Power775
UEPO Cable Service Procedure
Last Modified 9/29/2011

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Figure List

Table List

1 GENERAL

1.1 Release / Revision History

File Name	Date	Description
"p775_uepo_cable.pdf"	9/30/2011	Initial Release

Table 1 Release / Revision History

- Do not make any unauthorized alterations to the document.
- Report any deviations from this procedure through the appropriate Product Engineering channels.
- Destroy entire document when no longer needed, recalled, or obsolete.

1.2 Required Documents

Document	PN	Location
Safety Notices http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7hdx/G229-9054.pdf	Document #G229-9054	InfoCenter *

Table 2 Required Documents

*InfoCenter Website: http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7ee2/p7ee2kickoff.htm

1.3 Related Documents

Document	PN	Location
Power775 BPC FSP Command Line Procedure		Appendix A

Table 3 Related Documents

*InfoCenter Website: http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7ee2/p7ee2kickoff.htm

1.4 Acronyms / Abbreviations

Acronym/Abbreviation	Definition	Details
BPA	Bulk Power Assembly	BPE populated with BPCH, BPD, BPRs, & BPFs
BPCH	Bulk Power Controller Hub	Referred to as BPC on the HMC
BPD	Bulk Power Distributor	
BPE	Bulk Power Enclosure	
BPF	Bulk Power Fan	
CB	Circuit Breaker	Branch circuit wall CB or PDU CB is part of customer's facilities power infrastructure
CEC	Central Electronics Complex	Also referred to as the NODE-P7IH on the Rating Labels
DCCA	Distributed Converter and Control Assembly	The Power Supply for CEC and DE are called the CEC DCCA and DE DCCA, respectively
DE	Disk Enclosure	
EDFI	Error Detection / Fault Isolation	Power/Thermal firmware diagnostic function
FRU	Field Replaceable Unit	
FSP	Flexible Service Processor	
GPFS	Global Parallel File System	IBM's file system utilizing software RAID
HDD	Hard Disk Drive	This also means hard drive
HMC	Hardware Maintenance Console	
HPC	High Performance Computing	
LED	Light Emitting Diode	
LIC	Licensed Internal Code	Specifically Power/Thermal firmware in this procedure's context
MTMS	Machine Type, Model, Serial #	
PCB	Printed Circuit Board	
RAID	Redundant Array of Inexpensive Disks	
SAS	Serial Attached SCSI	Protocol used for direct attached storage
SFP	Service Focal Point	Service application on the HMC
SSR	System Service Representative	IBM Field Service personnel
SSD	Solid State Drive	
UEPO	Unit Emergency Power Off	

Table 4 Acronyms / Abbreviations

2 OVERVIEW

This section is an overview only. Do not start the service procedure until Section 3 which contains the detailed steps.

2.1 Safety Notices

2.1.1 IMPORTANT

Read "Safety_Notices_G229-9054.pdf " available from InfoCenter – see Section 1.2. The following are some of the cautions that specifically pertain to this Power775 service procedure.

CAUTION:
Energy hazard present. Shorting might result in system outage and possible physical injury. Remove all metallic jewelry before servicing. (C001)

CAUTION:
The doors and covers to the product are to be closed at all times except for service by trained service personnel. All covers must be replaced and doors locked at the conclusion of the service operation. (C013)

CAUTION:
Servicing of this product or unit is to be performed by trained service personnel only. (C032)

2.1.2 IMPORTANT

Here is a danger that specifically pertains to this Power775 service procedure.

DANGER:
Hazardous voltage present. Voltages present constitute a shock hazard, which can cause severe injury or death. (L004)

Figure 1 Hazardous Voltage, Current, or Energy

2.2 Attention – File System Risk Statement

The Global Parallel File System (GPFS) implementation of software RAID stripes data across all the Disk Enclosures in the cluster. **If a single Disk Enclosure is powered off while GPFS is active, the file system will go into panic and become unavailable.**

2.3   UEPO Cable Description

Referring to the drawing in Figure 2 UEPO Panel Location below, the UEPO cables are connected to the UEPO panel at location U-D1 (where U is the MTMS 9125 F2C Serial #) on the front of the rack. Specifically, the BPA-A UEPO cable plug labeled EPOS-T1 connects to UEPO panel jack U-D1-T1 and the opposite cable end labeled A33B-BPCHA-T4 connects to U-P2-C1-T4. Likewise, the BPA-B UEPO cable plug labeled EPOS-T2 connects to UEPO panel jack U-D1-T2 and the other end labeled A33B-BPCHB-T4 connects to U-P1-C1-T4.

