



Duple Backup Application Introduction



TerraMaster



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01.Introduction

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Data backup application serving TNAS

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Duple Backup



Duple Backup is a disaster recovery tool to strengthen the data security of TNAS devices. It can back up important volumes, folders or iSCSI LUN in TNAS to multiple destinations (such as other TNAS, file servers and cloud disks), prevent data loss caused by hardware fault or system fault of TNAS devices, and restore the lost data quickly when device fault occurs.

01. Definition

Duple Backup

Centralized Backup



TNAS data in **external** backup/restoration

External data in **TNAS** backup/restoration

◆ 02.Advantages

Features & advantages

01

Regular backup

Back up the important data in TNAS regularly, and store it in a safe location to prevent data loss or damage and then restore it when necessary.

02

Data security

TNAS will encrypt and compress the backup data when externally backing up the data in order to protect the security of sensitive information and prevent unauthorized access and disclosure.

03

Disaster recovery

Device hardware or system fault may occur on the TNAS devices and thus cause data loss. When a device fault occurs, it can quickly restore the lost data.

03.Backup task management

Backup task information display

The screenshot displays the Backup management interface. On the left, there is a sidebar with options: Backup (selected), Restore, and Log. The main area shows a list of backup tasks. The task 'task_1' is selected and its details are shown in a table. A function bar is visible above the task details, and a version number '1.0.19' is shown at the bottom left.

Task Name	Task Status	Backup Source
task_2	Backup succeeded	Local shared folder
task_1	Backup succeeded	Local LUN backup

Connection status	Connected
Backup source	LUN 1
Destination	/Volume1/DB_Backup/test
Backup mode	Hybrid mode
Backup schedule	Not enabled
Enable notification	Not enabled
Last run	2024-3-19 18:36:46
Number of backup files	1
Number of successful backup files	1
Next run	---
Integrity check	---
The result of check	---

01.Task information

Display the detailed information of the current backup task, including task name, online state, backup source, destination, plan, execution time, number of succeeded tasks, and integrity check...

02.Function bar

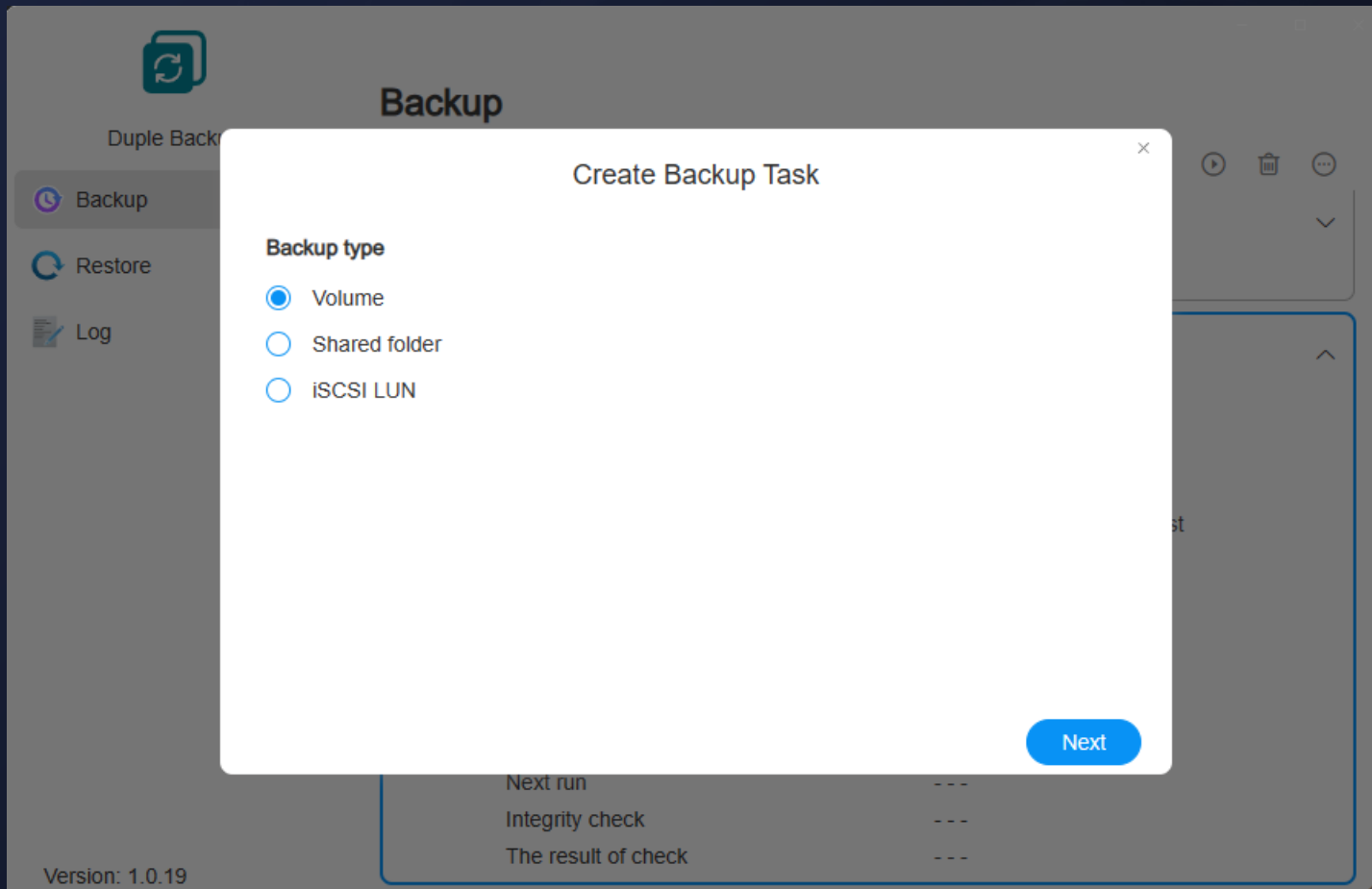
Search: Search task name
Create: Add a new backup task

