



Thecus N4100 Nsync Quick Guide

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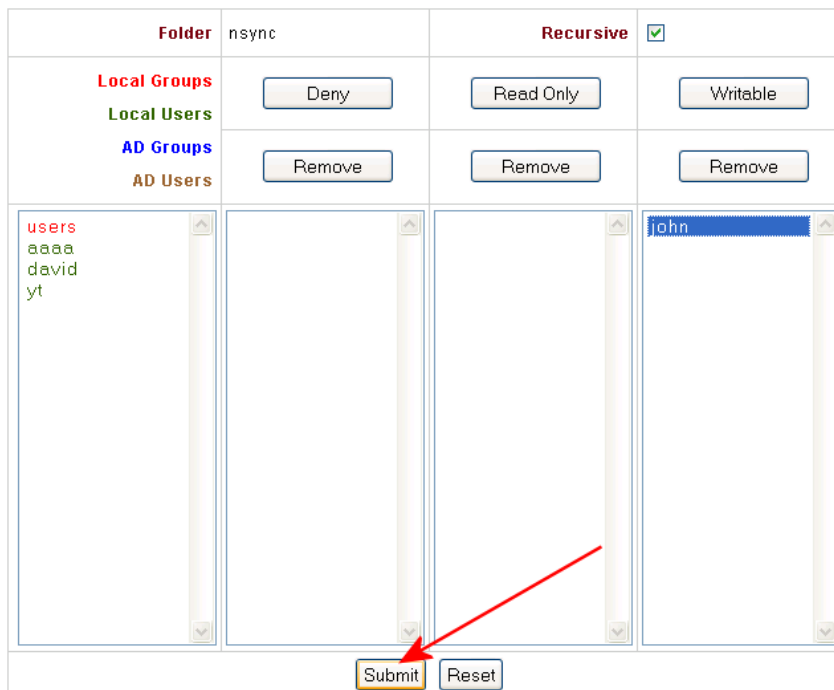
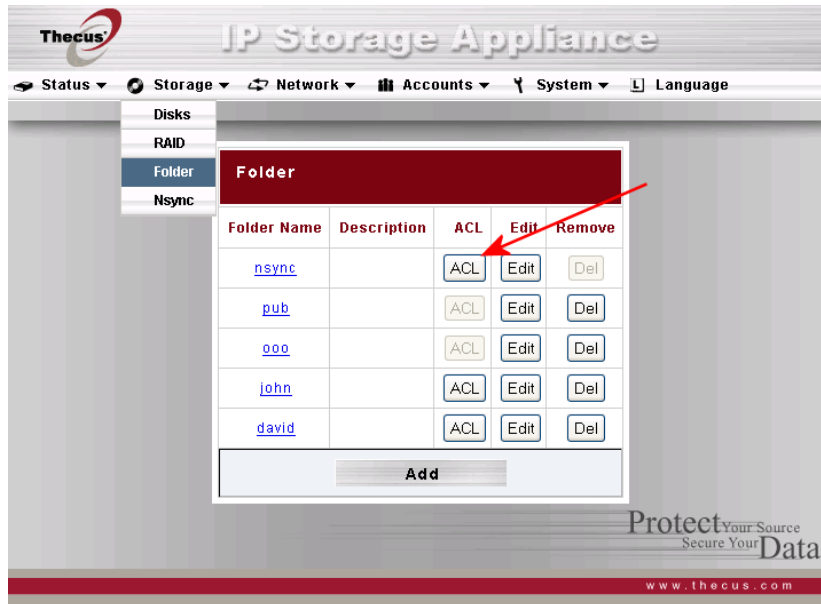
1. Overview

Nsync is a folder-to-folder level synchronization/backup function brought by Thecus NAS N4100. The backup task could be scheduled periodically or manually start it whenever you want. Basically you will need a target machine to store the backup data. Either another N4100 or a traditional FTP server is okay.