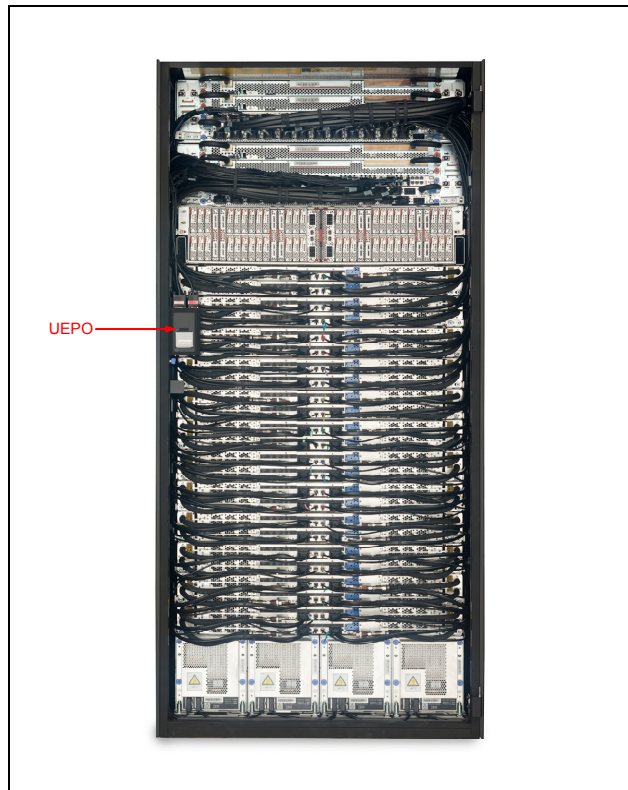**Figure 2 UEPO Panel Location**

Figure 3 is a drawing of the UEPO Panel on the front of the rack. Note the UEPO cables (2X) plug into the top as also illustrated in Figure 15 further in this document.
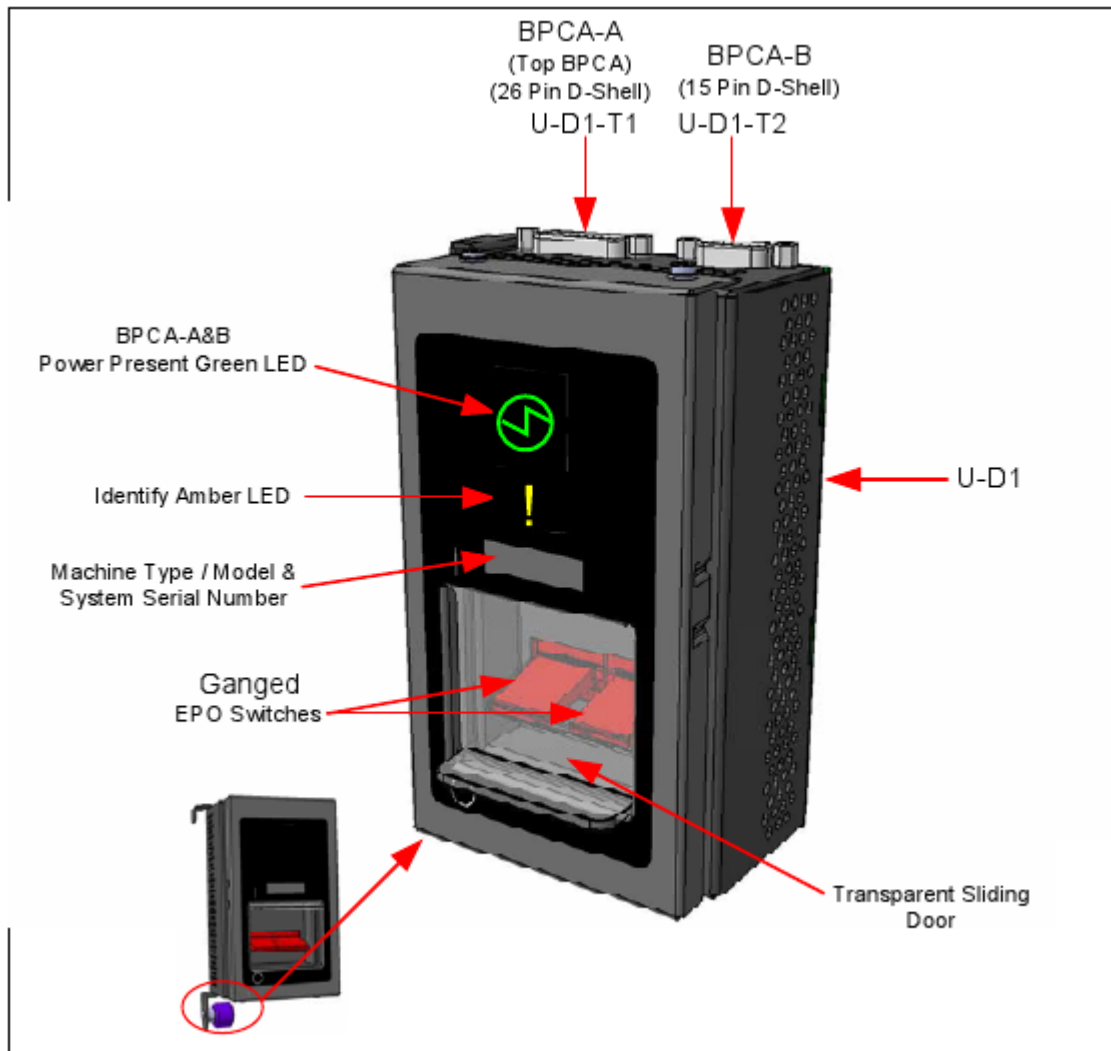
Figure 3 UEPO Panel in OFF (down) position