Edit: Edit the current backup task settings
Start/pause: Start/pause the task
Delete: Delete the current task

Task version: Display all the version information of the current tasks
Integrity check: Check the integrity of the task data that are currently backed up

03. What supports the TNAS backup?

Backup types supported



01. Volume

Single volume partition (all shared folders within the volume)



02. Shared folders

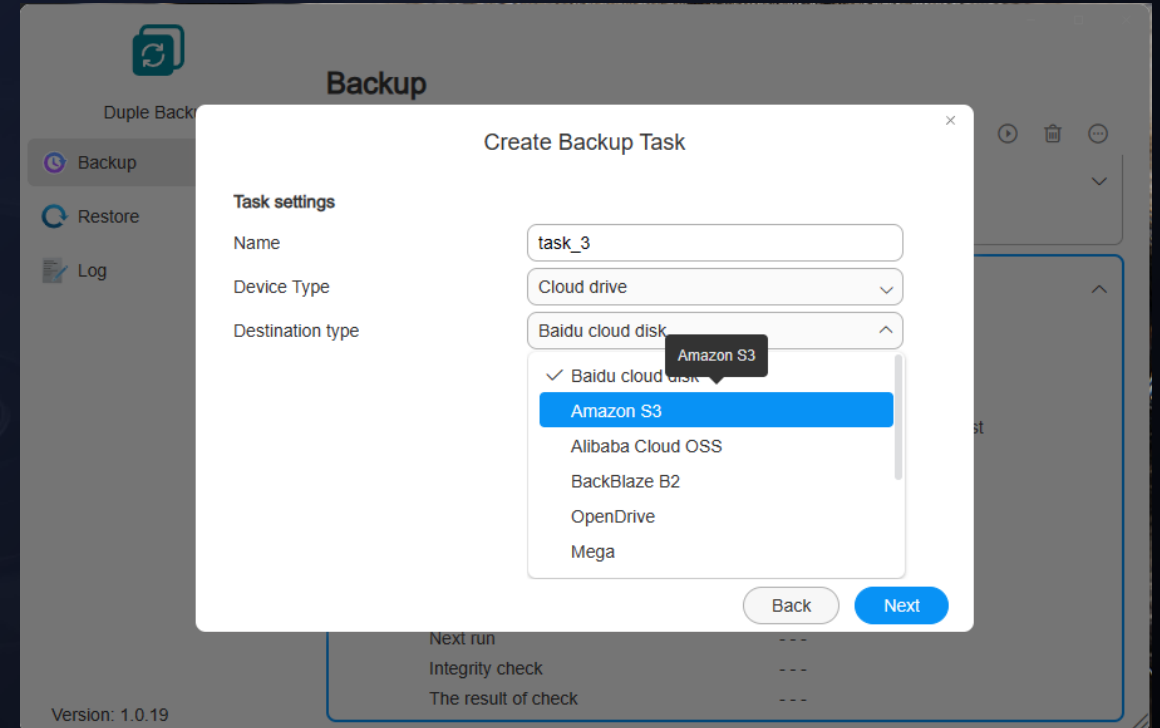
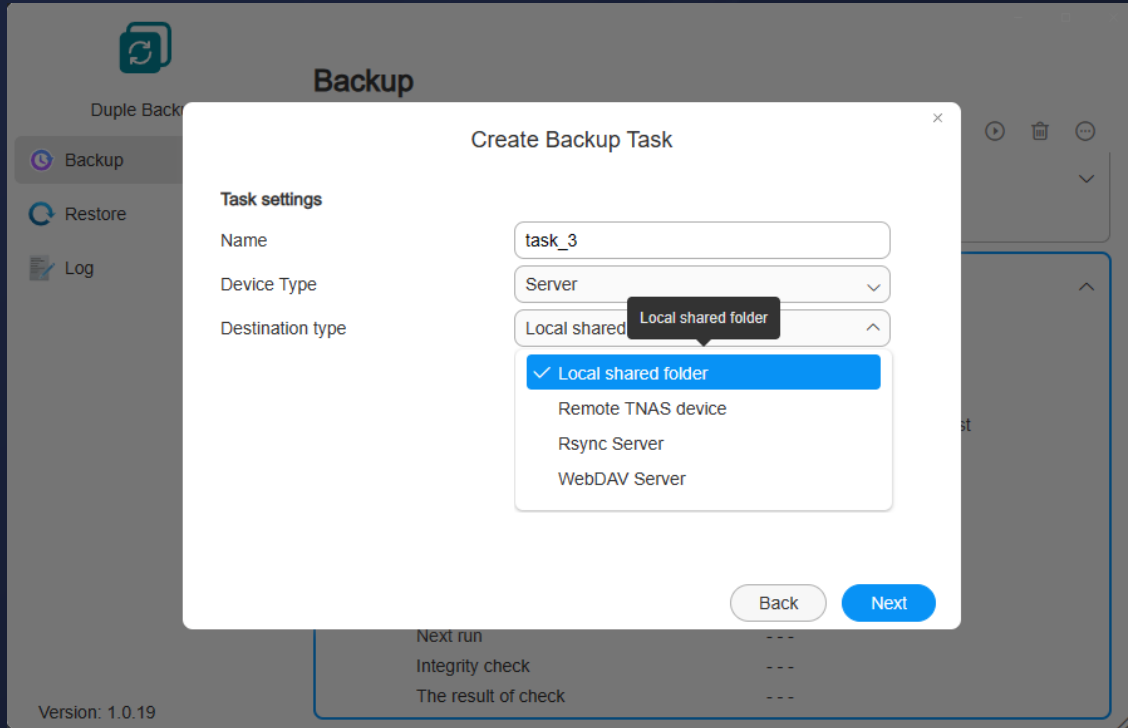
A single shared folder (internal folder)



