

C シリーズ サーバ再起動のトラブルシューティング

目次

[概要](#)

[前提条件](#)

[使用するコンポーネント](#)

[背景説明](#)

[想定リブート](#)

[想定外のリブート](#)

[キー ポイント](#)

[分析用のログバンドルの収集](#)

[リブートおよびシャットダウン状態ごとに想定される出力](#)

[OS - ESXi、RHEL、Windows からのリブート](#)

[OBFL ログ](#)

[RHEL - /var/log/messages](#)

[Windows - イベント ログ](#)

[OS - ESXi、RHEL、Windows からのシャットダウン](#)

[OBFL ログ :](#)

[ESXi - /var/log/hostd.log](#)

[RHEL - /var/log/messages](#)

[Windows - イベント ログ](#)

[CIMC からの電源投入](#)

[OBFL ログ :](#)

[CIMC からの電源再投入](#)

[OBFL ログ](#)

[CIMC からの電源切断](#)

[OBFL ログ](#)

[PSU 障害からの電力損失](#)

[OBFL ログ](#)

[前面電源オフ ボタン](#)

[OBFL ログ](#)

[前面電源オン ボタン](#)

[OBFL ログ](#)

[関連情報](#)

概要

このドキュメントでは、リブートまたはシャットダウンがハードウェアで開始されたか、またはオペレーティングシステム (OS) から開始されたかを確認する方法を説明します。

サーバがリブートしたりシャットダウンする理由を判断する際に注目すべきログがいくつかあります。Cisco Integrated Management Controller (CIMC) のテクニカル サポートを検索する場合、var/log/messages または オンボード障害ロギング (OBFL) ログを参照してください。

このドキュメントで示されている出力例は、var/log/messages または OBFL に加えて ESXi、RHEL、Windows の OS ログから引用したものです。

前提条件

このドキュメントに関する固有の要件はありません。

使用するコンポーネント

このドキュメントの情報は、次のソフトウェアとハードウェアのバージョンに基づくものです。

- Cisco Unified Computing System (UCS) C200-M1 ファームウェアバージョン 1.4(3w)
- Cisco UCS C210-M2 ファームウェアバージョン 1.4(3w)
- Cisco UCS C220-M3 ファームウェアバージョン 2.0(3d)
- Cisco UCS C220-M4 ファームウェアバージョン 2.0(3f)
- ESXi 5.0 U2
- RHEL 6.6
- Windows 2008 R2

このドキュメントの情報は、特定のラボ環境にあるデバイスに基づいて作成されたものです。このドキュメントで使用するすべてのデバイスは、クリアな (デフォルト) 設定で作業を開始しています。ネットワークが稼働中の場合は、コマンドが及ぼす潜在的な影響を十分に理解しておく必要があります。

背景説明

リポートには想定内のものと想定外のものがあります。想定されたリポートでも、すべての利害関係者がそれを想定しているとは限りません。全員が把握した上でこの操作ができるように、リポートまたはシャットダウン タスクの変更制御プロセスを実施することが重要です。

想定リポート

これは、人、プロセス、またはスクリプトによって意図的に開始されたリポートまたはシャットダウン イベントです。このイベントには複数のきっかけがあります。これらのログ スニペットはどのリポート シナリオが発生したかを特定するのに役立ち、誰が、または何がこの操作を行ったかを追跡することができます。

- CIMC GUI を通じて
- OS から
- サーバの前面にある前面パネル ボタンを押したとき

想定外のリポート

これは計画も想定もされていないリポートですが、操作を開始した人またはプロセスはこのリポートを想定可能です。また、データセンターの PSU 障害や停電などのハードウェア障害も考えられます。これらのイベントには複数のきっかけがあります。

前面パネルのボタンが押されたことが判明したら、リポート時にデータセンターへ誰が物理的にアクセスしたかを追跡できます。電源の問題である場合、そのときに電源障害が発生していたかどうかをデータセンター チームに確認してもらいます。

- CIMC GUI を通じて
- OS から
- サーバの前面にある前面パネル ボタンを押したとき
- PSU 障害や電源コードの不良などのハードウェア障害から
- データセンターの配電ユニット (PDU) の障害
- データセンターの無停電電源装置 (UPS) の障害、停電、電圧低下

キー ポイント

- CIMC が開始したリポート、シャットダウン、および電源オンのログには、常に「do_power」というキーワードが含まれます。
- 前面パネル ボタンを押下すると、新しいファームウェア バージョンを実行したときに、ログに「passthrough_pin2_isr」が含まれます。また、これに関連する OS レベルのイベントはない可能性が高いです。
- OS が開始したリポートとシャットダウンでは、関連する OS レベルのイベントがあります。「do_power」が記録されない場合、その代わりに「高電圧モード」が記録される可能性があることに注意してください。

分析用のログ バンドルの収集

関連するログを調べる前に、まずログ バンドルを生成する必要があります。このドキュメントの出力例と比較するときの参照用に、次のリソースを使用して必要なログを作成してください。

C シリーズ CIMC テクニカル サポート

[テクニカル サポート ファイルを収集するためのビジュアル ガイド \(B および C シリーズ \)](#)

ESXi

[VMware ナレッジベース](#)

RHEL

[What is a sosreport and how to create one in Red Hat Enterprise Linux 4.6 and later?](#)

Windows

[Archive a Windows Event Log](#)

