

Enterprise Vault Snapshot

on

FlashNAS ZFS Systems

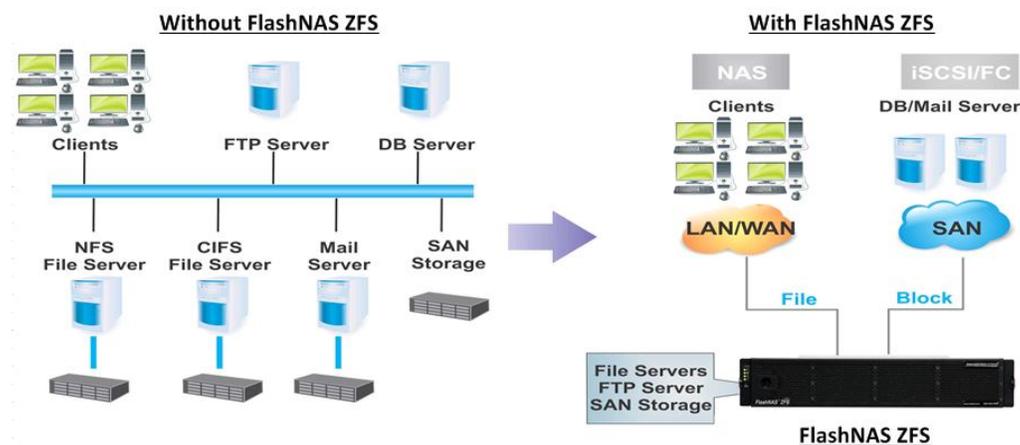
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Why Use FlashNAS ZFS Systems?

IT environments often feature multiple types of storage infrastructures to accommodate various types of data and achieve different service levels. The scattered boxes for DAS (Direct-Attached Storage), SAN (Storage Area Network) and NAS (Network-Attached Storage) configurations lead to poor utilization and complicated management.

Winchester Systems FlashNAS ZFS simultaneously serves file and block-based applications with a unified storage platform, and features easy management, high availability, flexible scalability and competitive price/performance. In addition, FlashNAS ZFS offers a comprehensive set of advanced software features at no additional cost. FlashNAS ZFS systems help businesses effectively meet diverse and changing data demand while staying within limited budgets.

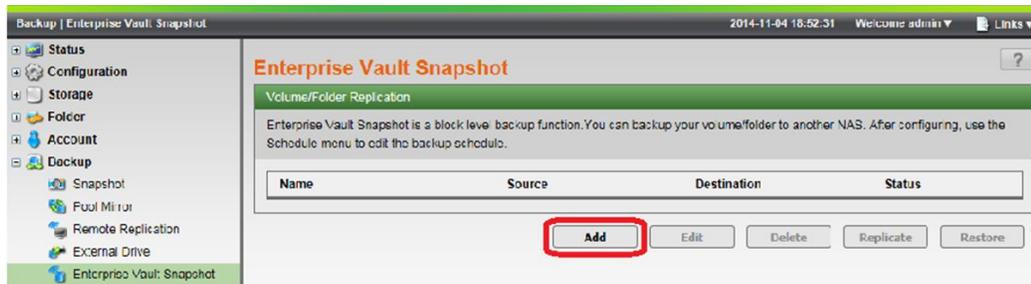


Enterprise Vault Snapshot on FlashNAS ZFS

Enterprise Vault Snapshot (EVS) allows users to backup an entire iSCSI or Fibre volume/Folder to another FlashNAS ZFS system. Users may choose a password-protected device for added security and add schedules to the backup so data is always protected.

Using Enterprise Vault Snapshot to Backup a Volume

1. Go to *Backup > Enterprise Vault Snapshot*, and then click *Add*.



2. In the window that appears, follow the steps below to set up an Enterprise Vault Snapshot task.

Select the source folder/volume you want to replicate

Backup Source

Directory: Pool-2/20G

Specify the target system

Backup Target

IP Address: 172.24.110.71

Username: admin

Password: •••••

Pool:

Directory:

Advanced Option

Step1: Select the volume you want to do EVS

Step2: Enter the valid IP and username/Password of the target site

Step3: Fetch

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Backup Target

IP Address: 172.24.110.71

Username: admin

Password: •••••

Pool: Pool-1

Directory: 20G_EV_S_Backup

Advanced Option

Enable Encryption

Schedule your backup task.

