



Managing the System Event Log

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System Event Log

The system event log (SEL) resides on the BMC in NVRAM. It records most server-related events, such as over and under voltage, temperature events, fan events, events from BIOS, etc. The SEL is mainly used for troubleshooting purposes.

SEL file is approximately 40KB in size, and no further events can be recorded when it is full. It must be cleared before additional events can be recorded.

You can use the SEL policy to backup the SEL to a remote server, and optionally clear the SEL after a backup operation occurs. Backup operations can be triggered based on specific actions, or they can occur at regular intervals. You can also manually backup or clear the SEL.

The backup file is automatically generated. The filename format is `sel-SystemName-ChassisID-ServerID-ServerSerialNumber-Timestamp`; for example, `sel-UCS-A-ch01-serv01-QCI12522939-20091121160736`.

Viewing the System Event Log for a Server

Viewing the System Event Log from Exec Mode

Procedure

	Command or Action	Purpose
Step 1	UCS-A# show sel 1/3	Displays the system event log.

The following example displays the system event log from Exec mode for blade 3 in chassis 1.

```
UCS-A# scope server 1/3
UCS-A /chassis/server # show sel
 1 | 01/01/1970 01:23:27 | System Event 0x83 | Timestamp clock synch | SEL timestamp
clock updated, event is f
irst of pair | Asserted
 2 | 01/01/1970 01:23:28 | Drive slot(Bay) SAS0_LINK_STATUS | Transition to Degraded |
Asserted
 3 | 01/01/1970 01:23:28 | Drive slot(Bay) SAS0_LINK_STATUS | Transition to On Line |
Deasserted
 4 | 01/01/1970 01:23:28 | Platform alert LED_SAS0_FAULT | LED is blinking fast |
Asserted
 5 | 01/01/1970 01:23:28 | Platform alert LED_SAS0_FAULT | LED is on | Deasserted
 6 | 01/01/1970 01:23:28 | Platform alert LED_FPID | LED is on | Asserted
 7 | 01/01/1970 01:23:28 | Platform alert LED_FPID | LED is off | Deasserted
 8 | 01/01/1970 01:23:29 | Entity presence MAIN_POWER | Device Absent | Asserted
 9 | 01/01/1970 01:23:29 | Entity presence MAIN_POWER | Device Present | Deasserted
 a | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED is on | Asserted
 b | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED color is green | Asserted
 c | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED is blinking fast |
Deasserted
 d | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED color is amber | Deasserted
 e | 01/01/1970 00:00:22 | Drive slot(Bay) SAS0_LINK_STATUS | Transition to Degraded |
Asserted
 f | 01/01/1970 00:00:22 | Entity presence MEZZ_PRS | Device Present | Asserted
10 | 01/01/1970 00:00:22 | Entity presence HDD1_PRS | Device Absent | Asserted
```

Viewing the System Event Log from Chassis Server Mode

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope server chassis-id/blade-id	Enters chassis server mode for the specified server.
Step 2	UCS-A /chassis/server # show sel	Displays the system event log.

The following example displays the system event log from chassis server mode for blade 3 in chassis 1.

```
UCS-A# scope server 1/3
UCS-A /chassis/server # show sel
 1 | 01/01/1970 01:23:27 | System Event 0x83 | Timestamp clock synch | SEL timestamp
clock updated, event is f
```

```

first of pair | Asserted
 2 | 01/01/1970 01:23:28 | Drive slot(Bay) SAS0_LINK_STATUS | Transition to Degraded |
  Asserted
 3 | 01/01/1970 01:23:28 | Drive slot(Bay) SAS0_LINK_STATUS | Transition to On Line |
  Deasserted
 4 | 01/01/1970 01:23:28 | Platform alert LED_SAS0_FAULT | LED is blinking fast |
  Asserted
 5 | 01/01/1970 01:23:28 | Platform alert LED_SAS0_FAULT | LED is on | Deasserted
 6 | 01/01/1970 01:23:28 | Platform alert LED_FPID | LED is on | Asserted
 7 | 01/01/1970 01:23:28 | Platform alert LED_FPID | LED is off | Deasserted
 8 | 01/01/1970 01:23:29 | Entity presence MAIN_POWER | Device Absent | Asserted
 9 | 01/01/1970 01:23:29 | Entity presence MAIN_POWER | Device Present | Deasserted
 a | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED is on | Asserted
 b | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED color is green | Asserted

 c | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED is blinking fast |
  Deasserted
 d | 01/01/1970 01:23:29 | Platform alert LED_SAS0_FAULT | LED color is amber | Deasserted

 e | 01/01/1970 00:00:22 | Drive slot(Bay) SAS0_LINK_STATUS | Transition to Degraded |
  Asserted
 f | 01/01/1970 00:00:22 | Entity presence MEZZ_PRS | Device Present | Asserted
10 | 01/01/1970 00:00:22 | Entity presence HDD1_PRS | Device Absent | Asserted
    
```

Configuring the SEL Policy

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope org <i>org-name</i>	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # scope ep-log-policy sel	Enters organization endpoint log policy mode and scopes the SEL policy.
Step 3	UCS-A /org/ep-log-policy # set description <i>description</i>	(Optional) Provides a description for the policy. Note If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any show command output.
Step 4	UCS-A /org/ep-log-policy # set backup action [log-full] [on-change-of-association] [on-clear] [timer] [none]	Specifies an action or actions that will trigger a backup operation.
Step 5	UCS-A /org/ep-log-policy # set backup clear-on-backup { no yes }	Specifies whether or not to clear the system event log after a backup operation occurs.
Step 6	UCS-A /org/ep-log-policy # set backup destination <i>URL</i>	Specifies the protocol, user, password, remote hostname, and remote path for the backup operation. Depending on the protocol used, specify the <i>URL</i> using one of the following syntax:

	Command or Action	Purpose
		<ul style="list-style-type: none"> • <code>ftp://hostname/path</code> • <code>scp://username@hostname/path</code> • <code>sftp://username@hostname/path</code> • <code>tftp://hostname:port-num/path</code> <p>Note You can also specify the backup destination by using the <code>set backup hostname</code>, <code>set backup password</code>, <code>set backup protocol</code>, <code>set backup remote-path</code>, <code>set backup user</code> commands, or by using the <code>set backup destination</code> command. Use either method to specify the backup destination.</p>
Step 7	<code>UCS-A /org/ep-log-policy # set backup format {ascii binary}</code>	Specifies the format for the backup file.
Step 8	<code>UCS-A /org/ep-log-policy # set backup hostname {hostname ip-addr}</code>	Specifies the hostname or IP address of the remote server.
Step 9	<code>UCS-A /org/ep-log-policy # set backup interval {1-hour 2-hours 4-hours 8-hours 24-hours never}</code>	Specifies the time interval for the automatic backup operation. Specifying the never keyword means that automatic backups will not be made.
Step 10	<code>UCS-A /org/ep-log-policy # set backup password password</code>	Specifies the password for the username. This step does not apply if the TFTP protocol is used.
Step 11	<code>UCS-A /org/ep-log-policy # set backup protocol {ftp scp sftp tftp}</code>	Specifies the protocol to use when communicating with the remote server.
Step 12	<code>UCS-A /org/ep-log-policy # set backup remote-path path</code>	Specifies the path on the remote server where the backup file is to be saved.
Step 13	<code>UCS-A /org/ep-log-policy # set backup user username</code>	Specifies the username the system should use to log in to the remote server. This step does not apply if the TFTP protocol is used.
Step 14	<code>UCS-A /org/ep-log-policy # commit-buffer</code>	Commits the transaction.

The following example configures the SEL policy to back up the system event log (in ascii format) every 24 hours or when the log is full and clear the system event log after a backup operation occurs and commits the transaction:

```
UCS-A# scope org /
UCS-A /org # scope ep-log-policy sel
UCS-A /org/ep-log-policy # set backup destination scp://user@192.168.1.10/logs
Password:
UCS-A /org/ep-log-policy* # set backup action log-full
UCS-A /org/ep-log-policy* # set backup clear-on-backup yes
UCS-A /org/ep-log-policy* # set backup format ascii
UCS-A /org/ep-log-policy* # set backup interval 24-hours
```

```
UCS-A /org/ep-log-policy* # commit-buffer
UCS-A /org/ep-log-policy #
```

Backing Up the System Event Log for a Server

Backing Up the System Event Log from Exec Mode

Before You Begin

Configure the system event log policy. The manual backup operation uses the remote destination configured in the system event log policy.

Procedure

	Command or Action	Purpose
Step 1	UCS-A /chassis/server # backup sel <i>chassis-id/blade-id</i>	Clears the system event log.
Step 2	UCS-A# commit-buffer	Commits the transaction.

The following example backs up the system event log from exec mode for blade 3 in chassis 1 and commits the transaction.

```
UCS-A# backup sel 1/3
UCS-A* # commit-buffer
UCS-A#
```

Backing Up the System Event Log from Chassis Server Mode

Before You Begin

Configure the system event log policy. The manual backup operation uses the remote destination configured in the system event log policy.

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope server <i>chassis-id/blade-id</i>	Enters chassis server mode for the specified server.
Step 2	UCS-A /chassis/server # backup sel	Clears the system event log.
Step 3	UCS-A /chassis/server # commit-buffer	Commits the transaction.

The following example backs up the system event log from chassis server mode for blade 3 in chassis 1 and commits the transaction.

```
UCS-A# scope server 1/3
UCS-A /chassis/server # backup sel
UCS-A /chassis/server* # commit-buffer
UCS-A /chassis/server #
```

Clearing the System Event Log for a Server

Clearing the System Event Log from Exec Mode

Procedure

	Command or Action	Purpose
Step 1	UCS-A# <code>clear sel chassis-id/blade-id</code>	Clears the system event log.
Step 2	UCS-A# <code>commit-buffer</code>	Commits the transaction.

The following example clears the system event log from Exec mode for blade 3 in chassis 1 and commits the transaction:

```
UCS-A# clear sel 1/3
UCS-A* # commit-buffer
UCS-A#
```

Clearing the System Event Log from Chassis Server Mode

Procedure

	Command or Action	Purpose
Step 1	UCS-A# <code>scope server chassis-id/blade-id</code>	Enters chassis server mode for the specified server.
Step 2	UCS-A /chassis/server # <code>clear sel</code>	Clears the system event log.
Step 3	UCS-A /chassis/server # <code>commit-buffer</code>	Commits the transaction.

The following example clears the system event log from chassis server mode for blade 3 in chassis 1 and commits the transaction:

```
UCS-A# scope server 1/3
UCS-A /chassis/server # clear sel
UCS-A /chassis/server* # commit-buffer
UCS-A /chassis/server #
```