リポートおよびシャットダウン状態ごとに想定される出力

OS - ESXi、RHEL、Windows からのリポート

OBFL ログ

```
5:2015 May 15 14:46:03:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x6 Cmd:0x6 Resp:0x0
5:2015 May 15 14:46:03:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0x85 0x83
5:2015 May 15 14:46:03:BMC:IPMI:567: VirtualSEL.c:224:SEL Evt[48 03]
< 48 03 02 AB 06 56 55 03 00 04 12 83 6F 05 00 FF>
5:2015 May 15 14:46:04:BMC:kernel:-:<5>LPC Reset ISR -> ResetState: 1
5:2015 May 15 14:46:04:BMC:BIOSReader:376: BIOSReader.c:555:File Close :
/var/nuova/BIOS/BiosTech_4.txt
5:2015 May 15 14:46:04:BMC:kernel:-:[block_transfer_fetch_host_request_for_app]
:2125:block_transfer_fetch_host_request_for_app : BT_FILE_CLOSE :
HostBTDescr = 6 : FName = BiosTech_4.txt
5:2015 May 15 14:46:04:BMC:IPMI:574: Pilot2SrvPower.c:394:Blade Power Changed To: [ OFF ]
5:2015 May 15 14:46:04:BMC:IPMI:572: VirtualSEL.c:224:SEL Evt[49 03]
< 49 03 02 AC 06 56 55 20 00 04 25 52 08 00 FF FF >
5:2015 May 15 14:46:04:BMC:bioscom:-: lv_mode_dimm_support.c:126:
[lpc_reset_seen]LPC Reset Count is Different [0x5:0x6] Asserted LPC Reset Seen
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x28 Resp:0x0
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0x9 0x80
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x28 Resp:0x0
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0xa 0x80
5:2015 May 15 14:46:04:BMC:bioscom:-: lv_mode_dimm_support.c:197:
[transition_function]Starting Transition to [High Voltage Mode] from [Unknown Mode]
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x28 Resp:0x0
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0x9 0x80
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x28 Resp:0x0
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0xa 0x80
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x26 Resp:0x0
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0x9 0x36
0x92 0x92 0x89 0x9f 0x9f 0xa8
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4
Cmd:0x26 Resp:0x0
5:2015 May 15 14:46:04:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0xa
0x36 0x92 0x92 0x89 0x9f 0x9f 0xa8
5:2015 May 15 14:46:04:BMC:bioscom:-: lv_mode_dimm_support.c:217:
[transition_function]Transition to [High Voltage Mode] Success
5:2015 May 15 14:46:04:BMC:IPMI:572: VirtualSEL.c:224:SEL Evt[4A 03]
< 4A 03 02 AC 06 56 55 20 00 04 24 59 7F 04 88 36 >
5:2015 May 15 14:46:04:BMC:IPMI:572: VirtualSEL.c:224:SEL Evt[4B 03]
< 4B 03 02 AC 06 56 55 20 00 04 08 61 EF 03 FF FF >
5:2015 May 15 14:46:05:BMC:IPMI:572: VirtualSEL.c:224:SEL Evt[4C 03]
< 4C 03 02 AD 06 56 55 20 00 04 24 B0 7F 00 88 36 >
5:2015 May 15 14:46:06:BMC:bioscom:-: lv_mode_dimm_support.c:311:
[handle_event_enable_tick]enable sensor event
5:2015 May 15 14:46:06:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x28 Resp:0x0
5:2015 May 15 14:46:06:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0x9 0xc0
5:2015 May 15 14:46:06:BMC:IPMI:567: Bridge.c:1388:audit from:kcs Fn:0x4 Cmd:0x28 Resp:0x0
5:2015 May 15 14:46:06:BMC:IPMI:567: Bridge.c:1415:audit data&colon; 0xa 0xc0
```

OS がこのイベントを開始した理由についての詳細は、ESXi ログを確認します。

- /var/log/vmksummary.log
- /var/log/vmkernel.log
- /var/log/hostd.log
- /var/log/shell.log

[VMware KB](#)

RHEL - /var/log/messages

```
May 12 12:55:00 localhost rtkit-daemon[10450]: Demoting known real-time threads.
May 12 12:55:00 localhost rtkit-daemon[10450]: Successfully demoted thread
10987 of process 10987 (/usr/bin/pulseaudio).
May 12 12:55:00 localhost console-kit-daemon[10311]: WARNING: no sender#012
May 12 12:55:00 localhost rtkit-daemon[10450]: Demoted 1 threads.
May 12 12:55:00 localhost rpcbind: rpcbind terminating on signal.
Restart with "rpcbind -w" May 12 12:55:00 localhost init:
Disconnected from system bus
May 12 12:55:00 localhost auditd[3587]: The audit daemon is exiting.
May 12 12:55:00 localhost kernel: type=1305 audit(1431453300.949:33):
audit_pid=0 old=3587 auid=4294967295 ses=4294967295 subj=system_u:
system_r:auditd_t:s0 res=1
May 12 12:55:01 localhost kernel: type=1305 audit(1431453301.053:34):
audit_enabled=0 old=1 auid=4294967295 ses=4294967295 subj=system_u:
system_r:auditctl_t:s0 res=1
May 12 12:55:01 localhost kernel: Kernel logging (proc) stopped.
May 12 12:55:01 localhost rsyslogd: [origin software="rsyslogd" swVersion="5.8.10"
x-pid="3617" x-info="http://www.rsyslog.com"] exiting on signal 15.
May 12 12:58:27 localhost kernel: imklog 5.8.10, log source = /proc/kmsg started.
May 12 12:58:27 localhost rsyslogd: [origin software="rsyslogd" swVersion="5.8.10"
x-pid="3631" x-info="http://www.rsyslog.com"] start
May 12 12:58:27 localhost kernel: Initializing cgroup subsys cpuset
May 12 12:58:27 localhost kernel: Initializing cgroup subsys cpu
May 12 12:58:27 localhost kernel: Linux version 2.6.32-504.el6.x86_64
(mockbuild@x86-023.build.eng.bos.redhat.com) (gcc version 4.4.7 20120313
(Red Hat 4.4.7-11) (GCC) ) #1 SMP Tue Sep 16 01:56:35 EDT 2014
May 12 12:58:27 localhost kernel: Command line:
ro root=/dev/mapper/VolGroup-lv_root rd_NO_LUKS LANG=en_US.UTF-8
rd_NO_MD rd_LVM_LV=VolGroup/lv_swap SYSFONT=latarcyrheb-sun16 crashkernel=auto
rd_LVM_LV=VolGroup/lv_root KEYBOARDTYPE=pc KEYTABLE=us rd_NO_DM rhgb quiet
```