2.4   Background

2.4.1   UEPO Circuit Operation
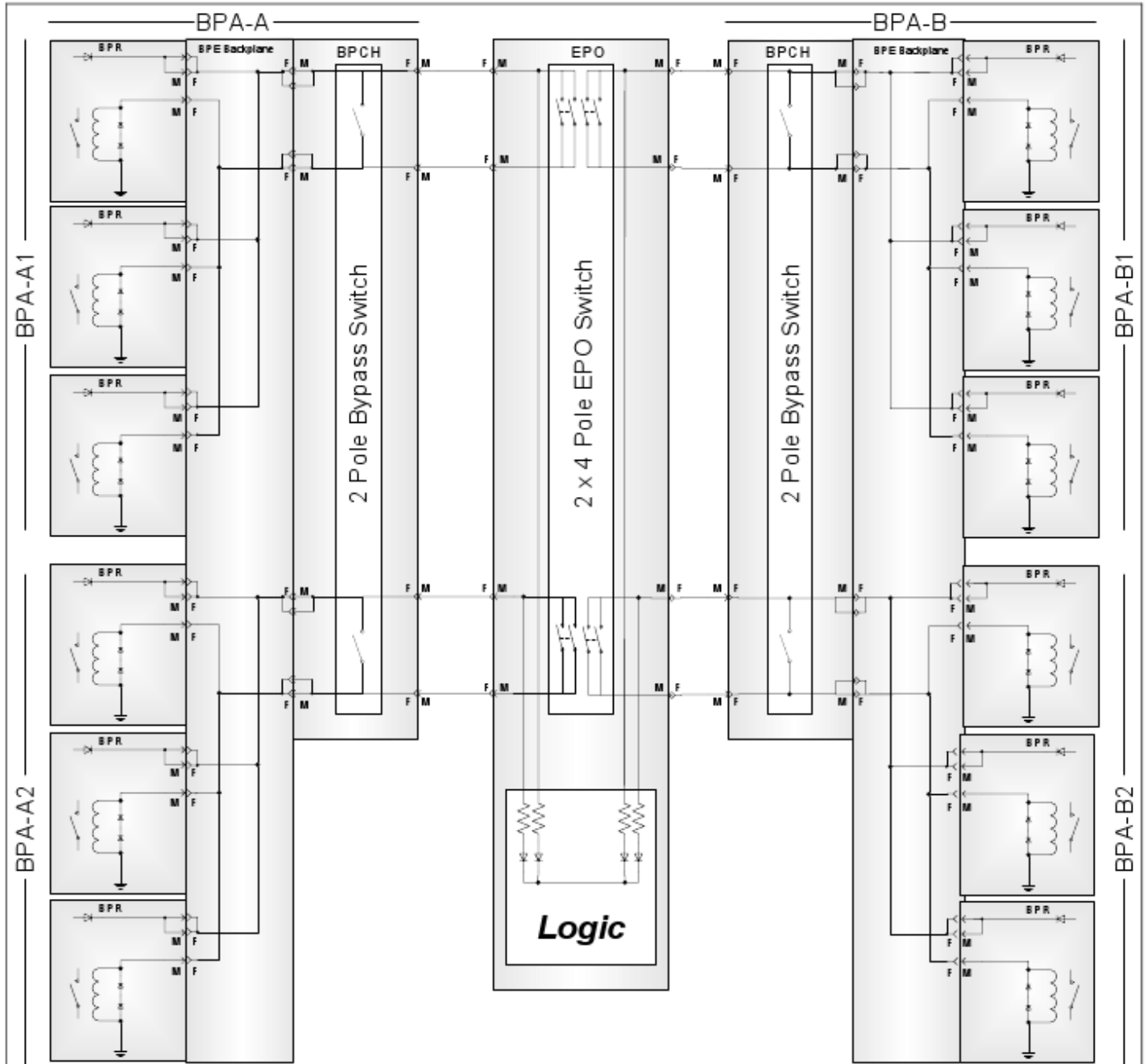
Figure 4 UEPO Circuit Block Diagram

Both of the UEPO bypass switches located on each BPCH will need to be placed in bypass during the UEPO Cable service procedure defined here. Referring to the drawing in Figure 4 UEPO Circuit Block Diagram above, the center block is the UEPO switch. The block on the left is BPA-A and the block on the right is BPA-B. Note one "2-pole Bypass Switch" is in the BPA-A BPCH and another is in the BPA-B BPCH. They are wired in parallel with the UEPO switch. During normal operation both the "2-pole Bypass Switches" are open so the UEPO Panel controls the system power state. Figure 5 UEPO Normal Operation (One of 4 Loop Paths Highlighted) below has one of the four UEPO loops highlighted in red. With the UEPO panel switch closed, the system is powered on and the green LED is lit on the UEPO Panel. Note that if the UEPO panel switch is opened (moved to down position) or one UEPO cable is removed, the loop is broken and the system powers down as indicated by the UEPO Panel green LED going out.
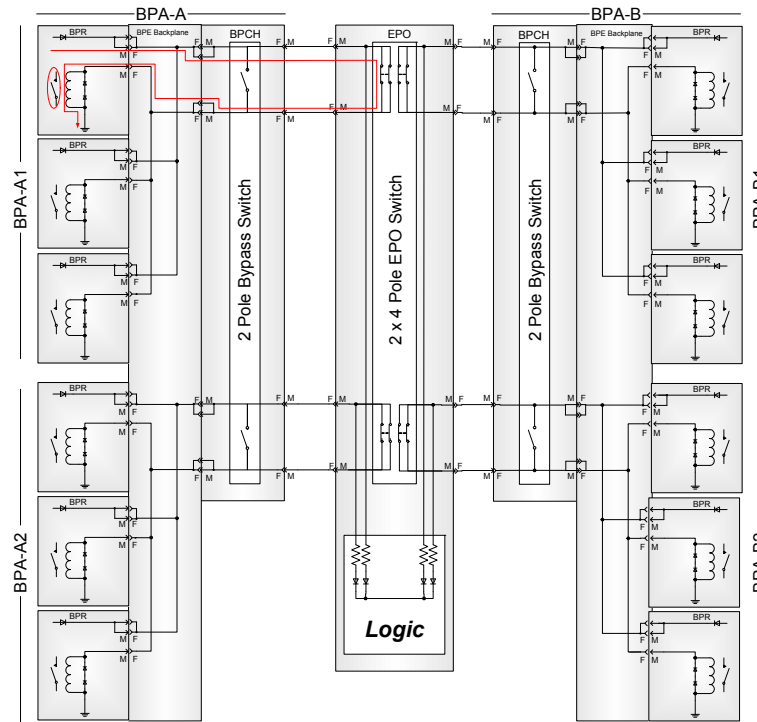
Figure 5 UEPO Normal Operation (One of 4 Loop Paths Highlighted)

Figure 6 UEPO Panel With BPA-A BPCH Bypass Switch in Bypass below highlights the UEPO loop path when the "2 Pole Bypass Switch" is closed. Note that the "2 Pole Bypass Switch" being closed acts as a short across the UEPO switch. It forces the UEPO loop to remain closed, the system to be kept running, and the UEPO Panel green LED to stay lit. This allows us to concurrently remove the UEPO cables without opening the UEPO loop or causing a hard system power down. It is important to remember that once the new UEPO Panel is installed, we place both BPCH "2 Pole Bypass Switches" back in the normal (or open) position to allow the UEPO Panel control to function as intended.
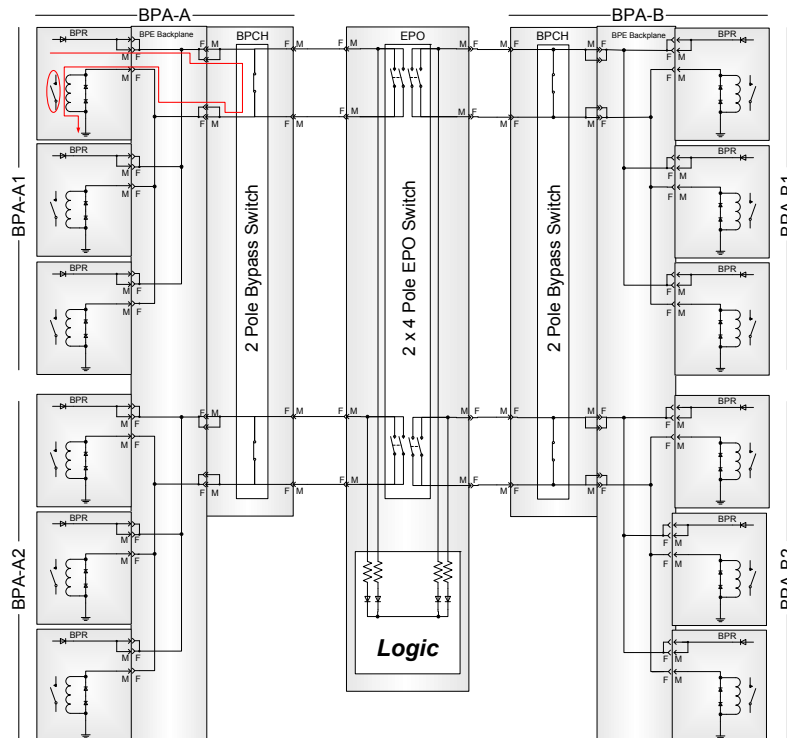
Figure 6 UEPO Panel With BPA-A BPCH Bypass Switch in Bypass

2.5   Concurrency

The UEPO cables are concurrently maintainable. The UEPO bypass switches located on the BPCHs need to be placed in bypass as described in the following procedure.

