Volume administration

Amazon FSx for NetApp ONTAP

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Volume administration

Enable volume autogrow

Enable volume autogrow to let Workload Factory manage volume capacity for you. You can disable it at any time.

Optionally, you can manually increase the volume capacity of a volume at any time using the increase volume capacity feature.

Volume autogrow isn't supported for iSCSI volumes.

Before you begin

To enable volume autogrow, you must associate a link. If you don't have an existing link, create a link. To associate a link in the file system, click **Associate link** under **Account name**. Once the link associates, return to this operation.

Steps

1. Log in to the Workload Factory console
2. In Storage, select **Go to storage inventory**.
3. In the FSx for ONTAP tab, select the three dots menu of the file system with the volume to update and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, select the three dots menu for the volume you want to modify.
6. Select **Basic actions**, then **Edit volume autogrow**.
7. In the Edit autogrow dialog, enable volume autogrow.
8. Click **Apply**.

Increase volume capacity

Manually increase the volume capacity of a volume at any time.

Optionally, you can enable the autogrow feature to let Workload Factory manage volume capacity for you.

About this task

For an iSCSI LUN, this operation increases the size of the host LUN. After the capacity increases, follow the procedure provided by your host operating system to discover the new size of the LUN and expand the file system of the LUN.

Before you begin

To increase volume capacity, you must associate a link. If you don't have an existing link, create a link. To associate a link in the file system, click **Associate link** under **Account name**. Once the link associates, return to this operation.

Steps

1. Log in to the Workload Factory console

2. In Storage, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system with the volume to update and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, select the three dots menu of the volume to increase capacity for.
6. Select **Basic actions**, then **Increase volume capacity**.
7. In the Increase volume capacity dialog, provide the following:
   a. Select a larger size.
   b. Change the unit if needed.
8. Click **Increase**.

Edit volume tags

Tags can help you categorize your resources. You can add, edit, and remove volume tags at any time for FSx for ONTAP volumes.

Steps

1. Log in to the Workload Factory console
2. In Storage, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system with the volume to update and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, click the three dots menu for the volume to modify tags for.
6. Select **Basic actions** then **Edit volume tags**.
7. On the Edit volume tags page, add, edit, or remove tags.

   The maximum number of tags you can apply to a volume is 50.

8. Click **Apply**.

Rebalance a volume's capacity

Rebalance the capacity of a volume to avoid imbalances that develop over time.

About this task

Rebalancing a volume redistributes the capacity when imbalances develop over time due to the addition of new files and file growth. After you manually start the rebalance operation, we select the files and move them automatically and non-disruptively.

Rebalancing a volume is only supported for FlexGroup volumes.

Before you begin

To rebalance a volume, you must associate a link. If you don't have an existing link, create a link. To associate a link in the file system, click **Associate link** under **Account name**. Once the link associates, return to this operation.

Steps

1. Log in to the Workload Factory console
2. In **Storage**, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system that contains the volume to rebalance and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, select the three dots menu of the volume to rebalance.
6. Select **Advanced actions**, then **Rebalance volume**.
7. In the Rebalance volume dialog, select **Rebalance**.

Change the tiering policy of a volume

Change the tiering policy to automatically re-allocate data from the high-performance primary storage tier to the secondary capacity pool storage tier.

About this task

You can change the tiering policy of a volume at any time. The tiering policy is defined per volume.

Deciding where your data is stored has implications for your cost savings.

FSx for ONTAP has two tiers for storing volume data:

- **SSD storage tier**: This primary storage tier is for the data you access most frequently, also known as *hot* data. Storing data in the primary storage tier is more expensive than in the secondary storage tier.
- **Capacity pool storage tier**: This secondary storage tier is for archived data or infrequently accessed data, also known as *cold* data.

Refer to Managing storage capacity in AWS for FSx for NetApp ONTAP documentation for more information about storage tiers.

Before you begin

Review the four available tiering policies before you change the tiering policy.