RHEL のリブートに関するトラブルシューティングの方法については、「[Red Hat KBarticle](#)」を参照してください。

Windows - イベント ログ

Event 1074

The process **Explorer.EXE** has initiated the restart of computer WIN-5JPBKNMMRNF on behalf of user WIN-5JPBKNMMRNF\Administrator for the following reason: Other (Planned)
Reason Code: 0x85000000
Shutdown Type: restart
Comment: C-Series Test

Event 1074

The process **C:\Windows\system32\winlogon.exe** (WIN-5JPBKNMMRNF) has initiated the restart of computer WIN-5JPBKNMMRNF on behalf of user WIN-5JPBKNMMRNF\Administrator for the following reason: No title for this reason could be found
Reason Code: 0x500ff
Shutdown Type: restart Comment:

Event 109

The kernel power manager has initiated a shutdown transition.

Event 13

The operating system is shutting down at system time ?2015?-?05?-?18T08:26:32.778837300Z.

Event 12

The operating system started at system time ?2015?-?05?-?18T08:28:28.610798500Z.

Windows イベント ログの詳細については、「[TechNet article](#)」を参照してください。

OS - ESXi、RHEL、Windows からのシャットダウン

OBFL ログ :

```
5:2015 May 12 18:03:37:BMC:IPMI:1563: Bridge.c:1478:audit from:kcs
Fn:0x6 Cmd:0x6 Data&colon; 0x85 0x83
5:2015 May 12 18:03:37:BMC:IPMI:1563: Bridge.c:1484:audit Resp:0x0
5:2015 May 12 18:03:38:BMC:kernel:-:<5>[lpc_reset_isr_handler]:79:LPC
Reset ISR -> ResetState: 1
5:2015 May 12 18:03:38:BMC:kernel:-:<5>[readPostData]:519:BIOS_POST_
CMPLT Asserted --> BIOS has completed
5:2015 May 12 18:03:38:BMC:kernel:-:<5>drivers/bmc/usb/usb1.1/se_pilot2_udc_
usb1_1.c:2288:USB FS:
VDD Power WAKEUP- Power Good = OFF
5:2015 May 12 18:03:38:BMC:kernel:-:<5>[se_pilot2_wakeup_interrupt]
:2561:USB HS: VDD Power = OFF
5:2015 May 12 18:03:38:BMC:IPMI:1563: Pilot3SrvPower.c:484:Blade Power Changed To: [ OFF ]
5:2015 May 12 18:03:38:BMC:video_trigger:-: video_trigger.c:262:
Sending event_ipmi_power_state_change (OFF) ..
5:2015May 12 18:03:39:BMC:selparser:1602: selparser.c:678:
# 11 04 00 00 01 02 00 00 7A 40 52 55 2C 60 04 DC 1A 00 00 00 F4 03 00 00
# 411 | 05/12/2015 18:03:38 | Unknown #0x602c | Unknown #0x1a |
5:2015 May 12 18:03:39:BMC:selparser:1602: selparser.c:678:
# 12 04 00 00 01 02 00 00 7A 40 52 55 20 00 04 25 A9 00 00 00 08 00 FF FF # 412 |
05/12/2015 18:03:38 | CIMC | Entity presence MAIN_POWER_PRS #0xa9 | Device Absent | Asserted
```

ESXi - /var/log/hostd.log

```
2015-05-15T00:46:01.809Z [28B69B90 info 'TaskManager'] Task Created :
haTask--vim.host.AutoStartManager.autoPowerOff-245137084
2015-05-15T00:46:01.810Z [28AE7B90 info 'TaskManager'] Task Completed :
haTask--vim.host.AutoStartManager.autoPowerOff-245137084 Status success
2015-05-15T00:46:01.814Z [28AE7B90 verbose 'Default']
CloseSession called for session id=526869fe-3f96-f54a-4bb6-41250fa3242b
2015-05-15T00:46:01.814Z [28AE7B90 info 'ha-eventmgr'] Event 107 : User dcui logged out
2015-05-15T00:46:01.822Z [28AA6B90 verbose 'Proxysvc Req00060'] New proxy client SSL
(TCP(local=127.0.0.1:0, peer=127.0.0.1:58274))
2015-05-15T00:46:01.822Z [28AA6B90 warning 'Proxysvc Req00060'] Error reading from
client while waiting for header: N7Vmacore15SystemExceptionE(Connection reset by peer)
2015-05-15T00:46:02.077Z [29441B90 verbose 'Proxysvc Req00061'] New proxy client
SSL(TCP(local=127.0.0.1:443, peer=127.0.0.1:58877))
2015-05-15T00:46:02.088Z [28AE7B90 verbose 'Ticket 52 27 9e 4d f0 16 ac aa-13 f8
86 f9 f1 a3 61 8b'] Ticket issued for dcui
2015-05-15T00:46:02.090Z [2930AB90 verbose 'Ticket 52 27 9e 4d f0 16 ac aa-13 f8
86 f9 f1 a3 61 8b'] Ticket used
Accepted password for user dcui from 127.0.0.1
2015-05-15T00:46:02.090Z [2930AB90 info 'Vimsvc'] [Auth]: User dcui
2015-05-15T00:46:02.091Z [2930AB90 info 'ha-eventmgr'] Event 108 :
User dcui@127.0.0.1 logged in
2015-05-15T00:46:02.093Z [29366B90 info 'InternalServiceInstance'] Shutting down service
2015-05-15T00:46:22.104Z [FFAB2AD0 error 'Default'] SSLStreamImpl::
```

