x71150000	Persistent Storage Manager (PSM)
0x71160000	Disktarg (TDD)
0x71170000	Scsitarg (TCD)
0x71180000	CMI
0x71190000	SP ID Service (SPID)
0x71200000	Reboot
0x71210000	KTCons (remote debug console)
0x71220000	CDS
0x71230000	CMI Scd
0x71240000	Fibre Disk Mirror Drive
0x71500000	Host Admin
0x71510000	Non-Disruptive Upgrade (NDU)
0x76000000	K10GlobalManagement, K10 DGSSP
0x79000000	K10 Std. Disk Admin
0x79500000	K10 System-Specific Admin
0x8000 0000	MmanAdmin
0x80007000	MmanAdminDispatch

Informational Codes

This section lists FC4700 informational codes from all software modules in the SP.

Code	Source	Description
0x00000000	Any module	Successful execution.
0x40000000	Message Manager	An MP for Core Software was handled entirely in a preprocessor of the Redirector but completed successfully.
0x40000001	Message Manager	The MessageDispatcher is entering or exiting. Informational message. If there is a real error, it should be reported elsewhere. This is an informational message only, not an error message. If this condition occurs often, the Monitor or Governor may declare a real error.
0x41000000	Governor	Starting the governor.
0x41000001	Governor	Starting the monitor
0x41000002	Governor	Starting the NDUAPP process.
0x41000003	Governor	A process that was expected to run to completion exited.
0x41000100	Dump Manager	The Dump Manager started.
0x41000101	Dump Manager	No new dump file was found.
0x41000200	PSM Dumper	PSM dumper has started.
0x41000201	PSM Dumper	PSM dumper is exiting.
0x6000069F	Base Software	Read cache enabled.
0x600006A0	Base Software	Read cache disabled.
SnapView Informational Codes		
Code	**Source**	**Description**
0x71000001	SnapView	Driver has successfully loaded.
0x71000002	SnapView	Driver has unloaded.
0x71000003	SnapView	Specified session has started.
0x71000004	SnapView	Specified session has stopped.
0x71000005	SnapView	DCA has been disabled for Snapshot.
0x71000006	SnapView	SnapView has been bound to specified device.

0x71000007	SnapView	SnapView has been unbound from specified device.
0x71000008	SnapView	Specified device has been added to the SnapView cache.
0x71000009	SnapView	Specified device has been removed from the SnapView cache.
0x7100000A	SnapView	Specified Snapshot has been created.
0x7100000B	SnapView	Specified Snapshot has been removed.
0x7100000C	SnapView	The SnapView chunk size has changed.
0x7100000D	SnapView	The SnapView Maximum Allowed Memory has changed.
MirrorView Informational Codes		
Code	**Source**	**Description**
0x71050101	MirrorView (AdMgr)	Unable to deallocate write intent log during destroy operation.
0x71050102	MirrorView (AdMgr)	Received a request to create a mirror.
0x71050103	MirrorView (AdMgr)	Received a request to destroy a mirror.
0x71050105	MirrorView (AdMgr)	Received a request to add a secondary image.
0x71050106	MirrorView (AdMgr)	Received a request to remove a secondary image.
0x71050107	MirrorView (AdMgr)	Received a request to get mirror properties. Not currently used.
0x71050108	MirrorView (AdMgr)	Received a request to set mirror properties. Not currently used.
0x71050109	MirrorView (AdMgr)	Received a request to get image properties.
0x7105010A	MirrorView (AdMgr)	Received a request to set image properties.
0x7105010B	MirrorView (AdMgr)	Received a request to promote a secondary image to be primary.
0x7105010C	MirrorView (AdMgr)	Updating mirror and/or image properties.
0x7105010D	MirrorView (AdMgr)	Received a request to set driver properties.
0x7105010E	MirrorView (AdMgr)	Received a request to set driver properties.
0x7105010F	MirrorView (AdMgr)	Received a request to bind an LUN. Not currently used.
0x71050110	MirrorView (AdMgr)	Received a request to bind mirroring into a device stack.
0x71050111	MirrorView (AdMgr)	Received a request to rebind mirroring into a device stack.
0x71050112	MirrorView (AdMgr)	Received a request to unbind mirroring from a device stack.
0x71050113	MirrorView (AdMgr)	Received a request to enumerate the list of bound LUNs which are not part of a mirror.

0x71050115	MirrorView (AdMgr)	Received a request to halt I/O to an LUN.
0x71050116	MirrorView (AdMgr)	Received a request to shut down the mirroring driver.
0x71050117	MirrorView (AdMgr)	PSM contents were restored after our peer failed during an update.
0x71050118	MirrorView (AdMgr)	Received a request from a remote storage system to create a mirror.
0x71050119	MirrorView (AdMgr)	Received a request from a remote storage system to destroy a mirror.
0x7105011A	MirrorView (AdMgr)	Received a request from a remote storage system to promote a secondary image.
0x7105011B	MirrorView (AdMgr)	Received a request from a remote storage system to update a mirror's properties.
0x7105011C	MirrorView (AdMgr)	Received a request from our peer SP to create a mirror.
0x7105011D	MirrorView (AdMgr)	Received a request from our peer SP to destroy a mirror.
0x7105011E	MirrorView (AdMgr)	Received a request from our peer SP to update a mirror's properties.
0x7105011F	MirrorView (AdMgr)	Received a request from our peer SP to bind mirroring into a device stack.
0x71050120	MirrorView (AdMgr)	Received a request from our peer SP to rebind mirroring into a device stack.
0x71050121	MirrorView (AdMgr)	Received a request from our peer SP to unbind mirroring from a device stack.
0x71050122	MirrorView (AdMgr)	Received a ping from a remote storage system.
0x71050123	MirrorView (AdMgr)	Received a request from our peer SP to update the driver properties.
0x71050124	MirrorView (AdMgr)	Receive a stage update request from our peer SP. Not currently used.
0x71050127	MirrorView (AdMgr)	Mirror state was set to inactive.
0x71050128	MirrorView (AdMgr)	Mirror state was set to active.
0x71050129	MirrorView (AdMgr)	Mirror state was set to attention.
0x7105012A	MirrorView (AdMgr)	Image was fractured by an administrator.
0x7105012B	MirrorView (AdMgr)	Synchronization of an image was started by an administrator.
0x7105012C	MirrorView (AdMgr)	An 'orphan' image (secondary image with no reachable primary) was destroyed.
0x7105012D	MirrorView (AdMgr)	Set the current % complete value for an image synchronization.
0x7105012E	MirrorView (AdMgr)	Admin subsystem initialized.
0x71050134	MirrorView (AdMgr)	Not currently used.
0x71050135	MirrorView (AdMgr)	Not currently used.
0x71050136	MirrorView (AdMgr)	Received a request from our peer SP to halt I/O to a LUN.

0x71050137	MirrorView (AdMgr)	For debugging only.
0x71050138	MirrorView (AdMgr)	Cookie on the old primary differs from the secondary during a promote operation.
0x71050139	MirrorView (AdMgr)	The LUN will be rebound after this rebind.
0x71050200	MirrorView (CfgMgr)	An image was fractured. If the failure clears automatic resynchronization may be allowed.
0x71050201	MirrorView (CfgMgr)	An image was fractured, and administrator action is required for resynchronization.
0x71050202	MirrorView (CfgMgr)	Image *image-ID mirror-ID* has been fractured.
0x71050203	MirrorView (CfgMgr)	An administrator started resynchronization of an image.
0x71050204	MirrorView (CfgMgr)	Synchronization of an image based on a fracture log was started.
0x71050205	MirrorView (CfgMgr)	Full synchronization of an image was started.
0x71050206	MirrorView (CfgMgr)	Image synchronization completed.
0x71050207	MirrorView (CfgMgr)	A mirror was automatically activated when its minimum conditions were met.
0x71050208	MirrorView (CfgMgr)	A mirror was automatically placed into the attention state, as its minimum requirements are no longer met.
0x71050209	MirrorView (CfgMgr)	The mirroring driver has entered the degraded state. No write requests are allowed.
0x71050300	MirrorView (DB Mgr)	Must wait for PSM to become available.
0x71050400	MirrorView (Failover Mgr)	A remote storage system has become reachable.
0x71050401	MirrorView (Failover Mgr)	A remote storage system has become unreachable.
0x71050500	MirrorView	Internal error. The mirrorview driver failed to find an item during a search and will attempt to search again.
0x71050600	MirrorView (System Mgr)	The mirroring driver was successfully loaded.
0x71050601	MirrorView (System Mgr)	The mirroring driver was successfully unloaded.
0x71050602	MirrorView (System Mgr)	Loading of the mirroring driver has started.

MPS (Message Passing Service) Informational Codes		
Code	**Source**	**Description**
0x71100000	MPS (Event Log)	The MPS device driver started. The compile time and type of build (i.e. debug or retail) are included for debugging purposes.
0x71100001	MPS (Event Log)	The MPS device driver received a lost contact event from CMI. The conduit and destination are specified.
0x71100002	MPS (Event Log)	The MPS driver unloaded.
0x71100003	MPS (Event Log)	The MPS device driver received a handshake IOCTL that causes the MPS device driver to accept requests as a kernel mode DLL.
DLS (Distributed Lock Service) Informational Codes		
Code	**Source**	**Description**
0x71110001	DistLockServ	Unused.
0x71110002	DistLockServ	Distributed Lock Service Driver Entry() has been called.
0x71110003	DistLockServ	Distributed Lock Service Export Driver Entry() has returned.
0x71110004	DistLockServ	Distributed Lock Service Export Driver has been unloaded.
0x71110005	DistLockServ	Distributed Lock Service Export Driver has been initialized.
0x71110006	DistLockServ	Enters local SP ID in the System Event Log.
0x71110007	DistLockServ	Enters local SP ID in the System Event Log.
0x71110008	DistLockServ	Enters *"The local SP is completing a Cabal Join due to the death or absence of the Peer SP"* in System Event Log.
0x71110009	DistLockServ	Obsolete.
0x7111000A	DistLockServ	Obsolete.
0x7111000B	DistLockServ	Obsolete.
0x7111000C	DistLockServ	Obsolete.
0x7111000D	DistLockServ	The Local SP is processing previously delayed Join request from the Peer SP.
0x7111000E	DistLockServ	The Peer SP died and is being restarted.
0x7111000F	DistLockServ	The Local SP died and is being restarted.

DLU (Distributed Lock Utilities) Informational Codes		
Code	**Source**	**Description**
0x71120000	DistLock Utils	Unused.
0x71120002	DistLock Utils	DLU Driver Entry() has been called.
0x71120003	DistLock Utils	DLU Driver Entry has returned.
0x71120004	DistLock Utils	User DLU Driver has been unloaded.
UDLS (User Distributed Lock Services) Informational Codes		
0x71130000	Usr Dist Lock Serv	Unused.
0x71130002	Usr Dist Lock Serv	UDLS Driver Entry() has been called.
0x71130003	Usr Dist Lock Serv	UDLS Driver Entry has returned.
0x71130004	Usr Dist Lock Serv	UDLS has been unloaded.
PSM (Persistent Storage Manager) Informational Codes		
Code	**Source**	**Description**
0x71150001	PSM Exp Driver	Unused.
0x71150002	PSM Exp Driver	PSM Driver Entry() has been called.
0x71150003	PSM Exp Driver	PSM Driver Entry() has returned.
0x71150004	PSM Exp Driver	PSM has been unloaded.
0x71150005	PSM Exp Driver	The PSM default container has been read and processed.
0x71150006	PSM Exp Driver	There are no more Secondary LUNs on the Persistent Container List.
Disk Targ (TDD) Informational Codes		
0x71160000	DiskTarg (TDD)	The DiskTarg driver is starting.
0x71160001	DiskTarg (TDD)	The DiskTarg driver is unloading.
ScsiTarg (TCD) Informational Codes		
Code	**Source**	**Description**
0x71170000	ScsiTarg (TCD)	The ScsiTarg driver is starting.
0x71170001	ScsiTarg (TCD)	The ScsiTarg driver is unloading.
0x71170002	ScsiTarg (TCD)	ScsiTarg claimed a Port (for FE or CMI).

0x71170003	ScsiTarg (TCD)	DiskTarg or CMIscd successfully registered with ScsiTarg.
0x71170004	ScsiTarg (TCD)	DiskTarg or CMIscd activation with ScsiTarg succeeded.
0x71170005	ScsiTarg (TCD)	DiskTarg or CMIscd deactivation and de-registration with ScsiTarg succeeded.
0x71170006	ScsiTarg (TCD)	WWN is being changed for a host port.
CMI Informational Codes		
Code	**Source**	**Description**
0x71180001	CMI	Generic CMI Information.
0x71180002	CMI	Calling Driver Entry().
0x71180003	CMI	My SP ID is xxx.
0x71180004	CMI	Heartbeat interval is n 1/10-second ticks.
0x71180005	CMI	Peer SP timeout interval is n 1/10-second ticks.
0x71180006	CMI	Remote SP timeout interval is n 1/10-second ticks.
0x71180007	CMI	Peer SP transmission retry limit is n.
0x71180008	CMI	Remote SP transmission retry limit is n.
0x71180009	CMI	CMI Transport Device gate(s) found.
0x7118000A	CMI	Treating SP ID 0xn (Signature 0xm) as peer.
0x7118000B	CMI	CMI Transport Device n: Gate m connects to SP ID 0xi:j (Signature 0xk).
0x7118000C	CMI	Serial Line connection to peer is functioning.
0x7118000D	CMI	Serial Mail has been disabled in Registry.
0x7118000E	CMI	Using n as Serial Line connection to peer.
SPID Informational Codes		
Code	**Source**	**Description**
0x71190001	SP ID	Generic SPID Information.
0x71190002	SP ID	My SP ID is 0xn2:m, signature is 0xo.
0x71190003	SP ID	Found HKLM\ n in Registry; ignoring hardware value.

Reboot Driver Informational Codes		
Code	**Source**	**Description**
0x71200001	Reboot Driver	Unused.
0x71200002	Reboot Driver	Reboot Driver Entry() has been called.
0x71200003	Reboot Driver	Reboot Driver Entry() has returned.
0x71200004	Reboot Driver	Reboot Driver Export Driver has been unloaded.
0x71200005	Reboot Driver	Deleting the Reboot Driver's Device Object.
CMIscd Informational Codes		
Code	**Source**	**Meaning**
0x71230001	CMI Scd	Unused
0x71500002	CMI Scd	Load version - Compiled on %2 at %3, %4.
0x715000003	CMI Scd	Driver Entry() returned %2.
0x71500004	CMI Scd	Unloaded.
K10_GlobalManagement and K10_DGSSP Informational Codes		
0x76000100	K10_DGSSP	DGSSP application started/stopped.
0x76000101	K10_DGSSP	Lists the BIOS date and revision. Note this information when reporting an error.
MmanAdminDispatch Informational Codes		
0x80070057	MmanAdminDispatch	Windows NT error, defined in winerror.h. This error occurs when preconditions are not satisfied for a read or write operation, for example For a write operation: Any of the following Preconditions is not satisfied: Buffer Size >= 0 if Buffer Size > 0, input buffer is not NULL if Buffer Size = 0, input buffer is NULL, Error value address is not NULL. To recover, reset the arguments.

Warning Codes

This section lists FC4700 warning codes from all software modules in the SP.

Code	Source	Description
0x40004000	Message Manager	The MessageDispatcher received an explicit shutdown command.
0x40004001	Message Manager	The MessageDispatcher detected an warning, see text. This error code appears only in the event log messages.
0x40004002	Message Manager	A problem occurred while gathering performance statistics. I/O will be able to proceed normally. Call your service provider.
0x40004003	Message Manager	A problem occurred while gathering performance statistics. I/O will be able to proceed normally. Call your service provider.
0x40004004	Message Manager	A problem occurred while gathering performance statistics. I/O will be able to proceed normally. Call your service provider.
0x40004005	Message Manager	A problem occurred while gathering performance statistics. I/O will be able to proceed normally. Call your service provider.
0x40004006	Message Manager	A problem occurred while gathering performance statistics. I/O will be able to proceed normally. Call your service provider.
0x40004007	Message Manager	A problem occurred while gathering performance statistics. I/O will be able to proceed normally. Call your service provider.
0x41004000	Governor	SP is in degraded mode.
0x41004001	Governor	A process did not post a startup event within the allotted time. The process may just be late, or it may be hung. Use other log entries and expected behavior to determine which is the case.
0x41004002	Governor	A process ran to completion without ever posting a startup event. If a process has high enough priority, the Governor will wait for it to post a startup event before it starts another process. This error indicates that the process completed during the wait, and never posted startup. It is likely that the process has crashed before doing much of its work.
0x41004100	Dump Manager	This warming code is used for two purposes: The detection of a dump and notification that DumpManager experienced an error. See the log text. Since DumpManager is not required for normal data processing, this is only a warning condition. However, you should contact your service provider in either case.
0x41004101	Dump Manager	DumpManager was not able to delete an old dump. Old dumps are deleted to allow space for new ones. Since DumpManager is not required for normal data processing, this is only a warning condition. However, you should contact your service provider.