2.6   UEPO Cable Weight

The UEPO Cable weighs approximately 498.95 grams / 1.1 lbs

2.7   Required SSRs and Roles

This service procedure requires one SSR.

2.8   Estimated Service Time

This procedure normally takes approximately 30 minutes.

2.9   P7IH Hand Tool Kit P/N 74Y0988 Required Tools

3   SERVICE PROCEDURE

STOP – Do not proceed unless you have read "Safety_Notices_G229-9054.pdf" which is available from InfoCenter; see Section 1.2.

3.1   Customer System Administrator

The Customer System Administrator should be made aware of this service activity, but they don't normally have specific steps to perform.

3.2   Identify and Replace UEPO Cable <= SSR Task

1. You should have downloaded this procedure from the InfoCenter Website listed here to ensure you are using the latest version and ensure no pages are missing by verifying the last section is titled "End of Document":

    http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7ee2/p7ee2kickoff.htm

2. If using printed copies of these procedures, then be sure to staple or paperclip the pages together to help keep them in the right page number sequence.

3. An HMC Service Focal Point SRC FRU Call or direction from a higher level of support should have directed you to perform this procedure

4. Ensure the UEPO Panel switch is ON (double-red-switch in UP position -- reference Figure 7 UEPO Panel location on Front Door below). The HMC can be accessed via the keyboard/display that resides in the management rack

5. Locate rack that requires service.

6. If the rack could not be located in Step 5 above, then light the UEPO Service Identify LED by accessing the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and select **SIDE_A** on the **Launch ASM Interface** window) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):
    ```
    bpccmd -c 28aa0001ff01
    ```

    ```
    Expect 00aa00 returned which means the command executed properly
    and reported successful "UEPO Service Identify LED On" status.
    ```

    If something different is returned, then contact the next level of support. For reference, the returned "rrssdd" format hexadecimal characters can be translated as follows:

    "rr" Return Code Definitions:
    00 = Command executed properly
    21 = Cage Not Present / Configured
    22 = FRU Not Present / Configured.
    27 = Location code error
    4A = Error in sent command
    4B = Invalid State
    95 = BPCH LIC Detected Error
    96 = Mail-boxing error

    "ss" Sequence Number:

    aa = Arbitrary and unimportant

    "dd" Return Data Definitions
      00 = UEPO Service Identify LED turned on successfully. It is OK to continue with the service procedure

7. The UEPO Panel Identify Amber "!" LED should be blinking. Verify the rack MTMS (Machine Type Model Serial number) are as expected. The rack level MTMS is located on the face of the UEPO Panel (see Figure 7 UEPO Panel location on Front Door below). The Green circular lightning-bolt LED indicates that the UEPO loop is complete and it should remain lit throughout the procedure.
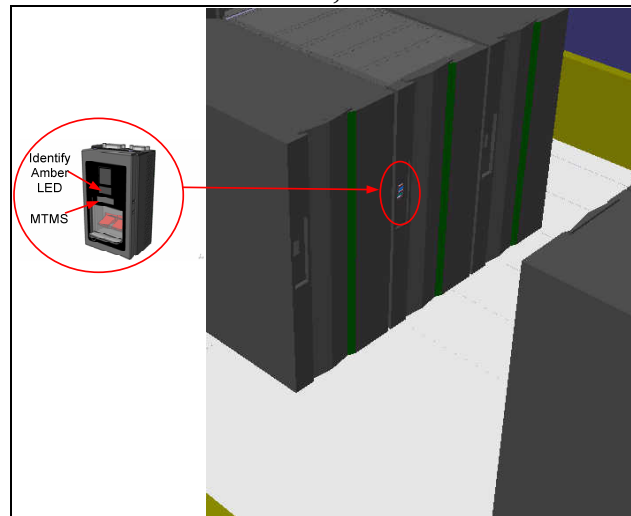
Figure 7 UEPO Panel location on Front Door

8. Make sure the UEPO Cable status is redundant by sending a UEPO Panel/Cable redundancy command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 9baa0000ffef
```