BIOSRead (291a1000) timed out

Section for VMware ESX, pid=2882, version=5.0.0, build=build-914586, option=Release

RHEL - /var/log/messages

```
May 12 13:03:24 localhost init: tty (/dev/tty2) main process
(10152) killed by TERM signal
May 12 13:03:24 localhost init: tty (/dev/tty3) main process
(10154) killed by TERM signal
May 12 13:03:24 localhost init: tty (/dev/tty4) main process
(10156) killed by TERM signal
May 12 13:03:24 localhost init: tty (/dev/tty5) main process
(10158) killed by TERM signal
May 12 13:03:24 localhost init: tty (/dev/tty6) main process
(10162) killed by TERM signal
May 12 13:03:25 localhost abrttd: Got signal 15, exiting
May 12 13:03:29 localhost acpid: exiting
May 12 13:03:30 localhost NetworkManager[9732]: <info>
caught signal 15, shutting down normally.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth0): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth0): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth1): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth1): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth4): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth4): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth5): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth5): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth6): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth6): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth7): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth7): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth2): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth2): taking down device.
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth3): cleaning up...
May 12 13:03:30 localhost NetworkManager[9732]: <info> (eth3): taking down device.
May 12 13:03:31 localhost rpcbind: rpcbind terminating on signal.
Restart with "rpcbind -w"
May 12 13:03:31 localhost rtkit-daemon[10367]: Demoting known real-time threads.
May 12 13:03:31 localhost rtkit-daemon[10367]: Successfully demoted thread 1
0365 of process 10365 (/usr/bin/pulseaudio).
May 12 13:03:31 localhost rtkit-daemon[10367]: Demoted 1 threads.
May 12 13:03:31 localhost console-kit-daemon[10228]: WARNING: no sender#012
May 12 13:03:31 localhost init: Disconnected from system bus
May 12 13:03:31 localhost auditd[3601]: The audit daemon is exiting.
May 12 13:03:31 localhost kernel: type=1305 audit(1431453811.355:22):
audit_pid=0 old=3601 auid=4294967295 ses=4294967295 subj=system_u
:system_r:auditd_t:s0 res=1
May 12 13:03:31 localhost kernel: type=1305 audit(1431453811.459:23):
audit_enabled=0 old=1 auid=4294967295 ses=4294967295 subj=system_u
:system_r:auditctl_t:s0 res=1
May 12 13:03:31 localhost kernel: Kernel logging (proc) stopped.
May 12 13:03:31 localhost rsyslogd: [origin software="rsyslogd"
swVersion="5.8.10" x-pid="3631" x-info="http://www.rsyslog.com"] exiting on signal 15.
```

Windows - イベント ログ

Event 1074

The process C:\Windows\system32\winlogon.exe (WIN-5JPBKNMMRNF) has initiated the power off of computer WIN-5JPBKNMMRNF on behalf of user WIN-5JPBKNMMRNF\Administrator

for the following reason: No title for this reason could be found
Reason Code: 0x500ff
Shutdown Type: power off
Comment

Event 1074

The process **Explorer.EXE** has initiated the shutdown of computer
WIN-5JPBKNMMRNF on behalf of
user WIN-5JPBKNMMRNF\Administrator for the following reason: Other (Planned)
Reason Code: 0x85000000
Shutdown Type: shutdown
Comment: Shut down Test

Event 109

The kernel power manager has initiated a shutdown transition.

Event 13

The operating system is shutting down at system time ?2015?-?05?-?18T08:38:13.237425300Z.

