

Last login: Tue Dec 12 13:03:58 on console  
mnda:~ mndaserver\$ promiseutil

-----  
Promise Utility  
Version: 4.00.0000.09 Build Date: Jul 17, 2017  
-----

List available RAID HBAs and Subsystems

```
=====
=====
Type #   Model      Alias                WWN                Seq
=====
=====
hba  1  * Pegasus R6                2000-0001-5553-6671  1
=====
```

Totally 1 HBA(s) and 0 Subsystem(s)

-----  
The row with '\*' sign refers the current working HBA/Subsystem path  
To change the current HBA/Subsystem path, you may use the following command:

spath -a chgpath -t hba|subsys -p <path #>.

Type help or ? to display all the available commands  
-----

cliib> subsys -v

-----  
Alias:  
Vendor: Promise Technology, Inc.      Model: Pegasus R6  
PartNo: F29DS6722000000              SerialNo: M74H11A18500820  
Rev: A2                                  WWN: 2000-0001-5553-6671  
PDSN: N/A

cliib> enclosure -v

-----  
Enclosure Setting:

EnclosureId: 1  
EnclWarningTempThreshold: 51C/123F      EnclCriticalTempThreshold: 56C/132F  
CtrlWarningTempThreshold: 64C/147F      CtrlCriticalTempThreshold: 69C/156F

-----  
Enclosure Info and Status:

EnclosureId: 1  
EnclosureType: Pegasus R6  
SEPFwVersion: 1.00  
MaxNumOfControllers: 1            MaxNumOfPhyDrvSlots: 6  
MaxNumOfFans: 1                MaxNumOfBlowers: 0  
MaxNumOfTempSensors: 2        MaxNumOfPSUs: 1  
MaxNumOfBatteries: 0           MaxNumOfVoltageSensors: 3

=====  
=====  
PSU      Status  
=====

=====  
1        Powered On and Functional

=====  
=====  
Fan Location      FanStatus      HealthyThreshold    CurrentFanSpeed  
=====

=====  
1 Backplane      Functional      > 500 RPM      1100 RPM

=====  
=====  
TemperatureSensor    Location      HealthThreshold    CurrentTemp    Status  
=====

=====  
1            Controller    < 64C/147F      52C/125F      normal  
2            Backplane    < 51C/123F      39C/102F      normal

=====  
=====  
VoltageSensor    Type    HealthyThreshold      CurrentVoltage    Status  
=====

=====  
1            3.3V    +/- 5% (3.13 - 3.46) V    3.3V      Operational  
2            5.0V    +/- 5% (4.75 - 5.25) V    5.1V      Operational  
3            12.0V   +/- 8% (11.04 - 12.96) V    12.4V      Operational

cliib> ctrl -v

-----  
CtrlId: 1

Alias:

OperationalStatus: OK, BGA Running    PowerOnTime: 31 hours 10 minutes  
LUNAffinity: N/A    LunmappingMethod: WWN Based  
CacheUsagePercentage: 1%    DirtyCachePercentage: 0%

Vendor: PROMISE    Model: Pegasus R6  
PartNo: F29DS6722000000    SerialNo: M74H11A18500820  
HWRev: A2    WWN: 2000-0001-5553-6671  
CmdProtocol: SCSI-3  
MemType: DDR SDRAM    MemSize: 512MB  
FlashType: Flash Memory    FlashSize: 8MB  
NVRAMType: FRAM    NVRAMSize: 32KB  
BootLoaderVersion: 5.04.0000.61    BootLoaderBuildDate: Dec 26, 2016  
FirmwareVersion: 5.04.0000.61    FirmwareBuildDate: Dec 26, 2016  
SoftwareVersion: 5.04.0000.61    SoftwareBuildDate: Dec 26, 2016  
BIOSVersion: 5.04.0000.61    BIOSBuildDate: Dec 26, 2016  
SingleImageVersion: 5.04.0000.61    SingleImageBuildDate: Dec 26, 2016  
CtrlCPLDVersion: 0.08