Schedule

Backup daily at 00 : 00

Backup weekly at 00 : 00 every Monday

Customize

Step4: Select the pool in target site where you want to store the backup volume.

Step5: Create a volume name

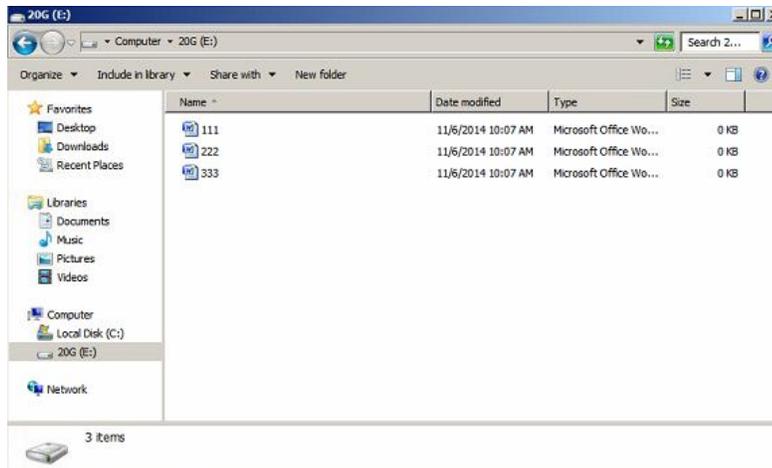
Note:

If the volume name entered already exists, you will be prompted to create a new name. The FlashNAS will not delete any volume automatically. If you want to use the existing volume name, please manually delete the volume before creating the EVS backup volume.

Parameter Info:

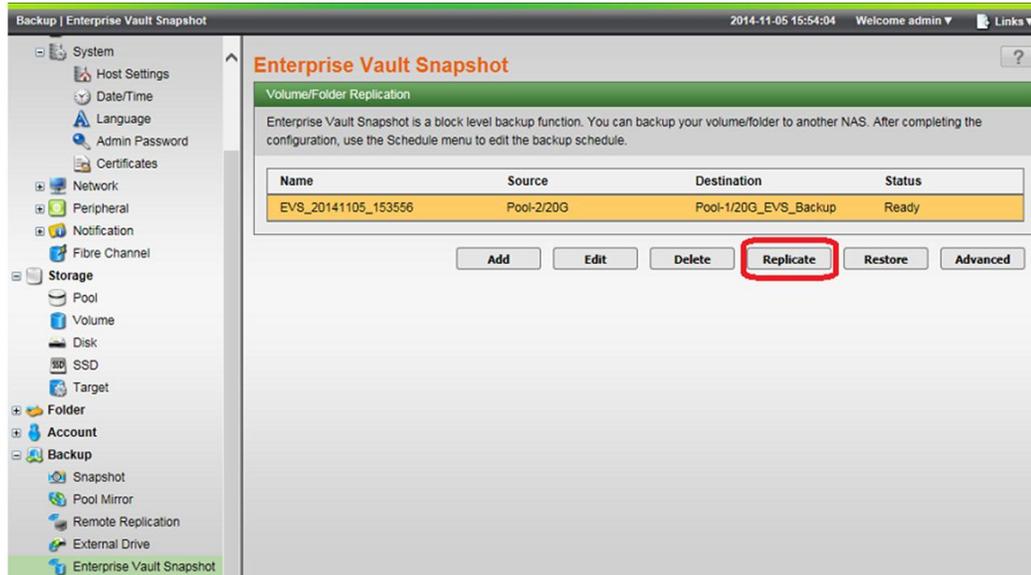
Section	Name	Description
Backup Source	<i>Directory</i>	Click Browse to select an existing volume/folder on the source device.
	<i>IP Address</i>	Enter a valid target device IP address. The IP address must be that of a data port (instead of the management port).
	<i>Username</i>	Enter the username for the target system.
Backup Target	<i>Password</i>	Enter the password for the target system.
	<i>Pool</i>	Click Fetch to load pool configuration on the target device
	<i>Directory</i>	Create the target volume/folder name.
Advanced Option	<i>Enable Encryption</i>	Select the checkbox to enable encryption for extra data security.
Schedule your backup task	<i>Schedule</i>	Users can choose to backup on a daily/weekly basis, or customize their own schedule

In our example, we have used the client computer to access the source volume and add three files to it.