CIMC からの電源投入

OBFL ログ :

```
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[__do_power_on]:340: __do_power_on
5:2015 May 12 18:08:31:BMC:IPMI:1563: Bridge.c:1478:audit from:kcs Fn:0x0 Cmd:0x2
Data&colon; 0x1
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[__do_power_on]:345:Power Driver:
Power On Logic Pulse for 250ms @ 25164275955:2015 May 12 18:08:31:BMC:IPMI:
1563: Bridge.c:1484:audit Resp:0x0
5:2015 May 12 18:08:31:BMC:AUDIT:20723: Server power state modify (op:power-on)
5:2015 May 12 18:08:31:BMC:kernel:-:<5>drivers/bmc/usb/usbl1.1/
se_pilot2_udc_usbl_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = ON
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[se_pilot2_wakeup_interrupt]
:2561:USB HS: VDD Power = ON
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[se_pilot2_udc_usb_connect]:
2685:Failed USB2.0 register test
5:2015 May 12 18:08:31:BMC:IPMI:1565: Pilot3SrvPower.c:481: ->
Power State On: LPC RESET is NOT IN RESET; powerOnLPCOff[2]
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[se_pilot2_udc_usb_connect]
:2685:Failed USB2.0 register test
5:2015 May 12 18:08:31:BMC:IPMI:1565: Pilot3SrvPower.c:484:Blade
Power Changed To: [ ON ]
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[lpc_reset_isr_handler]
:79:LPC Reset ISR -> ResetState: 0
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[lpc_reset_handler_Port80_Capture_setup]
:560:BIOS_POST_CMPLT De-asserted --> BIOS is running
5:2015 May 12 18:08:31:BMC:IPMI:1566: Pilot3SrvPower.c:191:Pilot2SrvPowerOn
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[__do_power_on]:375:
Power Driver: Power On Logic Done @ 2516427846
5:2015 May 12 18:08:31:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_7.txt
5:2015 May 12 18:08:31:BMC:BIOSReader:1247: BIOSReader.c:748:File Close
: /var/nuova/BIOS/BiosTech_7.txt
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 1406 : Filename = BiosTech_7.txt
5:2015 May 12 18:08:31:BMC:kernel:-:<5>[block_transfer_fetch_host_request_for_app]
:1944:block_transfer_fetch_host_request_for_app : BT_FILE_CLOSE :
```



```
HostBTDescr = 1406 : FName = BiosTech_7.txt
5:2015 May 12 18:08:32:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 1408 : Filename = BiosTech_6.txt
5:2015 May 12 18:08:32:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_6.txt
5:2015 May 12 18:08:32:BMC:BIOSReader:1247: BIOSReader.c:748:File Close
: /var/nuova/BIOS/BiosTech_6.txt
5:2015 May 12 18:08:32:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1944:block_transfer_fetch_host_request_for_app : BT_FILE_CLOSE :
HostBTDescr = 1408 : FName = BiosTech_6.txt
5:2015 May 12 18:08:32:BMC:video_trigger--: video_trigger.c:262:Sending
event_ipmi_power_state_change (ON) ..
5:2015 May 12 18:08:32:BMC:video_trigger--: video_trigger.c:137:Sending
event_server_boot_start..
5:2015 May 12 18:08:32:BMC:video_trigger--: video_trigger.c:148:
Will be able to send event_server_crash..
5:2015 May 12 18:08:32:BMC:selparser:1602: selparser.c:678:
# 13 04 00 00 01 02 00 00 A0 41 52 55 2C 60 04 DC 1A 00 00 00 74 07 00 00
# 413 | 05/12/2015 18:08:32 | Unknown
#0x602c | Unknown #0x1a |
5:2015 May 12 18:08:32:BMC:selparser:1602: selparser.c:678:
# 14 04 00 00 01 02 00 00 A0 41 52 55 20 00 04 25 00 00 00 00 08 00 FF FF
# 414 | 05/12/2015 18:08:32 | CIMC | Entity presence BIOS_POST_CMPLT
#0x00 | Device Absent | Asserted
5:2015 May 12 18:08:32:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 1410 : Filename = BiosTech_5.txt
5:2015 May 12 18:08:32:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1944:block_transfer_fetch_host_request_for_app : BT_FILE_CLOSE :
HostBTDescr = 1410 : FName = BiosTech_5.txt
5:2015 May 12 18:08:32:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_5.txt
```