DiskArrayPresent: 1    OverallRAIDStatus: Critical  
LogDrvPresent: 1    LogDrvOnline: 0  
LogDrvOffline: 0    LogDrvCritical: 1  
PhyDrvPresent: 6    PhyDrvOnline: 5  
PhyDrvOffline: 0    PhyDrvPFA: 1  
GlobalSparePresent: 0    DedicatedSparePresent: 0  
ReversibleGlobalSparePresent: 0    ReversibleDedicatedSparePresent: 0  
ReversibleGlobalSpareUsed: 0    ReversibleDedicatedSpareUsed: 0

WriteThroughMode: No    MaxSectorSize: 4KB  
PreferredCacheLineSize: 64 KB    CacheLineSize: 64 KB  
Coercion: Enabled    CoercionMethod: GBTruncate  
SMART: Enabled    SMARTPollingInterval: 10 minutes  
MigrationStorage: DDF    CacheFlushInterval: 3 second(s)  
PollInterval: 15 second(s)    AdaptiveWBCache: Disabled  
ForcedReadAhead: Disabled

PowerSavingLevel: 1    SpindownType: N/A  
IdleTimeToParkRwHeads: Never    IdleTimeToLowerRotationSpeed: Never  
IdleTimeToSpinDown: Never

SGPIOBackPlane: Default/Generic (0)    SASReadyLED: Off  
SpinUpDelay: 0 millisecond    PowerManagement: Enable

SecurityAdminPassword: N/A

PciFuncAddr: N/A    PciLinkSpeed: N/A

PciLinkWidth: N/A

cliib> phydrv -v

-----  
PdId: 1  
OperationalStatus: OK  
Alias:  
PhysicalCapacity: 1TB                      ConfigurableCapacity: 1TB  
UsedCapacity: 1TB                      LogicalBlockSize: 512Bytes  
ConfigStatus: Array0 No.0              Location: Encl1 Slot1  
ModelNo: Hitachi HDS72101  
SerialNo: MSK5215H062N3G              FirmwareVersion: MS2OA5Q0  
DriveInterface: SATA 6Gb/s              Protocol: ATA/ATAPI-8  
WriteCacheSupport: Yes                  WriteCache: Enabled  
RLACacheSupport: Yes                    RLACache: Enabled  
SMARTFeatureSetSupport: Yes  
SMARTSelfTestSetSupport: Yes           SMARTErrorLoggingSupport: Yes  
CmdQueuingSupport: NCQ                  CmdQueuing: Enabled  
CmdQueueDepth: 32                      MediumErrorThreshold: 64  
Errors: 0                                  NonRWEErrors: 0  
ReadErrors: 0                              WriteErrors: 0  
PowerSavingStatus: Full Power           TemperaturePollingInterval: 3 minutes  
DriveTemperature: 31C/87F              ReferenceDriveTemperature: N/A  
Flags: N/A                                  LastUnconfiguredFragement: N/A  
PhysicalSectorSize: 0Byte

-----  
PdId: 2  
OperationalStatus: OK  
Alias:  
PhysicalCapacity: 1TB                      ConfigurableCapacity: 1TB  
UsedCapacity: 1TB                      LogicalBlockSize: 512Bytes  
ConfigStatus: Array0 No.1              Location: Encl1 Slot2  
ModelNo: Hitachi HDS72101  
SerialNo: MSK5215H058AGG              FirmwareVersion: MS2OA5Q0  
DriveInterface: SATA 6Gb/s              Protocol: ATA/ATAPI-8  
WriteCacheSupport: Yes                  WriteCache: Enabled  
RLACacheSupport: Yes                    RLACache: Enabled  
SMARTFeatureSetSupport: Yes  
SMARTSelfTestSetSupport: Yes           SMARTErrorLoggingSupport: Yes  
CmdQueuingSupport: NCQ                  CmdQueuing: Enabled  
CmdQueueDepth: 32                      MediumErrorThreshold: 64  
Errors: 0                                  NonRWEErrors: 0  
ReadErrors: 0                              WriteErrors: 0  
PowerSavingStatus: Full Power           TemperaturePollingInterval: 3 minutes