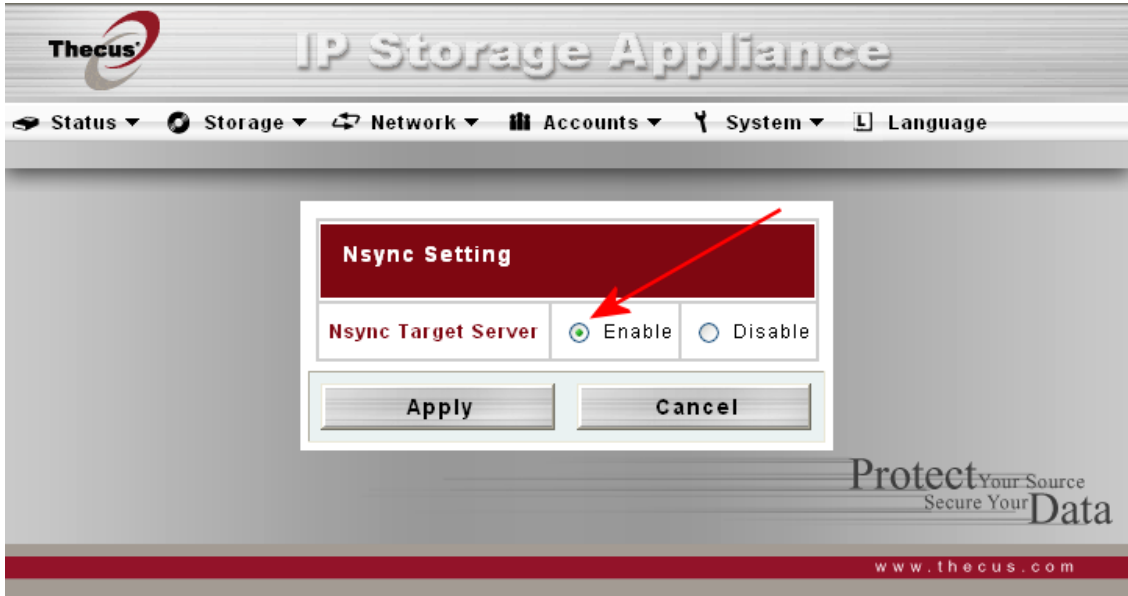
2. Nsync from an N4100 (172.16.66.88) to another N4100 (172.16.66.99)

2-1. Setup Target N4100 (where backup data will be stored)

- 1) The target N4100 should have RAID created. In addition, create a user account that will have writable permission of Nsync folder, say **john**. Then add **john** into the writable list of Nsync folder ACL. [Storage / Folder]