0x41004200	PSM Dumper	PSM dumper encountered an error, but it should not necessarily otherwise effect the operation of the array. Check the Event Log text for details.
0x41004201	PSM Dumper	Could not find a PSM file.
0x41004202	PSM Dumper	Could not access the PSM file because it is currently in use.
0x410042003	PSM Dumper	PSM file is unreadable.
0x41004204	PSM Dumper	PSM file is empty.
0x41004205	PSM Dumper	Could not open the PSM file.
0x41004206	PSM Dumper	Unable to create a file to hold a copy PSM data.
0x41004207	PSM Dumper	Unable to write the PSM data to a file.
0x41004208	PSM Dumper	Error reading the PSM file into a buffer.
0x41004300	Lockwatch	Non-Fatal Error in Lockwatch. I/O will be able to proceed normally. Call your service provider.
0x71004000	SnapView	Cache usage exceeded specified level.
0x71114000	DistLockServ	Unused.
0x71114001	DistLockServ	Distributed Lock Service internal status that indicates that lock with the specified name has not been found.
0x71114002	DistLockServ	Distributed Lock Service internal status that prevents a lock name from being added twice.
0x71114003	DistLockServ	Distributed Lock Service internal status that indicates that a search of the Lock Map by Cabal Lock Id failed.
0x71114004	DistLockServ	Distributed Lock Service status that indicates the a lock is being opened. The caller will receive a call back when the open is complete.
0x71114005	DistLockServ	Distributed Lock Service status that indicates the a lock is being closed. The caller will receive a call back when the open is complete.
0x71114006	DistLockServ	Distributed Lock Service status that indicates the a lock is being converted. The caller will receive a call back when the open is complete.
0x71114007	DistLockServ	Unused.
0x71114008	DistLockServ	Unused.
0x71114009	DistLockServ	Distributed Lock Service internal status.
0x7111400A	DistLockServ	An attempt with the DLS_CLIENT_CONVERT_LOCK_NO_WAIT flag to request to convert a lock was denied.
0x71124000	DistLock Utils	Unused.

0x71124001	DistLock Utils	DistLockUtilWaitForSemaphore() returned without having acquired the Distributed Semaphore.
0x7111400B	DistLockServ	The Peer SP is being dismissed. Dismissal will be complete when the Peer is a Zombie.
0x7111400C	DistLockServ	The Peer SP has been dismissed. The Peer SP is now a Zombie.
0x7111400D	DistLockServ	An attempt to send a message to the Peer SP returned a bad status.
0x71134000	Usr Disk Lock Serv (UDLS)	Unused.
0x71154000	PSM (Persistent Storage Mgr) Export Driver	Unused.
0x71154001	PSM Exp Driver	The Peer SP has exclusive access to the data area; will try again.
0x71154002	PSM Exp Driver	Could not read and process default Persistent Container.
0x71154003	PSM Exp Driver	The Persistent Container for this Data Area was not found.
0x71154004	PSM Exp Driver	The Data Area was not found.
0x71154005	PSM Exp Driver	An attempt was made to write to a Data Area opened for read only.
0x71154006	PSM Exp Driver	An attempt was made to read from a Data Area opened for write only.
0x71154007	PSM Exp Driver	An attempt was made to remove a Persistent Container with an open Data Area.
0x71154008	PSM Exp Driver	An attempt was made to open an already open Data Area.
0x71154009	PSM Exp Driver	An attempt was made to delete an open Data Area.
0x7115400A	PSM Exp Driver	An attempt was made to add a Persistent Container with the same name as an existing Persistent Container.
0x7115400B	PSM Exp Driver	An attempt was made to add a Persistent Container with the same name as the default Persistent Container.
0x7115400C	PSM Exp Driver	An attempt was made to delete the default Persistent Container.
0x7115400D	PSM Exp Driver	Input buffer has the wrong API revision.
0x7115400E	PSM Exp Driver	An attempt was made to remove a Persistent Container that does not exist.
0x71174000	ScsiTarg (TCD)	Creating "HostsideConfigData" PSM file. Should happen only once, after PSM LUN is created.
0x71184000	CMI	Generic CMI Warning.
0x71184001	CMI	Partition from live peer detected; other SP will shut down.

0x71184002	CMI	Lost contact with SP ID n.m.
0x71184003	CMI	Serial Line connection to peer has failed.
0x71194001	SP ID	Generic SPID Warning.
0x71204000	Reboot Driver	Unused.
0x71230000	CMI Scd	Unused
0x71204001	Reboot Driver	The SP has been rebooted unsuccessfully too many times. The SP drivers will not load.
0x71214000	KTCons	The service failed to start, or was stopped. See error text for details.
0x76004000	K10GlobalMgt_1	Empty transaction log. Only seen in diagnostic applications. N/A.
0x76004100	K10_DGSSP	DGSSP agent non-fatal condition. Examine details of error message.
0x80004003	MmanAdminDispatch	Windows NT error, defined in winerror.h. This error occurs when performing a Read or Write operation, the input pointer is NULL. For example, for a write operation, input TLD list (or buffer) is NULL, buffer size is 0, or error value address is NULL; for a read operation, error value address is NULL.

Error Codes

This section lists FC4700 error codes from all software modules in the SP. These generally require the attention of a system engineer.

Message Manager and Message Dispatcher Error Codes		
Code	**Source**	**Description**
0x40008000	Message Manager	The SP must be A or B. The request is bad.
0x40008001	Message Manager	Address is NULL or too long. The request is bad.
0x40008002	Message Manager	Header is malformed. The request is bad.
0x40008003	Message Manager	The layer is not 'U' or 'K'. The request is bad.
0x40008004	Message Manager	No header where a header is required. The request is bad.
0x40008005	Message Manager	Timed out on an internal IO or DeviceIOControl. A retry might succeed.
0x40008006	Message Manager	The OS did not detect an error, but the number of bytes requested (to read or write) was not the actual number read or written.
0x40008007	Message Manager	Malformed Ack struct – wrong size or bad contents
0x40008008	Message Manager	Data (usually Mode Page or TLD) wrong size, did not checksum, or contained incorrect values.On a write command, this error means that the command was bad. On a read, the problem is more serious and might be a fatal error.
0x40008009	Message Manager	Ran out of memory. Possibly indicates a memory leak.
0x4000800A	Message Manager	Could not get security from client. Possibly indicates a configuration problem.
0x4000800B	Message Manager	Data too large to send to kernel processor.
0x4000800C	Message Manager	Not a known mode page to dispatch. Do not use the offending mode page in commands.
0x4000800D	Message Manager	Don't know this CDB code in Redirector. This is a fatal error if it occurs on an essential command.
0x4000800E	Message Manager	Redirector client allowed too little buffer, or IOCTL buffer too small. Not currently used.
0x4000800F	Message Manager	Configuration is not complete on the storage system.
0x40008010	Message Manager	int3, int5, etc. You may need to restart the SP.
0x40008011	Message Manager	MPS got message from SP not in our storage system. Not currently used.

0x40008012	Message Manager	Data size in MManInBufHdr bad. Was trying to get XLU or VARRAY data. Possibly an internal formatting inconsistency.
0x40008013	Message Manager	Peer SP has apparently failed – can't communicate with it. If you can confirm the failure, initiate failover.
0x40008014	Message Manager	Unknown AAQ/AAS database ID. Possibly a bad command.
0x40008015	Message Manager	Do not support Storage Group VLUs (Virtual LUN numbers) in bind, unbind.
0x40008016	Message Manager	PSM LUN is not initialized. You must initialize it using Manager or the CLI. If it recurs, this is a fatal error.
0x40008017	Message Manager	Port value is out of range for WWN creation.
0x40008018	Message Manager	You cannot expand a LUN in an FC4700K storage system. Indicates a bad command.
0x40008019	Message Manager	Object name illegal or unexpected.
0x4000801A	Message Manager	Could not access a DLS object.
0x4000801B	Message Manager	Attempt to insert driver in wrong place on stack.
0x4000801C	Message Manager	Could not create and/or access device map file, which is memory mapped. Possibly you are running out of memory or the map file path is invalid.
0x4000801D	Message Manager	Memory mapped file too small to hold data.
0x4000801E	Message Manager	Error using device map file lock/mutex.
0x4000801F	Message Manager	Operation needs lock, but doesn't own it.
0x40008020	Message Manager	Error closing PSM file.
0x40008021	Message Manager	Error in WaitForSingleObject, WaitForMultipleObjects or extended versions. This is NOT a timeout. Possibly the module is waiting on an undefined event.
0x40008022	Message Manager	One or more of the required services is not started.
0x40008023	Message Manager	Cannot close a driver handle.
0x40008024	Message Manager	Fairness value greater than that supported by system.
0x40008025	Message Manager	Unsupported version of an internal structure (incoherent install).
0x40008026	Message Manager	LUN Indirection is not supported in Mode Page 37.
0x40008027	Message Manager	Cannot change MP8 Or RCE bits in host options.
0x40008028	Message Manager	You may not change auto trespass via page37 General Feature, Param8.
0x40008029	Message Manager	You may not use VLU-based trespass with this API.

0x4000802A	Message Manager	IO is pending, but we are not set for async IO!
0x4000802B	Message Manager	Multiple methods of determining the specified LUN yield different results.
0x4000802C	Message Manager	LUN count was not the expected value.
0x4000802D	Message Manager	PSM incorrectly configured. Usually means PSM LUN is an illegal value.
0x4000802E	Message Manager	Unable to remove a Page 37 parameter.
0x4000802F	Message Manager	Mode Page 37 contained an unsupported default.
0x40008030	Message Manager	An input argument was invalid.
0x40008031	Message Manager	Storage system has been restarted but the storage system drivers did not start (NDU degraded mode). This is not the same as RAID 5 degradation. If NDU (Software Installation) just upgraded the SP, you may need to back out the changes made.
0x40008032	Message Manager	Not allowed to set write cache on PSM LUN.
0x40008033	Message Manager	Request number of connections exceeded the allowed maximum.
0x40008034	Message Manager	A pointer was expected to be NULL, but was not.
0x40008035	Message Manager	A pointer was unexpectedly found to be NULL.
0x40008036	Message Manager	Handle was set to INVALID_HANDLE_VALUE but there was no error (say from GetLastError()). Possibly means that the OS has become unstable.
0x40008037	Message Manager	The PSM LUN has double faulted. Try to see if the LUN can be repaired; otherwise unbind and rebind.
0x40008038	Message Manager	An attempt was made to trespass a private LUN. This is not allowed.
0x40008039	Message Manager	Other DeviceIOControl Error. NOT a timeout.
0x4000803A	Message Manager	Invalid System Serial Number entered. The Core Software will not write to number to the storage system.
0x4000803B	Message Manager	Logic error.
0x4000803C	Message Manager	Subrouting failed. See the data section for source error.
0x4000803D	Message Manager	Expanding a LUN is illegal if there is more than one LUN in the RAID group.
0x4000803E	Message Manager	A LUN used by a layered driver cannot be expanded.
0x4000803F	Message Manager	The specified LUN is not in the Device Map.
0x40008040	Message Manager	You may not enable the Write Cache while SP software installation (NDU) is in progress.

0x40008041	Message Manager	The data returned is not for the object (LUN, Mode Page) expected. This error is currently unused. This error indicates that multiple programs are simultaneously querying the SP software. This can cause a conflict in the cases where a MODE SELECT must be done before the query (MODE SENSE) to specify the object.
0x40008042	Message Manager	Unused.
0x40008043	Message Manager	Unused
0x40008044	Message Manager	You must commit the current software installation (NDU) of the Base Software package before you can bind a LUN. Perform a software installation (NDU) commit of the Base Software package and then retry the command.
0x40008045	Message Manager	Unused.
0x40008046	Message Manager	The Logical Unit cannot be expanded. Expansion of a private Logical Unit is illegal. Do not try to do this.
0x40008100	Message Manager	Thread's IO state is invalid. Since the states are assigned by the Message Dispatcher itself, this indicates a serious error.
0x40008101	Message Manager	Pipe handle state is invalid. Since the states are assigned by the Message Dispatcher itself, this indicates a serious error.
0x40008102	Message Manager	The pipe state is inconsistent with other state data, such as the IO state. May indicate that Message Dispatcher state machine is broken.
0x40008103	Message Manager	The state is not a legal value. Since the states are assigned by the Message Dispatcher itself, this indicates a serious error.
0x40008104	Message Manager	The state is inconsistent with what just happened. May indicate that Message Dispatcher machine is broken.
0x40008105	Message Manager	One or more required buffers are full.
0x40008106	Message Manager	Reading a pipe yielded less data than expected, or no data at all. Could also be that NT indicated there was more pipe data, but none was available.
0x40008107	Message Manager	The MessageDispatcher detected an error, see text. This error code appears only in the event log messages. If this occurs often, the Monitor/Governor may declare a fatal error.
0x40008108	Message Manager	The MessageDispatcher detected an error during initialization, see text. This error code appears only in the event log messages If this occurs often, the Monitor/Governor may declare a fatal error.

K10Governor, Dump Manager, PSM Dumper, and Lockwatch Error Codes

Because some of the processes it manages are required for standard diagnostic procedures, the Governor will try to keep running even if it detects an error condition. In the list below, only errors marked as fatal will cause the Governor to terminate.
Since the PSMdumper runs periodically, a failure to perform its function is not necessarily fatal, as it may run without error the next time. For example, if a PSM file is in the process of being updated, PSMdumper may not be able to access it.

Code	Source	Description
0x41008000	Governor	The command for running the governor is K10Governor -<Params>, Param could be r, d, c, a or p. This error is thrown when the input command hasn't that format. To recover, follow the instruction.
0x41008001	Governor	Can't start governor, could be that termination event (WaitForSingleObject) isn't in the signaled state or the time-out interval elapses, also could be failure on starting the service's thread. This is a fatal error. Restart the SP using the CLI reboot or by powering it off and on.
0x41008002	Governor	Failure in calling function StartServiceCtrlDispatcher() which connects the main thread of a service process to the service control manager. This is a fatal error; try and start the governor again.
0x41008003	Governor	Failure in starting Governor service, e.g. error in OpenSCManager / CreateService / OpenService / QueryServiceStatus / ControlService / DeleteService. This is a fatal error; try and start the governor again.
0x41008004	Governor.	Caught ASSERT or INT5
0x41008005	Governor	Cannot start Monitor thread after the retry limit has been reached. Obsolete as of build 52.
0x41008006	Governor	Monitor has run out of retries trying to create a process which "Must Run". A nonfatal error; the Governor will keep retrying.
0x41008007	Governor	Can't create a process. A nonfatal error; if the process is a "MustRun", the Governor will keep retrying.
0x41008008	Governor	A process object's state is signaled when the process terminates. A process terminated during startup. A nonfatal error; the Governor will keep retrying.
0x41008009	Governor	A process timed out waiting for a startup event. The governor will not restart the process.
0x4100800A	Governor	Process got a wait call failure during startup. Not a fatal error, but indicative of a serious problem.
0x4100800B	Governor	A process failed. MustRun processes will always be restarted. Others will be restarted unless they are out of retries.
0x4100800C	Governor	Process timed out waiting for a startup event. Lack of a startup event does not cause a process restart.
0x4100800D	Governor	There are no processes for monitor to start. Fatal error; the Governor will terminate.

0x4100800E	Governor	A memory allocation failure. Fatal error; the Governor will restart the system.
0x4100800F	Governor	Monitor got a WaitForMultipleObjects() failure. Fatal error; the Governor will restart the system.
0x41008010	Governor	A “Must Run” process failed. The process will be restarted.
0x41008011	Governor	An unexpected return from main wait. Programmer error.
0x41008012	Governor	A process that was supposed to complete before others started exceeded its timeout interval. Process is taking longer than expected to start.
0x41008013	Governor	Got an exception when trying to call InDegradedMode() to see if the SP is degraded. Governor will assume degraded mode and keep running.
0x41008014	Governor	Process did not respond to its terminate event. The Governor will stop it with TerminateProcess( ). TerminateProcess may cause leaks and crashes on Governor restart (DLL exit routine were not called).
0x41008015	Governor	Unable to open the trace device when the tracing object was instantiated.
0x41008016	Governor	Unable to write a trace message to the trace buffers. Currently not implemented.
0x41008017	Governor	The Governor was unable to start any of the processes on its list.This indicates a serious problem. The Governor may try to restart itself; if not, you should reboot the SP.
0x41008100	Dump Manager	Unable to delete an old dump. Old dumps are deleted to allow space for new ones.
0x41008101	Dump Manager	Unknown fatal error.
0x41008102	Dump Manager	Unable to read the registry entry that contains the name NT uses for the system dump file.
0x41008103	Dump Manager	Name of the dump file read from the registry was NULL.
0x41008104	Dump Manager	Unable to allocate memory to hold the name of the dump file.
0x41008105	Dump Manager	Unable to expand the environment variables in the dump file name.
0x41008200	PSM Dumper	PSM dumper encountered an error. Check the Event Log text for details. There may also be a secondary error code in the data section of the event.
0x41008201	PSM Dumper	Unable to allocate memory to hold the PSM object. May indicate that the system is running out of memory.
0x41008202	PSM Dumper	Unable to allocate memory for a buffer. May indicate that the system is running out of memory.
0x41008300	Lockwatch	I/O will be able to proceed normally. Call your service provider.
0x41008301	Lockwatch	I/O will be able to proceed normally. Call your service provider.