DriveTemperature: 30C/86F      ReferenceDriveTemperature: N/A  
Flags: N/A      LastUnconfiguredFragement: N/A  
PhysicalSectorSize: 0Byte

-----  
PdId: 3  
OperationalStatus: OK, PFA  
Alias:  
PhysicalCapacity: 1TB      ConfigurableCapacity: 1TB  
UsedCapacity: 1TB      LogicalBlockSize: 512Bytes  
ConfigStatus: Array0 No.2      Location: Encl1 Slot3  
ModelNo: Hitachi HDS72101  
SerialNo: MSK5215H06T3BG      FirmwareVersion: MS2OA5Q0  
DriveInterface: SATA 6Gb/s      Protocol: ATA/ATAPI-8  
WriteCacheSupport: Yes      WriteCache: Disabled  
RLACacheSupport: Yes      RLACache: Enabled  
SMARTFeatureSetSupport: Yes  
SMARTSelfTestSetSupport: Yes      SMARTErrorLoggingSupport: Yes  
CmdQueuingSupport: NCQ      CmdQueuing: Enabled  
CmdQueueDepth: 32      MediumErrorThreshold: 64  
Errors: 4      NonRWErrors: 0  
ReadErrors: 4      WriteErrors: 0  
PowerSavingStatus: Full Power      TemperaturePollingInterval: 3 minutes  
DriveTemperature: 32C/89F      ReferenceDriveTemperature: N/A  
Flags: N/A      LastUnconfiguredFragement: N/A  
PhysicalSectorSize: 0Byte

-----  
PdId: 4  
OperationalStatus: OK  
Alias:  
PhysicalCapacity: 1TB      ConfigurableCapacity: 1TB  
UsedCapacity: 1TB      LogicalBlockSize: 512Bytes  
ConfigStatus: Array0 No.3      Location: Encl1 Slot4  
ModelNo: Hitachi HDS72101  
SerialNo: MSE5215V0655SE      FirmwareVersion: MS2OA5Q0  
DriveInterface: SATA 6Gb/s      Protocol: ATA/ATAPI-8  
WriteCacheSupport: Yes      WriteCache: Enabled  
RLACacheSupport: Yes      RLACache: Enabled  
SMARTFeatureSetSupport: Yes  
SMARTSelfTestSetSupport: Yes      SMARTErrorLoggingSupport: Yes  
CmdQueuingSupport: NCQ      CmdQueuing: Enabled  
CmdQueueDepth: 32      MediumErrorThreshold: 64  
Errors: 0      NonRWErrors: 0  
ReadErrors: 0      WriteErrors: 0  
PowerSavingStatus: Full Power      TemperaturePollingInterval: 3 minutes

DriveTemperature: 31C/87F      ReferenceDriveTemperature: N/A  
Flags: N/A      LastUnconfiguredFragement: N/A  
PhysicalSectorSize: 0Byte

-----  
PdId: 5  
OperationalStatus: Rebuilding  
Alias:  
PhysicalCapacity: 1TB      ConfigurableCapacity: 1TB  
UsedCapacity: 0Byte      LogicalBlockSize: 512Bytes  
ConfigStatus: Array0 No.4      Location: Encl1 Slot5  
ModelNo: Hitachi HDS72101  
SerialNo: MSK5215H0MMVMH      FirmwareVersion: MS2OA5Q0  
DriveInterface: SATA 6Gb/s      Protocol: ATA/ATAPI-8  
WriteCacheSupport: Yes      WriteCache: Enabled  
RLACacheSupport: Yes      RLACache: Enabled  
SMARTFeatureSetSupport: Yes  
SMARTSelfTestSetSupport: Yes      SMARTErrorLoggingSupport: Yes  
CmdQueuingSupport: NCQ      CmdQueuing: Enabled  
CmdQueueDepth: 32      MediumErrorThreshold: 64  
Errors: 0      NonRWErrors: 0  
ReadErrors: 0      WriteErrors: 0  
PowerSavingStatus: Full Power      TemperaturePollingInterval: 3 minutes  
DriveTemperature: 31C/87F      ReferenceDriveTemperature: N/A  
Flags: N/A      LastUnconfiguredFragement: N/A  
PhysicalSectorSize: 0Byte

