

Accessing FlashNAS ZFS

from the

Internet

Table of Contents

Product Models Covered by This Document.....	3
FlashNAS ZFS Family of Unified Storage Systems	4
Accessing FlashNAS ZFS from the Internet.....	5
<i>Step 1: Preparing the environment</i>	<i>5</i>
<i>Step 2: Assigning a static IP address to FlashNAS ZFS</i>	<i>5</i>
<i>Step 3: Preparing a user account for Internet access</i>	<i>6</i>
<i>Step 4: Setting up port forwarding on the router</i>	<i>8</i>
<i>Step 5: Accessing FlashNAS ZFS from the Internet</i>	<i>8</i>

Product Models Covered by This Document

This document applies to the following product models:

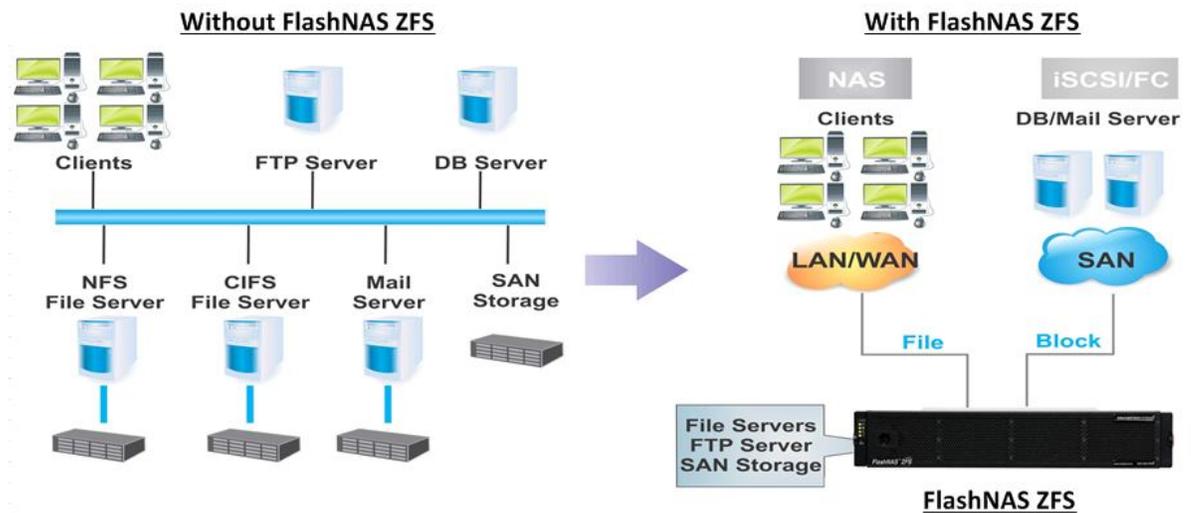
- **FlashNAS ZX2U12**
- **FlashNAS ZX3U16**

For more information about compression, virtualization, snapshot, remote replication, ZFS, backup, storage, network-attached-storage, file-sharing and WORM (Write Once, Read Many), please visit www.winsys.com

FlashNAS ZFS Family of Unified Storage 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.

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



Accessing FlashNAS ZFS from the Internet

Accessing data from anywhere, anytime is the norm for ever-changing business environments. FlashNAS ZFS allows users to access data directly from the Internet. The direct Internet access provides access to data when users are in an environment with Internet connection but without sophisticated network infrastructure: airport lounges, hotels, and even their homes.

No software installation or network infrastructure configuration is required on the client's side; a web browser is all that's necessary. Users can upload and download files using a GUI interface similar to major file management applications such as Windows Explorer.

Setting up port forwarding is required to allow accessing the FlashNAS ZFS from the Internet side; in general, corporate Intranet is protected by firewall, preventing direct access from WAN. The following steps describe how to configure FlashNAS ZFS to access data through the Internet (HTTP/HTTPS protocol).

Step 1: Preparing the environment

Make sure the devices meet the following requirements:

- Router: Capable of port forwarding
- FlashNAS ZFS: At least one virtual pool created, available static IP address (contact the system administrator to obtain one)

Step 2: Assigning a static IP address to FlashNAS ZFS

(If a static IP address has already been assigned, go to Step 3).