```
Expect 00aa00 returned which means the command executed properly
and reported successful "Redundant UEPO Panel/Cable" status.
```

If something different is returned, then contact the next level of support. For reference, the returned "rrssdd" format hexadecimal characters can be translated as follows:

"rr" Return Code Definitions:
00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
43 = Not valid for this FRU
96 = Mail-boxing error

"ss" Sequence Number:

aa = Arbitrary and unimportant

"dd" Return Data Definitions:
00 = Redundant status. It is OK to replace the UEPO Cable and continue with Step 9
01 = Non-redundant status. It is NOT OK to replace the UEPO Cable. Please contact next level of support

9. Open the front door as shown in Figure 8 below.
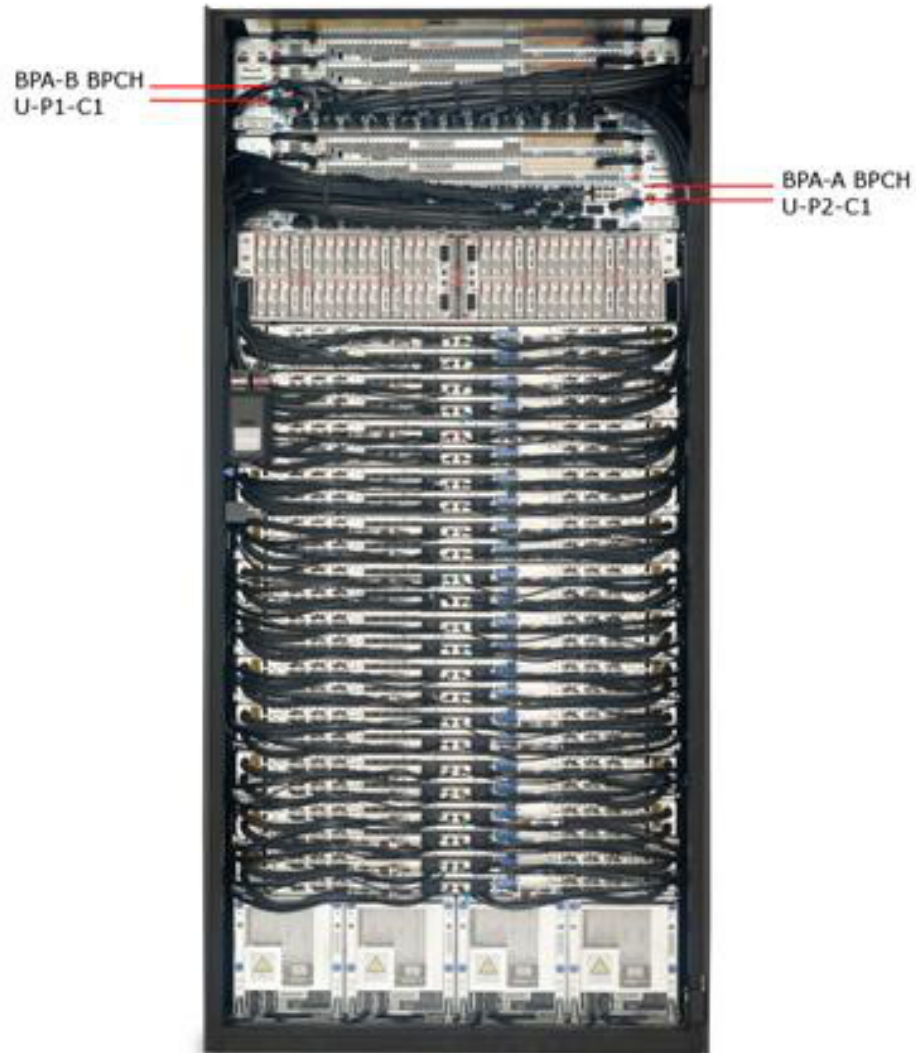
Figure 8 Front Door Open

DANGER:
Hazardous voltage present. Voltages present constitute a shock hazard, which can cause severe injury or death. (L004)

Figure 9 Hazardous Voltage, Current, or Energy

10. Locate both BPCHs (see Figure 10 below) and the UEPO Cable plugged into position T4 on each BPCH.

Figure 10 Location of BPCHs in rack

11. Set the UEPO switches on **both** BPCHs to the "BYPASS" position to the right before replacing the UEPO Cable (reference Figure 11 below).

Figure 11 BPCH UEPO Bypass Switch shown in desired BYPASS position (moved to the right)

12. Check Bypass Switch State is correct by sending the UEPO Bypass Status Read command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):
```
bpccmd -c 97aa0030
```

Expect 00aadddddddd returned (where ddddddd are any alpha-numeric characters) which means the command executed properly and successful "UEPO Bypass" status has been confirmed.

If "95aa0f 0006 Failed: First token 3 bytes are payload, second token is netcStatus" is returned, then double-check the UEPO switches on **both** BPCHs are set to the "BYPASS" position (moved to the right as shown in Figure 11 above). Repeat this Step 12 if necessary.

If different data is returned, then contact the next level of support. For reference, the returned "rrssdddddddd" format hexadecimal characters can be translated as follows:

"rr" Return Code Definitions:
00 = Command executed properly
21 = Cage Not Present / Configured
4A = Error in Sent Command
95 = BPC LIC detected error/failed

"ss" Sequence Number:

aa = Arbitrary and unimportant

"dddddddd" Return Data Definitions:

dd Data	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
1st & 3rd dd Bytes	-CROSS PWR DCVP	Pull-Up	-EPO1 PWR COMPLETE	-EPO1 PWR GOOD	BPCH EPO1 BYPASSED	-BPD PLUG DETECT	-BPF4 PLUG DETECT	-BPF3 PLUG DETECT
2nd & 4th dd Bytes	<------- Pull-Up ------->		-EPO2 PWR COMPLETE	-EPO2 PWR GOOD	BPCH EPO2 BYPASSED	Pull-Up	-BPCH BIAS 2 DCVP	-BPCH BIAS 1 DCVP

Table 5 BPA / UEPO Status Registers

The Return Data needs each "dd" byte converted from hexadecimal to binary and plugged into the appropriate row of the above Table 5 for translation (Bytes 1 & 2 are BPCH-A status and bytes 3 & 4 are BPCH-B status). A typical value of "48CC48CC" has only the Pull-Up bits equal to 1 (i.e., forced high due to pull-up resistors), both bit 3's equal to one (active high UEPO Bypassed), and all the other bits equal to 0 (i.e., active low as designated by the – sign prefix). This technical information is supplied strictly as a debug aid and is not expected to be easily understood. If you are not sure how to proceed, then please call the next level of support.

13. Issue a UEPO Panel deactivate command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):
```
bpccmd -c 10aa0000ffef
```

```
Expect 00aa00 returned which means the command executed properly
and confirmed successful "Deactivated UEPO Panel" status.
```

If something different is returned, then the returned "rrssdd" format hexadecimal characters can be translated as follows:

"rr" Return Code Definitions:
00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

"ss" Sequence Number:

aa = Arbitrary and unimportant

"dd" Return Data Definitions:
  00 = Deactivate successful. It is OK to replace the UEPO Cable and continue with the service procedure

14. Disconnect either the suspect EPOS-T1 or EPOS-T2 UEPO cable from the UEPO Panel assembly T1 or T2 position by loosening the connector thumb screws and unplugging only one cable (reference Figure 12 below)

Figure 12 UEPO Cable Removal

15. Trace out the cable and disconnect the other end of the UEPO Cable from either BPCH-A T4 location U-P2-C1-T4 or BPCH-B T4 location U-P1-C1-T4 (where U is the MTMS 9125 F2C Serial #) by loosening the connector thumb screws and unplugging the cable connector as shown in Figure 13 below)

Figure 13 Removal of UEPO Cable from BPCH T4

16. Unfasten any required Soft Cable Ties/velcro from the cable bundle and remove the suspect defective UEPO cable from the rack.

17. Ensure location labels are present on each plug of the replacement UEPO Cable. If they are not, then label the plugs similar to the suspect defective cable just removed.

18. Connect the replacement UEPO Cable to either the BPCH-A T4 location U-P2-C1-T4 or BPCH-B T4 location U-P1-C1-T4 (where U is the MTMS 9125 F2C Serial #) by plugging the T4 cable connector and tightening the connector thumb screws (reference Figure 14 below)

Figure 14 UEPO Cable Plugged into BPCH

19. Connect the other end of the UEPO Cable labeled either EPOS-T1 or EPOS-T2 to the UEPO Panel assembly by plugging into the connector positions labeled T1 or T2 and tightening the connector thumb screws as shown in Figure 15 below

Figure 15 UEPO Cables Plugged into UEPO Panel

20. Neatly route the replacement UEPO Cable and resecure the Cable Ties/velcro strips keeping the cable bundle neatly inside the frame.

21. Ensure the UEPO Panel switch is still ON (double-red-switch in UP position).

22. Set the UEPO bypass switches on **both** BPCHs back to the "NORMAL" (left) positions as shown in Figure 16 below.

Figure 16 BPCH UEPO Bypass Switch shown in the desired NORMAL position (moved to the left)

23. Check Bypass Switch State is correct by sending the UEPO Bypass Status Read command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):
```
bpccmd -c 97aa0031
```