0x41008302	Lockwatch	I/O will be able to proceed normally. Call your service provider.
0x41008303	Lockwatch	I/O will be able to proceed normally. Call your service provider.
Common_1 Library Error Codes Common_1 provides support for applications running under the Governor		
Code	**Source**	**Description**
0x41058000	Common_1 lib	A required registry value is missing. Recovery may require reinstallation or manual editing of the registry.
0x41058001	Common_1 lib	A required registry key is missing. Recovery may require reinstallation or manual editing of the registry.
0x41058002	Common_1 lib	Buffer provided was too small to hold the registry value. Possibly results from bad data or the type of data in the registry.
0x41058003	Common_1 lib	Registry value is not of the expected type. To recover, reload the configuration.)
0x41058004	Common_1 lib	Unable to create or delete a key. Recovery may require reinstallation or manual editing of the registry.
0x41058005	Common_1 lib	Unable to write a value to the registry.
0x41058006	Common_1 lib	Could not convert a registry string into an integer. Bad installation; reinstall.
0x41058007	Common_1 lib	Bad argument given to an internal function.
0x41058008	Common_1 lib	Unrecognized tag sequence.
K10FlareAdmin Error Codes K10FlareAdmin is the standard interface library for Core Software (Flare) administrative operations.		
Code	**Source**	**Description**
0x60018000	K10FlareAdmin	Unrecognized database ID. This Database ID is not implemented and out of range. This request is bad. Others might work.
0x60018001	K10FlareAdmin	Unrecognized opcode. This opcode is not implemented and out of range. This request is bad. Others might work.
0x60018002	K10FlareAdmin	Unrecognized item spec. This item spec is not implement and out of range. This request is bad. Others might work.
0x60018003	K10FlareAdmin	This error will occur after maximum timeout (2 minutes) elapses when waiting for an asynchronous response from DeviceIoControl.
0x60018004	K10FlareAdmin	For a Read operation, the data returned is not as expected, i.e. empty data, wrong size, or wrong structure.
0x60018005	K10FlareAdmin	Unrecognized TLD tag.

0x60018006	K10FlareAdmin	For an input TLD list, some data (TAG, data, field, etc.) is missing.
0x60018007	K10FlareAdmin	In order to generate target WWN (Generate a single Type 6 (SIX) WWN using the K10_WWID struct as a container), call COM K10FlareAdminLib, DbId = K10_FLAREADMIN_DB_PASSTHROUGH, OpCode = MM_MPCODE_PEER
0x60018008	K10FlareAdmin	LUN divined from device name doesn't match LUN reported by Core Software.
0x60018009	K10FlareAdmin	The data returned from IOCTL call has the wrong size.
0x6001800A	K10FlareAdmin	IOCTL failed, see data section for source error.
0x6001800B	K10FlareAdmin	Subroutine failed, see data section for source error.

K10Storage-Centric Library Error Codes

The K10 Storage-Centric Library is the standard interface library for the front-end driver (ScsiTarg), which handles Storage-Centric configuration.

Code	Source	Description
0x70008000	K10 SC lib	Unrecognized database ID in CDB. This request is bad. Others might work.
0x70008001	K10 SC lib	Unrecognized op code in command. This request is bad. Others might work.
0x70008002	K10 SC lib	Unrecognized item specifier in command. This request is bad. Others might work.
0x70008003	K10 SC lib	Timed out waiting for an asynchronous response from a DeviceIOControl. Retry might work.
0x70008004	K10 SC lib	Other Device IO Control Error. NOT a timeout.
0x70008005	K10 SC lib	Command or functionality not supported.
0x70008006	K10 SC lib	Incorrect data element size. Reload the configuration.
0x70008007	K10 SC lib	PSM file version not supported.
0x70008008	K10 SC lib	Trying to put private LUN in a Storage Group.
0x70008009	K10 SC lib	Pointer that was expected to be NULL was not
0x7000800A	K10 SC lib	Illegal input argument. Currently only posted by logging. There may be bad or missing event log entries if you see this error.
0x7000800B	K10 SC lib	Illegal options bits for an initiator record.
0x7000800C	K10 SC lib	File error; see description.
0x7000800D	K10 SC lib	A navicli storagegroup -setpath command failed. Logged text is "Attempting to add more than 32 initiators to a port". This error most likely occurred because you attempted to add more than the maximum number of initiators to a port.

SnapView Error Codes		
Code	**Source**	**Description**
0x71008000	SnapView	Invalid DBID sent to Admin Library.
0x71008001	SnapView	Invalid OP Code sent to Admin Lib.
0x71008002	SnapView	Invalid ISPEC sent to Admin Library.
0x71008003	SnapView	Ioctl from Admin Lib to driver timed out.
0x71008004	SnapView	Admin lib could not open driver.
0x71008005	SnapView	SnapView driver load failed.
0x71008006	SnapView	Creation of the device structure for SnapView failed.
0x71008007	SnapView	Creation of the symlink to the driver device object failed.
0x71008008	SnapView	Deletion of the symlink to the driver device object failed.
0x71008009	SnapView	Creation of the specified device failed.
0x7100800A	SnapView	Open/Close received for unknown device.
0x7100800B	SnapView	IOCTL packet revision is invalid.
0x7100800C	SnapView	Deletion of the specified device failed.
0x7100800D	SnapView	SnapView driver has exceeded its memory allocation or system is really out of memory.
0x7100800E	SnapView	Source LUN does not exist.
0x7100800F	SnapView	Snapshot does not exist.
0x71008010	SnapView	SnapView is already bound to specified device.
0x71008011	SnapView	Specified logical unit does not exist.
0x71008012	SnapView	Cannot unbind a source LUN while there are active sessions.
0x71008013	SnapView	Cannot unbind a source LUN while it has Snapshots defined.
0x71008014	SnapView	Device is already part of the SnapView cache.
0x71008015	SnapView	Specified device is not part of the SnapView cache.
0x71008016	SnapView	Cannot remove specified SnapView cache device unless it is assigned to this SP.
0x71008017	SnapView	Cannot remove specified SnapView cache device while there are active sessions.
0x71008018	SnapView	Cannot open specified SnapView cache device.

0x71008019	SnapView	Cannot read specified SnapView cache device geometry information.
0x7100801A	SnapView	SnapView cache is full.
0x7100801B	SnapView	The maximum number of SnapView cache devices (256) has been exceeded.
0x7100801C	SnapView	PSM driver could not be opened.
0x7100801D	SnapView	The SnapView maximum allowed number of cache LUNs has been reached. (The error message text for this condition might be erroneously displayed as SnapView could not open the specified PSM data file.)
0x7100801E	SnapView	SnapView could not close the specified PSM data file.
0x7100801F	SnapView	SnapView could not read from the specified PSM data file.
0x71008020	SnapView	SnapView could not write to the specified PSM data file.
0x71008021	SnapView	The specified SnapView PSM data file has been created.
0x71008024	SnapView	MPS driver could not be opened.
0x71008025	SnapView	Open of MPS filament failed.
0x71008026	SnapView	Close of MPS filament failed.
0x71008027	SnapView	MpsGetSpid() call failed.
0x71008028	SnapView	The peer SP is unreachable.
0x71008029	SnapView	SnapView received an invalid message.
0x7100802A	SnapView	SnapView received an invalid event from MPS.
0x7100802B	SnapView	Specified session does not exist.
0x7100802C	SnapView	Specified session already exists.
0x7100802D	SnapView	Read portion of Copy On Write failed.
0x7100802E	SnapView	Cannot change chunk size while sessions are active.
0x7100802F	SnapView	Cannot start a SnapView session without cache devices.
0x71008030	SnapView	Invalid device request received.
0x71008031	SnapView	Buffer of invalid size received.
0x71008032	SnapView	Invalid parameter received.
0x71008033	SnapView	Required TLD parameter is missing from command list.

0x71008034	SnapView	Chunk size value is invalid or missing.
0x71008035	SnapView	Functionality is not implemented.
MirrorView Error Codes		
Code	**Source**	**Description**
0x71008036	SnapView	Functionality is not implemented.
0x71008037	SnapView	SnapView session stopped because cache is full.
0x71008038	SnapView	SnapView session stopped because memory limit exceeded.
0x71008039	SnapView	SnapView session stopped because of host trespass.
0x71058000	MirrorView (Admin DLL)	Invalid database ID detected in admin DLL.
0x71058001	MirrorView (Admin DLL)	Invalid operation code detected in admin DLL.
0x71058002	MirrorView (Admin DLL)	Not currently used.
0x71058003	MirrorView (Admin DLL)	Not currently used.
0x71058004	MirrorView (Admin DLL)	Not currently used.
0x71058005	MirrorView (Admin DLL)	Not currently used.
0x71058006	MirrorView (Admin DLL)	Not currently used.
0x71058007	MirrorView (Admin DLL)	Not currently used.
0x71058008	MirrorView (Admin DLL)	Not currently used.
0x71058009	MirrorView (Admin DLL)	Not currently used.
0x7105800A	MirrorView (Admin DLL)	Not currently used.
0x7105800B	MirrorView (Admin DLL)	No currently used.
0x7105800C	MirrorView (Admin DLL)	Not currently used.
0x7105800D	MirrorView (Admin DLL)	Not currently used.
0x7105800E	MirrorView (Admin DLL)	Not currently used.
0x7105800F	MirrorView (Admin DLL)	Not currently used.
0x71058010	MirrorView (Admin DLL)	Not currently used.
0x71058011	MirrorView (Admin DLL)	Not currently used.

0x71058012	MirrorView (Admin DLL)	Not currently used.
0x71058013	MirrorView (Admin DLL)	Not currently used.
0x71058014	MirrorView (Admin DLL)	Not currently used.
0x71058015	MirrorView (Admin DLL)	Not currently used.
0x71058016	MirrorView (Admin DLL)	Not currently used.
0x71058017	MirrorView (Admin DLL)	Not currently used.
0x71058018	MirrorView (Admin DLL)	Not currently used.
0x71058019	MirrorView (Admin DLL)	Not currently used.
0x7105801A	MirrorView (Admin DLL)	Not currently used.
0x7105801B	MirrorView (Admin DLL)	Not currently used.
0x7105801C	MirrorView (Admin DLL)	Not currently used.
0x7105801D	MirrorView (Admin DLL)	Not currently used.
0x7105801E	MirrorView (Admin DLL)	Not currently used.
0x7105801F	MirrorView (Admin DLL)	Not currently used.
0x71058020	MirrorView (Admin DLL)	Not currently used.
0x71058021	MirrorView (Admin DLL)	Not currently used.
0x71058022	MirrorView (Admin DLL)	The LUN specified for the write intent log is already in use.
0x71058023	MirrorView (Admin DLL)	Not currently used.
0x71058024	MirrorView (Admin DLL)	Not currently used.
0x71058025	MirrorView (Admin DLL)	Not currently used.
0x71058026	MirrorView (Admin DLL)	Not currently used.
0x71058027	MirrorView (Admin DLL)	Not currently used.
0x71058028	MirrorView (Admin DLL)	Could not access mirroring device.
0x71058029	MirrorView (Admin DLL)	Request to create a mirror specifies an invalid LUN ID value.
0x7105802A	MirrorView (Admin DLL)	Request to add secondary image does not specify a mirror ID.
0x7105802B	MirrorView (Admin DLL)	Request to add a secondary image does not specify the image to add.
0x7105802C	MirrorView (Admin DLL)	Request to add a secondary image specifies an invalid LUN ID value.

0x7105802D	MirrorView (Admin DLL)	Request to get mirror properties specifies an invalid mirror ID.
0x7105802E	MirrorView (Admin DLL)	Request to get image properties specifies an invalid mirror ID.
0x7105802F	MirrorView (Admin DLL)	Request to get image properties specifies an invalid image ID.
0x71058030	MirrorView (Admin DLL)	Request to promote a secondary image specifies an invalid array ID for the old primary.
0x71058031	MirrorView (Admin DLL)	Request to promote a secondary image specifies an invalid array ID for the new primary.
0x71058032	MirrorView (Admin DLL)	Request to destroy a mirror specifies an invalid mirror ID.
0x71058033	MirrorView (Admin DLL)	Request to define write intent logs specifies an invalid LUN ID for SP A.
0x71058034	MirrorView (Admin DLL)	Request to define write intent logs specifies an invalid LUN ID for SP B.
0x71058035	MirrorView (Admin DLL)	Request to set mirror properties specifies an invalid mirror ID.
0x71058036	MirrorView (Admin DLL)	Request to remove a secondary image specifies an invalid mirror ID.
0x71058037	MirrorView (Admin DLL)	Request to remove a secondary image specifies an invalid ID for the target image.
0x71058038	MirrorView (Admin DLL)	Request to fracture a secondary image specifies an invalid mirror ID.
0x71058039	MirrorView (Admin DLL)	Request to fracture a secondary image specifies an invalid ID for the target image.
0x7105803A	MirrorView (Admin DLL)	Request to synchronize a secondary image specifies an invalid mirror ID.
0x7105803B	MirrorView (Admin DLL)	Request to synchronize a secondary image specifies an invalid ID for the target image.
0x7105803C	MirrorView (Admin DLL)	Request to set image properties specifies an invalid mirror ID.
0x7105803D	MirrorView (Admin DLL)	Request to set image properties specifies an invalid image ID.
0x7105803E	MirrorView (Admin DLL)	An invalid name was specified for a mirror.
0x7105803F	MirrorView (Admin DLL)	An invalid description was provided for a mirror.
0x71058040	MirrorView (Admin DLL)	An invalid role (primary or secondary) was specified.
0x71058041	MirrorView (Admin DLL)	An invalid state was specified.
0x71058042	MirrorView (Admin DLL)	An invalid recovery policy was specified.
0x71058043	MirrorView (Admin DLL)	An invalid image condition was specified.
0x71058044	MirrorView (Admin DLL)	An invalid value for the synchronization delay was specified.
0x71058045	MirrorView (Admin DLL)	An invalid value for the preferred SP was specified.
0x71058046	MirrorView (Admin DLL)	Not currently used.

0x71058047	MirrorView (Admin DLL)	No synchronization delay value was specified for an image.
0x71058048	MirrorView (Admin DLL)	Not currently used.
0x71058049	MirrorView (Admin DLL)	Not currently used.
0x7105804A	MirrorView (Admin DLL)	Request to destroy a mirror failed as we could not halt I/O to the mirror.
0x7105804B	MirrorView (Admin DLL)	Request to quiesce a LUN failed.
0x7105804C	MirrorView (Admin DLL)	Request to unquiesce a LUN failed.
0x7105804D	MirrorView (Admin DLL)	Request to unquiesce the mirror failed.
0x71058100	MirrorView (Admin Mgr)	Unable to either complete or back out of a bind operation.
0x71058101	MirrorView (Admin Mgr)	Unable to either complete or back out of a rebind operation.
0x71058102	MirrorView (Admin Mgr)	Unable to complete an unbind operation.
0x71058103	MirrorView (Admin Mgr)	Unable to either complete or back out of a create mirror operation.
0x71058104	MirrorView (Admin Mgr)	Failed to add a secondary image to a mirror.
0x71058105	MirrorView (Admin Mgr)	Not currently used.
0x71058106	MirrorView (Admin Mgr)	Unable to allocate memory during the update of a mirror.
0x71058107	MirrorView (Admin Mgr)	Unable to allocate memory required to commit changes.
0x71058108	MirrorView (Admin Mgr)	Not currently used.
0x71058109	MirrorView (Admin Mgr)	Invalid response returned from remote storage system from a create mirror request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105810A	MirrorView (Admin Mgr)	Invalid response returned from a remote storage system from a destroy mirror request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105810B	MirrorView (Admin Mgr)	Invalid response returned from peer SP from a create mirror request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105810C	MirrorView (Admin Mgr)	Invalid response returned from peer SP from a destroy mirror request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105810D	MirrorView (Admin Mgr)	Invalid response returned from peer SP from a mirror update request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105810E	MirrorView (Admin Mgr)	Invalid response returned from peer SP from a get consumable request. Make sure that both storage systems are running compatible revisions of mirroring software.