CIMC からの電源再投入

OBFL ログ

```
5:2015 May 12 19:18:45:BMC:kernel:--<5>[do_cycle]:560:do_cycle
5:2015 May 12 19:18:45:BMC:IPMI:1563: Bridge.c:1478:audit from:kcs Fn:0x0
Cmd:0x2 Data&colon; 0x2
5:2015 May 12 19:18:45:BMC:kernel:--<5>[__do_power_off]:298:__do_power_off
5:2015 May 12 19:18:45:BMC:IPMI:1563: Bridge.c:1484:audit Resp:0x0
5:2015 May 12 19:18:45:BMC:kernel:--<5>[__do_power_off]:300:Power Driver:
Power Off Logic @ 2520641182
5:2015 May 12 19:18:45:BMC:IPMI:1566: Pilot3SrvPower.c:539:
Pilot2SrvPowerCycle
5:2015 May 12 19:18:45:BMC:AUDIT:20723: Server power state modify
(op:power-cycle)
5:2015 May 12 19:18:49:BMC:kernel:--<5>[lpc_reset_isr_handler]:
79:LPC Reset ISR -> ResetState: 1
5:2015 May 12 19:18:49:BMC:kernel:--<5>[readPostData]:519:
BIOS_POST_CMPLT Asserted --> BIOS has completed
5:2015 May 12 19:18:49:BMC:kernel:--<5>drivers/bmc/usb/
usb1.1/se_pilot2_udc_usb1.1.c:2288:USB FS: VDD Power WAKEUP- Power Good = OFF
5:2015 May 12 19:18:49:BMC:kernel:--<5>[se_pilot2_wakeup_interrupt]
:2561:USB HS: VDD Power = OFF
5:2015 May 12 19:18:49:BMC:video_trigger--: video_trigger.c:262:
Sending event_ipmi_power_state_change (OFF) ..
5:2015 May 12 19:18:49:BMC:IPMI:1532: Pilot3SrvPower.c:484:
Blade Power Changed To: [ OFF ]
5:2015 May 12 19:18:49:BMC:selparser:1602: selparser.c:678:
```

```
# 1A 04 00 00 01 02 00 00 19 52 52 55 20 00 04 25 A9 00 00 00 08 00 FF FF
# 41a | 05/12/2015 19:18:49 | CIMC | Entity presence MAIN_POWER_PRS #0xa9
| Device Absent | Asserted
5:2015 May 12 19:18:55:BMC:selparser:1602: selparser.c:678:
# 1B 04 00 00 01 02 00 00 1E 52 52 55 2C 60 04 DC 1A 00 00 00 74 03 00 00
# 41b | 05/12/2015 19:18:54 | Unknown #0x602c | Unknown #0x1a |
5:2015 May 12 19:18:55:BMC:selparser:1602: selparser.c:678:
# 1C 04 00 00 01 02 00 00 1E 52 52 55 2C 60 04 16 16 00 00 00 0A 00 00 00
# 41c | 05/12/2015 19:18:54 | Unknown
#0x602c | Microcontroller/Coprocessor
#0x16 | Transition to Running | Asserted
5:2015 May 12 19:19:05:BMC:kernel:--<5>[__do_power_on]:340:__do_power_on
5:2015 May 12 19:19:05:BMC:kernel:--<5>[__do_power_on]:345:
Power Driver: Power On Logic Pulsefor 250ms @ 2520661694
5:2015 May 12 19:19:05:BMC:kernel:--<5>drivers/bmc/usb/usbl1.1/
se_pilot2_udc_usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = ON
5:2015 May 12 19:19:05:BMC:kernel:--<5>[se_pilot2_wakeup_interrupt]
:2561:USB HS: VDD Power = ON
5:2015 May 12 19:19:05:BMC:kernel:--<5>[se_pilot2_udc_usb_connect]:
2685:Failed USB2.0 register test
5:2015 May 12 19:19:05:BMC:kernel:--<5>[se_pilot2_udc_usb_connect]:
2685:Failed USB2.0 register test
5:2015 May 12 19:19:05:BMC:kernel:--<5>[lpc_reset_isr_handler]
:79:LPC Reset ISR -> ResetState: 0
5:2015 May 12 19:19:05:BMC:kernel:--<5>[lpc_reset_handler_Port80_Capture_setup]
:560:BIOS_POST_CMPLT De-asserted --> BIOS is running
5:2015 May 12 19:19:05:BMC:IPMI:1566: Pilot3SrvPower.c:542:Pilot2SrvPowerCycle
5:2015 May 12 19:19:05:BMC:kernel:--<5>[__do_power_on]
:375:Power Driver: Power On Logic Done @ 2520661945
5:2015 May 12 19:19:05:BMC:IPMI:1566: Pilot3SrvPower.c:481:
-> Power State On: LPC RESET is NOT IN RESET; powerOnLPCOff[2]
5:2015 May 12 19:19:05:BMC:IPMI:1566: Pilot3SrvPower.c:484:
Blade Power Changed To: [ ON ]
5:2015 May 12 19:19:06:BMC:BIOSReader:1247: BIOSReader.c:242:
File Open : BiosTech_7.txt
5:2015 May 12 19:19:06:BMC:BIOSReader:1247: BIOSReader.c:748:
File Close : /var/nuova/BIOS/BiosTech_7.txt
5:2015 May 12 19:19:06:BMC:kernel:--<5>[block_transfer_fetch_host_
request_for_app]:1860:block_transfer_fetch_host_request_for_app:
BT_OPEN_FOR_READ: HostDescriptor = 1466 : Filename = BiosTech_7.txt
5:2015 May 12 19:19:06:BMC:kernel:--<5>[block_transfer_fetch_host_
request_for_app]:1944:block_transfer_fetch_host_request_for_app :
BT_FILE_CLOSE : HostBTDescr = 1466 : FName = BiosTech_7.txt
5:2015 May 12 19:19:06:BMC:selparser:1602: selparser.c:678:
# 1D 04 00 00 01 02 00 00 29 52 52 55 2C 60 04 DC 1A 00 00 00 74 07 00 00
# 41d | 05/12/2015 19:19:05 | Unknown #0x602c | Unknown #0x1a |
5:2015 May 12 19:19:06:BMC:video_trigger:--: video_trigger.c:262:
Sending event_ipmi_power_state_change (ON) ..
5:2015 May 12 19:19:06:BMC:video_trigger:--: video_trigger.c:137:
Sending event_server_boot_start ..
5:2015 May 12 19:19:06:BMC:video_trigger:--: video_trigger.c:148:
Will be able to send event_server_crash ..
5:2015 May 12 19:19:06:BMC:kernel:--<5>[block_transfer_fetch_host_
request_for_app]:1860:block_transfer_fetch_host_request_for_app:
BT_OPEN_FOR_READ: HostDescriptor = 1468 : Filename = BiosTech_6.txt
```