```
Expect 00aaddddddddd returned (where ddddddd are any alpha-
numeric characters) which means the command executed properly and
successful "Normal UEPO" status has been confirmed.
```

If "95aa0f 0006 Failed: First token 3 bytes are payload, second token is netcStatus" is returned, then double-check the UEPO switches on **both** BPCHs are set to the "NORMAL" position (moved to the left as shown in Figure 16 above). Repeat this Step 23 if necessary.

If something different is returned, then contact the next level of support. For reference, the returned "rrssddddddddd" format hexadecimal characters can be translated as follows:

"rr" Return Code Definitions:
00 = Command executed properly
21 = Cage Not Present / Configured
4A = Error in Sent Command
95 = BPC LIC detected error/failed

"ss" Sequence Number:

aa = Arbitrary and unimportant

"ddddddddd" Return Data Definitions:

dd Data	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
1st & 3rd dd Bytes	-CROSS PWR DCVP	Pull-Up	-EPO1 PWR COMPLETE	-EPO1 PWR GOOD	BPCH EPO1 BYPASSED	-BPD PLUG DETECT	-BPF4 PLUG DETECT	-BPF3 PLUG DETECT
2nd & 4th dd Bytes	<------- Pull-Up ------->		-EPO2 PWR COMPLETE	-EPO2 PWR GOOD	BPCH EPO2 BYPASSED	Pull-Up	-BPCH BIAS 2 DCVP	-BPCH BIAS 1 DCVP

Table 6 BPA / UEPO Status Registers

The Return Data needs each "dd" byte converted from hexadecimal to binary and plugged into the appropriate row of the above Table 6 for translation (Bytes 1 & 2 are BPCH-A status and bytes 3 & 4 are BPCH-B status). A typical value of "40C440C4" has only the Pull-Up bits equal to 1 (i.e., forced high due to pull-up resistors) and all the other bits equal to 0 (i.e., active low as designated by the – sign prefix). This technical information is supplied strictly as a debug aid and is not expected to be easily understood. If you are not sure how to proceed, then please call the next level of support.

24. Issue a UEPO Panel activate command to the BPCH-A FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 11aa0000ffef
```


```
Expect 00aa00 returned which means the command executed properly
and reported successful "Activated UEPO Panel" status.
```

If something different is returned, then contact the next level of support. For reference, the returned "rrssdd" format hexadecimal characters can be translated as follows:

"rr" Return Code Definitions:
00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

"ss" Sequence Number:

aa = Arbitrary and unimportant

"dd" Return Data Definitions
    00 = Activate successful and UEPO Cable/Panel EDFI is re-enabled. It is OK to continue the service action

25. If the UEPO Service Identify LED is still on, then turn it off by accessing the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 28aa0000ff01
```

```
Expect 00aa00 returned which means the command executed properly
and reported successful "UEPO Service Identify LED Off" status.
```

If something different is returned, then contact the next level of support. For reference, the returned "rrssdd" format hexadecimal characters can be translated as follows:

"rr" Return Code Definitions:
00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

"ss" Sequence Number:

aa = Arbitrary and unimportant

"dd" Return Data Definitions
    00 = UEPO Service Identify LED turned off successfully. It is OK to continue with the service procedure

26. Confirm the UEPO Panel Service Identify LED is now off.

27. Wait 5 minutes and then perform Steps 28 & 29 to verify the original SRC does NOT reoccur and to confirm the service procedure completed successfully.

28. Issue an BPCH-A real-time Power/Thermal SRC read-out command to the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) by entering the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -m gi,3,s
```

```
Verify the original SRC problem is not listed in any of the
src.referenceCode fields (there may be multiple fields to check).
```

29. Open a new **ASM SIDE_B** window and issue an BPCH-B real-time Power/Thermal SRC read-out command to the **HMC BPC-B ASM SIDE_B** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and select **SIDE_B** on the **Launch ASM Interface** window) by entering the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -m gi,3,s
```