In the FlashNAS ZFS GUI, go to the *Configuration > Network > Basic Settings* menu and highlight the LAN interface.

The screenshot shows the 'Basic Settings' page for LAN interfaces. The table below represents the data shown in the interface:

Interface	IP Address	Netmask	Gateway	Configu...	Speed	Status	Protocol	Action
Mgmt1	(A - P) 192.168.150.95	255.255.255.0	192.168.150.254	DHCP	1000M	UP	IPv4	⊖
	(B - S) 192.168.150.96	255.255.255.0	192.168.150.254	DHCP	1000M	UP	IPv4	⊖
CH0	(A) 0.0.0.0	255.0.0.0	---	DHCP	0M	DOWN	IPv4	⊖
	(B) 0.0.0.0	255.0.0.0	---	DHCP	0M	DOWN	IPv4	⊖
CH1	(A) 0.0.0.0	255.0.0.0	---	DHCP	0M	DOWN	IPv4	⊖
	(B) 0.0.0.0	255.0.0.0	---	DHCP	0M	DOWN	IPv4	⊖
CH2	(A) 192.168.150.80	255.255.255.0	192.168.150.254	DHCP	1000M	UP	IPv4	⊖
	(B) 192.168.150.117	255.255.255.0	192.168.150.254	DHCP	1000M	UP	IPv4	⊖
CH3	(A) 192.168.150.74	255.255.255.0	192.168.150.254	DHCP	1000M	UP	IPv4	⊖
	(B) 192.168.150.118	255.255.255.0	192.168.150.254	DHCP	1000M	UP	IPv4	⊖

Click the *Edit* button. Select *Static* as the IP address and enter the address

Accessing FlashNAS ZFS from the Internet
(contact the system administrator if necessary). Click the *OK* button to confirm.

Edit Basic Network Settings

Enable IPV6
 Enable IPV4

Controller - Primary

DHCP
 Static IP Address

IP Address: 192.168.0.12
Mask: 255.255.255.0
Gateway: 192.168.0.254
MAC Address: 00:21:3a:11:84:27

Controller - Secondary

DHCP
 Static IP Address

IP Address: 192.168.0.13
Mask: 255.255.255.0
Gateway: 192.168.0.254
MAC Address: 00:21:3a:19:84:27

OK Cancel

Step 3: Preparing a user account for Internet access

(If a user account already exists, go to step 4)

Go to the *Account > Users* menu and click the *Add* button.

WINCHESTERSYSTEMS
Purpose-Built Storage

Alert Shortcut Explorer Home

Account | User Welcome admin Logout Links

User Accounts

Create user accounts for accessing shared volumes or files with unique usernames and passwords. Configure their access rights: read/write or read only.

Search: [] [] []

Name	Home Directory	Superuser	Type	Group	Quota	Description
guest	----		Local	Users	none	

Page 1 / Total 1 Pages Total 1 User(s)

Add Edit Delete Import

Enter the parameters.

Add User

Create a new user account and configure account settings.

Username: InternetAccess
Password:
Re-enter Password:
Description:
Group: Users
 Home Directory: /Pool-1/UserHome/InternetAccess