03. iSCSI LUN

Single iSCSI LUN

03. Where can it be backed up?



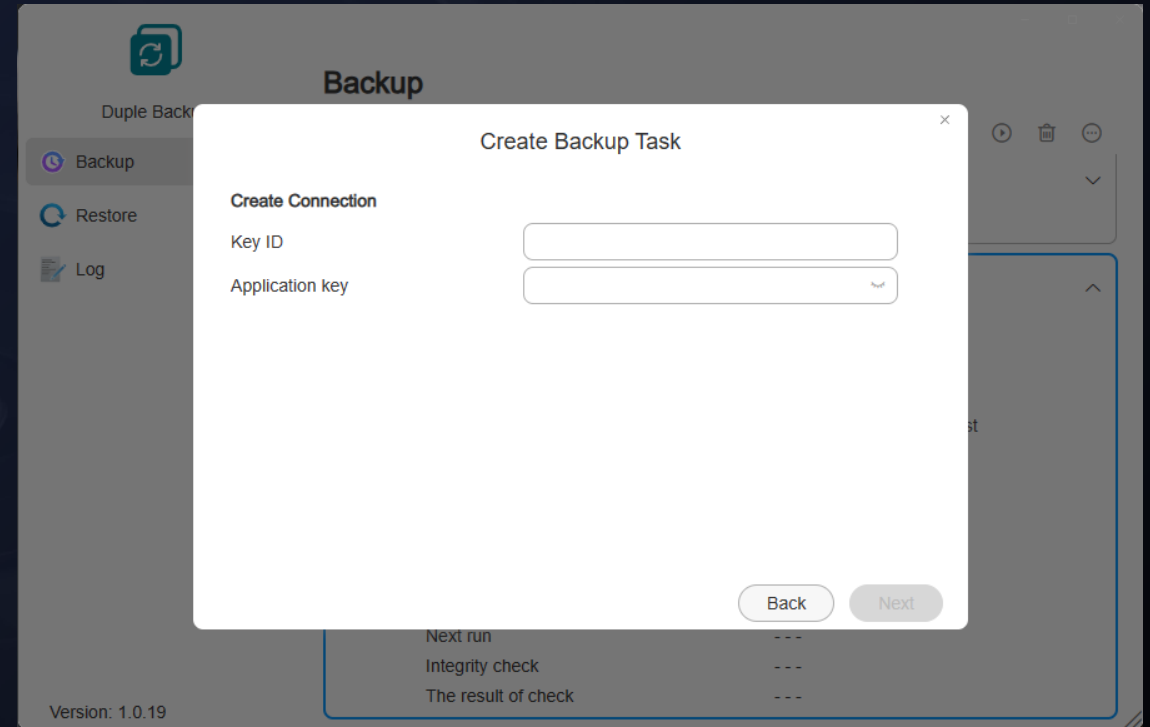
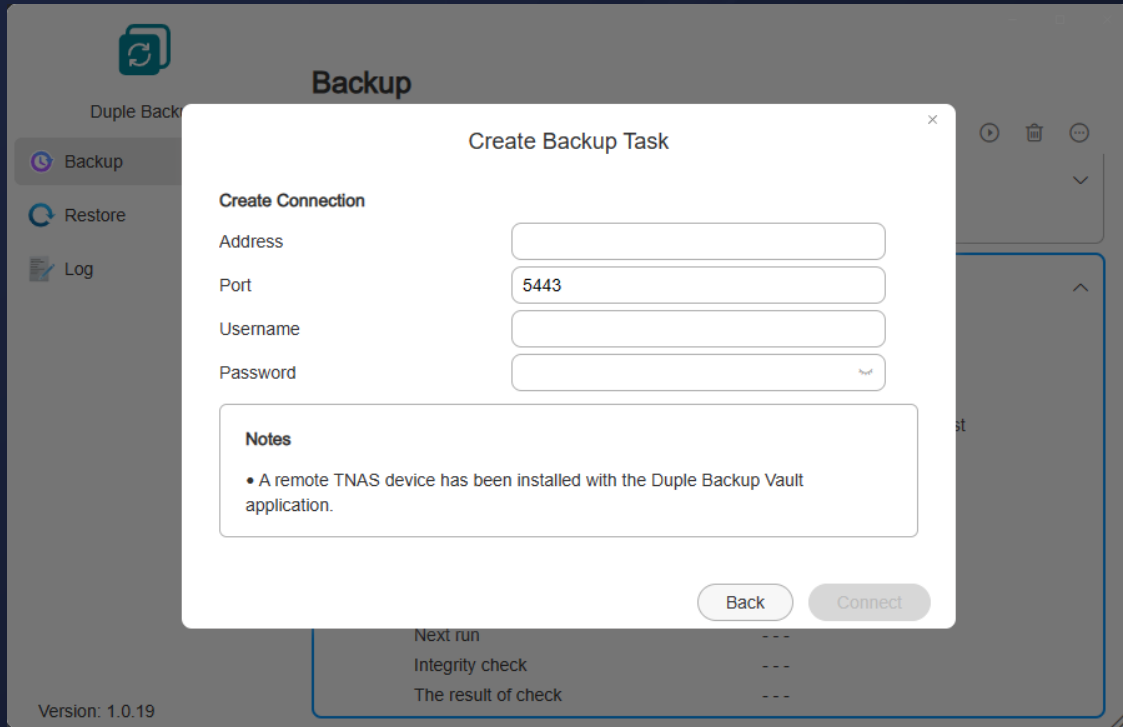
■ Server