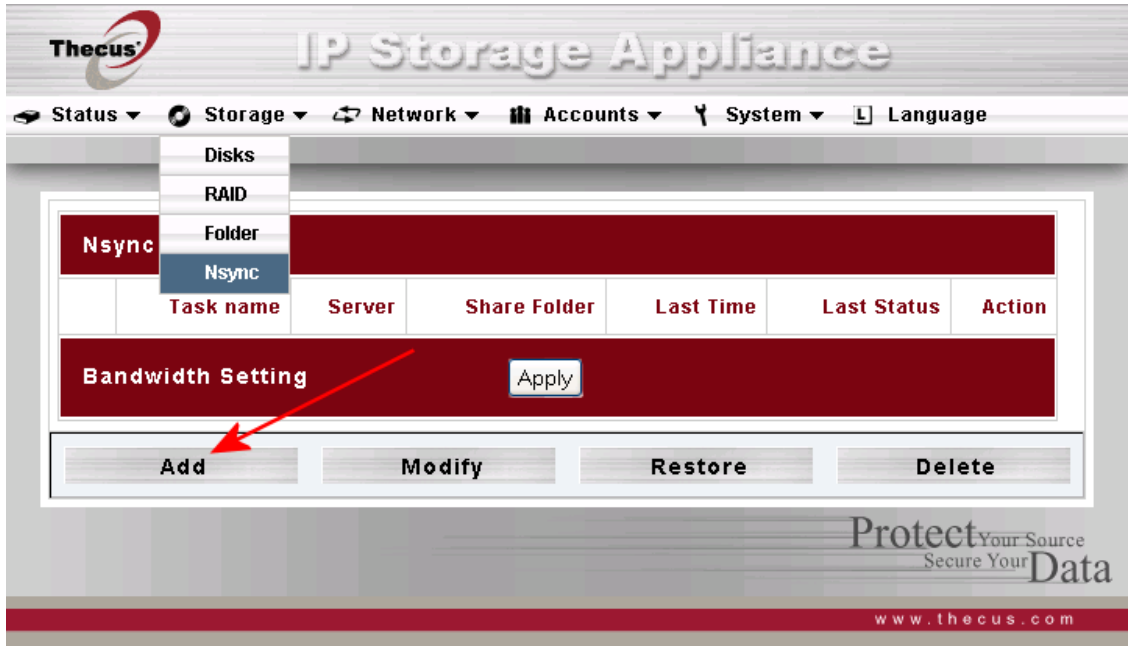


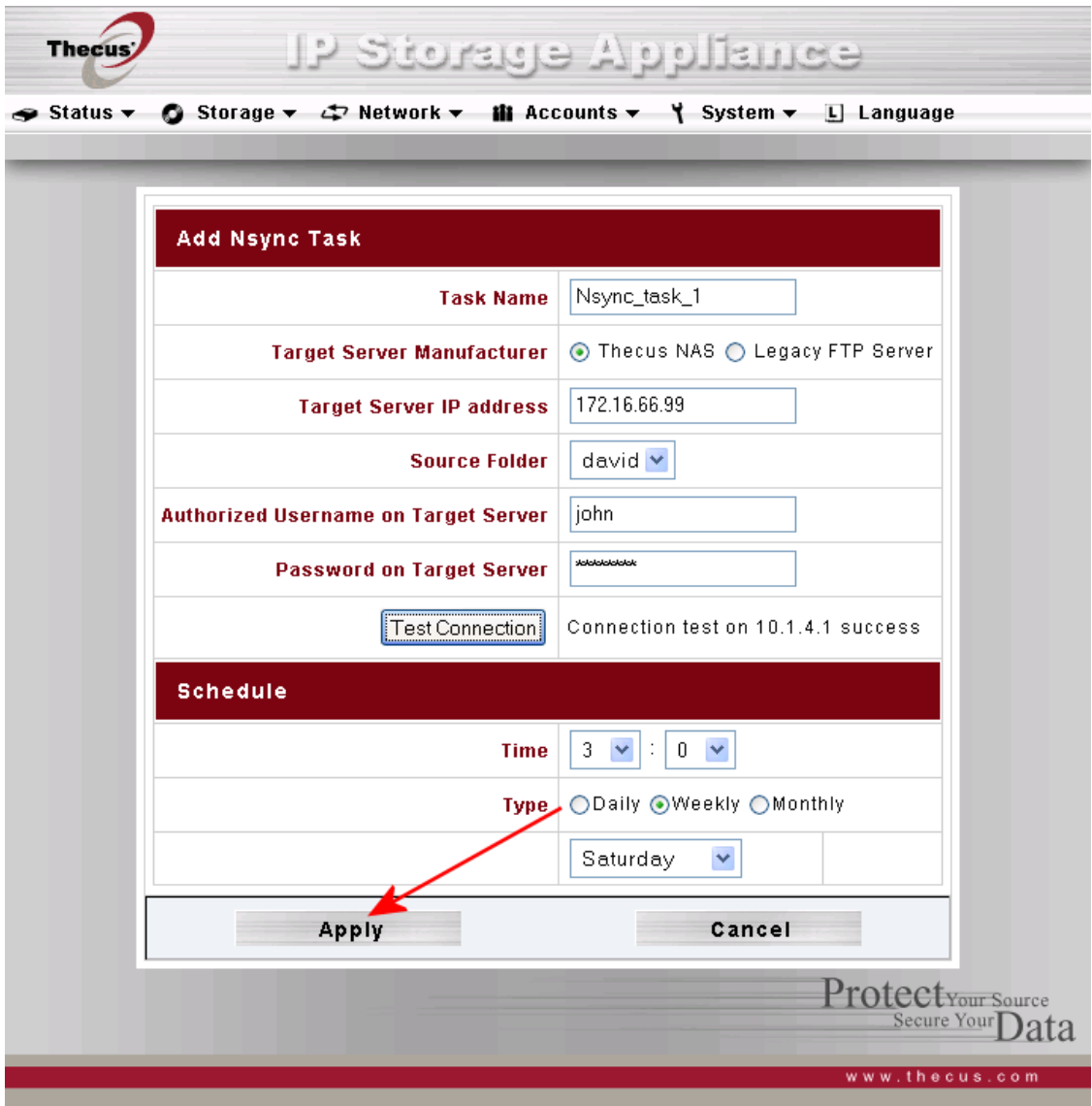
2) Nsync Target setting: leave Nsync Target Server as enabled. [Network / Target]



