

Appendix C : Logs/Events

The lists of log and event, alert messages that Universal RAID Utility logs to RAID Log and OS Log are described in this section.

[Event Source, Alert Type]

OS event source name: raidsrv
 Source Name on NEC ESM PRO Manager (Windows): raidsrv
 Source Name on NEC ESM PRO Manager (Linux, VMware): RAIDS RV
 Alert Type : URAIDUTL

[Log]

Mark	Description
R	Universal RAID Utility logs this event to RAID Log.
O	Universal RAID Utility logs this event to OS log.

[Alert]

Mark	Description
M and MA	Universal RAID Utility sends this event to NEC ESM PRO Manager as alert.

[Address] description in [Description]

The [Address] description is different from the category of event.

Category of Event	Type	Description
RAID Controller Battery Flash Backup Unit	1	[CTRL:%1(ID=%2)] %1 : Number of RAID Controller %2 : ID of RAID Controller
Physical Device	2	[CTRL:%1(ID=%2) PD:%3(ID=%4) %5%6] %1 : Number of RAID Controller %2 : ID of RAID Controller %3 : Number of Physical Device %4 : ID of Physical Device %5 : Vendor and Model of Physical Device %6 : Firmware Version of Physical Device
Logical Drive	3	[CTRL:%1(ID=%2) LD:%3(ID=%4)] %1 : Number of RAID Controller %2 : ID of RAID Controller %3 : Number of Logical Drive %4 : ID of Logical Drive
Enclosure	4	[CTRL:%1(ID=%2) ENC:%3] %1 : Number of RAID Controller %2 : ID of RAID Controller %3 : Number of Enclosure
Power Supply Unit in Enclosure	5	[CTRL:%1(ID=%2) ENC:%3 POW:%4] %1 : Number of RAID Controller %2 : ID of RAID Controller %3 : Number of Enclosure %4 : Number of Power Supply Unit
Fan Unit in Enclosure	6	[CTRL:%1(ID=%2) ENC:%3 FAN:%4] %1 : Number of RAID Controller %2 : ID of RAID Controller %3 : Number of Enclosure %4 : Number of Fan Unit

[priority, facility]

The messages of Universal RAID Utility have the following priority and facility on Linux or VMware ESX.

kind	priority	facility
information	info	daemon
warning	warning	daemon
error	err	daemon

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0201 (400000C9)	Information	[Address Type 1] The buzzer of RAID Controller is enable.	R			
0202 (400000CA)	Information	[Address Type 1] The buzzer of RAID Controller is disable.	R			
0203 (400000CB)	Information	[Address Type 1] The Rebuild Priority of RAID Controller was changed. (Value : %1)	R			
0204 (400000CC)	Information	[Address Type 1] The Consistency Check Priority of RAID Controller was changed. (Value: %1)	R			
0205 (400000CD)	Information	[Address Type 1] The Initialize Priority of RAID Controller was changed. (Value : %1)	R			
0206 (400000CE)	Information	[Address Type 1] Auto Patrol Read function is enable.	R			
0207 (400000CF)	Information	[Address Type 1] Auto Patrol Read function is disable.	R			
0208 (400000D0)	Information	[Address Type 1] A Patrol Read Priority of RAID Controller was changed. (Value : %1)	R			
0209 (400000D1)	Information	[Address Type 1] Patrol Read was started.	R			
0210 (400000D2)	Information	[Address Type 1] Patrol Read completed.	R			
0211 (800000D3)	Warning	[Address Type 1] A Warning Error happened to RAID Controller. Detail : %1	RO	M	RAID Controller Warning	Please check the RAID Controller. If some kind of problem happens to the RAID Controller repeatedly, please replace it.
0212 (C00000D4)	Fatal	[Address Type 1] A Fatal Error happened to RAID Controller. Detail : %1	RO	MA	RAID Controller Fatal	Please replace the RAID Controller.
0213 (400000D5)	Information	[Address Type 1] Patrol Read was paused.	R			
0214 (400000D6)	Information	[Address Type 1] Patrol Read was resumed.	R			
0215 (400000D7)	Information	[Address Type 1] Patrol Read was queued.	R			
0216 (400000D8)	Information	[Address Type 1] Patrol Read was stopped.	R			
0217 (C00000D9)	Fatal	[Address Type 1] Patrol Read failed.	RO	MA	Patrol Read Failed	Please disable the setting of Patrol Read and then enable it to retry Patrol Read. If Patrol Read fails again, the RAID System may have some problems. Please deal with the problem of the RAID System and retry Patrol Read.
0218 (C00000DA)	Fatal	[Address Type 1] A Fatal Firmware Error happened to RAID Controller. %1	RO	MA	RAID Controller Firmware Error	Fatal Please replace the RAID Controller.