Local shared folders, remote TNAS device, Rsync server and WebDAV server

■ Cloud disk

Amazon S3, Alibaba Cloud OSS, OpenDrive, BackBlaze B2, Mega, Box, Dropbox, Google Drive, OneDrive, pCloud, Baidu Netdisk

03. How is TNAS connected to other devices?



■ Server-IP, username, password

Remote TNAS device (Duple Backup Vault needs to be installed.)

Rsync server, WebDAV server

■ Cloud disk-username / ID, password /Key

Amazon S3, Alibaba Cloud OSS, OpenDrive, BackBlaze B2, Mega, Box, Dropbox, Google Drive, OneDrive, pCloud, Baidu Netdisk

03.Introduction to Duple Backup Vault

- The server application required for Duple Backup to establish a connection with other TNAS devices.

The screenshot displays the 'Duple Backup Vault' application window. The title bar reads 'Duple Backup Vault'. On the left, there is a sidebar with three menu items: 'Backup List' (selected), 'Settings', and 'Log'. The main area is titled 'Backup List' and contains a table with the following data:

Task Name	Client IP
task_3	10.18.8.90

Below the table, a detailed view for 'task_3' is shown, indicating 'Backup succeeded'. The details include:

- The client IP: 10.18.8.90
- Backup source: /Volume1/Surveillance
- Destination: /Volume1/DB_Backup/test11
- Backup mode: Hybrid mode
- Backup schedule: Not enabled
- Last run: 2024-03-20 16:51:03
- Number of backup files: 0
- Number of successful backup files: 0
- Previous backup result: Backup succeeded

Version: 1.0.24

01.Permission

Enable the Duple Backup to access and store the files in the shared folder on a remote TNAS device.