0x7105810F	MirrorView (Admin Mgr)	Invalid response returned from peer SP from a set driver properties request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058110	MirrorView (Admin Mgr)	Invalid response returned from peer SP from an update state request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058111	MirrorView (Admin Mgr)	Not currently used.
0x71058112	MirrorView (Admin Mgr)	The storage system hosting the primary image is unavailable.
0x71058113	MirrorView (Admin Mgr)	Invalid revision in create mirror request received from remote storage system. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058114	MirrorView (Admin Mgr)	Invalid revision in destroy mirror request received from remote storage system. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058115	MirrorView (Admin Mgr)	Invalid revision in promotion request received from remote storage system. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058116	MirrorView (Admin Mgr)	Invalid revision in update mirror request received from remote storage system. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058117	MirrorView (Admin Mgr)	Invalid revision in create mirror request received from peer SP. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058118	MirrorView (Admin Mgr)	Invalid revision in destroy mirror request received from peer SP. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058119	MirrorView (Admin Mgr)	Invalid revision in update mirror request received from peer SP. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105811A	MirrorView (Admin Mgr)	Invalid revision in set driver properties request received from peer SP. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105811B	MirrorView (Admin Mgr)	Invalid revision in stage update request received from peer SP. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105811C	MirrorView (Admin Mgr)	Failed to remove the specified image from the mirror, as it is the primary image.
0x7105811D	MirrorView (Admin Mgr)	The ‘staged update’ pointer was not NULL when it should have been. For debugging use only.
0x7105811E	MirrorView (Admin Mgr)	A request to bind mirroring into a device stack specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105811F	MirrorView (Admin Mgr)	A request to bind mirroring into a device stack specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058120	MirrorView (Admin Mgr)	A request to unbind mirroring from a device stack specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.

0x71058121	MirrorView (Admin Mgr)	A request to unbind mirroring from a device stack specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058122	MirrorView (Admin Mgr)	Not currently used.
0x71058123	MirrorView (Admin Mgr)	A request to enumerate objects specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058124	MirrorView (Admin Mgr)	A request to enumerate objects specified a buffer with an invalid revision number. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058125	MirrorView (Admin Mgr)	A request to get generic object properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058126	MirrorView (Admin Mgr)	A request to get generic object properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058127	MirrorView (Admin Mgr)	A request to create a mirror specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058128	MirrorView (Admin Mgr)	A request to create a mirror specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058129	MirrorView (Admin Mgr)	A request to destroy a mirror specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105812A	MirrorView (Admin Mgr)	A request to destroy a mirror specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105812B	MirrorView (Admin Mgr)	A request to enumerate mirrors specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105812C	MirrorView (Admin Mgr)	A request to enumerate mirrors specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105812D	MirrorView (Admin Mgr)	A request to add a secondary image specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105812E	MirrorView (Admin Mgr)	A request to add a secondary image specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105812F	MirrorView (Admin Mgr)	A request to remove a secondary image specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058130	MirrorView (Admin Mgr)	A request to remove a secondary image specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058131	MirrorView (Admin Mgr)	A request to fracture an image specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.

0x71058132	MirrorView (Admin Mgr)	A request to fracture an image specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058133	MirrorView (Admin Mgr)	A request to synchronize an image specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058134	MirrorView (Admin Mgr)	A request to synchronize an image specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058135	MirrorView (Admin Mgr)	A request to get mirror properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058136	MirrorView (Admin Mgr)	A request to get mirror properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058137	MirrorView (Admin Mgr)	A request to set mirror properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058138	MirrorView (Admin Mgr)	A request to set mirror properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058139	MirrorView (Admin Mgr)	A request to get image properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105813A	MirrorView (Admin Mgr)	A request to get image properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105813B	MirrorView (Admin Mgr)	A request to set image properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105813C	MirrorView (Admin Mgr)	A request to set image properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105813D	MirrorView (Admin Mgr)	A request to enumerate available objects specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105813E	MirrorView (Admin Mgr)	A request to enumerate available objects specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x7105813F	MirrorView (Admin Mgr)	A request to promote a secondary image specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058140	MirrorView (Admin Mgr)	A request to promote a secondary image specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058141	MirrorView (Admin Mgr)	A request to set driver properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058142	MirrorView (Admin Mgr)	A request to set driver properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.

0x71058143	MirrorView (Admin Mgr)	A request to get driver properties specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058144	MirrorView (Admin Mgr)	A request to get driver properties specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058145	MirrorView (Admin Mgr)	A request to halt I/O to a mirror specified a buffer of invalid size. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058146	MirrorView (Admin Mgr)	A request to halt I/O to a mirror specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058147	MirrorView (Admin Mgr)	A request to shut down mirroring specified a buffer of invalid size. Make sure that all components are built from compatible revisions of mirroring software.
0x71058148	MirrorView (Admin Mgr)	A request to shut down mirroring specified a buffer with an invalid revision. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058149	MirrorView (Admin Mgr)	A request to fake a lost contact event specified a buffer of invalid size. For internal debugging use only.
0x7105814A	MirrorView (Admin Mgr)	A request to fake a lost contact event specified a buffer with an invalid revision. For internal debugging use only.
0x7105814B	MirrorView (Admin Mgr)	A request to modify debug parameters specified a buffer of invalid size. For internal debugging use only.
0x7105814C	MirrorView (Admin Mgr)	A request to modify debug parameters specified a buffer with an invalid revision. For internal debugging use only.
0x7105814D	MirrorView (Admin Mgr)	A request to get performance data specified a buffer of invalid size. For internal use only.
0x7105814E	MirrorView (Admin Mgr)	A request to get performance data specified a buffer with an invalid revision. For internal debugging use only.
0x7105814F	MirrorView (Admin Mgr)	An unrecognized request was made to the mirroring driver. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058150	MirrorView (Admin Mgr)	Received a request from our peer SP to update a mirror which is unknown to us
0x71058151	MirrorView (Admin Mgr)	Insufficient memory to stage the update from our peer SP
0x71058152	MirrorView (Admin Mgr)	Invalid response returned from remote storage system from a promote image request. Make sure that both storage systems are running compatible revisions of mirroring software.
0x71058153	MirrorView (Admin Mgr)	Promotion failed, since the old mirror couldn't be deleted and recreated.
0x71058154	MirrorView (Admin Mgr)	Failed to request remote storage system to create a mirror.
0x71058155	MirrorView (Admin Mgr)	Failed to request remote storage system to destroy a mirror.

0x71058156	MirrorView (Admin Mgr)	Failed to request remote storage system to update a mirror.
0x71058157	MirrorView (Admin Mgr)	Failed to request our peer SP to create a mirror.
0x71058158	MirrorView (Admin Mgr)	Failed to request our peer SP to destroy a mirror.
0x71058159	MirrorView (Admin Mgr)	Failed to request our peer SP to update a mirror.
0x7105815A	MirrorView (Admin Mgr)	Failed to request our peer SP to get consumable information.
0x7105815B	MirrorView (Admin Mgr)	Attempt to ping a remote storage system failed.
0x7105815C	MirrorView (Admin Mgr)	Attempt to ping primary storage system for a mirror failed
0x7105815D	MirrorView (Admin Mgr)	Failed to request our peer SP to update driver properties.
0x7105815E	MirrorView (Admin Mgr)	Failed to request our peer SP to stage update information.
0x7105815F	MirrorView (Admin Mgr)	Failed to request remote storage system to promote an image.
0x71058160	MirrorView (Admin Mgr)	Maximum number of mirrors exceeded for use of write intent log.
0x71058161	MirrorView (Admin Mgr)	Can't deallocate driver properties (write intent logs) as there are none allocated.
0x71058162	MirrorView (Admin Mgr)	Failed to promote a secondary image. The new primary storage system has no write intent logs defined, but the mirror is configured to use the WIL.
0x71058163	MirrorView (Admin Mgr)	Failed to commit an update on our peer SP.
0x71058164	MirrorView (Admin Mgr)	Failed to stage updated data to our peer SP.
0x71058165	MirrorView (Admin Mgr)	Not currently used.
0x71058166	MirrorView (Admin Mgr)	Attempted to stage an update while another update is still (apparently) in progress.
0x71058167	MirrorView (Admin Mgr)	No memory available to complete a local update.
0x71058168	MirrorView (Admin Mgr)	Failed to stage local update information to our peer SP.
0x71058169	MirrorView (Admin Mgr)	Failed to commit local update information on our peer SP.
0x7105816A	MirrorView (Admin Mgr)	An update can't be propagated to a remote storage system as it is currently unreachable.
0x7105816B	MirrorView (Admin Mgr)	Invalid size or revision received from our peer SP in response to a quiesce request.
0x7105816C	MirrorView (Admin Mgr)	Failed to send a quiesce request to our peer SP.
0x7105816D	MirrorView (Admin Mgr)	Not currently used.
0x7105816E	MirrorView (Admin Mgr)	Failed to quiesce one or more LUNs on the local SP.
0x7105816F	MirrorView (Admin Mgr)	Invalid revision on a request from our peer SP to quiesce a LUN.

0x71058170	MirrorView (Admin Mgr)	A quiesce request received from our peer SP failed.
0x71058171	MirrorView (Admin Mgr)	A request to our peer SP to quiesce one or more LUNs failed.
0x71058172	MirrorView (Admin Mgr)	Failed to open PSM LUN during Admin initialization.
0x71058173	MirrorView (Admin Mgr)	Failed to enumerate the current list of objects.
0x71058174	MirrorView (Admin Mgr)	Failed to enumerate the current list of mirrors.
0x71058175	MirrorView (Admin Mgr)	Failed to get driver properties.
0x71058176	MirrorView (Admin Mgr)	Failed to get the generic properties of an object.
0x71058177	MirrorView (Admin Mgr)	Failover manager could not create a new mirror.
0x71058178	MirrorView (Admin Mgr)	Config manager could not add a new mirror.
0x71058179	MirrorView (Admin Mgr)	Failed to obtain current progress of an image synchronization.
0x7105817A	MirrorView (Admin Mgr)	Database subsystem initialization failed.
0x7105817B	MirrorView (Admin Mgr)	Failed to read current list of consumables during database subsystem initialization.
0x7105817C	MirrorView (Admin Mgr)	Failed to read current list of mirrors during database subsystem initialization.
0x7105817D	MirrorView (Admin Mgr)	Problem encountered attempting to update a remote mirror.
0x71058180	MirrorView (Admin Mgr)	Max number of mirrors created when using write intent log.
0x71058181	MirrorView (Admin Mgr)	Max number of LUNs bound for Mirroring while using write intent log.
0x7105819A	MirrorView (Admin Mgr)	Internal error with respect to buffer size updating peer SP. Most likely due to incorrect version of software on peer installed. Call your service provider.
0x7105819B	MirrorView (Admin Mgr)	RM Transport updating the peer deadlock prevention flag. Status: xxx. Wrong revision of MirrowView on one SP.
0x7105819C	MirrorView (Admin Mgr)	Internal error.
0xE105819D	MirrorView (Admin Mgr)	Failed to validate a request received from a remote K10. One of the SPs has wrong software revision installed. No message displayed.
0x7105819E	MirrorView (Admin Mgr)	Two MirrorView Admin Operations attempted to access global lock in a manner that could cause a deadlock and SP panic. To prevent deadlock, remote image operation was cancelled for this mirror. If attempting to add/delete a secondary image, try again.
0x71058200	MirrorView Config Mgr	Could not add all existing mirrors to the failover manager's watch list on driver startup.
0x71058201	MirrorView Config Mgr	Could not add all existing mirrors to the config manager's lists on driver startup.

0x71058202	MirrorView Config Mgr	An invalid image phase was detected while we were attempting to schedule an image synchronization.
0x71058203	MirrorView Config Mgr	An unexpected fail status was returned by the mirror manager when we attempted to start an image synchronization.
0x71058204	MirrorView Config Mgr	An unrecognized image condition was detected.
0x71058205	MirrorView Config Mgr	Failed to locate the target mirror during a trespass operation. This is either an internal driver consistency problem or the software incorrectly allowed deletion of the mirror.
0x71058206	MirrorView Config Mgr	Not currently used.
0x71058207	MirrorView Config Mgr	Failed to find an image in the mirror data structure, when it should have existed.
0x71058208	MirrorView Config Mgr	The config manager generated an invalid bucket number.
0x71058209	MirrorView Config Mgr	Unexpected error updating the config manager's hash table.
0x7105820A	MirrorView Config Mgr	Insufficient memory available to add a new mirror.
0x7105820B	MirrorView Config Mgr	Invalid image state detected during an add secondary operation.
0x7105820C	MirrorView Config Mgr	Unrecognized mirror operation detected while setting initial image state.
0x7105820D	MirrorView Config Mgr	Failed to gain exclusive access to the mirror during a destroy operation.
0x7105820E	MirrorView Config Mgr	Failed to gain exclusive access to the mirror during an add/remove secondary operation.
0x7105820F	MirrorView Config Mgr	Not currently used.
0x71058210	MirrorView Config Mgr	Unknown image condition detected during an administrative fracture operation.
0x71058211	MirrorView Config Mgr	The mirror manager unexpectedly failed during a fracture operation.
0x71058212	MirrorView Config Mgr	Unknown image condition detected during a synchronize operation.
0x71058213	MirrorView Config Mgr	A synchronization operation failed with an unexpected status.
0x71058214	MirrorView Config Mgr	Unexpected failure while fracturing an image following a media failure on the secondary.
0x71058215	MirrorView Config Mgr	Unrecognized state value detected during an attempted state change.
0x71058216	MirrorView Config Mgr	Unexpected image condition detected while handling an image becoming unreachable.
0x71058217	MirrorView Config Mgr	Unexpected image condition detected while handling an image becoming reachabl.e
0x71058218	MirrorView Config Mgr	Insufficient memory to process a state change of a remote storage system.
0x71058219	MirrorView Config Mgr	Not currently used.

0x7105821A	MirrorView Config Mgr	Insufficient memory available to process completion of a sync I/O.
0x7105821B	MirrorView Config Mgr	Insufficient memory available to process a media failure error.
0x7105821C	MirrorView Config Mgr	Failed to locate a mirror for which we are trying to handle a media failure.
0x7105821D	MirrorView Config Mgr	Insufficient memory available to handle an incoming write request.
0x7105821E	MirrorView Config Mgr	Failed to locate mirror for an incoming write request. Indicates an internal driver consistency failure.
0x7105821F	MirrorView Config Mgr	Insufficient memory available to handle a synchronization state update.
0x71058220	MirrorView Config Mgr	Insufficient memory available to handle completion of a synchronization operation.
0x71058221	MirrorView Config Mgr	Insufficient memory available to take ownership of a mirror.
0x71058222	MirrorView Config Mgr	Unrecognized reason code detected while attempting to take ownership of a mirror.
0x71058223	MirrorView Config Mgr	Failed to locate the target mirror during a trespass operation.
0x71058224	MirrorView Config Mgr	Invalid image condition detected during a trespass operation.
0x71058225	MirrorView Config Mgr	Failed to locate the target mirror while processing a failure of our peer SP.
0x71058226	MirrorView Config Mgr	Invalid image phase detected while taking control of an image.
0x71058227	MirrorView Config Mgr	Invalid image condition detected while handling a failure of our peer SP.
0x71058228	MirrorView Config Mgr	Unrecognized image state value detected internally.
0x71058229	MirrorView Config Mgr	Insufficient memory available to give up control of a mirror.
0x7105822A	MirrorView Config Mgr	Failed to locate the mirror we're attempting to give away.
0x7105822B	MirrorView Config Mgr	Not currently used.
0x7105822C	MirrorView Config Mgr	Not currently used.
0x7105822D	MirrorView Config Mgr	Invalid image state detected while handling a mirror failure.
0x7105822E	MirrorView Config Mgr	Unexpected image phase detected while attempting to add a synchronization request.
0x7105822F	MirrorView Config Mgr	Unrecognized image state detected while preparing to fracture an image.
0x71058230	MirrorView Config Mgr	Attempted to schedule synchronization of an already synchronized image.
0x71058231	MirrorView Config Mgr	Attempt to create a mirror with too many pieces (LUNs) in the primary image. Currently the software supports mirrors with one piece only.
0x71058232	MirrorView Config Mgr	Attempt to create a mirror with too many pieces (LUNs) in the secondary image. Currently the software supports mirrors with one piece only.