-----  
PdId: 6  
OperationalStatus: OK  
Alias:  
PhysicalCapacity: 1TB      ConfigurableCapacity: 1TB  
UsedCapacity: 1TB      LogicalBlockSize: 512Bytes  
ConfigStatus: Array0 No.5      Location: Encl1 Slot6  
ModelNo: Hitachi HDS72101  
SerialNo: MSE5215V0656JE      FirmwareVersion: MS2OA5Q0  
DriveInterface: SATA 6Gb/s      Protocol: ATA/ATAPI-8  
WriteCacheSupport: Yes      WriteCache: Enabled  
RLACacheSupport: Yes      RLACache: Enabled  
SMARTFeatureSetSupport: Yes  
SMARTSelfTestSetSupport: Yes      SMARTErrorLoggingSupport: Yes  
CmdQueuingSupport: NCQ      CmdQueuing: Enabled  
CmdQueueDepth: 32      MediumErrorThreshold: 64  
Errors: 0      NonRWErrors: 0  
ReadErrors: 0      WriteErrors: 0  
PowerSavingStatus: Full Power      TemperaturePollingInterval: 3 minutes

DriveTemperature: 33C/91F      ReferenceDriveTemperature: N/A  
Flags: N/A      LastUnconfiguredFragement: N/A  
PhysicalSectorSize: 0Byte

cliib> array -v

-----  
Dald: 0  
OperationalStatus: OK, Rebuilding, PFA  
Alias:  
PhysicalCapacity: 6TB      ConfigurableCapacity: 6TB  
FreeCapacity: 0Byte      MaxContiguousCapacity: 0Byte  
AvailableRAIDLevels: 0 5 6 10 50 1E  
PDM: Enabled      MediaPatrol: Enabled  
NumberOfPhysicalDrives: 6      NumberOfLogicalDrives: 1  
NumberOfDedicatedSpares: 0  
UserSetPowerSavingLevel: 1      CurrentPowerSavingLevel: 0  
PowerManagement: Enabled

Physical Drives in the Array:

=====

SeqNo	PdId	CfgCapacity	FreeCapacity	OpStatus
0	1	1TB	331.78KB	OK
1	2	1TB	331.78KB	OK
2	3	1TB	331.78KB	OK, PFA
3	4	1TB	331.78KB	OK
4	5	1TB	331.78KB	Rebuilding
5	6	1TB	331.78KB	OK

Logical Drives in the Array:

=====

LdId	Alias	RAIDLevel	Capacity	OpStatus
0		RAID5	5TB	Critical, Rebuilding

Available Spares to the Array:

=====

Id	OpStatus	PdId	CfgCapacity	Revertible	Type	DedicatedToArray
----	----------	------	-------------	------------	------	------------------

=====

No spare drive available in the array

cliib> logdrv -v

```
-----
LdId: 0
ArrayId: 0                      SYNCed: Yes
OperationalStatus: Critical, Rebuilding
Alias:                          TRIMSupport: Not Support TRIM
SerialNo: 0000000000000000000000008EAA4CD4C573F9C0
WWN: 2230-0001-5567-d23e        PreferredCtrlId: N/A
RAIDLevel: RAID5                StripeSize: 128KB
Capacity: 5TB                   PhysicalCapacity: 6TB
ReadPolicy: ReadAhead           WritePolicy: WriteBack
CurrentWritePolicy: WriteBack
NumOfUsedPD: 6                  NumOfAxles: 1
SectorSize: 512Bytes            RAID5&6Algorithm: right asymmetric (4)
TolerableNumOfDeadDrivesPerAxle: 1 ParityPace: N/A
CodecScheme: N/A
```

cliib> checktable -l 0

Ld Id: 0

```
=====
=====
Read Check Table
=====
=====
=====
=====
```

#	Starting Logical Block Address	Count
---	--------------------------------	-------

0	3537334912	1
1	4294967296	0
2	0	0
3	12885825230	0
4	8797860203681808384	5912
5	8797858958141358080	71
6	8797860205730220544	9608
7	-4613624524098221568	71
8	2048412160	41332

```
=====
=====
No write check table entry available
=====
=====
```



