# mindtouch™

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# 系统无法启动-无法恢复SP

## 适用场景

- AFF A220  / FAS27x0 /  AFF C190
- AFF A200 / FAS26x0
- FAS80x0
- FAS9500
- AFF A300/FAS8200
- AFF A700/FAS9000
- AFF AFF AFF A20
- AFF C60/ AFF C30

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## 问题描述

- 存储系统会重新启动(例如、在ONTAP升级期间)、但 无法启动、并暂停到Loader。

  **示例：**

  ```
  ...

  Waiting for SP ...
  SP failure. Resetting SP from primary FW. This can take a few minutes
  Waiting for SP ...
  SP failure. Resetting SP from backup FW. This can take a few minutes
  Waiting for SP ...
  Failed to recover SP
  IPMI PCI Slot Control failed.
  IPMI PCI Slot Configuration failed.
  Configuring Devices ...
  IPMI:Get controller FRU inventory:failed
  IPMI:Get midplane FRU 0 inventory:failed
  IPMI: Get NVRAM FRU inventory:failed

  BIOS POST Failure(s) detected: SP IPMI failure. Abort AUTOBOOT
  LOADER-A>

  BIOS POST Failure(s) detected: Failed to get FRU data. Abort AUTOBOOT
  ```

- 服务处理器(SP)事件 日志会报告类似的故障消息。

  **示例：**

  ```
  Record 1287: Tue Apr 14 14:34:05.000000 2020 [SysFW.notice]: IPMI:Read
  midplane FRU common header:timeout - retrying
  Record 1288: Tue Apr 14 14:34:10.000000 2020 [SysFW.notice]: IPMI:Read
  midplane FRU common header:timeout
  Record 1289: Tue Apr 14 14:34:13.000000 2020 [SysFW.notice]: Failed to
  recover SP
  Record 1290: Tue Apr 14 14:34:13.000000 2020 [SysFW.critical]: IPMI:Read
  midplane FRU common header:failed
  Record 1291: Sun Jan 01 00:02:58.340000 2017 [Trap Event.critical]:
  hwassist post_error (26)
  Record 1292: Tue Apr 14 14:34:14.000000 2020 [SysFW.critical]: IPMI PCI
  Slot Control failed.
  ```

```
Record 1293: Sun Jan 01 00:02:59.310000 2017 [Trap Event.critical]:
hwassist post_error (26)
Record 1294: Tue Apr 14 14:34:18.000000 2020 [CFE.notice]: Loader time
adjust: Set BMC time. Old time: Sun Jan  1 00:03:03 2017. New time: Tue
Apr 14 14:34:18 2020.
Record 1295: Tue Apr 14 14:34:18.000000 2020 [Boot Loader.notice]:
Received time sync
Record 1296: Tue Apr 14 14:34:20.000000 2020 [Boot Loader.critical]: Abort
Autoboot due to BIOS POST failure.
Record 1297: Tue Apr 14 14:34:20.280000 2020 [Trap Event.critical]:
hwassist post_error (26)
Record 1298: Tue Apr 14 14:34:24.020000 2020 [IPMI.notice]: 001c | 02 |
EVT: 6fc220ff | System_FW_Status | Assertion Event, "Bootloader is
running"
```

- 重新安装控制器后、问题描述仍然存在、并且没有任何缆线连接到e0M/e0M SP
  - (要排除因"SP IPMI故障"而导致节点关闭和启动失败 中所述的SP流量过多问题)