```
Verify the original SRC problem is not listed in any of the
src.referenceCode fields (there may be multiple fields to check).
```

30. If any of the src.referenceCode fields list the original SRC that led you to perform this service procedure, then continue with replacing the next item on the FRU call list or contact the next level of support.

31. If the original SRC error has not reoccurred and is now cleared, then close the front door of the rack and close out the HMC Service Focal Point problem as appropriate.

4 END OF POWER775 UEPO CABLE SERVICE PROCEDURE

5 APPENDIX A: POWER775 BPC FSP COMMAND LINE PROCEDURE

5.1 Procedure to Access the BPC FSP Command Line

1. The HMC can be accessed via the keyboard/display that resides in the network management rack.

2. Login to the HMC if not done already.

3. In the HMC navigation pane, expand 'Systems Management' + sign and then click 'Frames' (see Figure 17 HMC Frames)
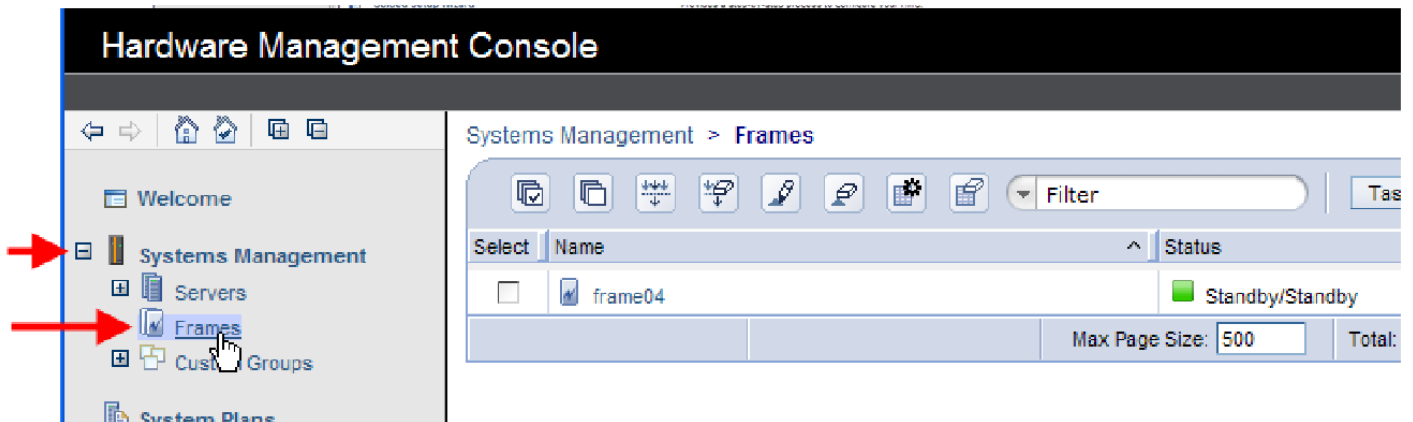
Figure 17 HMC Frames

4. From the Tasks Menu right-arrow pull-down menu, click **Operations ➔ Launch Frame Advanced Systems Management (ASM)** as shown in Figure 18
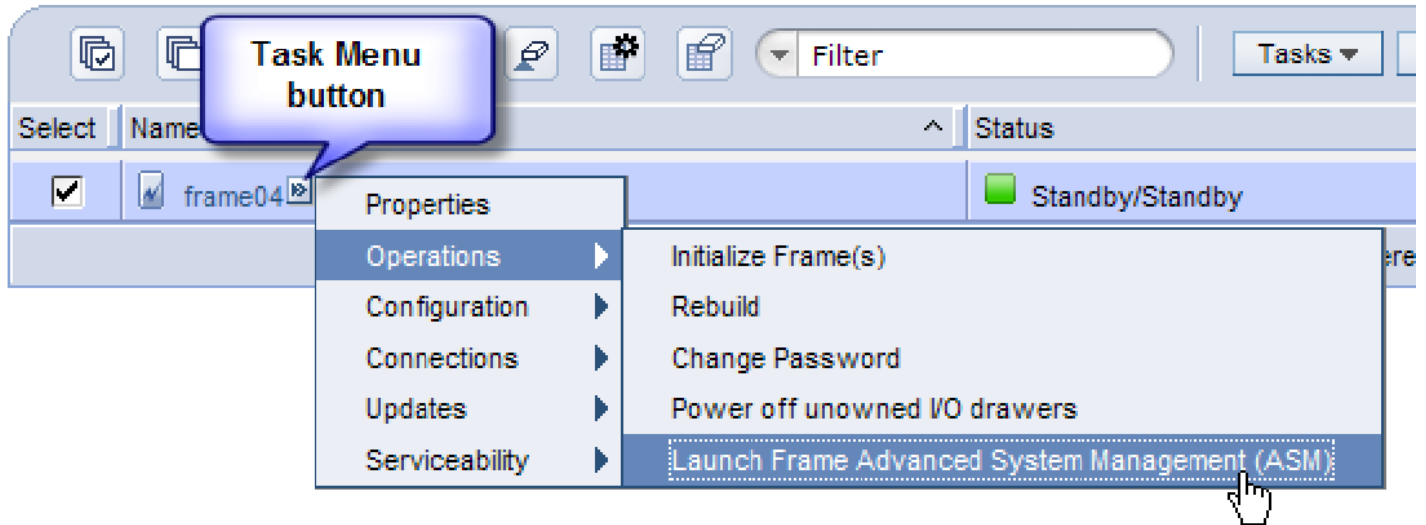

Figure 18 Launch Frame Advanced System Management (ASM)

