Event logs

Error codes and messages are displayed in the following types of event logs:

- **POST error log:** This log contains the three most recent error codes and messages that were generated during POST. You can view the POST error log through the Configuration/Setup Utility program.
- **System event/error log:** This log contains a copy of the events in the Remote Supervisor Adapter II event log. You can view the system event/error log through the Configuration/Setup Utility program.

  Each system event/error log entry is displayed on its own page. To move from one entry to the next, use the Up Arrow (↑) and Down Arrow (↓) keys.

  Selecting **Clear error logs** clears the system event/error log and the Remote Supervisor Adapter II event log.

- **BMC system-event log:** This log contains all BMC, POST, and system management interrupt (SMI) events. You can view the BMC system-event log through the Configuration/Setup Utility program and through the Dynamic System Analysis (DSA) program (as the IPMI event log).

  Some BMC sensors cause assertion events to be logged when their setpoints are reached. When a setpoint condition no longer exists, a corresponding deassertion event is logged. However, not all events are assertion-type events.

  The BMC system-event log is limited in size. When it is full, new entries will not overwrite existing entries; therefore, you must periodically save and then clear the BMC system-event log through the Configuration/Setup Utility program. When you are troubleshooting, you might have to save and then clear the BMC system-event log to make the most recent events available for analysis.

  Each BMC system-event log entry is displayed on its own page. To display all the data for an entry, use the Up Arrow (↑) and Down Arrow (↓) keys or the Page Up and Page Down keys. To move from one entry to the next, select **Get Next Entry** or **Get Previous Entry**.

- **Remote Supervisor Adapter II event log:** This log contains a filtered subset of all BMC, POST, and system management interrupt (SMI) events and any events that are passed from the BMC to the Remote Supervisor Adapter II. You can view this log through the Remote Supervisor Adapter II Web interface and through the Dynamic System Analysis (DSA) program (as the ASM event log).

  You can clear the Remote Supervisor Adapter II event log by displaying the system event/error log in the Configuration/Setup Utility program and selecting **Clear error logs**.

- **DSA log:** This log is generated by the Dynamic System Analysis (DSA) program, and it is a chronologically ordered merge of the BMC system-event log (as the IPMI event log), the Remote Supervisor Adapter II log (as the ASM event log), and the operating-system event logs. You can view the DSA log through the DSA program.

Viewing event logs through the Configuration/Setup Utility program

To view the POST error log, system event/error log, or BMC system-event log, complete the following steps:

1. Turn on the server.
2. When the prompt Press F1 for Configuration/Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
3. Use one of the following procedures:

   - To view the POST error log or system event/error log, select **Event/Error Logs** and then select **POST Error Log** or **System Event/Error Log**.

- To view the BMC system-event log, select **Advanced Setup**, select **Baseboard Management Controller (BMC) Settings**, and select **BMC System Event Log**.

Viewing event logs without restarting the server

If the server is not hung, methods are available for you to view one or more event logs without having to restart the server.

If you have installed Portable or Installable Dynamic System Analysis (DSA), you can use it to view the BMC system-event log (as the IPMI event log), the Remote Supervisor Adapter II event log (as the ASM event log), the operating-system event logs, or the merged DSA log. You can also use DSA Preboot to view these logs, although you must restart the server to use DSA Preboot. To install Portable DSA, Installable DSA, or DSA Preboot or to download a DSA Preboot CD image, go to http://www.ibm.com/systems/support/supportsite.wss/docdisplay?lndocid=SERV-DSA&brandind=5000008 or complete the following steps.

Note: Changes are made periodically to the IBM Web site. The actual procedure might vary slightly from what is described in this document.

1. Go to http://www.ibm.com/systems/support/.
2. Under **Product support**, click **System x**.
3. Under **Popular links**, click **Software and device drivers**.
4. Under **Related downloads**, click **Dynamic System Analysis (DSA)** to display the matrix of downloadable DSA files.

If IPMItool is installed in the server, you can use it to view the BMC system-event log. Most recent versions of the Linux operating system come with a current version of IPMItool. For information about IPMItool, see http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/index.jsp?topic=/com.ibm.xseries.tools.doc/config_tools_ipmitool.html or complete the following steps.

Note: Changes are made periodically to the IBM Web site. The actual procedure might vary slightly from what is described in this document.

1. Go to http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/index.jsp.
2. In the navigation pane, click **IBM System x and BladeCenter Tools Center**.
3. Expand **Tools reference**, expand **Configuration tools**, expand **IPMI tools**, and click **IPMItool**.

For an overview of IPMI, go to http://publib.boulder.ibm.com/infocenter/systems/index.jsp?topic=/liaai/ipmi/liaaiipmi.htm or complete the following steps:

1. Go to http://publib.boulder.ibm.com/infocenter/systems/index.jsp.
2. In the navigation pane, click **IBM Systems Information Center**.
3. Expand **Operating systems**, expand **Linux information**, expand **Blueprints for Linux on IBM systems**, and click **Using Intelligent Platform Management Interface (IPMI) on IBM Linux platforms**.

You can view the Remote Supervisor Adapter II event log through the **Event Log** link in the Remote Supervisor Adapter II Web interface. For more information, see the Remote Supervisor Adapter II *User's Guide*.

The following table describes the methods that you can use to view the event logs, depending on the condition of the server. The first two conditions generally do not require that you restart the server.

Table 1. Methods for viewing event logs

Condition	Action
The server is not hung and is connected to a network.	Use any of the following methods: • Run Portable or Installable DSA to view the event logs or create an output file that you can send to IBM service and support. • In a Web browser, type the IP address of the Remote Supervisor Adapter II and go to the Event Log page. • Use IPMItool to view the BMC system-event log.
The server is not hung and is not connected to a network.	Use IPMItool locally to view the BMC system-event log.
The server is hung.	If DSA Preboot is installed, restart the server and press F2 to start DSA Preboot and view the event logs. If DSA Preboot is not installed, insert the DSA Preboot CD and restart the server to start DSA Preboot and view the event logs. Alternatively, you can restart the server and press F1 to start the Configuration/Setup Utility program and view the POST error log, system event/error log, or BMC system-event log. For more information, see "Viewing event logs through the Configuration/Setup Utility program" on page 1.