- **Auto**: Tiers all cold data which includes user data and snapshots to the capacity pool storage tier for a specific time period.
- **Snapshot only**: Tiers only snapshot data to the capacity pool storage tier.
- **None**: Keeps all your volume's data on the primary storage tier.
- **All**: Marks all user data and snapshot data as cold and stores it in the capacity pool storage tier.

Note that some tiering policies have an associated minimum cooling period which sets the time, or *cooling days*, that user data in a volume must remain inactive for the data to be considered "cold" and moved to the capacity pool storage tier. The cooling period starts when data is written to the disk.

Steps

1. Log in to the Workload Factory console
2. In Storage, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system with the volume to update and

then select **Manage**.

4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, click the three dots menu of the volume to change the tiering policy for.
6. Select **Advanced actions**, then **Change tiering policy**.
7. On the Change tiering policy page, select one of the following tiering policies:
   - **Auto**: Enter the number of cooling days.
   - **Snapshot only**: Enter the number of cooling days.
   - **None**
   - **All**
8. Click **Apply**.

Change the NFS export policy for a volume

Change the NFS export policy for a volume that uses NFSv3 or NFSv4.1 protocol types.

About this task

Changing a volume's export policy involves adding export policy rules which detail client specifications, access control, super user access, and NFS version. You can add more than one export policy and prioritize them.

Before you begin

Determine the client specifications for the export policy rules. Valid values for the client specification are as follows:

- IP addresses
- IP addresses with subnet masks
- IP addresses with a network mask
- A netgroup name preceded by the "@" character
- A domain name preceded by a period "."
- Host names

Steps

1. Log in to the Workload Factory console
2. In Storage, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system with the volume to update and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, click the three dots menu for the volume to change the NFS export policy for.
6. Select **Advanced actions**, then **Edit NFS export policy**.
7. On the Edit NFS export policy page, provide the following:
   a. **Access control**: Select **Custom export policy** or **Existing export policy**.

      Alternatively, you can select **No access to the volume**.

b. **Export policy name**: Optionally, enter a name for the export policy.

c. **Add export policy rule**: Provide the following details and rank the policies starting with #1 as the priority rule:

i. **Client specification**: Separate multiple values with commas.

ii. **Access control**: Select **Read/Write**, **Read only**, or **No access** from the dropdown menu.

iii. **Super user access**: Select **Yes** or **No**.

iv. **NFS version**: Select **All**, **NFSv3**, or **NFSv4**.

8. Click **Apply**.

Change the CIFS share for a volume

Changing a volume's CIFS share involves determining the users and groups to give access to and the type of access to give them.

Before you begin

Determine the users or groups to give access to and the type of access to give them.

Steps

1. Log in to the Workload Factory console
2. In Storage, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system with the volume to update and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, click the three dots menu of the volume to change the SMB share for.
6. Select **Advanced actions**, then **Edit CIFS share**.
7. On the Edit CIFS share page, provide the following:

a. **Users or groups**: Enter valid users and groups. Separate each entry by a semi-colon ";".

b. **Permissions**: Select **Full control**, **Read/Write**, **Read**, or **No access**.

8. Click **Apply**.

Delete a volume

You can delete a volume in your FSx for ONTAP file system at any time. This operation is irreversible.

Before you begin

Consider the following before deleting a volume:

- Local snapshots: All snapshots associated with this FSx for ONTAP file system will be permanently deleted.
- FSx for ONTAP backup: FSx for ONTAP backup copies will remain and you can still use them.
- Replication relationships: We recommend that you delete any existing replication relationships for this volume before deleting the volume so that no broken relationships remain.

Steps

1. Log in to the Workload Factory console
2. In Storage, select **Go to storage inventory**.
3. In the **FSx for ONTAP** tab, select the three dots menu of the file system with the volume to delete and then select **Manage**.
4. From the file system overview, select the **Volumes** tab.
5. From the Volumes tab, select the three dots menu of the volume to delete.
6. Select **Basic actions** then **Delete volume**.
7. In the Delete volume dialog, do the following:
   a. Optionally, click **Back up the volume** to back up the volume before deletion.

      The backup will remain in the file system until you manually delete it.

   b. Click **Continue**.
   c. Type “delete” to delete the volume.
   d. Click **Delete**.

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