CIMC からの電源切断

OBFL ログ

```
5:2015 May 12 20:18:25:BMC:kernel:--<5>[__do_power_off]:298:__do_power_off
5:2015 May 12 20:18:25:BMC:IPMI:1563: Bridge.c:1478:audit from:kcs Fn:0x0
Cmd:0x2 Data&colon; 0x0
5:2015 May 12 20:18:25:BMC:kernel:--<5>[__do_power_off]:300:Power Driver:
Power Off Logic@ 2524221543
5:2015 May 12 20:18:25:BMC:IPMI:1563: Bridge.c:1484:audit Resp:0x0
5:2015 May 12 20:18:25:BMC:AUDIT:20723: Server power state modify (op:power-off)
5:2015 May 12 20:18:30:BMC:kernel:--<5>[lpc_reset_isr_handler]:
79:LPC Reset ISR -> ResetState: 1
5:2015 May 12 20:18:30:BMC:kernel:--<5>[readPostData]:519:BIOS_POST_CMPLT
Asserted --> BIOS has completed
5:2015 May 12 20:18:30:BMC:kernel:--<5>drivers/bmc/usb/usb1.1/se_pilot2_udc_
usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = OFF
5:2015 May 12 20:18:30:BMC:IPMI:1567: Pilot3SrvPower.c:484:Blade Power Changed To: [ OFF ]
5:2015 May 12 20:18:30:BMC:kernel:--<5>[se_pilot2_wakeup_interrupt]:
2561:USB HS: VDD Power = OFF
5:2015 May 12 20:18:30:BMC:selparser:1602: selparser.c:678:
# 24 04 00 00 01 02 00 00 16 60 52 55 20 00 04 25 A9 00 00 00 08 00 FF FF
# 424 | 05/12/2015 20:18:30 | CIMC | Entity presence MAIN_POWER_PRS
#0xa9 | Device Absent | Asserted
5:2015 May 12 20:18:30:BMC:video_trigger:--: video_trigger.c:262:
Sending event_ipmi_power_state_change (OFF) ..
5:2015 May 12 20:18:31:BMC:vkcs_mux:1582: vkcs_mux.c:76:[REQ] 00 01
5:2015 May 12 20:18:36:BMC:IPMI:1566: Pilot3SrvPower.c:348:Pilot2SrvPowerOff
5:2015 May 12 20:18:37:BMC:kernel:--<5>[__do_power_off]:298:__do_power_off
5:2015 May 12 20:18:37:BMC:blade-power:11311: host-power.c:53:POWER Off
5:2015 May 12 20:18:38:BMC:run-update:11313: ../..
/src/runupdate.c:511:Run-update Process Starting.
5:2015 May 12 20:18:38:BMC:run-update:11313: ../..
/src/runupdate.c:44:Setting FP Button Lock: current state 0
5:2015 May 12 20:18:38:BMC:kernel:--<5>[lock_front_panel_buttons]
:1373:Front Panel Power Button is now permanently locked.
5:2015 May 12 20:18:38:BMC:kernel:--<5>[lock_front_panel_buttons]
:1378:Front Panel Reset Button is now permanently locked.
```

PSU 障害からの電力損失

OBFL ログ

```
5:2015 May 15 14:29:12:BMC:kernel:--<5>[lpc_reset_isr_handler]:
79:LPC Reset ISR -> ResetState: 1
5:2015 May 15 14:29:12:BMC:kernel:--<5>[readPostData]:519:
BIOS_POST_CMPLT Asserted --> BIOS has completed
5:2015 May 15 14:29:12:BMC:kernel:--<5>drivers/bmc/usb/usb1.1/
se_pilot2_udc_usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = OFF
5:2015 May 15 14:29:12:BMC:kernel:--<5>[se_pilot2_wakeup_interrupt]
:2561:USB HS: VDD Power = OFF
5:2015 May 15 14:29:12:BMC:IPMI:1532: Pilot3SrvPower.c:484:
Blade Power Changed To: [ OFF ]
5:2015 May 15 14:29:12:BMC:video_trigger:--: video_trigger.c:262:
Sending event_ipmi_power_state_change (OFF) ..
5:2015 May 15 14:29:13:BMC:selparser:1602: selparser.c:678:
# 33 04 00 00 01 02 00 00 B8 02 56 55 20 00 04 08 27 00 00 00 03 00 FF FF
# 433 | 05/15/2015 14:29:12 | CIMC | Power supply PSU1_AC_OK
#0x27 | State Deasserted | Asserted
5:2015 May 15 14:29:13:BMC:selparser:1602: selparser.c:678:
# 34 04 00 00 01 02 00 00 B8 02 56 55 20 00 04 08 42 00 00 00 04 01 FF FF
# 434 | 05/15/2015 14:29:12 | CIMC | Power supply PMBUS_ALERT #0x42
| Predictive Failure asserted | Asserted
5:2015 May 15 14:29:13:BMC:selparser:1602: selparser.c:678:
```

```
# 35 04 00 00 01 02 00 00 B8 02 56 55 20 00 04 25 A9 00 00 00 08 00 FF FF
# 435 | 05/15/2015 14:29:12 | CIMC | Entity presence MAIN_POWER_PRS
#0xa9 | Device Absent | Asserted
5:1970 Jan 1 00:02:48:BMC:kernel:--:<5>Linux version 2.6.35.10
(buildsa@savbu-swbmc-vb1) (gcc version 3.4.5)
#2 Tue Nov 18 07:09:13 PST 2014 Unversioned directory
4:1970 Jan 1 00:02:48:BMC:kernel:--:<4>CPU: ARM926EJ-S [41069265]
revision 5 (ARMv5TEJ), cr=00053177
4:1970 Jan 1 00:02:48:BMC:kernel:--:<4>CPU: VIVT data cache, VIVT instruction cache
4:1970 Jan 1 00:02:48:BMC:kernel:--:<4>Machine: ServerEngines PILOT3 Hornet Board
4:1970 Jan 1 00:02:48:BMC:kernel:--:<4>Memory policy: ECC disabled, Data cache writeback
```