Options

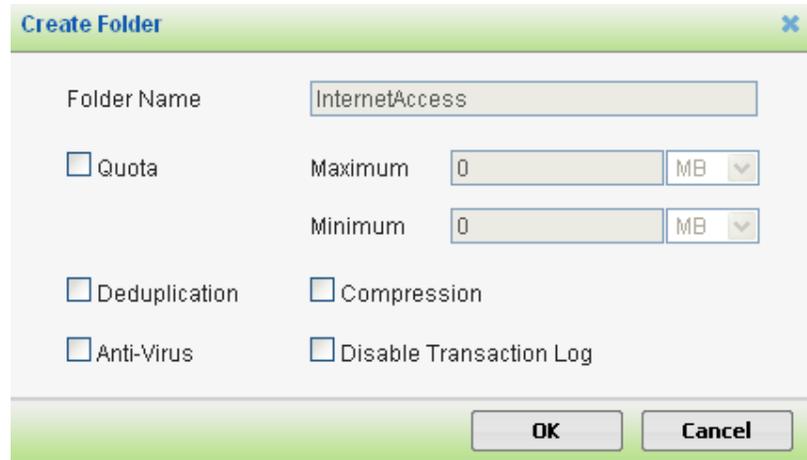
Next Cancel

- **Username/Password:** Specifies the user account. Only alphanumeric

Accessing FlashNAS ZFS from the Internet characters should be used.

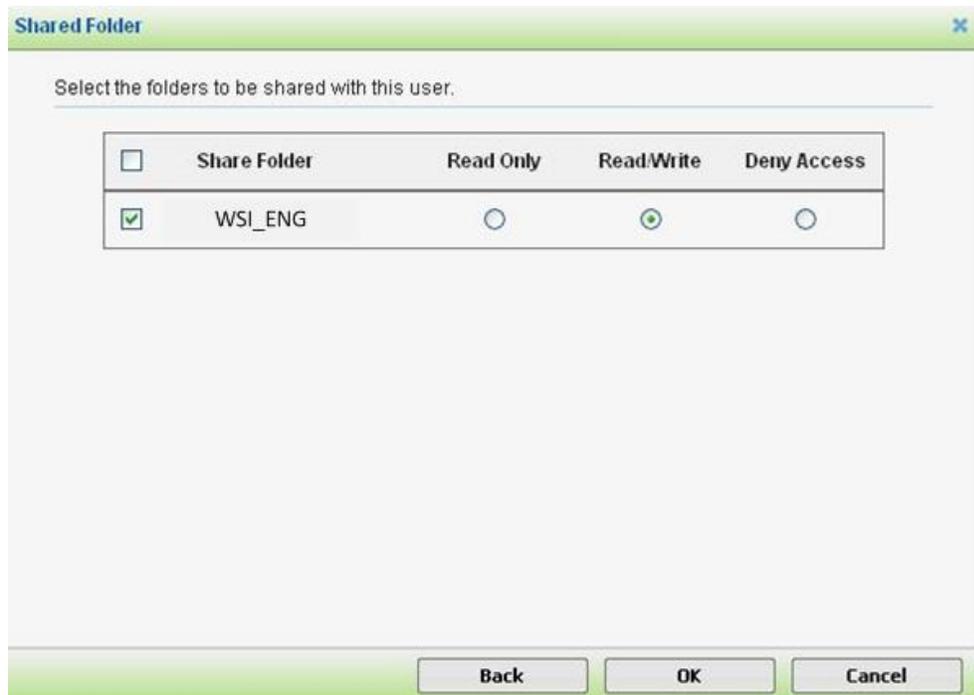
- **Group Name:** (Optional) Specifies the group to which the new user account belongs.
- **Home Directory:** (Recommended) Creates a home directory for the new user.

Click the *Options* button to create a folder under this user account. Click *OK* to go back to the previous menu and click the *Next* button to continue.



The 'Create Folder' dialog box has a title bar with a close button. It contains a text field for 'Folder Name' with the value 'InternetAccess'. Below this are four checked checkboxes: 'Quota', 'Deduplication', 'Anti-Virus', and 'Compression'. The 'Quota' section has 'Maximum' and 'Minimum' fields, both set to '0' with 'MB' dropdown menus. The 'Disable Transaction Log' checkbox is unchecked. At the bottom are 'OK' and 'Cancel' buttons.

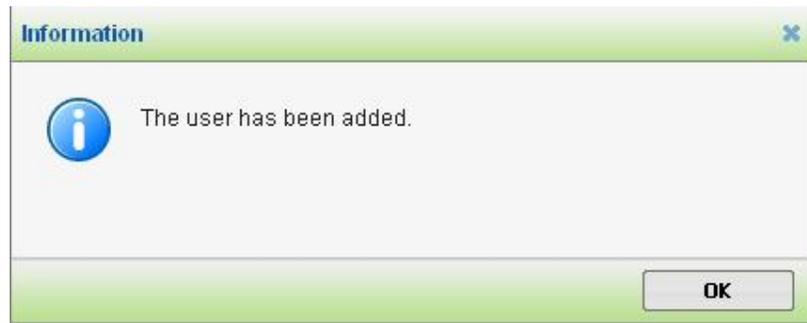
Setup the access control for this user account and click *OK*.