0x71058233	MirrorView Config Mgr	Can't remove the mirroring driver from a LUN stack, as it is currently part of a mirror.
0x71058234	MirrorView Config Mgr	Not currently used.
0x71058235	MirrorView Config Mgr	Can't remove the mirroring driver from a LUN stack, as it is currently synchronizing.
0x71058236	MirrorView Config Mgr	Can't find a mirror data structure during a shutdown request.
0x71058237	MirrorView Config Mgr	Failed to locate an expected image in our internal data structures. At least one I/O must be directed to a mirror before a fracture or synchronize can succeed.
0x71058238	MirrorView Config Mgr	Can't fracture an image as we're not the primary storage system and/or controlling SP for the mirror.
0x71058239	MirrorView Config Mgr	Image is already administratively fractured.
0x7105823A	MirrorView Config Mgr	Can't administratively fracture the image due to its image condition.
0x7105823B	MirrorView Config Mgr	Can't start synchronization as we're not the primary storage system and/or controlling SP for the mirror.
0x7105823C	MirrorView Config Mgr	Can't start synchronization from the current image condition.
0x7105823D	MirrorView Config Mgr	Mirror not found in config manager's database.
0x7105823E	MirrorView Config Mgr	Image not found in the specified mirror.
0x7105823F	MirrorView Config Mgr	The local array is not the primary storage system for the mirror.
0x71058240	MirrorView Config Mgr	Unable to generate a unique name for an exported device.
0x71058241	MirrorView Config Mgr	Not currently used.
0x71058242	MirrorView Config Mgr	Not currently used.
0x71058243	MirrorView Config Mgr	Attempt to destroy a mirror which still has at least one secondary image.
0x71058244	MirrorView Config Mgr	Attempt to destroy a mirror for which we're not the primary storage system.
0x71058245	MirrorView Config Mgr	Mirroring driver is currently operating in degraded mode after a previous failure.
0x71058246	MirrorView Config Mgr	A remote image is marked as in-sync, but has a stale cookie. The image will require a full resynchronization.
0x71058247	MirrorView Config Mgr	Attempt to remove a secondary image while it is being synchronized.
0x71058248	MirrorView Config Mgr	A secondary image reported a media failure.
0x71058249	MirrorView Config Mgr	Attempt to synchronize an image that is inactive.
0x7105824A	MirrorView Config Mgr	An attempt was made to remove a secondary image that is queued to be synchronized. The image needs to be administratively fractured before being removed

0x7105824B	MirrorView Config Mgr	An attempt was made to destroy a mirror, but the primary is still active. Before you can destroy the mirror, you must deactivate it.
0x7105824C	MirrorView Config Mgr	The secondary LUN is not the same size as the primary image LUN.
0x7105824D	MirrorView Config Mgr	Unable to remove the consistent image. Fracture the image before removing it.
0x71058300	MirrorView DB Mgr	Failed to store an updated administrative action count to PSM. This will result in the driver being degraded, since the software cannot create reliable cookies.
0x71058301	MirrorView DB Mgr	Failed to store updated driver properties to PSM. This will degrade the driver.
0x71058302	MirrorView DB Mgr	Insufficient memory available to add a new consumable.
0x71058303	MirrorView DB Mgr	Not currently used.
0x71058304	MirrorView DB Mgr	Insufficient memory available to write consumables list to PSM.
0x71058305	MirrorView DB Mgr	Insufficient memory available to read consumables list from PSM.
0x71058306	MirrorView DB Mgr	Unrecognized revision number for consumables list in PSM.
0x71058307	MirrorView DB Mgr	Incorrect amount of data read from PSM for consumables list header.
0x71058308	MirrorView DB Mgr	Incorrect amount of data read from PSM for a consumable item.
0x71058309	MirrorView DB Mgr	Not currently used.
0x7105830A	MirrorView DB Mgr	Database manager's mirror data structure has an unexpected size.
0x7105830B	MirrorView DB Mgr	Unable to find mirror with the specified ID.
0x7105830C	MirrorView DB Mgr	Unable to find an image with the specified ID in the given mirror.
0x7105830D	MirrorView DB Mgr	Unable to find the specified exported device based on its name.
0x7105830E	MirrorView DB Mgr	Unable to find the specified exported device based on its WWID.
0x7105830F	MirrorView DB Mgr	Unable to initialize the database manager from PSM.
0x71058310	MirrorView DB Mgr	Insufficient memory available to read mirroring driver data from PSM.
0x71058311	MirrorView DB Mgr	Incorrect number of bytes returned while reading driver version information from PSM.
0x71058312	MirrorView DB Mgr	Incorrect number of bytes returned while reading driver information from PSM.
0x71058313	MirrorView DB Mgr	Unrecognized revision of driver information read from PSM.
0x71058314	MirrorView DB Mgr	Not currently used.
0x71058315	MirrorView DB Mgr	Failed to write driver information to PSM. Cannot currently be returned or logged.

0x71058316	MirrorView DB Mgr	Insufficient memory available to write driver information to PSM.
0x71058317	MirrorView DB Mgr	Not currently used.
0x71058318	MirrorView DB Mgr	Not currently used.
0x71058319	MirrorView DB Mgr	Failed to increment administrative action count. Cannot currently be returned or logged.
0x7105831A	MirrorView DB Mgr	Failed to set write intent log partitions.
0x7105831B	MirrorView DB Mgr	Write intent log partitions are not currently defined. Cannot currently be returned or logged.
0x7105831C	MirrorView DB Mgr	Not currently used.
0x7105831D	MirrorView DB Mgr	Insufficient memory to add a new mirror.
0x7105831E	MirrorView DB Mgr	NULL pointer detected while attempting to remove a mirror from the global list
0x7105831F	MirrorView DB Mgr	NULL pointer detected while attempting to delete a mirror
0x71058320	MirrorView DB Mgr	Not currently used.
0x71058321	MirrorView DB Mgr	Insufficient memory available to write mirror data area to PSM.
0x71058322	MirrorView DB Mgr	Error writing mirror data area to PSM.
0x71058323	MirrorView DB Mgr	Insufficient memory available to read mirror data area from PSM.
0x71058324	MirrorView DB Mgr	Insufficient memory available to read mirror data area from PSM.
0x71058325	MirrorView DB Mgr	Failed to read complete mirror data area from PSM.
0x71058326	MirrorView DB Mgr	Insufficient memory available to list PSM contents.
0x71058327	MirrorView DB Mgr	Failed to read mirror data area from PSM.
0x71058328	MirrorView DB Mgr	Failed to list contents of PSM.
0x71058329	MirrorView DB Mgr	Failed to open PSM device.
0x7105832A	MirrorView DB Mgr	Failed to locate mirror data area(s) in PSM.
0x7105832B	MirrorView DB Mgr	Failed to retrieve number of existing entries from PSM.
0x7105832C	MirrorView DB Mgr	Open of PSM mirror data area failed.
0x7105832D	MirrorView DB Mgr	Failure attempting to read mirror data area from PSM.
0x7105832E	MirrorView DB Mgr	Incorrect amount of data read from consumables database, and the version number on the data is incorrect.

0x7105832F	MirrorView DB Mgr	Memory budget already exceeded during driver initialization.
0x71058330	MirrorView DB Mgr	Not currently used.
0x71058331	MirrorView DB Mgr	Not currently used.
0x71058332	MirrorView DB Mgr	Not currently used.
0x71058333	MirrorView DB Mgr	Not currently used.
0x71058334	MirrorView DB Mgr	Detected an incomplete write of driver data header information to PSM.
0x71058335	MirrorView DB Mgr	Detected an incomplete write of driver data to PSM.
0x71058336	MirrorView DB Mgr	Unable to either commit data to PSM or roll back operation during mirror creation.
0x71058337	MirrorView DB Mgr	Failed to write mirror data area to PSM.
0x71058338	MirrorView DB Mgr	Failed to write version information for mirror data area to PSM.
0x71058339	MirrorView DB Mgr	Detected an incomplete read of the mirror data area version information.
0x7105833A	MirrorView DB Mgr	Unrecognized revision read from PSM mirror data area.
0x7105833B	MirrorView DB Mgr	Unable to find a local image of the specified mirror.
0x7105833C	MirrorView DB Mgr	Failed to close a PSM data area.
0x7105833D	MirrorView DB Mgr	Unable to open Write Intent Log LUN.
0x7105833E	MirrorView DB Mgr	Unable to open Write Intent Log LUN.
0x7105833F	MirrorView DB Mg	Unable to set the compatibility mode, driver will be degraded. You should reboot the SP.
0x71058340	MirrorView DB Mg	Unable to load mirrors during rollback, driver will be degraded. Reboot the SP.
0x71058341	MirrorView DB Mg	Problem creating mirror during MirrorView rollback.
0x71058342	MirrorView DB Mg	Possible problem with PSM during rollback.
0x71058343	MirrorView DB Mg	Possible problem with PSM during rollback.
0x71058344	MirrorView DB Mg	Problem inside rollback code for PSM.
0x71058345	MirrorView DB Mg	PSM contents NULL when attempted to read.
0x71058346	MirrorView DB Mg	Attempting to rollback and found mirror list empty when it should have an entry.
0x71058347	MirrorView DB Mg	Attempting to rollback and found mirror list empty when it should have an entry.
0x71058348	MirrorView DB Mg	Unable to add mirror during rollback.
0x71058349	MirrorView DB Mg	Wrong number of mirrors to be adjusted.

0x7105834A	MirrorView DB Mg	Unable to open PSM during rollback.
0x7105834B	MirrorView DB Mg	Found two areas in PSM we cannot open, so unable to proceed with rollback.
0x7105834C	MirrorView DB Mg	Unable to open PSM during rollback to add a mirror.
0x7105834D	MirrorView DB Mg	Unable to close PSM area during rollback.
0x7105834E	MirrorView DB Mg	Unable to read from PSM during rollback.
0x7105834F	MirrorView DB Mg	Unable to read from mirror data area during rollback
0x71058350	MirrorView DB Mg	Attempting to read the mirror data area during rollback and unable to allocate memory.
0x71058351	MirrorView DB Mg	Attempting to read the mirror data area during rollback and unable to allocate memory.
0x71058352	MirrorView DB Mg	Unable to open PSM area during rollback.
0x71058353	MirrorView DB Mg	During read of PSM in rollback, incorrect number of bytes returned.
0x71058354	MirrorView DB Mgr	During read of PSM during rollback, found incorrect revision number.
0x71058355	MirrorView DB Mg	Failure in reading PSM during rollback.
0x71058356	MirrorView DB Mgr	Failure to read correct number of bytes during rollback
0x71058357	MirrorView DB Mg	Unable to add mirror during rollback.
0x71058358	MirrorView DB Mg	Unable to add mirror during rollback.
0x71058359	MirrorView DB Mg	Unable to update config during rollback.
0x7105835A	MirrorView DB Mgr	Attempted to add more than one mirror during rollback.
0x7105835B	MirrorView DB Mg	Unable to determine number of mirrors during rollback.
0x71058400	MirrorView Failover Mgr	Corrupted hash table detected in the failover manager.
0x71058401	MirrorView Failover Mgr	Consistency failure detected while updating failover manager data structures.
0x71058402	MirrorView Failover Mgr	Corrupted hash table detected in the failover manager.
0x71058403	MirrorView Failover Mgr	Unexpected fail status while setting up a ping of an unreachable storage system.
0x71058404	MirrorView Failover Mgr	Unexpected fail status while setting up a ping of an unreachable SP.
0x71058405	MirrorView Failover Mgr	Failed to locate the necessary mirror data structures while refreshing the cookie.
0x71058406	MirrorView Failover Mgr	Internal consistency failure with the transport mechanism while refreshing the cookie.
0x71058407	MirrorView Failover Mgr	Received a ping response for an unknown mirror.

0x71058408	MirrorView Failover Mgr	Internal consistency failure in failover manager's handling of pings.
0x71058409	MirrorView Failover Mgr	Internal consistency failure in failover manager's handling of pings.
0x7105840A	MirrorView Failover Mgr	Internal consistency failure in failover manager's handling of pings.
0x7105840B	MirrorView Failover Mgr	Ping response version is incompatible with the ping request.
0x7105840C	MirrorView Failover Mgr	Unrecognized event type for incoming ping request.
0x7105840D	MirrorView Failover Mgr	Unrecognized event type for incoming ping response.
0x7105840E	MirrorView Failover Mgr	Insufficient memory to obtain reference to storage system/mirror pair in failover manager.
0x7105840F	MirrorView Failover Mgr	Insufficient memory for new element in storage-system activity table.
0x71058410	MirrorView Failover Mgr	Failure to locate storage system in the storage-system activity table.
0x71058411	MirrorView Failover Mgr	Failure to insert storage system in storage-system activity table.
0x71058412	MirrorView Failover Mgr	Failed to locate mirror in the storage-system activity table.
0x71058413	MirrorView Failover Mgr	Failed to locate storage system in the storage system activity table.
0x71058500	MirrorView Mirror Mgr	Failed to initialize lock necessary for trespass operations.
0x71058501	MirrorView Mirror Mgr	Failed to open lock necessary for trespass operations.
0x71058502	MirrorView Mirror Mgr	Failed to close lock necessary for trespass operations.
0x71058503	MirrorView Mirror Mgr	Unexpected authority value while giving up control of a mirror.
0x71058504	MirrorView Mirror Mgr	Logic flaw caused a semaphore to be released too often while giving up control of a mirror.
0x71058505	MirrorView Mirror Mgr	Unexpected authority value while taking over control of a mirror.
0x71058506	MirrorView Mirror Mgr	Logic flaw caused a semaphore to be released too often.
0x71058507	MirrorView Mirror Mgr	Logic flaw caused a semaphore to be released too often.
0x71058508	MirrorView Mirror Mgr	Invalid mode detected while converting a DLS lock.
0x71058509	MirrorView Mirror Mgr	Unrecognized event detected in the DLS callback handler.
0x7105850A	MirrorView Mirror Mgr	Insufficient memory available to send fracture logs to our peer SP.
0x7105850B	MirrorView Mirror Mgr	Error initializing bitmap to send fracture logs to our peer SP.
0x7105850C	MirrorView Mirror Mgr	Error copying bitmap while attempting to send fracture logs to our peer SP.

0x7105850D	MirrorView Mirror Mgr	Insufficient memory to send config data to our peer SP.
0x7105850E	MirrorView Mirror Mgr	Unrecognized authority value detected in license.
0x7105850F	MirrorView Mirror Mgr	Insufficient memory to create internal work item while taking control of a mirror.
0x71058510	MirrorView Mirror Mgr	Detected a consistency failure from the config manager about the type of sync required.
0x71058511	MirrorView Mirror Mgr	Failed to find the consumable corresponding to the specified mirror.
0x71058512	MirrorView Mirror Mgr	Not currently used.
0x71058513	MirrorView Mirror Mgr	Detected an invalid fracture state while attempting to report synchronization progress.
0x71058514	MirrorView Mirror Mgr	Failed to mirror write due to a missing information about the secondary image.
0x71058515	MirrorView Mirror Mgr	Secondary write request rejected as the request didn't come from the primary.
0x71058516	MirrorView Mirror Mgr	Secondary write request rejected as the target device is not ready.
0x71058517	MirrorView Mirror Mgr	Insufficient memory to allocate context resources – write to secondary image rejected.
0x71058518	MirrorView Mirror Mgr	Insufficient memory to allocate IRP – write to secondary image rejected.
0x71058519	MirrorView Mirror Mgr	Insufficient memory to allocate MDL – write to secondary image rejected.
0x7105851A	MirrorView Mirror Mgr	Simulated immediate I/O failure on the secondary. Used only for debugging purposes on the checked build.
0x7105851B	MirrorView Mirror Mgr	Simulated I/O failure on the callback path of the secondary. Used only for debugging purposes on the checked build.
0x7105851C	MirrorView Mirror Mgr	Secondary image is not currently accepting I/O requests.
0x7105851D	MirrorView Mirror Mgr	Config manager couldn't pend or defer the operation so reboots the SP.
0x7105851E	MirrorView Mirror Mgr	During a failure operation, an unexpected config status was encountered.
0x7105851F	MirrorView Mirror Mgr	Unable to locate the mirror while attempting to lazy trespass.
0x71058520	MirrorView Mirror Mgr	An improper transport event was received and the SP will panic.
0x71058521	MirrorView Mirror Mgr	Attempted a lazy trespass and not enough memory on the system.
0x71058522	MirrorView Mirror Mgr	Unable to assign ownership to mirror.
0x71058523	MirrorView Mirror Mgr	Unable to determine size of mirror by WWID.
0x71058524	MirrorView Mirror Mgr	Error during synchronization, mirror device not ready.
0x71058525	MirrorView Mirror Mgr	Unable to allocate the write intent memory.