2-2. Setup Nsync N4100 (file source)

1) Add a new Nsync task. [Storage / Nsync]



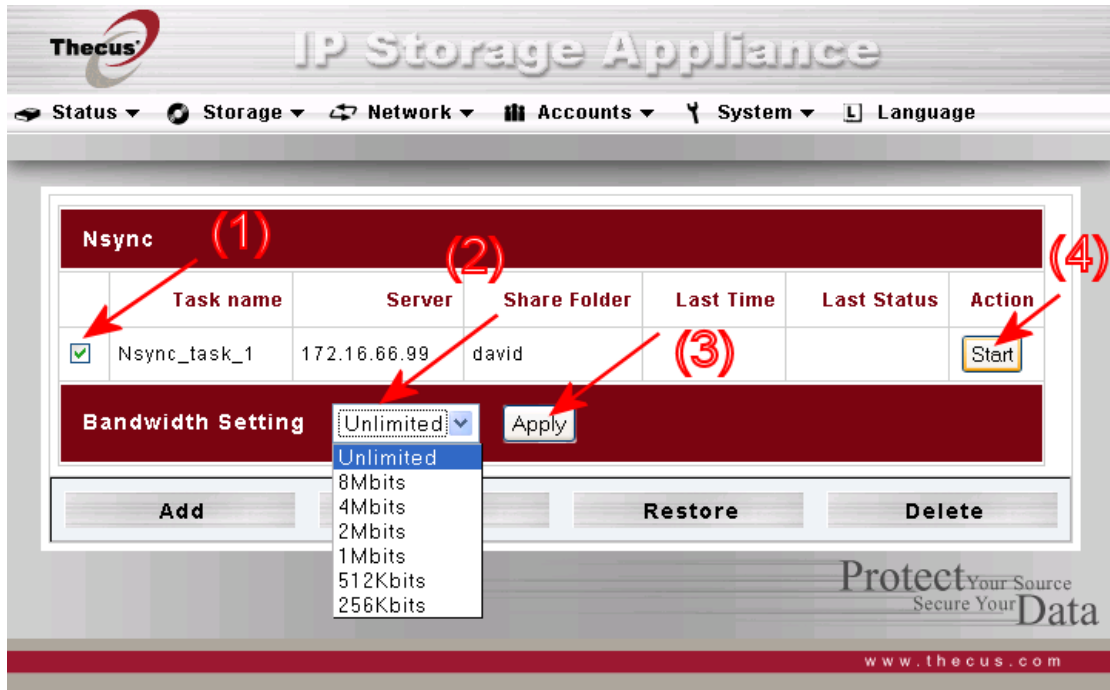


- Task Name:** give the task a name or use default Nsync_task_1.
- Target Server Manufacturer:** **Thecus NAS** means the target file server is a Thecus N4100 and you prefer a secure transfer. In case you want to backup files to a traditional FTP server or to a Thecus N4100 with non-secure transfer, please choose **Legacy FTP Server**. Please note secure transfer takes about 4 times longer to complete the task, compared to non-secure transfer.
- Target Server IP address:** 172.16.66.99 is the IP address of Target N4100, not Source N4100.
- Source Folder:** since we want the share folder **david** on Source N4100 periodically backed up, we choose **david** as the Source Folder.
- Authorized Username on Target Server:** to put files on to the Target N4100, you should have a user account that has writable permission to the Nsync folder on it. Please note that user account **john** is on Target N4100 (172.16.66.99), not on Source N4100 (172.16.66.88).
- Test Connection:** to make sure the authorized FTP account works well.