The 'Shared Folder' dialog box has a title bar with a close button. It contains the text 'Select the folders to be shared with this user.' Below this is a table with columns for 'Share Folder', 'Read Only', 'Read/Write', and 'Deny Access'. The 'WSI_ENG' folder is selected with a checked checkbox. The 'Read Only' radio button is unselected, 'Read/Write' is selected, and 'Deny Access' is unselected. At the bottom are 'Back', 'OK', and 'Cancel' buttons.

<input type="checkbox"/>	Share Folder	Read Only	Read/Write	Deny Access
<input checked="" type="checkbox"/>	WSI_ENG	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

After the account has been created successfully, a window will pop out and notify the user.



Step 4: Setting up port forwarding on the router

Port forwarding enables one port number on the gateway exclusive use of communication with the FlashNAS ZFS.

Open the configuration tool for the router and add a new port forwarding setting as follows. For details, refer to its user manual.

- Protocol/Service: HTTP (Web server) or HTTPS (Secure web server)
- Port: 80 (HTTP) or 443 (HTTPS)
- IP address: The IP address configured in Step 2
- Account (if necessary): The user account configured in Step 3

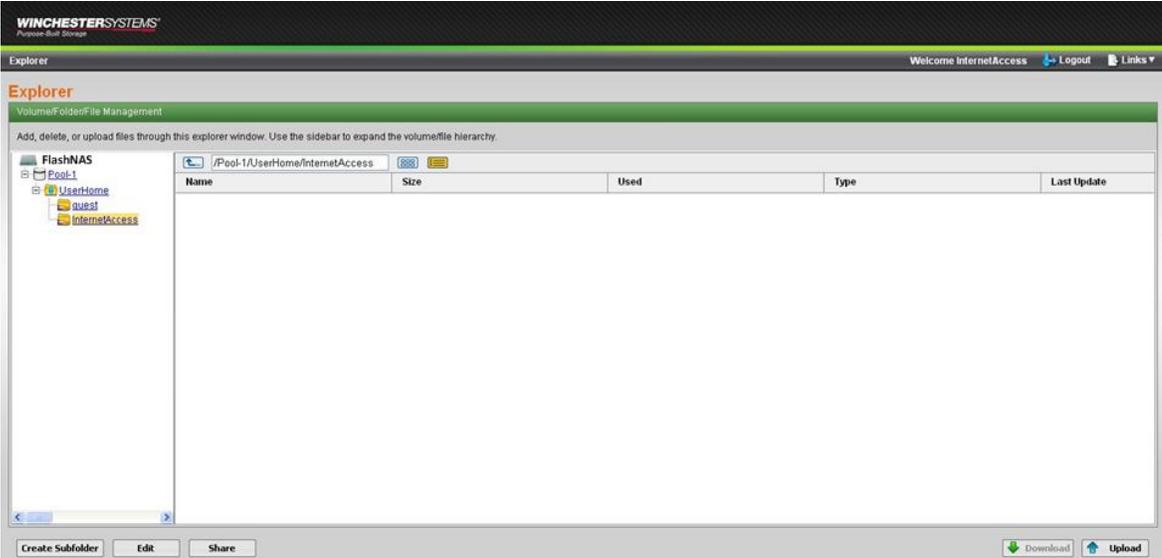
Step 5: Accessing FlashNAS ZFS from the Internet

Enter the FlashNAS ZFS IP address into the browser and press the *Enter* key. Login to FlashNAS ZFS using the account created in Step 3.



Enter the shared volume and browse the folders and files

Accessing FlashNAS ZFS from the Internet



To download or upload files, use the buttons at the bottom menu bar.