0x71058526	MirrorView Mirror Mgr	Mirror failed to allocate the write intent memory.
0x71058527	MirrorView Mirror Mgr	Unable to assign ownership of all mirrors, not enough memory.
0x71058528	MirrorView Mirror Mgr	Unable to quiesce the MirrorView driver within three minutes.
0x71058529	MirrorView Mirror Mgr	Unable to add secondary image.
0x7105852A	MirrorView Mirror Mgr	Unable to assign ownership of all mirrors, not enough memory.
0x7105852B	MirrorView Mirror Mgr	Unable to verify the remote storage system version during an add secondary operation. Check the MirrorView connection to the secondary storage system.This text is logged to the event log, and the event is returned to Navisphere.
0x7105852C	MirrorView Mirror Mgr	Failed attempt to read Write Intent Log. Turn off use of Write Intent Log by all mirrors and then reallocate the Write Intent Log on this storage system.
0x7105852D	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x7105852E	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x7105852F	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x71058530	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x71058531	MirrorView Mirror Mgr	Internal error code cannot acquire semaphore. SP will reboot.
0x71058532	MirrorView Mirror Mgr	Internal error code - invalid slave license. SP will reboot.
0x71058533	MirrorView Mirror Mgr	Internal error code- invalid slave license. SP will reboot.
0x71058534	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x71058535	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x71058536	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x71058537	MirrorView Mirror Mgr	Internal error code. SP will reboot.
0x71058538	MirrorView Mirror Mgr	MirrorView problem determining sync progress. SP will reboot. Problem should be automatically corrected after reboot.
0x71058539	MirrorView Mirror Mgr	Value used to calculate extent bad. SP will reboot and correct the problem.
0x7105853C	MirrorView Mirror Mgr	MirrorView Internal error. MirrorView was unable to read from a disk block and is adjusting the synchronization accordingly to proceed.
0x71058600	MirrorView System Mgr	Mirroring driver load failed.
0x71058601	MirrorView System Mgr	Insufficient memory available to load driver.

0x71058602	MirrorView System Mgr	Memory initialization in MirrorView failed with status = *pool-init -status*. SP will reboot.
0x71058603	MirrorView System Mgr	MirrorView cannot determine IRP stack size. Loading of the Remote Mirror driver failed. SP will reboot.
0x71058700	MirrorView Transp Mgr	Attempt to open a CMI conduit that's already open.
0x71058701	MirrorView Transp Mgr	Unexpected failure attempting to close a CMI conduit.
0x71058702	MirrorView Transp Mgr	Unexpected failure attempting to transmit data down a CMI conduit.
0x71058703	MirrorView Transp Mgr	Unexpected failure attempting to release received message resources.
0x71058704	MirrorView Transp Mgr	Invalid CMI buffer size detected.
0x71058705	MirrorView Transp Mgr	Unexpected CMI error status on transmitting CMI message.
0x71058706	MirrorView Transp Mgr	Unexpected failure on the conduit closed callback path.
0x71058707	MirrorView Transp Mgr	Received a response before the transport manager was even initialized.
0x71058708	MirrorView Transp Mgr	Attempted to release message resources before the transport manager was even initialized.
0x71058709	MirrorView Transp Mgr	Unexpected MPS close event received by the transport manager.
0x7105870A	MirrorView Transp Mgr	Unrecognized MPS event received by the transport manager.
0x7105870B	MirrorView Transp Mgr	Insufficient memory available for asynchronous response processing.
0x7105870C	MirrorView Transp Mgr	Detected a duplicate MPS mailbox name in use.
0x7105870D	MirrorView Transp Mgr	Unrecognized CMI transfer type detected.
0x7105870E	MirrorView Transp Mgr	Unrecognized CMI callback event detected.
0x7105870F	MirrorView Transp Mgr	Insufficient memory to allocate transport extension data structure.
0x71058710	MirrorView Transp Mgr	Could not access the CMI device object.
0x71058711	MirrorView Transp Mgr	Insufficient memory to allow command delivery. Caller will time out and may retry later.
0x71058712	MirrorView Transp Mgr	Command to another SP timed out.
0x71058713	MirrorView Transp Mgr	Driver is degraded so no response sent.

0x71058714	MirrorView Transp Mgr	Invalid Remote Mirror transport command. SP will reboot and should automatically correct the issue.
0x71058800	MirrorView	Two promote operations cannot be in process at same time. To prevent deadlock, remote image was not added to promoted mirror. The text above is entered in the event log. Do not attempt to promote two secondary images at once.
MPS (Message Passing Service) Error Codes		
Code	**Source**	**Meaning**
0x71108000	MPS (Event Log)	The MPS driver failed to load. Examine the corresponding K10_MPS_LOG_LOAD_ERROR_MESSAGE event log entry for more detail.
0x71108001	MPS (Event Log)	UMps sent a request to the MPS device driver with an unexpected size. Ensure that UMps and MPS are at compatible software revisions.
0x71108002	MPS (Event Log)	UMps sent an unsupported request to the MPS device driver.
0x71108003	MPS (Event Log)	The driver failed to load for the specified reason.
0x71108004	MPS (Event Log)	An underlying CMI conduit was assumed open when in fact it was not.
0x71108400	MPS (UMps)	One of the parameters (that is, filament handle, destination, buffer, etc.) passed to UMps was invalid (that is, NULL or Zero). Internal software error.
0x71108401	MPS (UMps)	An attempt was made to open a filament with a mailbox name that was already in use. Ensure that a duplicate instance of the software is not running.
0x71108402	MPS (UMps)	An attempt was made to send a transmission, receive a transmission, or close a filament with an invalid filament. Internal software error.
0x71108403	MPS (UMps)	A client on the destination did not have a filament open with a mailbox name identical to the sender. Ensure that the destination is ready (that is, the application started with the filament opened correctly).
0x71108404	MPS (UMps)	An attempt was made to release a received message that did not exist. Internal software error.
0x71108405	MPS (UMps)	Insufficient system resources existed to complete the transaction.
0x71108406	MPS (UMps)	The specified timeout for a receive operation expired.
0x71108407	MPS (UMps)	The client terminated during UMps initialization.
0x71108408	MPS (UMps)	The client specified a timeout of zero, and the message was not waiting on the synchronously received message queue.
0x71108409	MPS (UMps)	UMps could not open a handle to the MPS device driver. Ensure that the kernel mode MPS device is started.
0x7110840A	MPS (UMps)	The destination specified by the send request was unreachable. Ensure that the destination is valid and ready.

0x7110840B	MPS (UMps)	The underlying CMI Conduit was not open for communications on the destination. Ensure that the destination is ready (that is, the application started with the filament opened correctly).
0x7110840C	MPS (UMps)	The MPS device driver experienced an access violation (bad pointer) while attempting to satisfy the request. Internal software error.
0x7110840D	MPS (UMps)	An internal UMps error occurred.
DLS (Distributed Lock Service) Error Codes		
Code	**Source**	**Meaning**
0x71118000	DistLockServ	Unused
0x71118001	DistLockServ	Internal Distributed Lock Service error.
0x71118002	DistLockServ	Inserting a Lock into the Lock Map returned Hash out of Range Error.
0x71118003	DistLockServ	Internal Distributed Lock Service error.
0x71118004	DistLockServ	A new lock could not be inserted. HT_InsertBucket() returned an error.
0x71118005	DistLockServ	Internal Distributed Lock Service error.
0x71118006	DistLockServ	Internal Distributed Lock Service error.
0x71118007	DistLockServ	Internal Distributed Lock Service error.
0x71118008	DistLockServ	Internal Distributed Lock Service error.
0x71118009	DistLockServ	Internal Distributed Lock Service error
0x7111800A	DistLockServ	Distributed Lock Service could not open its MPS filament.
0x7111800B	DistLockServ	Distributed Lock Service could not allocate a message.
0x7111800C	DistLockServ	Distributed Lock Service internal error. The Clerk received an unknown message type.
0x7111800D	DistLockServ	Distributed Lock Service internal error.
0x7111800E	DistLockServ	The Local SP is being asked to process an unknown lock operation.
0x7111800F	DistLockServ	Distributed Lock Service could not allocate memory for a Distributed Lock.
0x71118010	DistLockServ	Unused.
0x71118011	DistLockServ	Distributed Lock Service internal error.
0x71118012	DistLockServ	Unused.
0x71118013	DistLockServ	The Local SP has been asked to open a lock while another Lock operation is in progress on the Local SP.

0x71118014	DistLockServ	The Local SP could not find or create the requested Lock.
0x71118015	DistLockServ	The Local SP has been asked to Close a Lock that has not been completely opened, or is in the process of being closed.
0x71118016	DistLockServ	Distributed Lock Service internal value.
0x71118017	DistLockServ	The Local SP has been asked to Close a Lock while another Lock Operation is in progress.
0x71118018	DistLockServ	The Local SP has been asked to Close a Lock that does not exist.
0x71118019	DistLockServ	Distributed Lock Service internal error.
0x7111801A	DistLockServ	Distributed Lock Service internal error.
0x7111801B	DistLockServ	Distributed Lock Service internal error.
0x7111801C	DistLockServ	An illegal conversion request was made.
0x7111801D	DistLockServ	The Local SP has been asked to Convert a Lock while another Lock Operation is effective.
0x7111801E	DistLockServ	The Local SP has been asked to Convert a Lock that does not exist.
0x7111801F	DistLockServ	The Local SP has been asked to Convert a Lock to an illegal mode.
0x71118020	DistLockServ	Distributed Lock Service internal error.
0x71118021	DistLockServ	Distributed Lock Service internal error. BugCheck fields: [1] pWorkOrder [2] pLocalLock [3] __LINE__ [4] Unexpected Op
0x71118022	DistLockServ	Unused.
0x71118023	DistLockServ	Unused.
0x71118024	DistLockServ	The Local SP has been asked to force a lock's mailbox while another lock operation is in progress on the Local SP.
0x71118025	DistLockServ	Distributed Lock Service internal error.
0x71118026	DistLockServ	Distributed Lock Service internal error.
0x71118027	DistLockServ	Distributed Lock Service internal error.7
0x71118028	DistLockServ	Distributed Lock Service internal error.
0x71118029	DistLockServ	Distributed Lock Service internal error.

0x7111802A	DistLockServ	Distributed Lock Service internal error.
0x7111802B	DistLockServ	Distributed Lock Service, processing pended lock operations on behalf of failing Peer, encountered an unexpected operation.
0x7111802C	DistLockServ	Distributed Lock Service, processing pended lock operations on behalf of failing Peer, received bad status.
0x7111802D	DistLockServ	Distributed Lock Service internal error.
0x7111802E	DistLockServ	Distributed Lock Service internal error.
0x7111802F	DistLockServ	Distributed Lock Service internal error.
0x71118030	DistLockServ	Distributed Lock Service Internal error.
0x71118031	DistLockServ	Distributed Lock Service internal error.
0x71118032	DistLockServ	Distributed Lock Service internal error.
0x71118033	DistLockServ	The Local SP's attempt to get its SPID failed.
0x71118034	DistLockServ	The Local SP could not allocate memory for its lock tables.
0x71118035	DistLockServ	The Local SP could not find a cabal registration while processing a cabal join request.
0x71118036	DistLockServ	The Local SP could not find the cabal registration for a joining peer.
0x71118037	DistLockServ	Distributed Lock Service internal error.
0x71118038	DistLockServ	Distributed Lock Service internal error.
0x71118039	DistLockServ	Distributed Lock Service internal error.
0x7111803A	DistLockServ	The Distributed Lock Service attempt to shut down the Valet failed.
0x7111803B	DistLockServ	The Distributed Lock Service attempt to shut down the Clerk failed.
0x7111803C	DistLockServ	The Distributed Lock Service attempt to shut down the Executioner failed.
0x7111803D	DistLockServ	Distributed Lock Service internal error.
0x7111803E	DistLockServ	Distributed Lock Service internal error.
0x7111803F	DistLockServ	Distributed Lock Service internal error
0x71118040	DistLockServ	Distributed Lock Service internal error.
0x71118041	DistLockServ	Distributed Lock Service internal error.

0x71118042	DistLockServ	Could not remove a Ghost lock from the Valet tables. BugCheck fields: [1] the lock [2] unused [3] line number [4] the bad status
0x71118043	DistLockServ	Could not destroy a Ghost lock. BugCheck fields: [1] the lock [2] unused [3] line number [4] the bad status
0x71118044	DistLockServ	The Distributed Lock Service Valet's attempt to Remove a Lock from internal tables failed.
0x71118045	DistLockServ	The Distributed Lock Service Valet's attempt to Remove a Lock from internal tables failed.
0x71118046	DistLockServ	Distributed Lock Service internal error.
0x71118047	DistLockServ	Distributed Lock Service internal error.
0x71118048	DistLockServ	Distributed Lock Service internal error.
0x71118049	DistLockServ	The Distributed Lock Service's attempt to leave the Cabal failed.
0x7111804A	DistLockServ	The Distributed Lock Service attempt to initialize the Message Passing Service failed.
0x7111804B	DistLockServ	Distributed Lock Service internal error.
0x7111804C	DistLockServ	Distributed Lock Service internal error.
0x7111804D	DistLockServ	Distributed Lock Service internal error.
0x7111804E	DistLockServ	Distributed Lock Service internal error.
0x7111804F	DistLockServ	Distributed Lock Service internal error.
0x71118050	DistLockServ	Distributed Lock Service internal error.
0x71118051	DistLockServ	Distributed Lock Service internal error.
0x71118052	DistLockServ	Distributed Lock Service internal error.
0x71118053	DistLockServ	Distributed Lock Service internal error.
0x71118055	DistLockServ	While dismissing the Peer SP, a registration with an unexpected state was encountered.
0x71118056	DistLockServ	The Distributed Lock Service Doorman, processing a Lock Reply, Read an invalid Peer Cabal Registration.

0x71118057	DistLockServ	Closing all locks on behalf of failing Peer, received bad status.
0x71118058	DistLockServ	Could not allocate memory to send a Join Request to Peer SP.
0x71118059	DistLockServ	Could not allocate memory to send a Leave Notification to Peer SP.
0x7111805A	DistLockServ	Could not allocate memory to send a Join Request to Peer SP.
0x7111805B	DistLockServ	Could not add a lock to the Distributed Lock Service lock map.
0x7111805C	DistLockServ	Could not find a lock immediately after creation.
0x7111805D	DistLockServ	Distributed Lock Service internal error.
0x7111805E	DistLockServ	A Lock Operation requested by the Peer SP was not completed in the required time. The Lock's Name appears as Data in the System Event Log.
0x7111805F	DistLockServ	A Lock Operation requested by the Peer SP was not completed in the required time. The Lock's Name appears as Data in the System Event Log.
0x71118060	DistLockServ	A allocation to add a Lock Request to the list of Requests to be times out failed. The Lock's Name is in the Data field in the System Event Log.
0x71118061	DistLockServ	A Lock Request could not be added to the list of Requests to be timed out.
0x71118062	DistLockServ	A allocation to add a Lock Request to the list of Requests to be times out failed. The Lock's Identifier is in the Data field in the System Event Log.
0x71118063	DistLockServ	A Lock Request could not be added to the list of Requests to be timed out.
0x71118064	DistLockServ	A Lock Request could not be found on a list of Request to be timed out.
0x71118065	DistLockServ	A Lock Request could not be found on a list of Request to be timed out.
0x71118066	DistLockServ	A Lock Request could not be found on a list of Request to be timed out.
0x71118067	DistLockServ	A Lock Request could not be removed from a list of Request to be timed out.
0x71118068	DistLockServ	A Lock Request could not be removed from a list of Request to be timed out.
0x71118069	DistLockServ	Distributed Lock Service internal error.
0x7111806A	DistLockServ	Distributed Lock Service internal error.
0x7111806B	DistLockServ	Distributed Lock Service internal error.
0x7111806C	DistLockServ	Distributed Lock Service internal error.
0x7111806D	DistLockServ	The Peer sent an Open Lock Request using an invalid Protocol Version.
0x7111806E	DistLockServ	The Peer sent a Local Open Reply using an invalid Protocol Version.
0x7111806F	DistLockServ	The Peer sent a Close Lock Request using an invalid Protocol Version.

0x71118070	DistLockServ	The Peer sent a Close Lock Reply using an invalid Protocol Version.
0x71118071	DistLockServ	The Peer sent a Convert Request using an invalid Protocol Version.
0x71118072	DistLockServ	The Peer sent a Convert Reply message using an invalid Protocol Version.
0x71118073	DistLockServ	The Peer sent a Convert Conflict using an invalid Protocol Version.
0x71118074	DistLockServ	The Peer sent a Force Mailbox using an invalid Protocol Version.
0x71118075	DistLockServ	The Peer sent a Join Request using an invalid Protocol Version.
0x71118076	DistLockServ	The Peer sent a Join Reply message using an invalid Protocol Version.
0x71118077	DistLockServ	The Peer SP has asked the Local SP to shut down. The Peer will have logged the reason for this request.
0x71118078	DistLockServ	Unused.
0x71118079	DistLockServ	The Local SP cannot find the Peer SP's Cabal Registration while processing a Join Cabal Request.
0x7111807A	DistLockServ	The Local SP cannot find a Cabal Registration while processing a Join Cabal Request.
0x7111807B	DistLockServ	The Local SP is attempting to satisfy a request from the Peer SP, but the Local SP operation is illegal.
0x7111807C	DistLockServ	Distributed Lock Service internal error.
0x7111807D	DistLockServ	Distributed Lock Service internal error.
0x7111807E	DistLockServ	Distributed Lock Service internal error.
0x7111807F	DistLockServ	Distributed Lock Service internal error.
0x71118080	DistLockServ	Distributed Lock Service internal error.
DLU (Distributed Lock Utilities) Error Codes		
Code	**Source**	**Meaning**
0x71128004	DistLock Utils	DLU internal error.
0x71128005	DistLock Utils	DLU internal error.
0x71128006	DistLock Utils	DLU internal error.
0x71128007	DistLock Utils	DLU internal error.
0x71128008	DistLock Utils	DLU internal error.
0x71128009	DistLock Utils	DLU internal error.