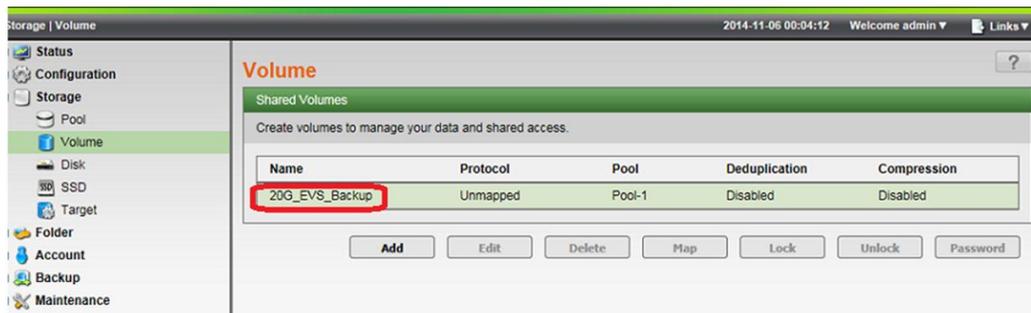


Enterprise Vault Snapshot on FlashNAS ZFS Systems

- To take an Enterprise Vault Snapshot of the volume, launch the web management interface of the FlashNAS ZFS, go to *Backup > Enterprise Vault Snapshot*, and select the task you just created. Click *Replicate* to start the backup task. When the task session is finished, the volume will be backed up to the target FlashNAS, and the *Status* column will turn to *Ready*. Operation time varies depending on the size of the source volume.

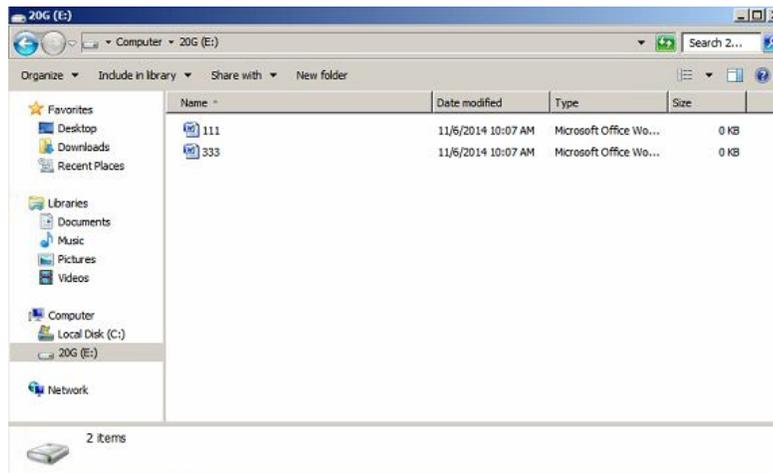


- Log in to the web management interface of the target FlashNAS, and you can see the backup volume under *Storage > Volume*.

