Configuring WWN Pools

This chapter includes the following sections:

WWN Pools

A WWN pool is a collection of WWNs for use by the Fibre Channel vHBAs in a Cisco UCS domain. You create separate pools for the following:

- WW node names assigned to the server
- WW port names assigned to the vHBA

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Important   A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

If you use WWN pools in service profiles, you do not have to manually configure the WWNs that will be used by the server associated with the service profile. In a system that implements multi-tenancy, you can use a WWN pool to control the WWNs used by each organization.

You assign WWNs to pools in blocks. For each block or individual WWN, you can assign a boot target.

WWNN Pools

A WWNN pool is a WWN pool that contains only WW node names. If you include a pool of WWNNs in a service profile, the associated server is assigned a WWNN from that pool.

WWPN Pools

A WWPN pool is a WWN pool that contains only WW port names. If you include a pool of WWPNs in a service profile, the port on each vHBA of the associated server is assigned a WWPN from that pool.

Configuring WWNN Pools

Creating a WWNN Pool

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Important   A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

Procedure

Step 1   In the **Navigation** pane, click the **SAN** tab.

Step 2   In the **SAN** tab, expand **SAN** > **Pools**.

Step 3   Expand the node for the organization where you want to create the pool.
If the system does not include multitenancy, expand the **root** node.

Step 4   Right-click **WWNN Pools** and select **Create WWNN Pool**.

Step 5   In the **Define Name and Description** page of the **Create WWNN Pool** wizard:

a) Enter a unique name and description for the WWNN Pool.
This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object has been saved.

b) Click **Next**.

Step 6   In the **Add WWN Blocks** page of the **Create WWNN Pool** wizard, click **Add**.

Step 7   In the **Create WWN Block** page, complete the following fields:

a) In the **From** field, enter the first WWNN in the pool.

b) In the **Size** field, enter the number of WWNNs to include in the pool.

c) Click **OK**.

Step 8   Do one of the following:

• Repeat Steps 6 through 7 to add another block to the pool.

• Click **Next** to move to the next page.

Step 9   Click **Finish**.

Adding a WWN Block to a WWNN Pool

Important A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

Procedure

Step 1 In the **Navigation** pane, click the **SAN** tab.

Step 2 In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .

Step 3 Expand the **WWNN Pools** node.

Step 4 Right-click the WWNN pool to which you want to add a WWN block and select **Create WWN Block**.

Step 5 In the **Create WWN Block** page, complete the following fields:

    a) In the **From** field, enter the first WWNN in the pool.

    b) In the **Size** field, enter the number of WWNNs to include in the pool.

    c) Click **OK**.

Deleting a WWN Block from a WWNN Pool

If you delete an address block from a pool, Cisco UCS Manager does not reallocate any addresses in that block that have been assigned to vNICs or vHBAs. All assigned addresses from a deleted block remain with the vNIC or vHBA to which they are assigned until one of the following occurs:

• The associated service profiles are deleted.

• The vNIC or vHBA to which the address is assigned is deleted.

• The vNIC or vHBA is assigned to a different pool.

Procedure

Step 1 In the **Navigation** pane, click the **SAN** tab.

Step 2 In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* > **WWNN Pools** > *WWNN_Pool_Name* .

Step 3 Right-click the WWN block that you want to delete and select **Delete**.

Step 4 If the Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Adding a WWNN Initiator to a WWNN Pool

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Important   A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

Procedure

Step 1   In the **Navigation** pane, click the **SAN** tab.

Step 2   In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .

Step 3   Expand the **WWNN Pools** node.

Step 4   Right-click the WWNN pool to which you want to add a WWNN initiator and select **Create WWNN Initiiator**.

Step 5   In the **Create WWNN Initiator** dialog box, complete the following fields:

Name	Description
World Wide Name field	The WWN.
Name field	The name of the WWNN initiator.
	This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object has been saved.
Description field	A user-defined description of the WWNN initiator.
	Enter up to 256 characters. You can use any characters or spaces except ^ (carat), \ (backslash), > (greater than), < (less than), ' (single quote), " (double quote), ` (accent mark), or = (equal sign).

Step 6   Click **OK**.

Deleting a WWNN Initiator from a WWNN Pool

Procedure

Step 1 In the **Navigation** pane, click the **SAN** tab.

Step 2 In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .

Step 3 Expand the **WWPN Pools** node.

Step 4 Choose the WWNN pool from which you want to delete a WWNN initiator.

Step 5 In the **Work** pane, click the **Initiators** tab.

Step 6 Right-click the initiator that you want to delete and choose **Delete**.

Step 7 If the Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Deleting a WWNN Pool

If you delete a pool, Cisco UCS Manager does not reallocate any addresses from that pool that have been assigned to vNICs or vHBAs. All assigned addresses from a deleted pool remain with the vNIC or vHBA to which they are assigned until one of the following occurs:

- The associated service profiles are deleted.
- The vNIC or vHBA to which the address is assigned is deleted.
- The vNIC or vHBA is assigned to a different pool.

Procedure

Step 1 In the **Navigation** pane, click the **SAN** tab.

Step 2 In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .

Step 3 Expand the **WWNN Pools** node.

Step 4 Right-click the WWNN pool you want to delete and select **Delete**.

Step 5 If the Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Configuring WWPN Pools

Creating a WWPN Pool

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Important   A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

Procedure

Step 1   In the **Navigation** pane, click the **SAN** tab.

Step 2   In the **SAN** tab, expand **SAN** > **Pools**.

Step 3   Expand the node for the organization where you want to create the pool.
If the system does not include multitenancy, expand the **root** node.

Step 4   Right-click **WWPN Pools** and select **Create WWPN Pool**.

Step 5   In the **Define Name and Description** page of the **Create WWN Pool** wizard:

a) Enter a unique name and description for the WWPN Pool.
This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object has been saved.

b) Click **Next**.

Step 6   In the **Add WWN Blocks** page of the **Create WWPN Pool** wizard, click **Add**.

Step 7   In the **Create WWN Block** page, complete the following fields:

a) In the **From** field, enter the first WWPN in the pool.

b) In the **Size** field, enter the number of WWPNs to include in the pool.

c) Click **OK**.

Step 8   Click **Finish**.

What to Do Next

Include the WWPN pool in a vHBA template.

Adding a WWN Block to a WWPN Pool

Important   A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

Procedure

Step 1   In the **Navigation** pane, click the **SAN** tab.

Step 2   In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .

Step 3   Expand the **WWPN Pools** node.

Step 4   Right-click the WWPN pool to which you want to add a WWN block and select **Create WWN Block**.

Step 5   In the **Create WWN Block** page, complete the following fields:

   a) In the **From** field, enter the first WWPN in the pool.

   b) In the **Size** field, enter the number of WWPNs to include in the pool.

   c) Click **OK**.

Deleting a WWN Block from a WWPN Pool

If you delete an address block from a pool, Cisco UCS Manager does not reallocate any addresses in that block that have been assigned to vNICs or vHBAs. All assigned addresses from a deleted block remain with the vNIC or vHBA to which they are assigned until one of the following occurs:

   • The associated service profiles are deleted.

   • The vNIC or vHBA to which the address is assigned is deleted.

   • The vNIC or vHBA is assigned to a different pool.

Procedure

Step 1   In the **Navigation** pane, click the **SAN** tab.

Step 2   In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* > **WWPN Pools** > *WWPN_Pool_Name* .

Step 3   Right-click the WWN block that you want to delete and select **Delete**.

Step 4   If the Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Adding a WWPN Initiator to a WWPN Pool

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Important   A WWN pool can include only WWNNs or WWPNs in the ranges from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF or from 50:00:00:00:00:00:00:00 to 5F:FF:FF:FF:FF:FF:FF:FF. All other WWN ranges are reserved. To ensure the uniqueness of the Cisco UCS WWNNs and WWPNs in the SAN fabric, we recommend that you use the following WWN prefix for all blocks in a pool: 20:00:00:25:B5:XX:XX:XX

Procedure

Step 1   In the **Navigation** pane, click the **SAN** tab.

Step 2   In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .

Step 3   Expand the **WWPN Pools** node.

Step 4   Right-click the WWPN pool to which you want to add a WWPN initiator and select **Create WWPN Initiator**.

Step 5   In the **Create WWPN Initiator** dialog box, complete the following fields:

Name	Description
World Wide Name field	The WWN.
Name field	The name of the WWPN initiator. This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object has been saved.
Description field	A user-defined description of the WWPN initiator. Enter up to 256 characters. You can use any characters or spaces except ^ (carat), \ (backslash), > (greater than), < (less than), ' (single quote), " (double quote), ` (accent mark), or = (equal sign).

Step 6   If you want to add a SAN boot target, expand the **Boot Target** area and complete the following fields:

Name	Description
Boot Target WWPN field	The WWPN that corresponds to the location of the boot image.
Boot Target LUN field	The LUN that corresponds to the location of the boot image.

Step 7   Click **OK**.

Deleting a WWPN Initiator from a WWPN Pool

Procedure

Step 1	In the **Navigation** pane, click the **SAN** tab.
Step 2	In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .
Step 3	Expand the **WWPN Pools** node.
Step 4	Choose the WWPN pool from which you want to delete a WWPN initiator.
Step 5	In the **Work** pane, click the **Initiators** tab.
Step 6	Right-click the initiator that you want to delete and choose **Delete**.
Step 7	If the Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Deleting a WWPN Pool

If you delete a pool, Cisco UCS Manager does not reallocate any addresses from that pool that have been assigned to vNICs or vHBAs. All assigned addresses from a deleted pool remain with the vNIC or vHBA to which they are assigned until one of the following occurs:

- The associated service profiles are deleted.

- The vNIC or vHBA to which the address is assigned is deleted.

- The vNIC or vHBA is assigned to a different pool.

Procedure

Step 1	In the **Navigation** pane, click the **SAN** tab.
Step 2	In the **SAN** tab, expand **SAN** > **Pools** > *Organization_Name* .
Step 3	Expand the **WWPN Pools** node.
Step 4	Right-click the WWPN pool you want to delete and select **Delete**.
Step 5	If the Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.