0x7112800A	DistLock Utils	DLU internal error.
0x7112800B	DistLock Utils	DLU internal error.
0x7112800C	DistLock Utils	DLU internal error.
0x7112800D	DistLock Utils	DLU internal error.
0x7112800E	DistLock Utils	DLU internal error.
0x7112800F	DistLock Utils	DLU internal error.
0x71128010	DistLock Utils	DLU internal error.
0x71128011	DistLock Utils	DLU internal error.
0x71128012	DistLock Utils	DLU internal error.
0x71128013	DistLock Utils	DLU internal error.
0x71128014	DistLock Utils	DLU internal error.
0x71128015	DistLock Utils	DLU internal error.
0x71128016	DistLock Utils	DLU internal error.
0x71128017	DistLock Utils	DLU internal error.
0x71128018	DistLock Utils	DLU internal error.
0x71128019	DistLock Utils	DLU internal error.
0x7112801A	DistLock Utils	DLU internal error.
0x7112801B	DistLock Utils	DLU internal error.
0x7112801C	DistLock Utils	DLU internal error.
0x7112801D	DistLock Utils	DLU internal error.
0x7112801E	DistLock Utils	DLU internal error.
0x7112801F	DistLock Utils	DLU internal error.
0x71128020	DistLock Utils	DLU internal error.
0x71120821	DistLock Utils	DLU internal error.
0x71128022	DistLock Utils	DLU internal error.
0x71128023	DistLock Utils	DLU internal error.
0x71128024	DistLock Utils	DLU internal error.

0x71128025	DistLock Utils	DLU internal error.
0x71128026	DistLock Utils	DLU internal error.
0x71128027	DistLock Utils	DLU internal error.
0x71128029	DistLock Utils	Unused.
UDLS (User Distributed Lock Services) Error Codes		
Code	**Source**	**Meaning**
0x71138000	Usr Dist Lock Serv	Unused
0x71138001	Usr Dist Lock Serv	UDLS driver could not allocate memory for its Ledger.
0x71138002	Usr Dist Lock Serv	UDLS internal error.
0x71138003	Usr Dist Lock Serv	UDLS received an unexpected callback from the Distributed Lock Service.
0x71138004	Usr Dist Lock Serv	UDLS internal error.
0x71138005	Usr Dist Lock Serv	UDLS internal error.
0x71138006	Usr Dist Lock Serv	UDLS internal error.
0x71138007	Usr Dist Lock Serv	UDLS internal error.
0x71138008	Usr Dist Lock Serv	The UDLS Bookkeeper has been asked to release an entry while a lock operation is still in progress. Bug Check fields: [1] entry to be released [2] entry's operation counter (should be MAXULONG) [3] entry's IOControlCode (should be MAXULONG) [4] entry's thread (should be NULL)
0x71138009	Usr Dist Lock Serv	The UDLS Bookkeeper has detected a duplicate operation during a Lock Open. Bug Check fields: [1] lockHandle [2] duplicate's operation counter [3] duplicate's IOControlCode [4] duplicate's thread
0x7113800A	Usr Dist Lock Serv	The UDLS Bookkeeper has cannot add an entry. Bug Check fields: [1] lockHandle [2] operation counter [3] IOControlCode [4] status

0x7113800B	Usr Dist Lock Serv	The UDLS Bookkeeper has cannot add find an entry. Bug Check fields: [1] lockHandle [2] operation counter [3] IOControlCode [4] status
0x7113800C	Usr Dist Lock Serv	The UDLS Bookkeeper has detected a duplicate in progress operation. Bug Check fields: [1] lockHandle [2] in progress operation counter (should be MAXULONG) [3] in progress IoControlCode (should be MAXULONG) [4] in progress thread (should be NULL)
0x7113800D	Usr Dist Lock Serv	The UDLS Bookkeeper has been asked to credit an unexpected IoControlCode. Bug Check fields: [1] lockHandle [2] operation counter [3] thread [4] IOControlCode
0x7113800E	Usr Dist Lock Serv	The UDLS Bookkeeper has detected a duplicate in progress operation. Bug Check fields: [1] lockHandle [2] in progress operation counter (should be MAXULONG) [3] in progress IoControlCode (should be MAXULONG) [4] in progress thread (should be NULL)
0x7113800F	Usr Dist Lock Serv	The UDLS Bookkeeper could not remove an entry. Bug Check fields: [1] lockHandle [2] in progress operation counter [3] in progress IOControlCode [4] bad status
0x71138010	Usr Dist Lock Serv	The UDLS Bookkeeper could not remove an entry. Bug Check fields: [1] lockHandle [2] in progress operation counter [3] in progress IOControlCode [4] bad status
0x71138011	Usr Dist Lock Serv	The UDLS Bookkeeper has been asked to credit an unexpected IoControlCode. Bug Check fields: [1] lockHandle [2] operation counter [4] thread [4] IOControlCode

0x711380012	Usr Dist Lock Serv	UDLS is being called back from DLS with a NULL Context. Bug Check fields: [1] dlsEvent [2] pEventData->dedLock, [3] pEventData->dedMode, [4] pEventData->dedContext
PSM (Persistent Storage Manager) Driver Export Error Codes		
Code	**Source**	**Meaning**
0x71158000	PSM Exp Driver	Unused.
0x71158001	PSM Exp Driver	Unused.
0x71158002	PSM Exp Driver	Unused.
0x71158003	PSM Exp Driver	Unused
0x71158004	PSM Exp Driver	Unused.
0x71158005	PSM Exp Driver	Attempt to use a Persistent Container with an sector size not equal to PSM_EXTENT_SIZE.
0x71158006	PSM Exp Driver	Attempt to validate a Persistent Container that is too small to be useful.
0x71158007	PSM Exp Driver	The default Persistent Container was found to be neither INCHOATE nor COMPLETE.
0x71158008	PSM Exp Driver	Unexpected error while reading or writing to Persistent Storage
0x71158009	PSM Exp Driver	The PSM Default LU key is missing from the Registry.
0x7115800A	PSM Exp Driver	The PSM opened a Data Area for Read with no valid information.
0x7115800B	PSM Exp Driver	The PSM opened a Data Area for Write with no valid information.
DiskTarg (TDD) Error Codes		
Code	**Source**	**Meaning**
0x71168000	DiskTarg (TDD)	DiskTarg unloading (can't access registry).
0x71168001	DiskTarg (TDD)	DiskTarg unloading (can’t access TCD). ScsiTarg driver must start first.
0x71168003	DiskTarg (TDD)	DiskTarg unloading (can't allocate IRP). To recover, resolve the cause of insufficient non-paged memory.
0x71168004	DiskTarg (TDD)	DiskTarg unloading (TCD link returned an error).
0x71168005	DiskTarg (TDD)	DiskTarg unloading (Device Object creation failed).
0x7116B000	DiskTarg (TDD)	Internal DiskTarg error. Fatal.

ScsiTarg (TCD) Error Codes		
Code	**Source**	**Meaning**
0x71178000	ScsiTarg (TCD)	ScsiTarg unloading (can't start Buffman). To recover, resolve the cause of insufficient non-paged memory.
0x71178001	ScsiTarg (TCD)	ScsiTarg unloading (can't initialize). SPID driver must start first.
0x71178002	ScsiTarg (TCD)	ScsiTarg unloading (no ports found). Mini ports are configured incorrectly.
0x71178003	ScsiTarg (TCD)	ScsiTarg can't claim a port which it was supposed to claim.
0x71178004	ScsiTarg (TCD)	ScsiTarg can't use a port which it claimed (can't create an associated device object).
0x71178005	ScsiTarg (TCD)	ScsiTarg can't use a port which it claimed (can't create an associated user space link).
0x71178006	ScsiTarg (TCD)	ScsiTarg can't use a port which it claimed (can't create an associated mutex). To recover, resolve the cause of insufficient non-paged memory.
0x71178007	ScsiTarg (TCD)	ScsiTarg can't use a port which it claimed (can't allocate port irp). To recover, resolve the cause of insufficient non-paged memory.
0x71178008	ScsiTarg (TCD)	ScsiTarg can't use a port which it claimed (miniport status or memory allocation failure). To recover, resolve the cause of insufficient non-paged memory.
0x71178009	ScsiTarg (TCD)	ScsiTarg can't use a port which it claimed (too many ports found).
0x7117800A	ScsiTarg (TCD)	DiskTarg or CMIscd registration with ScsiTarg failed.
0x7117800B	ScsiTarg (TCD)	DiskTarg or CMIscd activation with ScsiTarg failed.
0x7117800C	ScsiTarg (TCD)	The table of host connections (also called initiators) for this port is full. Each port is only allowed 32 Fibre Channel connections, including mirrorview connections. The log entry should contain text of the form "No room to add initiator, SP-X port Y.", where X is A or B, and Y is 0 or 1. The last 16 bytes of the hex data associated with the log message will contain the WWN of the initiator that we were unable to add. Remove any stale definitions in this port's host connection table using the CLI **port -removehba** command. If there are no stale connections, you may need to remove one of the existing connections in order to add the new one. This would involve both a physical disconnection and a Navisphere operation to remove it from the table.
0x7117B000	ScsiTarg (TCD)	Internal ScsiTarg error. This may be a critical error.
0x7117B264	ScsiTarg (TCD)	Host operation aborted by host, but cancellation not completed within 3 minutes. This is a Core Software, SnapVIew, or MirrorView internal error. Fatal.

CMI Error Codes		
Code	**Source**	**Meaning**
0x71188000	CMI	Generic CMI Error Code.
0x71188001	CMI	Could not determine my own SP ID.
0x71188002	CMI	Invalid Engine Number in SP ID.
0x71188003	CMI	Could not determine its own SP Index.
0x71188004	CMI	Could not determine the peer's SP Index.
0x71188005	CMI	No Transport Devices were found.
0x71188006	CMI	Could not allocate contiguous Bundle buffer.
0x71188007	CMI	Could not allocate Device Information Table.
0x71188008	CMI	Transport Device failed to initialize.
0x71188009	CMI	Serial Line to peer failed to initialize.
0x7118800A	CMI	Could not open Control Conduit.
0x7118800B	CMI	Could not get Device Object of a Transport Device.
0x7118800C	CMI	Handshake with Transport Device never returned.
0x7118800D	CMI	Handshake with Transport Device failed.
0x7118800E	CMI	SP Index Table has overflowed.
0x7118800F	CMI	Gate Table has overflowed.
0x71188010	CMI	Could not open SPID pseudo-device.
0x71188011	CMI	Could not get the Device Object of the SPID pseudo-device.
0x71188012	CMI	Could not allocate an IRP to contact the SPID pseudo-device.
0x71188013	CMI	Call to SPID driver never returned.
0x71188014	CMI	Call to SPID driver failed.
0x71188015	CMI	Partition from live peer detected; SP is shutting down.
0x71188016	CMI	Invalid Conduit ID.
0x71188017	CMI	Null Scatter/Gather entry address.
0x71188018	CMI	CMI cannot send Fixed Data until the Conduit's Fixed Data base address is set.

0x71188019	CMI	Message requires too many SGL entries to be sent via CMI.
0x7118801A	CMI	CMI Bundle SGL overflow.
0x7118801B	CMI	Bundle SGL is inconsistent.
0x7118801C	CMI	Null ioctl_info_ptr for transmitted message.
0x7118801D	CMI	Null ioctl_info_ptr for responded-to message.
0x7118801E	CMI	Could not reset Serial Line.
0x7118801F	CMI	Could not set Serial Line speed.
0x71188020	CMI	Could not get Serial Line speed.
0x71188021	CMI	Could not force Serial Line to correct speed.
0x71188022	CMI	Could not get Serial Line control settings.
0x71188023	CMI	Cannot allocate IRP to read/write Serial Line to peer.
0x71188024	CMI	Cannot open Serial Line to peer.
0x71188025	CMI	CMI Registry parameter was not found.
0x71188026	CMI	Bad CMI Bundle signature.
0x71188027	CMI	Received a Bundle from an unknown SP.
0x71188028	CMI	CMI message descriptor is garbled.
0x71188029	CMI	Cannot allocate a CMI_WORK_ITEM.
0x7118802A	CMI	Null ioctl_info_ptr for control message.
0x7118802B	CMI	Received a control message from an unknown SP ID.
0x7118802C	CMI	Could not create a worker thread.
0x7118802D	CMI	Could not obtain an object reference to a worker thread.
0x7118802E	CMI	Detected a flood of CMI transmissions.
SPID Error Codes		
Code	**Source**	**Meaning**
0x71198000	SP ID	Generic SPID Error Code.
0x71198001	SP ID	Cannot find HKLM in Registry.
0x71198002	SP ID	Invalid SP Signature value: xxx.

0x71198003	SP ID	Undefined Engine Number mechanism variety.
0x71198004	SP ID	Undefined SP Signature mechanism variety.
0x71198005	SP ID	Could not find or read FC4700 1 PROM Resume.
Reboot Driver Error Codes		
Code	**Source**	**Meaning**
0x71208000	Reboot Driver	Unused
0x71208001	Reboot Driver	Could not allocate information for Reboot Count read.
0x71208002	Reboot Driver	Unused.
CDS (Class Data Storage) Error Codes		
Code	**Source**	**Meaning**
0x71228000	CDS	Violation of CDS protocol.
0x71228001	CDS	Violation of CDS protocol.
0x71228002	CDS	Violation of CDS protocol.
0x71228003	CDS	Violation of CDS protocol.
0x71228004	CDS	Violation of CDS protocol.
0x71228005	CDS	Violation of CDS protocol.
0x71228006	CDS	Violation of CDS protocol.
0x71228007	CDS	Violation of CDS protocol.
0x71228008	CDS	Violation of CDS protocol.
0x71228009	CDS	Violation of CDS protocol.
0x7122800A	CDS	Violation of CDS protocol.
0x7122800B	CDS	Violation of CDS protocol.
0x7122800C	CDS	Violation of CDS protocol.
0x7122800D	CDS	Violation of CDS protocol.
0x7122800E	CDS	Violation of CDS protocol.
0x7122800F	CDS	Violation of CDS protocol.
0x71228010	CDS	Violation of CDS protocol.

0x71228011	CDS	Violation of CDS protocol.
0x71228012	CDS	Violation of CDS protocol.
0x71228016	CDS	Unexpected result on PSM file read.
0x71228017	CDS	Corrupted PSM file.
0x71228019	CDS	Unexpected result on PSM file write.
CMIscd Error Codes		
Code	**Source**	**Meaning**
0x71238000	CMI Scd	Unused
0x71238001	CMI Scd	Driver does not support this type of SCSI queue tag.
0x71238002	CMI Scd	Circular queue that holds asynchronous miniport events is full.
0x71238003	CMI Scd	DPC encountered an unexpected async event.
0x71238004	CMI Scd	Recovery thread encountered an unexpected event.
0x71238005	CMI Scd	Maximum number of outstanding reception blocks allowed has been exceeded.
K10HostAdminLib Error Codes This is the standard interface library for the front-end driver, which manages ports, host and system options (as well as storage centric operations).		
Code	**Source**	**Meaning**
0x71508000	K10HostAdmin	Unrecognized database ID in CDB. This request is bad. Others might work.
0x71508001	K10HostAdmin	Unrecognized op code in command. This request is bad. Others might work.
0x71508002	K10HostAdmin	Unrecognized item spec in command. This request is bad. Others might work.
0x71508003	K10HostAdmin	Timed out waiting for an async response from a DeviceIOControl. Retry might work.
0x71508004	K10HostAdmin	Wrong size for struct expected.
0x71508005	K10HostAdmin	An invalid field (for example, AAS Initiator field).
0x71508006	K10HostAdmin	Missing some data (TAG, data, field etc.) which should be there. Reload the configuration.
0x71508007	K10HostAdmin	Too much data (for example, Unexpected peer TLD of AAQ).
0x71508008	K10HostAdmin	SystemType not coherent across ports.
0x71508009	K10HostAdmin	Host Options not coherent across ports.

