ESCALA Power7

Managing Power Units using the SDMC

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The ESCALA Power7 publications concern the following models:

- Bull Escala E5-700 (Power 750 / 8233-E8B)
- Bull Escala M6-700 (Power 770 / 9117-MMB)
- Bull Escala M6-705 (Power 770 / 9117-MMC)
- Bull Escala M7-700 (Power 780 / 9179-MHB)
- Bull Escala M7-705 (Power 780 / 9179-MHC)
- Bull Escala E1-700 (Power 710 / 8231-E2B)
- Bull Escala E1-705 (Power 710 / 8231-E1C)
- Bull Escala E2-700 / E2-700T (Power 720 / 8202-E4B)
- Bull Escala E2-705 / E2-705T (Power 720 / 8202-E4C)
- Bull Escala E3-700 (Power 730 / 8231-E2B)
- Bull Escala E3-705 (Power 730 / 8231-E2C)
- Bull Escala E4-700 / E4-700T (Power 740 / 8205-E6B)
- Bull Escala E4-705 (Power 740 / 8205-E6C)

References to Power 755 / 8236-E8C models are irrelevant.

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Trademarks and Acknowledgements

Contents

Managing power units

Power units can be managed by using the IBM® Systems Director Management Console (SDMC).

A *power unit*, formerly called a frame or bulk power assembly (BPA), is a power assembly for the processor, memory, flexible service processor (FSP), and I/O enclosures.

Managing power unit connections

You can request a connection to a power unit, revoke an existing connection, and verify the status of connections. You can add or remove a field-replaceable unit (FRU), and you can open or close miscellaneous equipment specification (MES) numbers.

Viewing the bulk power assembly status

You can view the state of the connection from the IBM Systems Director Management Console (SDMC) to side A and side B of the bulk power assembly (BPA).

To view the status of the bulk power assembly, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to view the status.
4. Right-click the power unit, and click **Connections → Bulk Power Assembly (BPA) Status**.
   The Connection State column displays the status of the BPA.
5. Click **Close** to exit the status page.

Requesting, revoking, and verifying power unit connections

You can request access to a power unit, revoke the existing access connections, and verify the status of the connections.

Requesting connection access

You can allow authorized IBM Systems Director users to access a power unit. Use this procedure to request connection access to the target systems.

To request connection access, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to request access to the target systems.
4. Right-click the power unit, and click **Security → Request Access**.
5. On the Request Access page, type the user ID and password to authenticate the users to the target systems, and click **Request Access**. The credentials are created and authenticated to the target system. The **Access** column indicates the status of the request.

Revoking connection access

You can revoke access from the target systems to the power units.

To revoke access to power units, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.

3. Select the power unit for which you want to revoke access to the target systems.
4. Right-click the power unit, and click **Security** → **Revoke Access**.
5. Click **OK** in the confirmation window to revoke access. The access state of a power unit is changed to No Access.

Verifying connection access

You can verify whether there is a valid connection between the host and the power unit, and you can verify the credentials.

To verify the connection access for the power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to verify the connection access status.
4. Right-click the power unit, and click **Security** → **Verify Connection**.
5. On the Verify Connection page, select the **Query vital properties** check box if you want to verify the credentials.
6. Click **Verify Connection**. You can view the status of the connection in the Access column.

Servicing the power units

You can replace field-replaceable unit (FRU) in a power unit, and you can open or close miscellaneous equipment specification (MES) numbers.

Viewing the status of power units

You can view the connection status of the power units.

To view the status of the power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab. The Power Systems Resources pane is displayed.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to view the status.
4. Right-click the power unit, and click **Properties**.
5. Click the **Active Status** tab to view the status of the power unit.

Replacing a FRU

You may need to replace a field-replaceable unit (FRU) as part of an upgrade operation.

To replace a FRU, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to replace the FRU.
4. Right-click the power unit, and click **Service and Support** → **Hardware** → **Exchange FRU**.
5. On the Exchange FRU page, select the installed enclosure type from the **Installed Enclosure Types** list and click **Go**.
6. From the list of FRU types, select the FRU that you want to replace, and click **Next**.
7. Select the location for the FRU from the Location code column, and click **Add**. The FRU and its location are added to the Pending Actions area.
8. Click **Launch Procedure** to begin replacing the FRUs listed in the Pending Actions area.
9. Click **Finish**.

Performing MES tasks

You can add or remove a field-replaceable unit (FRU) to the power unit. You can open and close a miscellaneous equipment specification (MES) number for the power unit.

Adding a FRU:

You can install a new field-replaceable unit (FRU) as part of an upgrade operation.