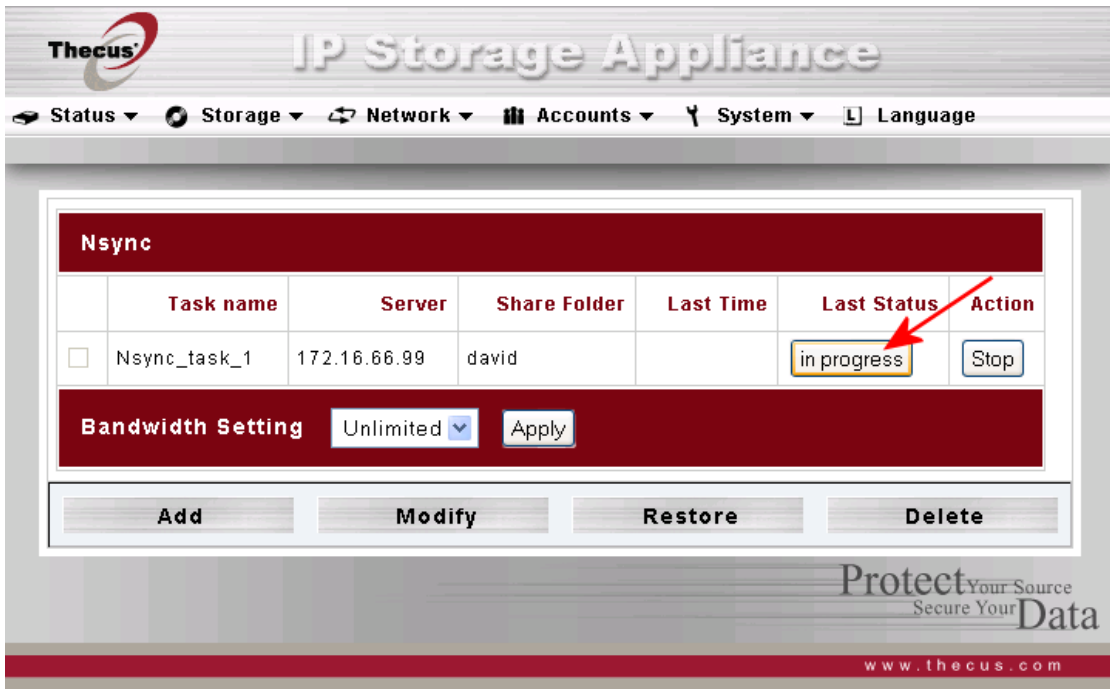
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Schedule: scheduling the task, if necessary.

2) Apply Bandwidth Limit to the task and start it.



3) The status is indicated on **Last Status** column. By clicking it, you will see the details.





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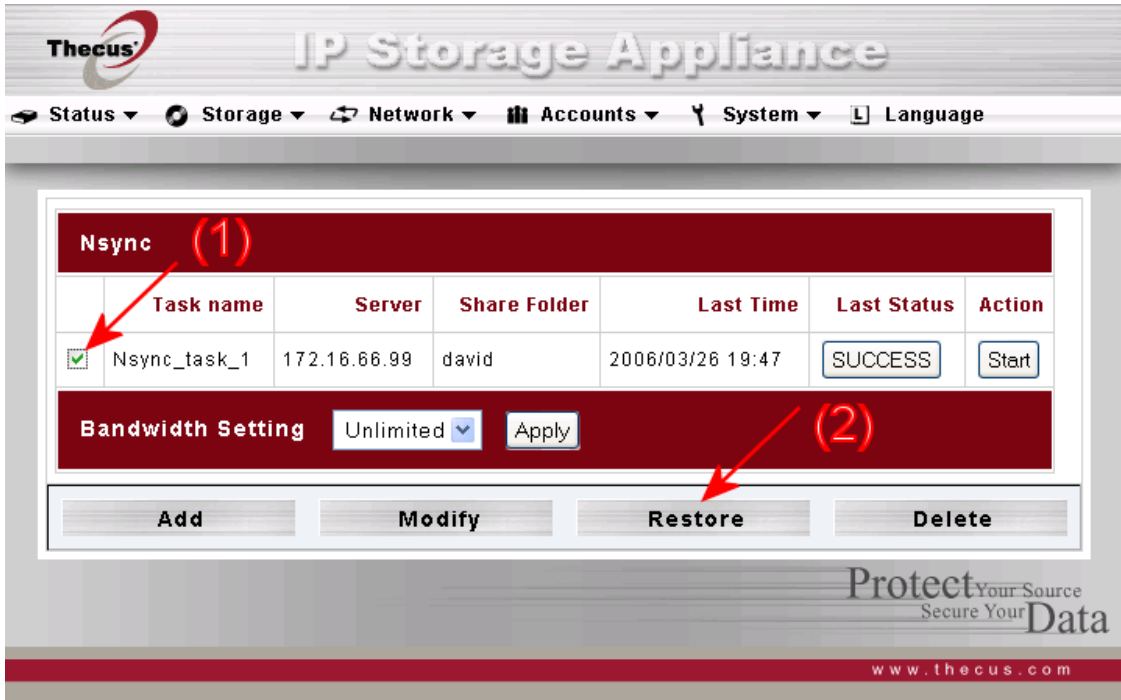
In progress	
Task Name	Nsync_task_1
IP address	172.16.66.99
Start Time	2006/03/26 19:46
Processed Files	298 /298
Status	Ext_Dsk_Enable.PNG