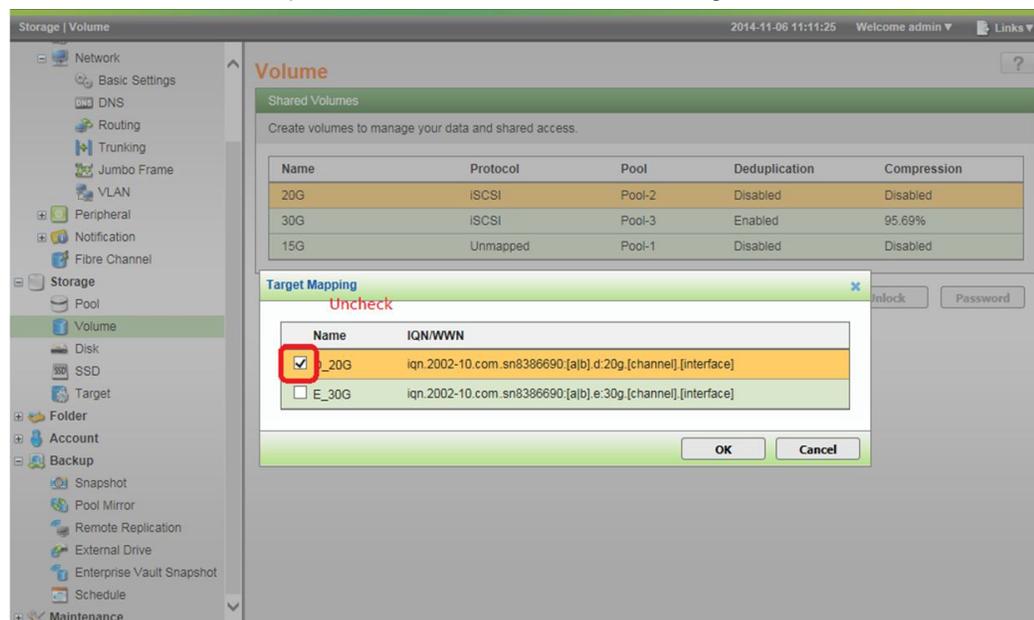


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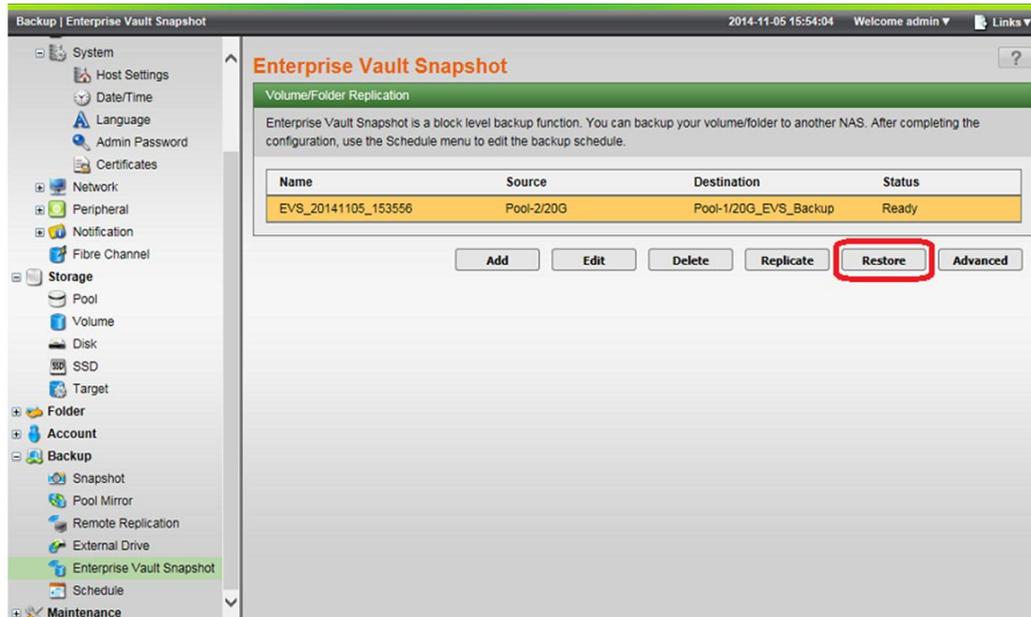
- Now we are going to simulate the condition of data loss occurring on the source volume by using the client computer to delete the file "222.doc."