To add FRUs to the power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to add the FRU.
4. Right-click the power unit, and click **Service and Support** → **Hardware** → **MES Tasks** → **Add FRU**.
5. On the Add FRU page, select the installed enclosure type from the **Installed Enclosures**, and click **Go**.
6. From the list of FRU types, select the FRU that you want to add, and click **Next**.
7. Select the location for the FRU from the Location code column, and click **Add**. The FRU and its location are added to the Pending Actions area.
8. Click **Launch Procedure** to begin adding the FRUs listed in the Pending Actions area.
9. Click **Finish** to complete the procedure.

Removing a FRU:

You can remove the installed field-replaceable unit (FRU) as part of an upgrade operation.

To remove FRUs from the power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to remove the FRU.
4. Right-click the power unit, and click **Service and Support** → **Hardware** → **MES Tasks** → **Remove FRU**.
5. On the Remove FRU page, select an enclosure type from the **Installed Enclosures** list, and click **Go**.
6. From the list of FRU types, select the FRU that you want to remove from the enclosure, and click **Next**.
7. Select the installed FRU location from the Location code column, and click **Add**. The FRU and its location are added to the Pending Actions area.
8. Click **Launch Procedure** to begin removing the FRUs listed in the Pending Actions area.
9. Click **Finish**.

Opening an MES:

You can open a miscellaneous equipment specification (MES) number for the power unit.

To open an MES for the power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to open the MES.
4. Right-click the power unit, and click **Service and Support** → **Hardware** → **MES Tasks** → **Open MES**.
5. Click **Add MES Order Number**.
6. Type the MES number, and click **OK**.

Closing an MES:

You can close a miscellaneous equipment specification (MES) number for the power unit.

To close an MES, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to close the MES.
4. Right-click the power unit, and click **Service and Support** → **Hardware** → **MES Tasks** → **Close MES**.
5. Select the MES order number that you want to close, and click **Next**.
6. Click **Add MES Order Number**.
7. Click **OK**.

Managing power unit operations

You can initialize power units, change the power unit password, change power unit properties, rebuild power units, launch the Advanced System Manager (ASM), and view the VLAN network data for the power unit.

Initializing the power unit

You can initialize a power unit.

To initialize power units, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit that you want to initialize.
4. Right-click the power unit, and click **Operations** → **Initialize power unit**.
5. On the Initialize Power unit page, click **OK** to initialize the power unit.

   When you initialize a power unit, the hosts and the I/O units that are associated with the power unit are initialized.

Changing power unit passwords

You can change the password for a power unit.

To change the password for a power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to change the password.
4. Right-click the power unit, and click **Operations** → **Change Password**.
5. On the Change Password page, type your current password in the **Current System Access password** field.
6. Type the new password in the **New System Access password** field.

   The password can be 4 - 64 characters in length, consist of uppercase letters (A - Z), lowercase letters (a - z), and numerals (0 - 9).
7. Reenter the new password in the **Verify System Access password** field.
8. Click **OK**.

   Note: After the password is changed, you must update the IBM Systems Director Management Console (SDMC) access password for all other SDMCs from which you want to access this power unit.

Changing power unit properties

You can view and edit the properties of the power unit.

To edit the properties of the power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit that you want to edit.
4. Right-click the power unit, and click **Edit Power Unit**.
5. Click the **General** tab.
6. Edit the **System name** property as required.
7. Edit the **Number** property as required.

   Notes:
   - You can modify the power unit number only if all the hosts inside the power unit are powered off. Otherwise, the field is disabled.
   - The possible values for the power unit number are 1 - 65535.
8. Click **OK**.

   Notes: You can edit only the properties under the **General** tab. However, you can view the other properties of the power unit.
   - Click the **Managed Systems** tab to view the list of all the hosts associated with the power unit.
   - Click the **I/O Units** tab to view the list of all the I/O units associated with the power unit.

Rebuilding the power unit

You can rebuild the internal representation of a power unit in the IBM Systems Director Management Console (SDMC).

To rebuild a power unit, complete the following steps:

Note: You cannot perform other tasks on the power unit while SDMC rebuilds it.

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit that you want to rebuild.
4. Right-click the power unit, and click **Operations** → **Rebuild**.
5. On the Rebuild page, click **OK**.

Launching Advanced System Manager

You can launch the Advanced System Management (ASM) for a power unit to perform general and administrator-level tasks.

To start the ASM for a power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to launch ASM.
4. Right-click the power unit, and click **Operations** → **Launch Advanced System Management (ASM)**.
5. On the Launch Advanced System Management (ASM) page, select the IP address to which you want to connect from the **Power unit IP Address** list. The login window for ASM is displayed.

Viewing VLAN network data

You can view the details of the virtual local area network (VLAN) associated with the power unit, such as switches, ports, and network addresses.

To view the VLAN network details for a power unit, complete the following steps:

1. On the Welcome page, click the **Resources** tab.
2. Click **Power Units** to view the list of power units.
3. Select the power unit for which you want to view the VLAN network details.
4. Right-click the power unit, and click **Service and Support** → **View VLAN Network Data** to view the View VLAN Network Data page.
5. Click **Close** to exit the page.

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