The screenshot shows the web interface of a Thecus IP Storage Appliance. At the top, there is a navigation bar with the Thecus logo and the title "IP Storage Appliance". Below the navigation bar, there are several tabs: Status, Storage, Network, Accounts, System, and Language. The main content area is titled "Nsync" and contains a table with the following columns: Task name, Server, Share Folder, Last Time, Last Status, and Action. The table has one row with the following data: Task name: Nsync_task_1, Server: 172.16.66.99, Share Folder: david, Last Time: 2006/03/26 19:47, Last Status: SUCCESS (highlighted with a red arrow), and Action: Start. Below the table, there is a "Bandwidth Setting" section with a dropdown menu set to "Unlimited" and an "Apply" button. At the bottom of the main content area, there are four buttons: Add, Modify, Restore, and Delete. The footer of the interface includes the slogan "Protect Your Source Secure Your Data" and the website address "www.thecus.com".

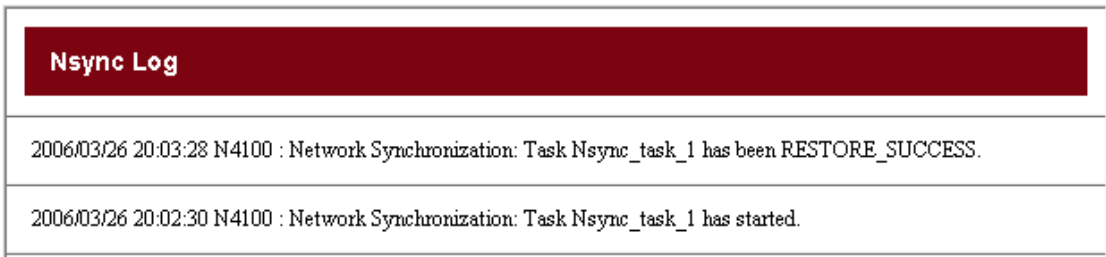
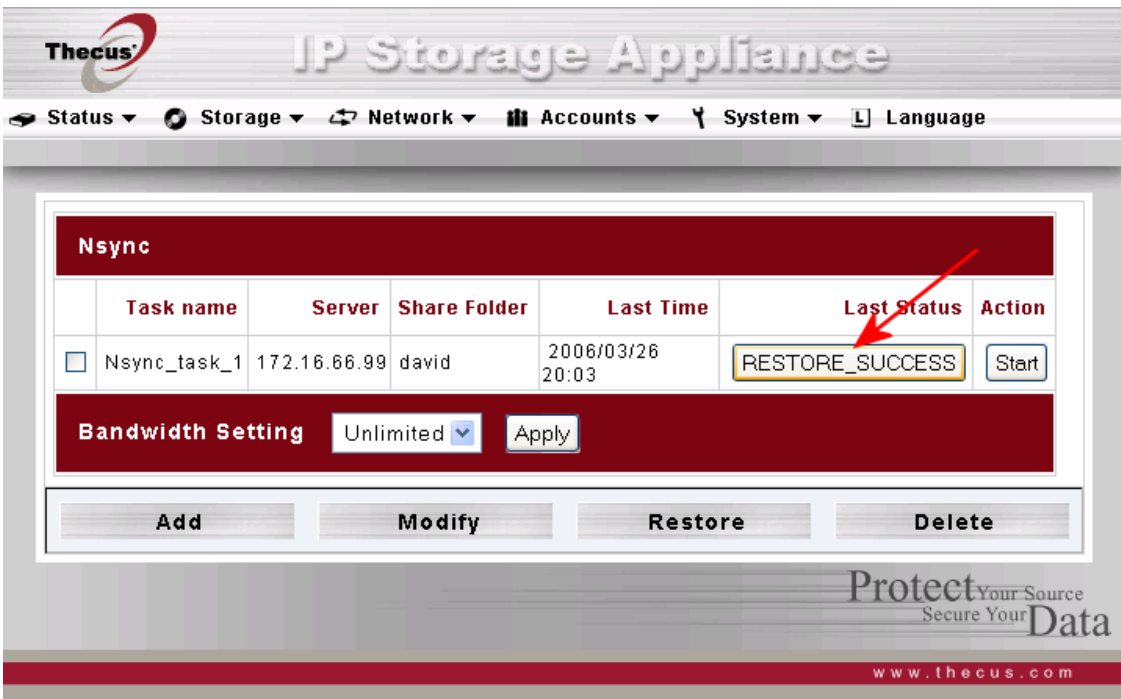
Nsync Log	
2006/03/26 19:47:15 N4100	: Network Synchronization: Task Nsync_task_1 has been SUCCESS.
2006/03/26 19:46:09 N4100	: Network Synchronization: Task Nsync_task_1 has started.