No inconsistent block table entry available

cliib> event

```
=====
=====
Seq  Device      Severity TimeStamp      Description
=====
=====
0   Ctrl 1       Warning Dec 11, 2017 10:43:25 Last shutdown is abnormal
1   Ctrl 1       Info   Dec 11, 2017 10:43:31 The system is started
2   SEP 1       Info   Dec 11, 2017 10:43:39 SEP is found
3   LD 0        Major  Dec 11, 2017 10:43:47 Logical drive has been
                        set to critical
4   DA 0        Info   Dec 11, 2017 10:49:35 Rebuild is stopped
5   DA 0        Info   Dec 11, 2017 11:12:16 Rebuild is started
6   PD 3        Minor  Dec 11, 2017 11:14:48 Command times out on
                        physical disk
7   PD 3        Info   Dec 11, 2017 11:14:48 Physical Disk has been
                        reset
8   PD 3        Minor  Dec 11, 2017 11:22:29 Command times out on
                        physical disk
9   PD 3        Info   Dec 11, 2017 11:22:29 Physical Disk has been
                        reset
10  PD 3        Minor  Dec 11, 2017 11:30:51 Command times out on
                        physical disk
11  PD 3        Info   Dec 11, 2017 11:30:51 Physical Disk has been
                        reset
12  PD 3        Minor  Dec 11, 2017 11:36:06 Command times out on
                        physical disk
13  PD 3        Info   Dec 11, 2017 11:36:07 Physical Disk has been
                        reset
```

cliib> event -l nvram

```
=====
=====
Seq  Device      Severity TimeStamp      Description
=====
=====
333 PD 3        Info   Dec 7, 2017 17:31:39 Physical Disk has been
                        reset
334 PD 3        Minor  Dec 7, 2017 17:37:29 Command times out on
                        physical disk
335 PD 3        Info   Dec 7, 2017 17:37:29 Physical Disk has been
                        reset
336 PD 3        Minor  Dec 7, 2017 17:44:43 Command times out on
                        physical disk
```

337	PD 3	Info	Dec 7, 2017 17:44:43	Physical Disk has been reset
338	PD 3	Minor	Dec 7, 2017 17:51:36	Command times out on physical disk
339	PD 3	Info	Dec 7, 2017 17:51:36	Physical Disk has been reset
340	PD 3	Minor	Dec 7, 2017 17:58:26	Command times out on physical disk
341	PD 3	Info	Dec 7, 2017 17:58:26	Physical Disk has been reset
342	PD 3	Minor	Dec 7, 2017 18:05:36	Command times out on physical disk
343	PD 3	Info	Dec 7, 2017 18:05:36	Physical Disk has been reset
344	PD 3	Minor	Dec 7, 2017 18:12:33	Command times out on physical disk
345	PD 3	Info	Dec 7, 2017 18:12:34	Physical Disk has been reset
346	PD 3	Minor	Dec 7, 2017 18:19:41	Command times out on physical disk
347	PD 3	Info	Dec 7, 2017 18:19:41	Physical Disk has been reset
348	PD 3	Minor	Dec 7, 2017 18:24:40	Command times out on physical disk
349	PD 3	Info	Dec 7, 2017 18:24:40	Physical Disk has been reset
350	PD 3	Minor	Dec 7, 2017 18:30:59	Command times out on physical disk
351	PD 3	Info	Dec 7, 2017 18:30:59	Physical Disk has been reset
352	PD 3	Minor	Dec 7, 2017 18:37:23	Command times out on physical disk
353	PD 3	Info	Dec 7, 2017 18:37:23	Physical Disk has been reset
354	PD 3	Minor	Dec 7, 2017 18:43:35	Command times out on physical disk
355	PD 3	Info	Dec 7, 2017 18:43:35	Physical Disk has been reset
356	PD 3	Minor	Dec 7, 2017 18:53:19	Command times out on physical disk
357	PD 3	Info	Dec 7, 2017 18:53:19	Physical Disk has been reset
358	PD 3	Minor	Dec 7, 2017 18:57:49	Command times out on physical disk
359	PD 3	Info	Dec 7, 2017 18:57:49	Physical Disk has been reset