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0219 (400000DB)	Information	[Address Type 1] RAID Controller property was changed.	RO			
0220 (800000DC)	Warning	[Address Type 1] SAS wide port lost link on SAS Expander.	RO	MA	SAS Port link lost	Check if the Mini-SAS cable between a RAID controller and a drive bay is connected properly. If the same error still occurs after that, replace the Mini-SAS cable. If the same error persists after replacing the Mini-SAS cable, replace the RAID controller or the expander board. If you can not solve this issue by these measures, contact your service representative and gather system information by collect.exe tool (collectsa.sh when you use Linux) and send him/her the information.
0221 (400000DD)	Information	[Address Type 1] SAS wide port lost link on SAS Expander.	RO	M	SAS Port link restored	None
0301 (4000012D)	Information	[Address Type 2] Physical Device is Online.	RO	M	Physical Device Online	None
0302 (4000012E)	Information	[Address Type 2] Physical Device is Ready.	RO	M	Physical Device Ready	None
0303 (4000012F)	Information	[Address Type 2] Physical Device is Hot Spare.	RO	M	Physical Device Hot Spare	None
0304 (C0000130)	Fatal	[Address Type 2] Physical Device is Failed.	RO	MA	Physical Device Failed	Please replace the Physical Device.
0305 (80000131)	Warning	[Address Type 2] Detected S.M.A.R.T. Error.	RO	MA	S.M.A.R.T. Error	Please replace the Physical Device.
0306 (40000132)	Information	[Address Type 2] Rebuild was started.	RO	MA	Rebuild Started	None
0307 (40000133)	Information	[Address Type 2] Rebuild completed.	RO	MA	Rebuild Completed	None
0308 (C0000134)	Fatal	[Address Type 2] Rebuild failed.	RO	MA	Rebuild Failed	Please replace the Physical Device.
0309 (40000135)	Information	[Address Type 2] Rebuild was stopped.	RO	MA	Rebuild Stopped	None
0311 (40000137)	Information	[Address Type 2] Physical Device was inserted.	RO	M	Physical Device Inserted	None
0312 (40000138)	Information	[Address Type 2] Physical Device was removed.	RO	M	Physical Device Removed	None
0313 (40000139)	Information	[Address Type 2] Global Hot Spare created.	R			
0314 (4000013A)	Information	[Address Type 2] Dedicated Hot Spare created.	R			
0315 (4000013B)	Information	[Address Type 2] Global Hot Spare removed.	R			