2-3. Restore Backup Data

1) Check the task you want to restore, and then click **Restore** button.



2) The status is indicated on **Last Status** column. By clicking it, you will see the details.



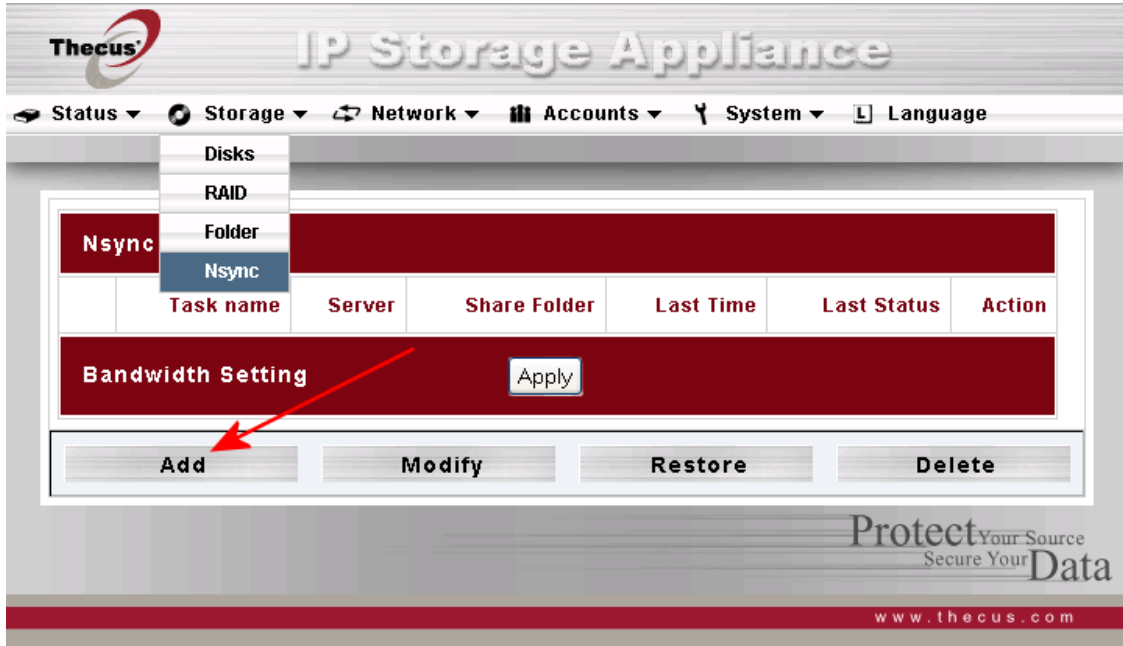
3. Nsync from an N4100 (172.16.66.88) to an FTP Server (172.16.66.99)