0x7150800A	K10HostAdmin	Can't get host port list.
0x7150800B	K10HostAdmin	Failed when looking at each port and checking if its PortKey matches the initiator's.
0x7150800C	K10HostAdmin	DeviceIOControl was not expected to return data, but it did.
0x7150800D	K10HostAdmin	There are no port objects on the SP!
0x7150800E	K10HostAdmin	Incorrect structure version.
0x7150800F	K10HostAdmin	Default VA not consistent across ports.
0x71508010	K10HostAdmin	An IOCTL failed. See driver error in data section of event record.
0x71508011	K10HostAdmin	A subroutine failed, see source error in data section of event record.
0x71508012	K10HostAdmin	An illegal value was specified for the type of Auto Trespass. However, I/O should be able to proceed normally. Contact your service provider.
NDU (NonDistruptive Upgrade) Error Codes		
Code	**Source**	**Meaning**
0x71518000	NDU	The command contained an unknown operation ID. Call service provider.
0x71518001	NDU	The command contained an unknown operation code. Call service provider.
0x71518002	NDU	The command did not contain a required name or path. Call service provider.
0x71518003	NDU	The specified file was not a valid Upgrade Package File. Upgrade files have the extension .ndu.
0x71518004	NDU	The software package you attempted to uninstall was not installed.
0x71518005	NDU	Installation did not occur. At least one software package requires another package to be installed at the same time.
0x71518006	NDU	The software package specified does not require a commit. Do not try to commit software packages that do not require commit.
0x71518007	NDU	The software package may not be reverted, either because it has already been committed or because no previous revision is available. Do not try to revert packages for which revert is not available.
0x71518008	NDU	The software package specified is already installed. Do not try to install a package that is already installed.
0x71518009	NDU	The primary SP did not return after an upgrade. Call service provider.
0x7151800A	NDU	The secondary SP did not return after an upgrade. Call service provider.

0x7151800B	NDU	The software package will result in a disruptive upgrade, but the perform disruptive upgrade parameter was not specified. Specify the disruptive upgrade parameter with Navisphere CLI.
0x7151800C	NDU	An attempt to save the software package to persistent storage failed. Examine event logs for PSM messages. Call service provider.
0x7151800D	NDU	The requested operation could not be initiated because another operation is in progress. Wait for the pending operation to complete.
0x7151800E	NDU	The specified package has already been committed. Do not try to commit a committed package.
0x7151800F	NDU	The current version of the specified package must be committed before it may be upgraded. Commit the current version of the specified package; then retry the upgrade.
0x71518010	NDU	Internal state violation. Call service provider.
0x71518011	NDU	An SP rebooted unexpectedly. Check for a dump file and then retry the installation. Call service provider.
0x71518012	NDU	The specified package may not be uninstalled. Do not try to uninstall it.
0x71518013	NDU	A check script contained in the associated package failed. Consult other SP Event Log entries for details.
0x71518014	NDU	Installation of software on the peer SP failed. Consult other SP Event Log entries for details.
0x71518015	NDU	Installation of software on the master SP failed. Consult other SP Event Log entries for details.
0x71518016	NDU	An attempt to quiesce I/O on the peer SP failed. Consult other SP Event Log entries for details. Call service provider.
0x71518017	NDU	An attempt to quiesce I/O on the master SP failed. Consult other SP Event Log entries for details. Call service provider.
0x71518018	NDU	An attempt to deactivate software on the peer SP failed. Consult other SP Event Log for details. Call service provider.
0x71518019	NDU	An attempt to deactivate software on the master SP failed. Consult other SP Event Log for details. Call service provider.
0x7151801a	NDU	An attempt to activate software on the peer SP failed. Consult other SP Event Log for details. Consult service provider.
0x7151801b	NDU	An attempt to activate software on the master SP failed. Consult the other SP Event Log for details. Call service provider.
0x7151801c	NDU	Memory allocation error. Call service provider.

0x7151801d	NDU	Unexpected exception. Call service provider.
0x7151801e	NDU	Attempt to install two revisions of the same software package.
0x7151801f	NDU	Installation of this package breaks an existing dependency. Try upgrading multiple packages at once.
0x71518020	NDU	Do not try to upgrade to an older revision of software.
0x71518021	NDU	An attempt was made to install a new package with insufficient disk space on the SPs. Call service provider.
0x71518022	NDU	Operation on the secondary SP took too long to complete and the SP was rebooted to cause a dump. Call service provider.
0x71518023	NDU	An attempt to uninstall software on the peer SP failed. Call service provider.
0x71518024	NDU	An attempt to uninstall software on the master SP failed. Call service provider.
0x71518025	NDU	Memory deallocation error. Call service provider.
0x71518026	NDU	The peer SP failed to reboot. Call service provider.
0x71518027	NDU	The master SP failed to reboot. Call service provider.
0x71518028	NDU	A sync operation had a failure. Call service provider.
0x71518029	NDU	A read from PSM LUN failed. Call service provider.
0x7151802a	NDU	There was an error accessing the Table of Contents. Call service provider.
0x7151802b	NDU	Error occurred accessing the Table of Contents (rename error). Call service provider.
0x7151802c	NDU	The storage system could not determine the disk free space. Call service provider.
0x7151802d	NDU	The storage system was could not determine the size of the disk. Call service provider.
0x7151802e	NDU	This SP has an incorrectly partitioned disk and should be replaced. Call service provider.
0x7151802f	NDU	The storage system had an error while handling the SPID. Call service provider.
0x71518030	NDU	The storage system had an error while handling the WWN. Call service provider.
0x71518031	NDU	The storage system had an error while getting the port id. Call service provider.
0x71518032	NDU	The storage system had an error while setting the port id. Call service provider.
0x71518033	NDU	The storage system encountered an error while disabling cache settings. Message is 'Failed to disable cache settings.'
0x71518034	NDU	The storage system encountered an error while restoring cache settings. Message is 'Unable to restore cache settings.'

K10GlobalManagement and K10_DGSSP Error Codes This library provides an internal API for standard admin libraries which must determine object (LUN) state.		
Code	**Source**	**Meaning**
0x76008000	K10GlobalMgt_1	Unrecognized database ID in CDB. Not used; intended for future expansion.
0x76008001	K10GlobalMgt_1	Unrecognized op code in command. Not used; intended for future expansion.
0x76008002	K10GlobalMgt_1	Unrecognized item spec in command. Not used; intended for future expansion.
0x76008003	K10GlobalMgt_1	Timed out waiting for an async response from a DeviceIOControl.
0x76008004	K10GlobalMgt_1	Wrong size for struct expected.
0x76008005	K10GlobalMgt_1	DeviceIOControl failure, other than a timeout.
0x76008006	K10GlobalMgt_1	Failure in creating an event.
0x76008007	K10GlobalMgt_1	Failure in closing a handle.
0x76008008	K10GlobalMgt_1	Failure in closing a registry key.
0x76008009	K10GlobalMgt_1	Did not init an object before using. Programmer error.
0x7600800A	K10GlobalMgt_1	Subroutine failed; see data section for source error.
0x7600800B	K10GlobalMgt_1	Precondition not met/logic error. Must be caught in testing.
0x7600800C	K10GlobalMgt_1	Cannot alloc or free memory. Fatal.
0x7600800D	K10GlobalMgt_1	Registry key in unexpected format. Catch in qualification.
0x7600800E	K10GlobalMgt_1	Cannot query key/value. See data section for source error.
0x7600800F	K10GlobalMgt_1	Cannot read value. See data section for source error.
0x76008010	K10GlobalMgt_1	The PSM Driver is not accessible.
0x76008011	K10GlobalMgt_1	The PSM LUN is not bound.
0x76008012	K10GlobalMgt_1	The file opened for reading or the file being sized has not been initialized by this class. Must do a write to initialize.
0x76008013	K10GlobalMgt_1	An unlinked reference to a public LUN was found and removed. This error indicates an aborted operation during the LUN binding procedure (SP reboot during bind).
0x76008014	K10GlobalMgt_1	Transaction system exceeded nesting maximum. Call your service provider.
0x76008100	K10_DGSSP	DGSSP encountered an error with a subroutine; see message details.
0x76008101	K10_DGSSP	Found single bit ECC error. See message details.

0x76008102	K10_DGSSP	Found multibit ECC error. See message details.
0x76008103	K10_DGSSP	Found POST error. See message details.
0x76008104	K10_DGSSP	Found OEM error. See message details.
0x76008105	K10_DGSSP	Unknown error record type in NVRAM.

K10DiskDriverAdmin Error Codes

This is a Standard IK10Admin API adhered to by all drivers or other components affecting the object (LUN) stack. This includes Core Software and layered drivers.

Code	Source	Meaning
0x79008000	K10DiskDriverAdmin	Unrecognized database ID in header. Programmer error.
0x79008001	K10DiskDriverAdmin	Unrecognized opcode in header. Programmer error.
0x79008002	K10DiskDriverAdmin	Invalid item specifier. Programmer error.
0x79008003	K10DiskDriverAdmin	Timeout when waiting for DeviceIoControl. Retry possible.
0x79008004	K10DiskDriverAdmin	Wrong version in structure. Programmer error.
0x79008005	K10DiskDriverAdmin	Size in header of our data does not agree with the size passed in. Upgrade is incompatible.
0x79008006	K10DiskDriverAdmin	Got Bytes returned on a Write ioctl, or read ioctl bytes returned not expected size. Upgrade is incompatible.
0x79008007	K10DiskDriverAdmin	Could not locate desired object. Stale data.
0x79008008	K10DiskDriverAdmin	Operation is not supported. Upgrade is incompatible.
0x79008009	K10DiskDriverAdmin	Attempt to consume/delete already consumed object. Device map rebuild.
0x7900800a	K10DiskDriverAdmin	Attempt to unconsume non-consumed object. Device map rebuild.
0x7900800b	K10DiskDriverAdmin	Attempt to consume object that has a layer on it and device name is of lower (pre-layered) device. Device map rebuild.
0x7900800c	K10DiskDriverAdmin	Wrong device is being released by host side. Device map rebuild.
0x7900800d	K10DiskDriverAdmin	Attempt to unconsume object when not owner. Device map rebuild.
0x7900800e	K10DiskDriverAdmin	Attempt to layer an object consumer/creator marked NoExtend. Device map rebuild.
0x7900800f	K10DiskDriverAdmin	Attempt to remove/private consume object with outstanding layers. Device map rebuild.
0x79008010	K10DiskDriverAdmin	Attempt to remove created device from filter stack. Device map rebuild.

0x79008011	K10DiskDriverAdmin	Driver reports layering a device which is not that exported by driver below. Device map rebuild.
0x79008012	K10DiskDriverAdmin	Environmental error writing to local disk (temp files etc.). Retry possible.
0x79008013	K10DiskDriverAdmin	A required file is not coherent/proper length. Fatal.
0x79008014	K10DiskDriverAdmin	Mutually exclusive values set in data. Upgrade is incompatible.
0x79008015	K10DiskDriverAdmin	Data does not pass consistency check. Data corruption.
0x79008016	K10DiskDriverAdmin	Empty/nonexistent transaction log. May indicate inaccessible PSM.
0x79008017	K10DiskDriverAdmin	"StackOps" string malformed. Install script bad.
0x79008018	K10DiskDriverAdmin	Trying to add driver in wrong place on stack. Device map rebuild.
0x79008019	K10DiskDriverAdmin	Node we're decrementing not last one in log. Programmer error.
0x7900801a	K10DiskDriverAdmin	See more objects than we can handle. Upgrade is incompatible.
0x7900801b	K10DiskDriverAdmin	Caught int 5/3. Fatal.
0x7900801c	K10DiskDriverAdmin	Driver returned a bad name for a bind object. Upgrade is incompatible
0x7900801d	K10DiskDriverAdmin	Driver returned an empty name for a bind object. Programmer error.
0x7900801e	K10DiskDriverAdmin	Driver did not use supplied bind name. Programmer error.

K10SystemAdmin Error Codes

This is the standard library used to modify all K10-specific hardware and parameters, such as multiple port setup, network ID, etc.

Code	Source	Meaning
0x79508000	K10SystemAdmin	Unrecognized database ID in CDB. This request is bad.
0x79508001	K10SystemAdmin	Unrecognized opcode. This opcode is not implemented and out of range. This request is bad.
0x79508002	K10SystemAdmin	Unrecognized item spec. This request is bad.
0x79508003	K10SystemAdmin	A kernel object exceeded the max timeout for response. Heavy I/O could cause this error.
0x79508004	K10SystemAdmin	For a Read operation, the data returned is not as expected, i.e. empty data, wrong size, or wrong structure. Retry.
0x79508005	K10SystemAdmin	The account name supplied is not found on the machine/network.
0x79508006	K10SystemAdmin	An input parameter is invalid, e.g., wrong size or empty data.

0x79508007	K10SystemAdmin	A reference is already in use.
0x79508008	K10SystemAdmin	Attempted to configure non-existent bus.
0x79508009	K10SystemAdmin	Attempted to configure non-existent slot.
0x7950800A	K10SystemAdmin	Incorrect password used.
0x7950800B	K10SystemAdmin	The security level of the request was not sufficient to authorize this operation.
0x7950800C	K10SystemAdmin	Cannot unbind the LUN.
0x7950800D	K10SystemAdmin	This error occurs when calls to layered driver databases don't match with request. Rebuild the device map.
0x7950800E	K10SystemAdmin	Tried to remove the device creator form the list of filter drivers.
0x7950800F	K10SystemAdmin	The device map is inconsistent.
0x79508010	K10SystemAdmin	For an input TLD list, some data (TAG, data, field etc.) is missing.
0x79508011	K10SystemAdmin	Unrecognized TLD tag.
0x79508012	K10SystemAdmin	This error occurs when multiple WWNs in an ATTRIBUTES_SET_BLOCK. Set one WWN per ATTRIBUTES_SET_BLOCK in the TLD list.
0x79508013	K10SystemAdmin	LUN ID occurs more than once in a Storage Group.
0x79508014	K10SystemAdmin	Attempting to set a non-existent port, i.e. when setting PreferredLoopId for a port.
0x79508015	K10SystemAdmin	Failure on setting host ports, i.e. cannot set preferred loop id for a port
0x79508016	K10SystemAdmin	Did not a find an expected driver in a filter stack. Indicates a serious memory or programming problem.
0x79508017	K10SystemAdmin	An IOCTL failed. See driver error in data section of event record.
0x79508018	K10SystemAdmin	Cannot get machine name from registry.
0x79508019	K10SystemAdmin	Cannot get IP address from registry.
0x7950801A	K10SystemAdmin	Cannot get subnet mask from registry.
0x7950801B	K10SystemAdmin	Cannot get default gateway from registry.
0x7950801C	K10SystemAdmin	Cannot get DHCP flag from registry.
0x7950801D	K10SystemAdmin	Cannot get domain name from registry.
0x7950801E	K10SystemAdmin	Cannot set machine name in the registry
0x7950801F	K10SystemAdmin	Cannot set IP address in the registry

0x79508020	K10SystemAdmin	Cannot set subnet mask in the registry
0x79508021	K10SystemAdmin	Cannot set default gateway in the registry
0x79508022	K10SystemAdmin	Cannot set DHCP flag in the registry
0x79508023	K10SystemAdmin	NetID is not in the range, i.e. not one of the following: DomainName, IPAddress, DHCP, SubnetMask, DefaultGateway.
0x79508024	K10SystemAdmin	TLD data was not of the expected type. Usually this is caused by numeric data that should fit in a long being larger than *sizeof* (long). This indicates a programmer error or data corruption.
0x79508025	K10SystemAdmin	Unexpected bytes returned from an IOCTL call.
0x79508026	K10SystemAdmin	Subroutine failed. See data section for source error.
0x79508027	K10SystemAdmin	Logic error. Should be caught in testing.
0x79508028	K10SystemAdmin	A LUN was deleted from the Base Software database because of inconsistent data.
0x79508029	K10_System_Admin	You cannot add a layer if a LUN is expanding.
0x7950802A	K10_System_Admin	The upper 64-bit of the LUN WWN and the Gang WWN do not match.

Critical Error Codes

This section lists FC4700 critical event codes from all software modules in the SP. These always require the attention of a system engineer

Code	Source	Meaning
0x7100C000	SnapView	Invalid DCA value specified – BUG CHECK.
0x7100C001	SnapView	Device no longer exists – BUG CHECK.
0x7111C000	DistLockServ	Insider.
0x7112C000	DistLock Utils	Unused.
0x7113C000	Usr Dist LockServ	Unused.
0x7115C000	PSM Exp Driver	Unused.
0x7116B000	DiskTarg (TDD)	Internal DiskTarg error. Fatal.
0x7117B000	ScsiTarg (TCD)	Internal ScsiTarg error. This may be a critical error.
0x7117B264	ScsiTarg (TCD)	Host operation aborted by host, but cancellation not completed within 3 minutes. This is a Core Software, SnapVIew, or MirrorView internal error. Fatal.
0x7118C000	CMI	Generic CMI Critical Error Code.
0x7120C000	Reboot Driver	Unused.
0x7123C000	CMI Scd	Unused.

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