5. From the Launch ASM Interface window, select **SIDE_A** or **SIDE_B** (whichever the instructions call for) from the 'Frame IP Address:' pull-down arrow menu, then click the **OK** button (see Figure 19 which shows the SIDE_A BPC FSP selected)
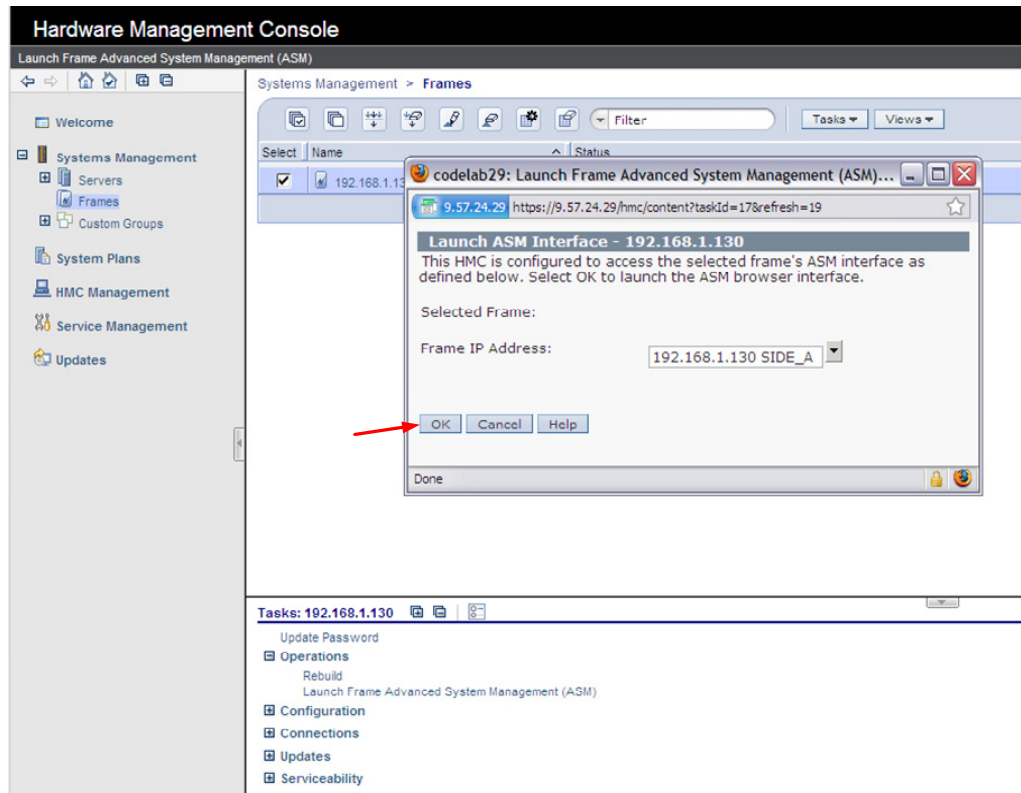

Figure 19 Select BPC FSP SIDE_A

6. The ASM login window is presented. Acquire the necessary User ID and Password.

    "celogin" requires Daily Password from the IBM Support Center.

    "celogin1" might be enabled by the customer. If so, obtain the password from the customer.

7. Enter User ID
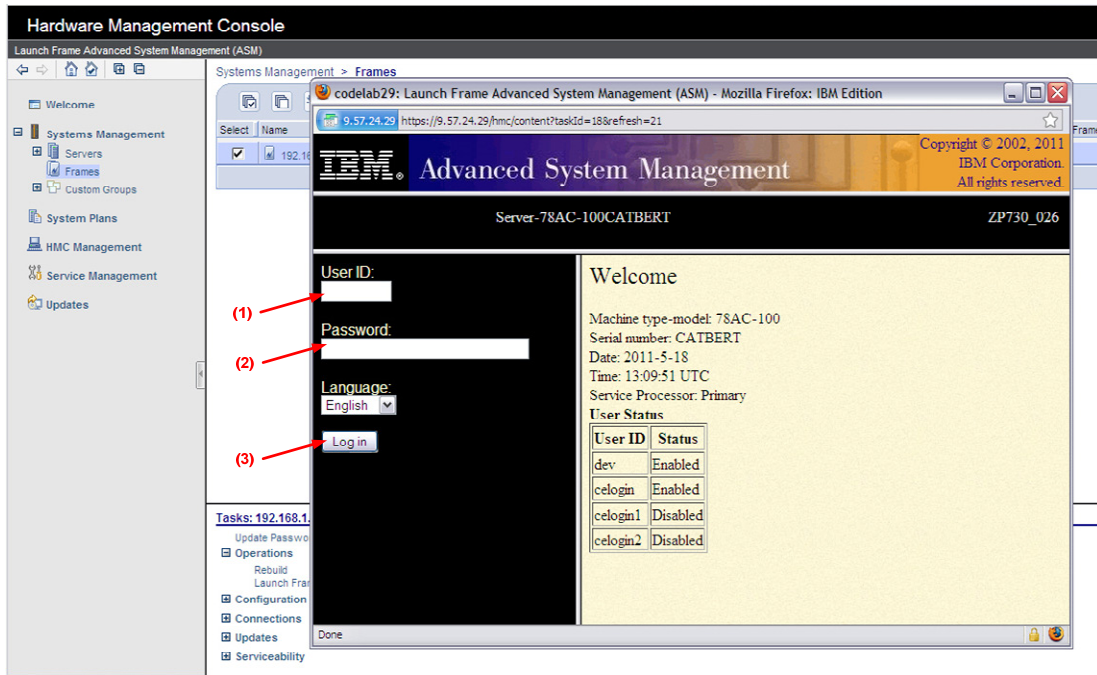
8. Enter Password

9. Click **Log in** button

Figure 20 ASM Login

10. Expand 'System Service Aids' + sign and Select 'Service Processor Command Line' to obtain Figure 21.
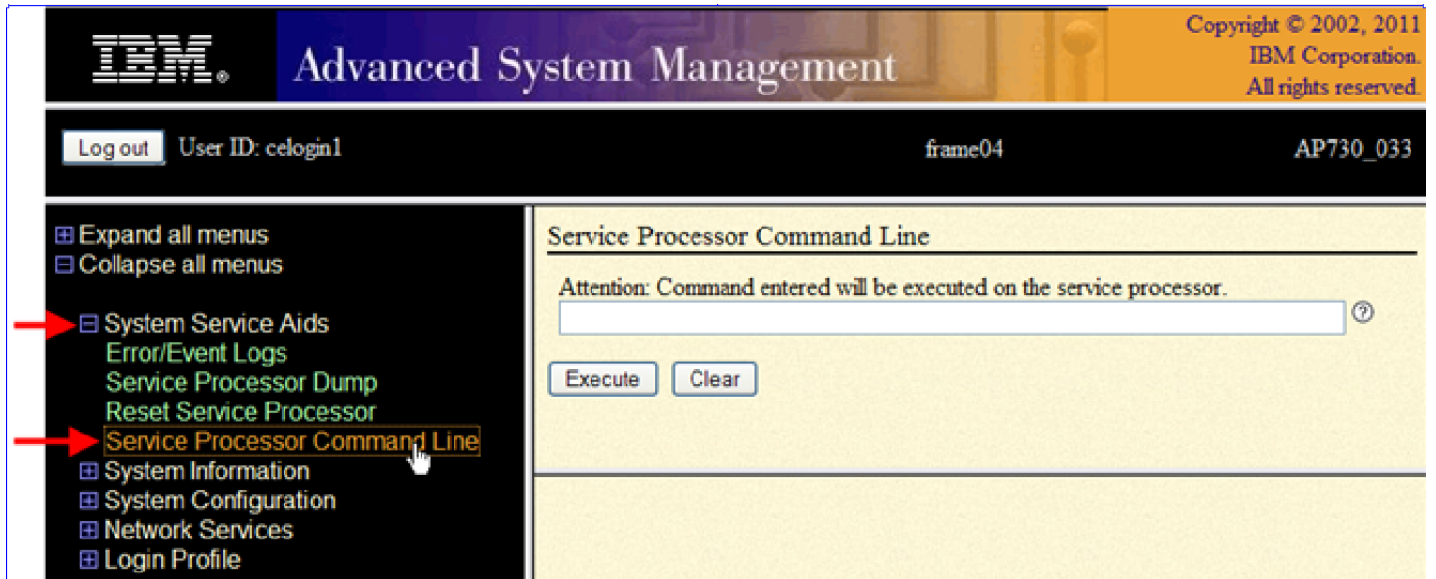

Figure 21 ASM Service Processor Command Line

11. The ASM BPC FSP Command line will be presented. Enter the commands defined in the paper service procedures at this command line and press the Enter key (or click the **Execute** button).

12. If you are not sure whether you are on the ASM **A_SIDE** or **B_SIDE** BPC FSP Command Line, then enter the command **bpccmd –m GET_SIDE** to query which BPC FSP is actively connected.

13. Return to the step of the paper service procedure that directed you to this Appendix A.

5.2   End of Appendix A: Power775 BPC FSP Command Line Procedure

6 END OF DOCUMENT