360	PD 3	Minor	Dec 7, 2017 19:02:55	Command times out on physical disk
361	PD 3	Info	Dec 7, 2017 19:02:55	Physical Disk has been reset
362	PD 3	Minor	Dec 7, 2017 19:08:26	Command times out on physical disk
363	PD 3	Info	Dec 7, 2017 19:08:26	Physical Disk has been reset
364	Ctrl 1	Info	Dec 7, 2017 19:26:20	The system is stopped
365	Ctrl 1	Info	Dec 8, 2017 10:27:27	The system is started
366	LD 0	Major	Dec 8, 2017 10:27:27	Logical drive has been set to critical
367	PD 3	Minor	Dec 8, 2017 10:34:06	Command times out on physical disk
368	PD 3	Info	Dec 8, 2017 10:34:06	Physical Disk has been reset
369	PD 3	Minor	Dec 8, 2017 10:36:31	Command times out on physical disk
370	PD 3	Info	Dec 8, 2017 10:36:32	Physical Disk has been reset
371	PD 3	Minor	Dec 8, 2017 12:05:11	Command times out on physical disk
372	PD 3	Info	Dec 8, 2017 12:05:11	Physical Disk has been reset
373	PD 3	Minor	Dec 8, 2017 12:12:04	Command times out on physical disk
374	PD 3	Info	Dec 8, 2017 12:12:05	Physical Disk has been reset
375	PD 3	Minor	Dec 8, 2017 12:16:18	Command times out on physical disk
376	PD 3	Info	Dec 8, 2017 12:16:18	Physical Disk has been reset
377	PD 3	Minor	Dec 8, 2017 12:22:08	Command times out on physical disk
378	PD 3	Info	Dec 8, 2017 12:22:08	Physical Disk has been reset
379	PD 3	Minor	Dec 8, 2017 12:28:18	Command times out on physical disk
380	PD 3	Info	Dec 8, 2017 12:28:19	Physical Disk has been reset
381	PD 3	Minor	Dec 8, 2017 12:41:17	Command times out on physical disk
382	PD 3	Info	Dec 8, 2017 12:41:18	Physical Disk has been reset
383	Ctrl 1	Warning	Dec 11, 2017 10:43:25	Last shutdown is abnormal
384	Ctrl 1	Info	Dec 11, 2017 10:43:31	The system is started

385	LD 0	Major	Dec 11, 2017 10:43:47	Logical drive has been set to critical
386	DA 0	Info	Dec 11, 2017 10:49:35	Rebuild is stopped
387	DA 0	Info	Dec 11, 2017 11:12:16	Rebuild is started
388	PD 3	Minor	Dec 11, 2017 11:14:48	Command times out on physical disk
389	PD 3	Info	Dec 11, 2017 11:14:48	Physical Disk has been reset
390	PD 3	Minor	Dec 11, 2017 11:22:29	Command times out on physical disk
391	PD 3	Info	Dec 11, 2017 11:22:29	Physical Disk has been reset
392	PD 3	Minor	Dec 11, 2017 11:30:51	Command times out on physical disk
393	PD 3	Info	Dec 11, 2017 11:30:51	Physical Disk has been reset
394	PD 3	Minor	Dec 11, 2017 11:36:06	Command times out on physical disk
395	PD 3	Info	Dec 11, 2017 11:36:07	Physical Disk has been reset

cliib>