02.Synchronization

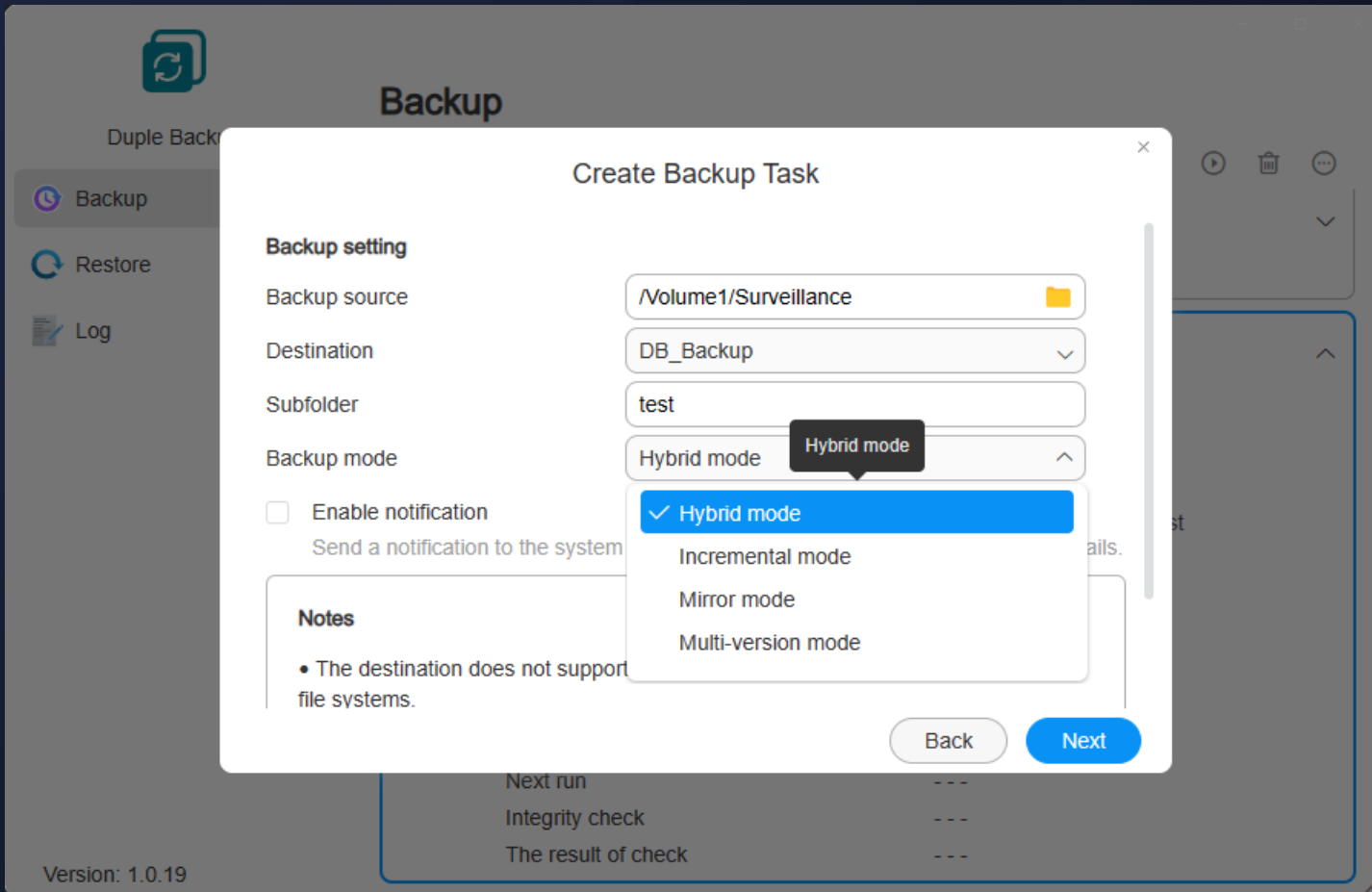
Realize functional interaction and information synchronization between Duple Backup and Duple Backup Vault.

03.Monitoring

Allow remote TNAS administrator to monitor the state of tasks and write at any time, and disconnect external connections in case of abnormal conditions.

03. What backup modes are supported?

Backup modes supported



01. Hybrid mode

Provide multiple versions, integrate the advantages of multi-version mode and incremental mode, share the same backup data, and encrypt the data blocks.

02. Incremental mode

With a single version, the created and changed files from backup source will be copied to the destination. If the backup source deletes a file, the destination will be remained.

03. Mirror mode

With a single version, the backup destination is a mirror copy of the backup source. If the files that do not exist in the backup source are added to the destination, they will be deleted.

04. Multi-version mode

With multiple versions, when running the backup every time, the backup destination will create a new version folder according to the version time.

03.General page

■ Scheduled task and retention policy

Create Backup Task

Schedule

Enable scheduled task

Execution cycle:

Time:

Repeat interval:

Retention policy

Always keep backed up versions

Maximum number of retention:

When the number of backed up versions exceeds the limit, the oldest will be deleted.

Locked versions will not be deleted.

Version: 1.0.19

■ Confirm settings

Create Backup Task

Confirm Settings

Name	task_3
Type	Remote TNAS device
Address	10.18.8.90
Backup source	/Volume1/Surveillance
Destination	/Volume1/DB_Backup
Subfolder	test11
Backup mode	Hybrid mode
Retention policy	Always keep backed up versions

Version: 1.0.19

03. Restoration task management

Restoration task information display

The screenshot shows the 'Restore' window in the Duple Backup application. The window title is 'Restore'. On the left sidebar, there are three options: 'Backup', 'Restore' (which is selected), and 'Log'. The main content area shows a task named 'restore_1' with the status 'Restored successfully'. Below this, there is a table of details:

Version information	task_3_2024-03-20_16:51:03
Source of restore	/Surveillance
Destination	/Volume1/DB_Restore
Enable notification	Not enabled
Skip files with the same name	Not enabled
Last runTime	2024-3-20 17:11:35
Number of restore files	0
Number of successful restore files	0

At the top of the task details panel, there is a search bar and three function icons: a plus sign, a play/pause icon, and a trash icon. A large orange number '2' is placed above the search bar, and a large orange number '1' is placed below the task details table.

