Managing the System Event Log

This chapter includes the following sections:

System Event Log

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

The 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 for an Individual Server

Procedure

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

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

```
UCS-A# show sel 1/3
     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 for All of the Servers in a Chassis

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
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
```

Configuring the SEL Policy

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope org** *org-name*	Enters organization mode for the specified organization. To enter the root organization mode, type / as the *org-name* .
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** *description*	(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 to clear the system event log after a backup operation occurs.

	Command or Action	Purpose
Step 6	UCS-A /org/ep-log-policy # **set backup destination** *URL*	Specifies the protocol, user, password, remote hostname, and remote path for the backup operation. Depending on the protocol used, specify the URL using one of the following syntax: • **ftp:**// *username@hostname* / *path* • **scp:**// *username* @ *hostname* / *path* • **sftp:**// *username* @ *hostname* / *path* • **tftp:**// *hostname* : *port-num* / *path* **Note** You can also specify the backup destination by using the **set backup hostname** , **set backup password** , **set backup protocol** , **set backup remote-path** , **set backup user** commands, or by using the **set backup destination** command. Use either method to specify the backup destination.
Step 7	UCS-A /org/ep-log-policy # **set backup format** {*ascii* | *binary*}	Specifies the format for the backup file.
Step 8	UCS-A /org/ep-log-policy # **set backup hostname** {*hostname* | *ip-addr*}	Specifies the hostname or IP address of the remote server.
Step 9	UCS-A /org/ep-log-policy # **set backup interval** {**1-hour** | **2-hours** | **4-hours** | **8-hours** | **24-hours** | **never**}	Specifies the time interval for the automatic backup operation. Specifying the **never** keyword means that automatic backups will not be made.
Step 10	UCS-A /org/ep-log-policy # **set backup password** *password*	Specifies the password for the username. This step does not apply if the TFTP protocol is used.
Step 11	UCS-A /org/ep-log-policy # **set backup protocol** {**ftp** | **scp** | **sftp** | **tftp**}	Specifies the protocol to use when communicating with the remote server.
Step 12	UCS-A /org/ep-log-policy # **set backup remote-path** *path*	Specifies the path on the remote server where the backup file is to be saved.
Step 13	UCS-A /org/ep-log-policy # **set backup user** *username*	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	UCS-A /org/ep-log-policy # **commit-buffer**	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 for an Individual Server

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** *chassis-id* / *blade-id*	Clears the system event log.
Step 2	UCS-A# **commit-buffer**	Commits the transaction.

The following example backs up the system event log 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 for All of the Servers in a Chassis

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** *chassis-id* / *blade-id*	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 for an Individual Server

Procedure

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

The following example clears the system event log 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 for All of the Servers in a Chassis

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope server** *chassis-id* / *blade-id*	Enters chassis server mode for the specified server.

	Command or Action	Purpose
Step 2	UCS-A /chassis/server # **clear sel**	Clears the system event log.
Step 3	UCS-A /chassis/server # **commit-buffer**	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 #
```