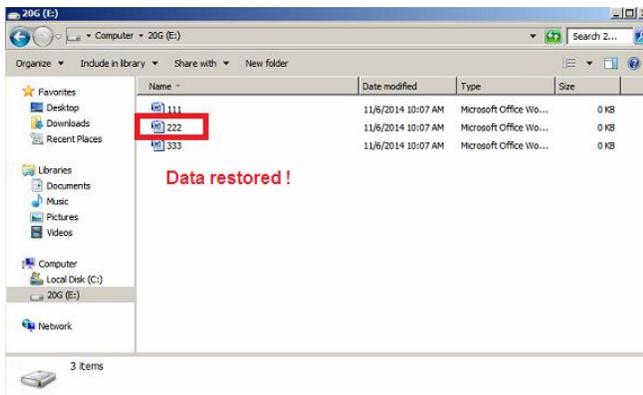
- To resolve data loss, we are going to restore data from the backup target. Before doing so, log in to the web management interface of the source FlashNAS, and unmap the source volume from its target.



7. Go to *Backup > Enterprise Vault Snapshot*, and then select *Restore* to restore data from the target volume.

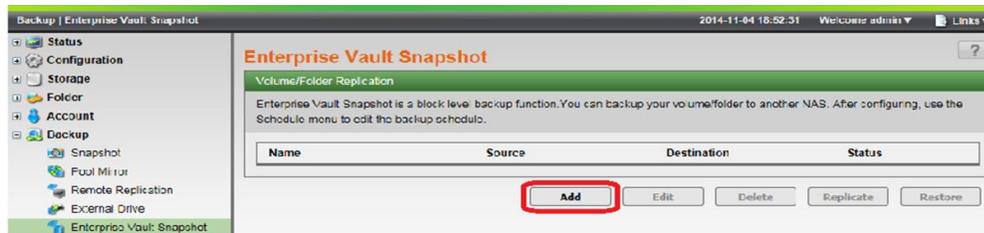


8. When the task session is finished and the *Status* column turns to *Ready*, map the volume back to the target. Use the client computer to access the volume, and you can see that "222.doc" is now restored.