Version: 1.0.19

01.Task information

Display the detailed information of the created restoration tasks, including task name, state, restoration mode, restoration source, destination, execution time, and number of successfully restored tasks...

02.Function bar

Search: Search task name

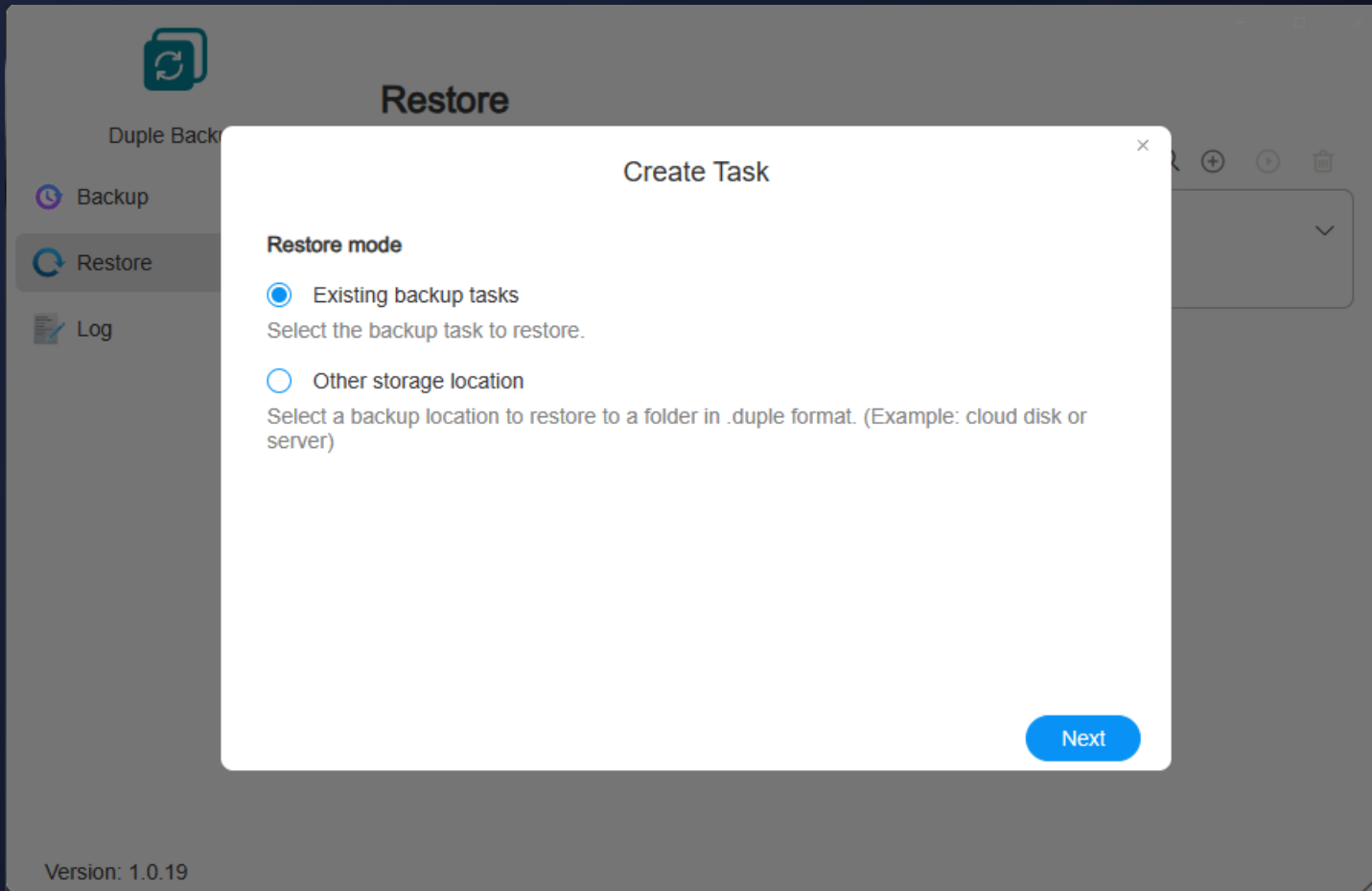
Add: Add a new restoration task

Start/pause: Start/pause the restoration

Delete: Delete the current task

03. What restoration modes are supported?

Restoration modes supported



01. Existing backup tasks

Select the corresponding versions from the tasks that have been backed up.