前面電源オフ ボタン

OBFL ログ

```
5:2015 May 15 14:50:19:BMC:kernel:--:<5>[passthrough_pin2_isr]:158:x86
Host Power Button Press
5:2015 May 15 14:50:19:BMC:kernel:--:<5>drivers/bmc/usb/usbl.1/se_pilot2_udc_
usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = ON
5:2015 May 15 14:50:19:BMC:kernel:--:<5>[se_pilot2_wakeup_interrupt]:2561:
USB HS: VDD Power = ON
5:2015 May 15 14:50:31:BMC:IPMI:1561: Bridge.c:1478:audit from:kcs Fn:0x6
Cmd:0x6 Data&colon; 0x85 0x83
5:2015 May 15 14:50:31:BMC:IPMI:1561: Bridge.c:1484:audit Resp:0x0
5:2015 May 15 14:50:35:BMC:kernel:--:<5>[lpc_reset_isr_handler]
:79:LPC Reset ISR -> ResetState: 1
5:2015 May 15 14:50:35:BMC:kernel:--:<5>[readPostData]:519:BIOS_POST_CMPLT
Asserted --> BIOS has completed
5:2015 May 15 14:50:35:BMC:video_trigger:--: video_trigger.c:262:
Sending event_ipmi_power_state_change (OFF) ..
5:2015 May 15 14:50:35:BMC:kernel:--:<5>drivers/bmc/usb/usbl.1/se_pilot2_udc_
usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = OFF
5:2015 May 15 14:50:35:BMC:kernel:--:<5>[se_pilot2_wakeup_interrupt]:
2561:USB HS: VDD Power = OFF
5:2015 May 15 14:50:35:BMC:IPMI:1531: Pilot3SrvPower.c:484:
Blade Power Changed To: [ OFF ]
5:2015 May 15 14:50:35:BMC:selparser:1602: selparser.c:678:
# A2 04 00 00 01 02 00 00 BB 07 56 55 2C 60 04 DC 1A 00 00 00 F4 03 00 00
# 4a2 | 05/15/2015 14:50:35 | Unknown #0x602c | Unknown #0x1a |
5:2015 May 15 14:50:35:BMC:selparser:1602: selparser.c:678:
# A3 04 00 00 01 02 00 00 BB 07 56 55 20 00 04 25 A9 00 00 00 08 00 FF FF
# 4a3 | 05/15/2015 14:50:35 | CIMC | Entity presence MAIN_POWER_PRS
#0xa9 | Device Absent | Asserted
```

前面電源オン ボタン

OBFL ログ

```
5:2015 May 15 14:51:18:BMC:kernel:--:<5>[passthrough_pin2_isr]
:158:x86 Host Power Button Press
5:2015 May 15 14:51:18:BMC:kernel:--:<5>drivers/bmc/usb/usbl.1/se_pilot2
_udc_usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = OFF
5:2015 May 15 14:51:18:BMC:kernel:--:<5>[se_pilot2_wakeup_interrupt]:
2561:USB HS: VDD Power = OFF
5:2015 May 15 14:51:19:BMC:kernel:--:<5>drivers/bmc/usb/usbl.1/se_pilot2_
udc_usb1_1.c:2288:USB FS: VDD Power WAKEUP- Power Good = ON
```

```
5:2015 May 15 14:51:19:BMC:kernel:--<5>[se_pilot2_wakeup_interrupt]
:2561:USB HS: VDD Power = ON
5:2015 May 15 14:51:19:BMC:kernel:--<5>[se_pilot2_udc_usb_connect]:
2685:Failed USB2.0 register test
5:2015 May 15 14:51:19:BMC:kernel:--<5>[se_pilot2_udc_usb_connect]:
2685:Failed USB2.0 register test
5:2015 May 15 14:51:19:BMC:kernel:--<5>[lpc_reset_isr_handler]:
79:LPC Reset ISR -> ResetState: 0
5:2015 May 15 14:51:19:BMC:kernel:--<5>[lpc_reset_handler_Port80_Capture_setup]
:560:BIOS_POST_CMPLT De-asserted --> BIOS is running
5:2015 May 15 14:51:19:BMC:IPMI:1561: Pilot3SrvPower.c:481: ->
Power State On: LPC RESET is NOT IN RESET; powerOnLPCOff[0]
5:2015 May 15 14:51:19:BMC:IPMI:1561: Pilot3SrvPower.c:484:
Blade Power Changed To: [ ON ]
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_7.txt
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_6.txt
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 118 : Filename = BiosTech_7.txt
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_5.txt
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 119 : Filename = BiosTech_6.txt
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_4.txt
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:748:
File Close : /var/nuova/BIOS/BiosTech_4.txt
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 120 : Filename = BiosTech_5.txt
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 121 : Filename = BiosTech_4.txt
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1944:block_transfer_fetch_host_request_for_app : BT_FILE_CLOSE :
HostBTDescr = 121 : FName = BiosTech_4.txt
5:2015 May 15 14:51:19:BMC:video_trigger:--: video_trigger.c:262:
Sending event_ipmi_power_state_change (ON) ..
5:2015 May 15 14:51:19:BMC:video_trigger:--: video_trigger.c:137:
Sending event_server_boot_start ..
5:2015 May 15 14:51:19:BMC:video_trigger:--: video_trigger.c:148
:Will be able to send event_server_crash ..
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1860:block_transfer_fetch_host_request_for_app: BT_OPEN_FOR_READ:
HostDescriptor = 123 : Filename = BiosTech_3.txt
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:242:File Open : BiosTech_3.txt
5:2015 May 15 14:51:19:BMC:kernel:--<5>[block_transfer_fetch_host_request_for_app]
:1944:block_transfer_fetch_host_request_for_app : BT_FILE_CLOSE :
HostBTDescr = 123 : FName = BiosTech_3.txt
5:2015 May 15 14:51:19:BMC:BIOSReader:1247: BIOSReader.c:748:
File Close : /var/nuova/BIOS/BiosTech_3.txt
```

関連情報

- [Cシリーズのリブートに関するトラブルシューティング - 2012年12月06日発表](#)
- [テクニカルサポートとドキュメント - Cisco Systems](#)