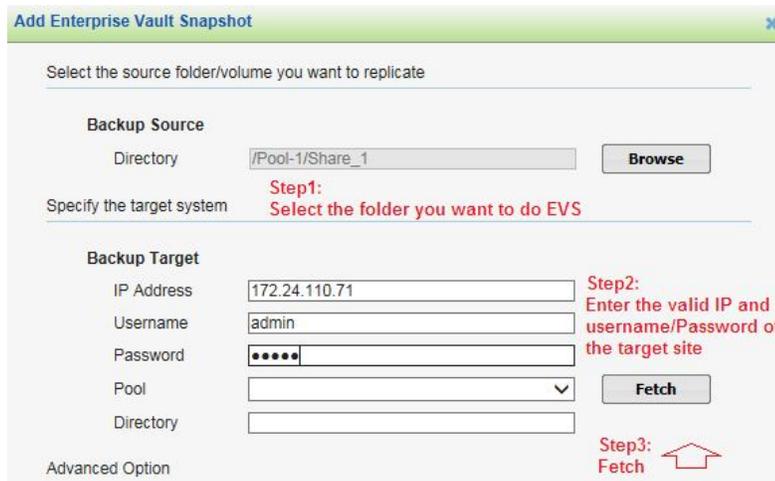


Using Enterprise Vault Snapshot to Backup a Folder

1. Go to *Backup > Enterprise Vault Snapshot*, and then click *Add*.

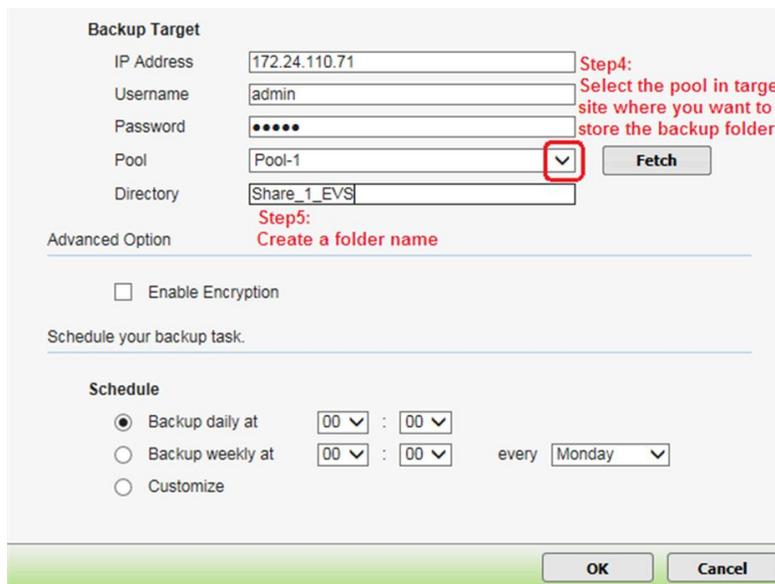


2. In the window that appears, follow the steps below to set up Enterprise Vault Snapshot task.



The screenshot shows the 'Add Enterprise Vault Snapshot' dialog box. It has a title bar with 'Add Enterprise Vault Snapshot' and a close button. The main content area is titled 'Select the source folder/volume you want to replicate'. Under 'Backup Source', there is a 'Directory' field with the value '/Pool-1/Share_1' and a 'Browse' button. Below this is the instruction 'Step1: Select the folder you want to do EVS'. Under 'Specify the target system', there is a 'Backup Target' section with fields for 'IP Address' (172.24.110.71), 'Username' (admin), 'Password' (masked with dots), 'Pool' (a dropdown menu), and 'Directory'. There is a 'Fetch' button next to the Pool field. To the right of the IP and Username fields is the instruction 'Step2: Enter the valid IP and username/Password of the target site'. Below the Pool field is the instruction 'Step3: Fetch' with a house icon. At the bottom left is an 'Advanced Option' section.

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The screenshot shows the 'Add Enterprise Vault Snapshot' dialog box at a later stage. The 'Pool' dropdown menu is now set to 'Pool-1' and is highlighted with a red rectangle. The 'Directory' field now contains 'Share_1_EVS'. To the right of the Pool field is the instruction 'Step4: Select the pool in target site where you want to store the backup folder'. Below the Directory field is the instruction 'Step5: Create a folder name'. The 'Advanced Option' section has an 'Enable Encryption' checkbox which is unchecked. Below this is the 'Schedule your backup task.' section with a 'Schedule' section. It has three radio buttons: 'Backup daily at' (selected), 'Backup weekly at', and 'Customize'. The 'Backup daily at' option has two time dropdowns set to '00' and '00'. The 'Backup weekly at' option has two time dropdowns set to '00' and '00', followed by 'every' and a 'Monday' dropdown. At the bottom are 'OK' and 'Cancel' buttons.

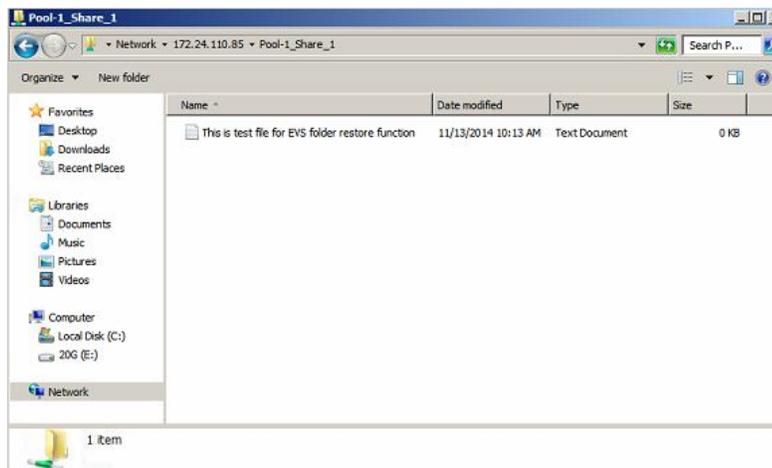
Note:

If the folder name entered already exists, you will be prompted to create a new name. The FlashNAS will not delete any folder automatically. If you want to use the existing folder name, please manually delete the folder before creating the EVS backup folder.