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0316 (4000013C)	Information	[Address Type 2] Dedicated Hot Spare removed.	R			
0317 (8000013D)	Warning	[Address Type 2] A Warning Error happened to Physical Device. Detail : %1	RO	M	Physical Device Warning	Please check the Physical Device. If some kind of problem happens to the Physical Device repeatedly, please replace it.
0318 (C000013E)	Fatal	[Address Type 2] A Fatal Error happened to Physical Device. Detail : %1	RO	MA	Physical Device Fatal	Please replace the Physical Device.
0319 (4000013F)	Information	[Address Type 2] Medium Error was detected in Physical Device and corrected. %1	RO	MA	Physical Device Medium Error(Correctable)	Please replace the Physical Device if too many errors are detected on a Physical Device. * : Replace the Physical Device if an error is detected equal to or more than 20 times a week on a Physical Device.
0320 (C0000140)	Fatal	[Address Type 2] Medium Error was detected in Physical Device but could not correct. %1 %1 : Logical Block Address	RO	MA	Physical Device Medium Error(Uncorrectable)	Please replace the Physical Device if too many errors are detected on a Physical Device. * : Replace the Physical Device if an error is detected equal to or more than 20 times a week on a Physical Device.
0321 (40000141)	Information	[Address Type 2] Rebuild was paused.	R			
0322 (40000142)	Information	[Address Type 2] Rebuild was resumed.	R			
0323 (40000143)	Information	[Address Type 2] Rebuild was queued.	R			
0324 (80000144)	Warning	[Address Type 2] Medium Error was detected in Physical Device. %1 %1 : Logical Block Address	RO	MA	Physical Device Medium Error Detected	Please replace the Physical Device if too many errors are detected on a Physical Device. * : Replace the Physical Device if an error is detected equal to or more than 20 times a week on a Physical Device.
0325 (40000145)	Information	[Address Type 2] Physical Device Power Status is Transitioning.	RO			
0326 (40000146)	Information	[Address Type 2] Physical Device Power Status is On.	RO			
0327 (40000147)	Information	[Address Type 2] Physical Device Power Status is Power Saving.	RO			
0328 (C0000148)	Fatal	[Address Type 2] Physical Device Power Status Change failed.	RO	MA	Physical Device Power Status Change Failed	Please replace the Physical Device.
0401 (40000191)	Information	[Address Type 3] Logical Drive is Online.	RO	M	Logical Drive Online	None

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0402 (80000192)	Warning	[Address Type 3] Logical Drive is Degraded.	RO	MA	Logical Drive Degraded	If there is Hot Spare, RAID System will rebuild automatically. If there is not it, please replace the Physical Device and rebuild it.
0403 (C0000193)	Fatal	[Address Type 3] Logical Drive is Offline.	RO	MA	Logical Drive Offline	Please replace the Physical Device and remake the Logical Drive. Next restore the backup data to the Logical Drive.
0404 (40000194)	Information	[Address Type 3] Initialization was started.	R			
0405 (40000195)	Information	[Address Type 3] Initialization completed.	R			
0406 (C0000196)	Fatal	[Address Type 3] Initialization failed.	RO	MA	Initialization Failed	Please retry Initialization. If Initialization failed repeatedly, the RAID System may have some kind of problem. Please deal with the problem of the RAID System.
0407 (40000197)	Information	[Address Type 3] Initialization was stopped.	R			
0409 (40000199)	Information	[Address Type 3] Consistency Check was started.	R			
0410 (4000019A)	Information	[Address Type 3] Consistency Check completed.	R			
0411 (C000019B)	Fatal	[Address Type 3] Consistency Check failed.	RO	MA	Consistency Check Failed	Please retry Consistency Check. If Consistency Check failed repeatedly, the RAID System may have some kind of problem. Please deal with the problem of the RAID System.
0412 (4000019C)	Information	[Address Type 3] Consistency Check was stopped.	R			
0413 (C000019D)	Fatal	[Address Type 3] Data Inconsistency was detected in Logical Drive by Consistency Check and corrected.	RO	MA	Data Inconsistency Error Corrected	Please execute Consistency Check again when the load of the system is low. If the error does not occur on the second time of Consistency Check, the Physical Device does not have any problems. If the same error occurs, please replace the Physical Device for the preventive maintenance (please be sure to ask NEC customer service before the replacement to identify which Physical Device has a failure). After replacing the Physical Device, restore the backup data to the Logical Drive.
0415 (4000019F)	Information	[Address Type 3] Logical Drive was created.	R			
0416 (400001A0)	Information	[Address Type 3] Logical Drive was deleted.	R			
0417 (400001A1)	Information	[Address Type 3] The Cache Mode of Logical Drive was changed. (Value : %1) %1 : Changed value *1	RO	M	Cache Mode Changed	None