Usage scenario: When the TNAS device does not have a fault, users can find the task from the application and restore it directly to the current TNAS.



02. Other storage locations

Select the backup destination folder in .duple format.

Usage scenario: When the TNAS device has a fault, users can directly restore to other TNAS according to the backup data folder.

03. Restoration of existing backup tasks

The screenshot shows the 'Create Task' dialog box with the following fields and options:

- Restore setting**
- Name: restore_1
- Backup task: task_3
- Version information: task_3_2024-03-20_16:51:03
- Source of restore: /Surveillance
- Destination: /Volume1/DB_Restore
- Enable notification
Send a notification to the system administrator when a task starts, completes, or fails.
- Skip files with the same name
When this function is enabled, existing files at the destination will be automatically skipped during restore. Overwriting will not be performed.

Buttons: Back, Next

Version: 1.0.19

■ Restoration settings

Settings of restoration information: Name, restoration source, destination, and function settings

Task and version: Select task and version

The screenshot shows the 'Confirm Settings' dialog box with the following information:

Name	restore_1
Backup task	task_3
Version information	task_3_2024-03-20_16:51:03
Source of restore	/Surveillance
Destination	/Volume1/DB_Restore
Enable notification	Disable
Skip files with the same name	Disable

Buttons: Back, Confirm

Version: 1.0.19

■ Confirm settings

Confirm the information about restoration settings

03. Restoration in other storage locations

Restore type

- Shared folder
- iSCSI LUN

Back Next

Restore setting

Shared folder: DB_Backup

Subfolder: test11

Version information: 2024-03-20_16:51:03

Source of restore: /Surveillance

Destination: /Volume1/DB_Restore

Enable notification
Send a notification to the system administrator when a task starts, completes, or fails.

Skip files with the same name
When this function is enabled, existing files at the destination will be automatically skipped during restore. Overwriting will not be performed.

Back Next

Confirm Settings

Name	restore_2
Source path	/Volume1/DB_Backup/test11.duple
Version information	2024-03-20_16:51:03
Source of restore	/Surveillance
Destination	/Volume1/DB_Restore
Enable notification	Disable
Skip files with the same name	Disable

Back Confirm

Task settings

Name: restore_2

Device Type: Server

Source type: Remote TNAS device

Back Next

Connect to remote TNAS

Address: [input]

Port: 5443

Username: [input]

Password: [input]

Notes

- A remote TNAS device has been installed with the Duple Backup Vault application.

Back Next

Steps for task creation

1. Select the restoration type
2. Select the restoration device
3. Connect the device
4. Restore the information settings
5. Confirm the settings

03. Log management

■ Display all the operation behavior logs in the application

1

2

3

Category	User	Event
restore_1	test	[restore_1] res...
restore_1	test	[restore_1] St...
restore_1	test	Restore task [r...
task_3	test	[task_3] backu...
task_3	test	[task_3] Starts...
task_3	test	Backup task [t...
task_2	test	[task_2] backu...
task_2	test	File backup su...
task_2	test	File backup su...
task_2	test	File backup su...

Version: 1.0.19

10 < 1 2 3 4 5 6 ... 11 > Total: 102

01. Type screening

Carry out classification and screening according to task items, and automatically screen the required logs after selecting different tasks.

02. Log information

Display the log of all operations in the application, create/delete tasks, execute/pause tasks, and give feedback for task state...

03. Management operation

Search: Search the corresponding logs by keywords

Refresh: Refresh the current page

Export: Export the currently selected log entry

Delete: Delete the current log entry

Settings: Set the log retention policy



Thank you

The End ◀◀◀