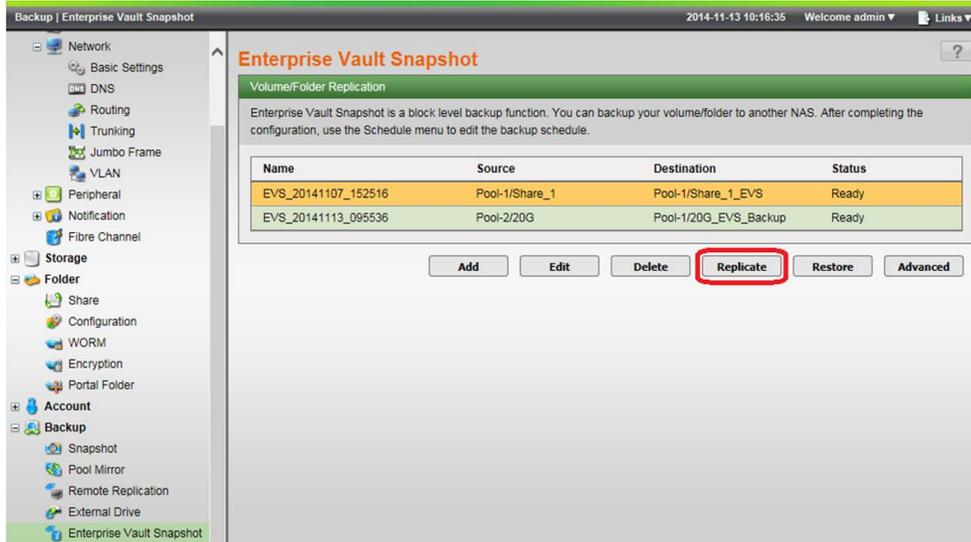
Parameter Info:

Section	Name	Description
Backup Source	<i>Directory</i>	Click Browse to select an existing volume/folder on the source device.
	<i>IP Address</i>	Enter a valid target device IP address. The IP address must be that of a data port (instead of the management port).
	<i>Username</i>	Enter the username for the target system.
Backup Target	<i>Password</i>	Enter the password for the target system.
	<i>Pool</i>	Click Fetch to load pool configuration on the target device
	<i>Directory</i>	Create the target volume/folder name.
	Advanced Option	<i>Enable Encryption</i>
Schedule your backup task	<i>Schedule</i>	Users can choose to backup on a daily/weekly basis, or customize their own schedule

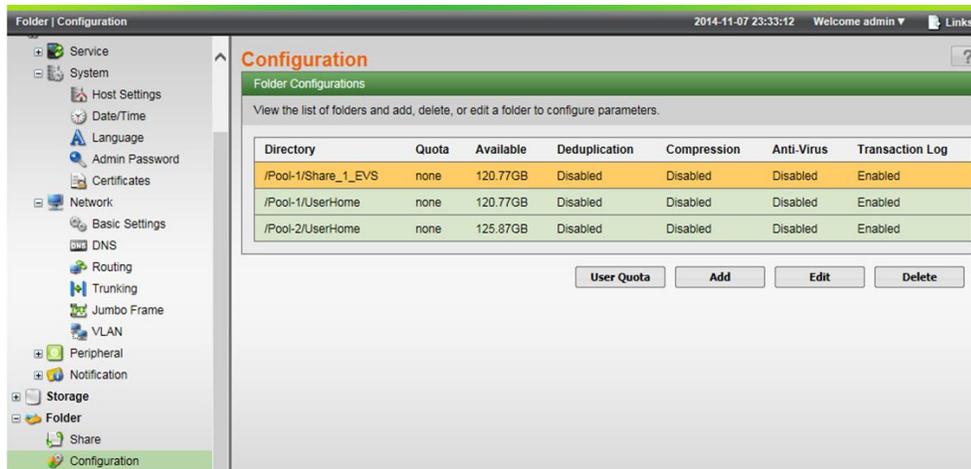
In our example, we have used the client computer to access the source folder and add the file "This is test file for EVS folder restore function.txt" to it.



- To take an Enterprise Vault Snapshot of the folder, launch the web management interface of the FlashNAS, go to *Backup > Enterprise Vault Snapshot*, and select the task you just created. Click *Replicate* to start the backup task. When the task session is finished, the folder will be backed up to the target FlashNAS, and the *Status* column will turn to *Ready*. Operation time varies depending on the size of the source folder.