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0418 (400001A2)	Information	[Address Type 3] Background Initialization was started.	R			
0419 (400001A3)	Information	[Address Type 3] Background Initialization completed.	R			
0420 (800001A4)	Warning	[Address Type 3] Background Initialization failed.	RO	MA	Background Initialization Failed	The RAID System may have some kind of problem. Please deal with the problem of the RAID System.
0421 (400001A5)	Information	[Address Type 3] Background Initialization was stopped.	R			
0422 (C00001A6)	Fatal	[Address Type 3] An error was detected in Logical Drive but could not correct.	RO	MA	Logical Drive Uncorrectable Error	Please replace the Physical Device (You need to ask it which Physical Device do you replace). After replacement of Physical Device, remake the Logical Drive and restore the backup data to it.
0423 (400001A7)	Information	[Address Type 3] An error was detected in Logical Drive and corrected.	RO	MA	Logical Drive Corrected Error	Please replace the Physical Device for the prevention of failure(You need to ask it which Physical Device do you replace). Next restore the backup data to the Logical Drive after replacement of Physical Device.
0424 (800001A8)	Warning	[Address Type 3] A Warning Error happened to Logical Drive. Detail : %1 %1 : Detail Information	RO	M	Logical Drive Warning	The RAID Controller and/or the Physical Device may have some kind of problem. You need to ask it which component has broken.
0425 (C00001A9)	Fatal	[Address Type 3] A Fatal Error happened to Logical Drive. Detail : %1 %1 : Detail information	RO	MA	Logical Drive Fatal	The RAID Controller and/or the Physical Device may have some kind of problem. You need to ask it which component has broken.
0426 (400001AA)	Information	[Address Type 3] Initialization was paused.	R			
0427 (400001AB)	Information	[Address Type 3] Initialization was resumed.	R			
0428 (400001AC)	Information	[Address Type 3] Initialization was queued.	R			
0429 (400001AD)	Information	[Address Type 3] Consistency Check was paused.	R			
0430 (400001AE)	Information	[Address Type 3] Consistency Check was resumed.	R			
0431 (400001AF)	Information	[Address Type 3] Consistency Check was queued.	R			
0432 (400001B0)	Information	[Address Type 3] Background Initialization was paused.	R			
0433 (400001B1)	Information	[Address Type 3] Background Initialization was resumed.	R			
0434 (400001B2)	Information	[Address Type 3] Background Initialization was queued.	R			

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0435 (400001B3)	Information	[Address Type 3] Power Save Mode of Logical Drive was changed.	RO			
0436 (400001B4)	Information	[Address Type 3] SSD Cache Drive was created.	RO	M	SSD Cache Drive Created	None
0437 (400001B5)	Information	[Address Type 3] SSD Cache Drive Capacity was changed.	RO	M	SSD Cache Drive Capacity Changed	None
0501 (400001F5)	Information	[Address Type 1] Battery was detected.	R			
0502 (800001F6)	Warning	[Address Type 1] Battery was disconnected.	RO	MA	Battery Disconnect	Please check the Battery. If some kind of problem happen to the Battery repeatedly, please replace it.
0503 (400001F7)	Information	[Address Type 1] Battery was replaced.	R			
0504 (400001F8)	Information	[Address Type 1] The temperature of Battery is normal.	RO	M	Battery Temperature Normal	None
0505 (800001F9)	Warning	[Address Type 1] The temperature of Battery is high.	RO	M	Battery Temperature High	Please check the Battery. If some kind of problem happens to the Battery repeatedly, please replace it.
0506 (800001FA)	Warning	[Address Type 1] The voltage of Battery is low.	RO	M	Battery Voltage Low	Please check the Battery. If some kind of problem happens to the Battery repeatedly, please replace it.
0507 (800001FB)	Warning	[Address Type 1] A Fatal Error happened to Battery.	RO	MA	Battery Fatal	Please replace the Battery.
0508 (800001FC)	Warning	[Address Type 1] The Battery state is unstable.	RO			
0509 (400001FD)	Information	[Address Type 1] The voltage of Battery is normal.	RO	M	Battery Voltage Normal	None
0510 (800001FE)	Warning	[Address Type 1] Battery Refresh required.	RO	M	Battery Refresh Required	Please start the Battery Refreshing.
0511 (400001FF)	Information	[Address Type 1] Flash Backup Unit was detected.	R			
0512 (80000200)	Warning	[Address Type 1] Flash Backup Unit was disconnected.	RO	MA	Flash Backup Unit Disconnect	Please check the Flash Backup Unit. If some kind of problem happens to the Flash Backup Unit repeatedly, please replace it.
0513 (40000201)	Information	[Address Type 1] Flash Backup Unit was replaced.	R			
0514 (40000202)	Information	[Address Type 1] The temperature of Flash Backup Unit is normal.	RO	M	Flash Backup Unit Temperature Normal	None
0515 (80000203)	Warning	[Address Type 1] The temperature of Flash Backup Unit is high.	RO	M	Flash Backup Unit Temperature High	Please check the Flash Backup Unit. If some kind of problem happens to the Flash Backup Unit repeatedly, please replace it.
0516 (80000204)	Warning	[Address Type 1] The voltage of Flash Backup Unit is low.	RO	M	Flash Backup Unit Voltage Low	Please check the Flash Backup Unit. If some kind of problem happens to the Flash Backup Unit repeatedly, please replace it.