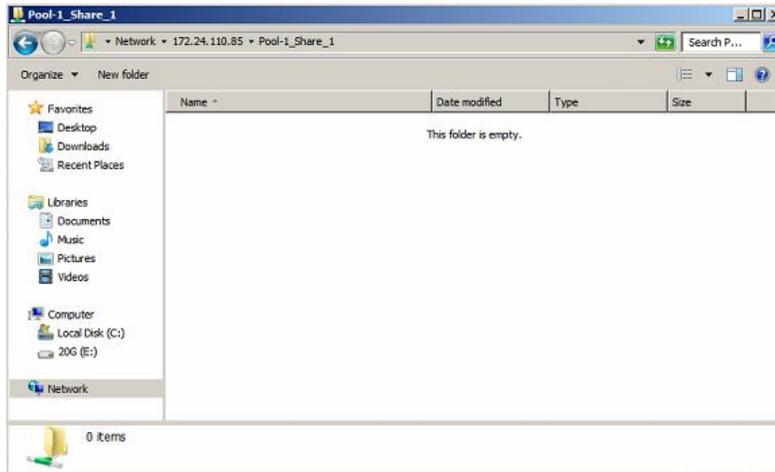
- Log in to the web management interface of the target FlashNAS, and you can see the backup folder under *Folder > Configuration*.



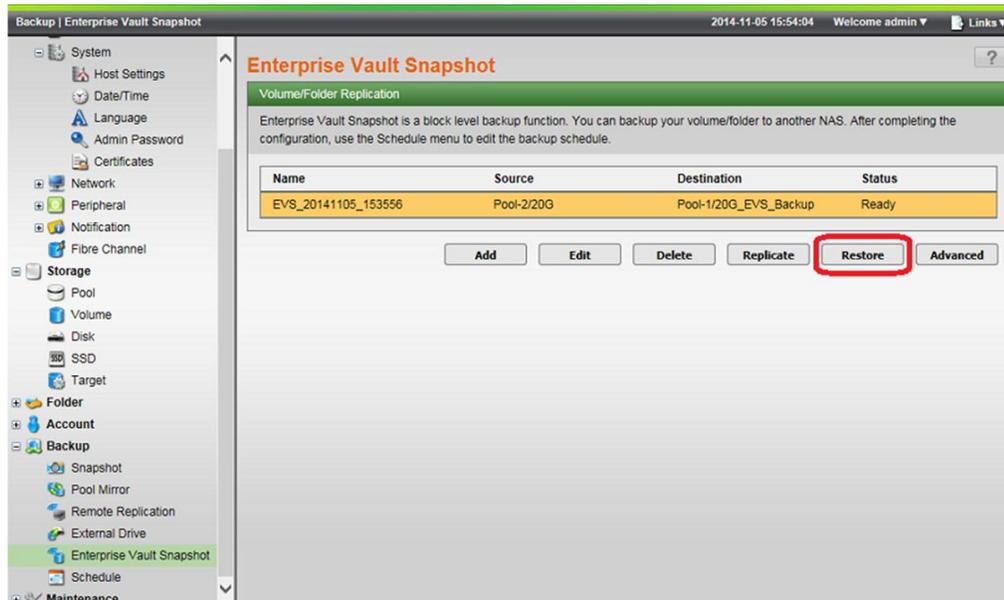
Note: Sharing the backup folder on the target FlashNAS is not prohibited, but doing so will render its access privilege as "read-only", and is NOT a recommended practice.

Enterprise Vault Snapshot on FlashNAS ZFS Systems

- Now we are going to simulate the condition of data loss occurring on the source folder by using the client computer to delete the file "This is test file for EVS folder restore function.txt."



- To resolve data loss, we are going to restore data from the backup target. Log in to the web interface of the source FlashNAS, go to *Backup > Enterprise Vault Snapshot*, and then select *Restore* to restore data from the target folder.



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7. When the task session is finished and the *Status* column turns to *Ready*, use the client computer to access the folder, and you will see that its content is now restored.