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0517 (80000205)	Warning	[Address Type 1] A Fatal Error happened to Flash Backup Unit.	RO	MA	Flash Backup Unit Fatal	Please replace the Flash Backup Unit.
0601 (80000259)	Warning	[Address Type 4] A Warning Error happened to Enclosure.	RO	M	Enclosure Warning	Please check the Enclosure. If some kind of problem happens to the Enclosure repeatedly, please deal with the problem of the Enclosure.
0602 (C000025A)	Fatal	[Address Type 4] A Fatal Error happened to Enclosure.	RO	MA	Enclosure Fatal	Please check the Enclosure. If some kind of problem happens to the Enclosure repeatedly, please deal with the problem of the Enclosure.
0603 (8000025B)	Warning	[Address Type 4] The temperature of Enclosure is Warning level.	RO	MA	Enclosure Temperature Warning	Please check the Fan Unit of the Enclosure. If some kind of problem happens to the Fan Unit, please deal with the problem.
0604 (C000025C)	Fatal	[Address Type 4] The temperature of Enclosure is Fatal level.	RO	MA	Enclosure Temperature Fatal	Please check the Fan Unit of the Enclosure. If some kind of problem happens to the Fan Unit, please deal with the problem.
0605 (8000025D)	Warning	[Address Type 5] An error happened to the Power Supply Unit of Enclosure.	RO	MA	Enclosure Power Supply Unit Error	Please check the Power Supply Unit of the Enclosure. If some kind of problem happens to the Power Supply Unit, please deal with the problem.
0606 (8000025E)	Warning	[Address Type 6] An error happened to the Fan Unit of Enclosure.	RO	MA	Enclosure Fan Unit Error	Please check the Fan Unit of the Enclosure. If some kind of problem happens to the Fan Unit, please deal with the problem.
0607 (4000025F)	Information	[Address Type 4] The temperature of Enclosure is Normal level.	RO	MA	Enclosure Temperature Normal	None
0701 (400002BD)	Information	[Address Type 1] The Configuration was cleared.	RO	M	Configuration Cleared	None
0702 (400002BE)	Information	<p>raidsrv Configuration</p> <p>[CTRL:%1(ID=%2)] Vendor Product Firmware Version [LD:%3(ID=%4)] RAID:RAIDlevel PD:X,Y,Z (count of LD STS:Status [PD:%5(ID=%6)] Vendor/Model Firmware Version STS:Status PWR:Power Status</p> <p>%1 : Number of RAID Controller %2 : ID of RAID Controller %3 : Number of Logical Drive %4 : ID of Logical Drive %5 : Number of Physical Device %6 : ID of Physical Device X, Y, Z : Number of Physical Device used in Logical Drive. There is not the STS of PD when the device type is not HDD or HDD(SSD).</p>	O			

Event ID (hex digit)	Severity	Description	Log	Alert	Summary	Deal Method
0801 (C0000321)	Fatal	It became unable to manage the RAID System due to a fatal error on the operating system.	RO	MA	Operating System Fatal Error	Please solve the fatal error on operating system. This event is reported by insufficient free memory space, insufficient free disk space or any other causes. Please refer Universal RAID Utility User's Guide for detail.

*1 : This item may not include in log message by the type of RAID Controller