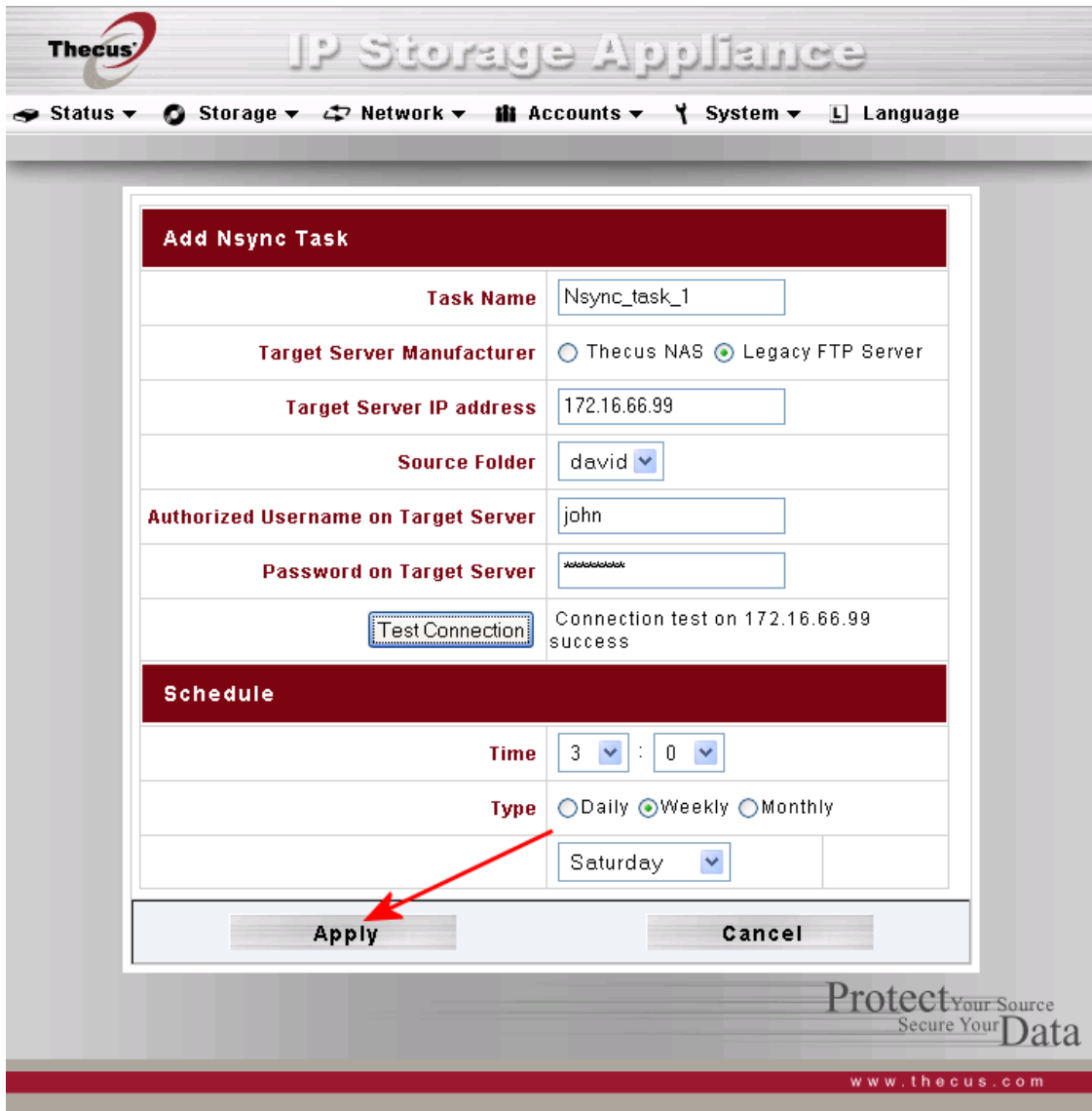
3-1. Setup Target FTP Server (where backup data will be stored)

1) A user account that has full permissions to his FTP login folder is prerequisite. In case the permissions are incomplete, Nsync won't work well.

3-2. Setup Nsync N4100 (file source)

1) Add a new Nsync task. [Storage / Nsync]





Task Name: give the task a name or use default Nsync_task_1.

Target Server Manufacturer: **Legacy FTP Server** means the target file server is a traditional FTP server. In case it's another N4100 but we want a non-secure transfer to speed up the task, click Legacy FTP Server too.

Target Server IP address: 172.16.66.99 is the IP address of Target FTP Server, not Source N4100.

Source Folder: since we want the share folder **david** on Source N4100 periodically backed up, we choose **david** as the Source Folder.

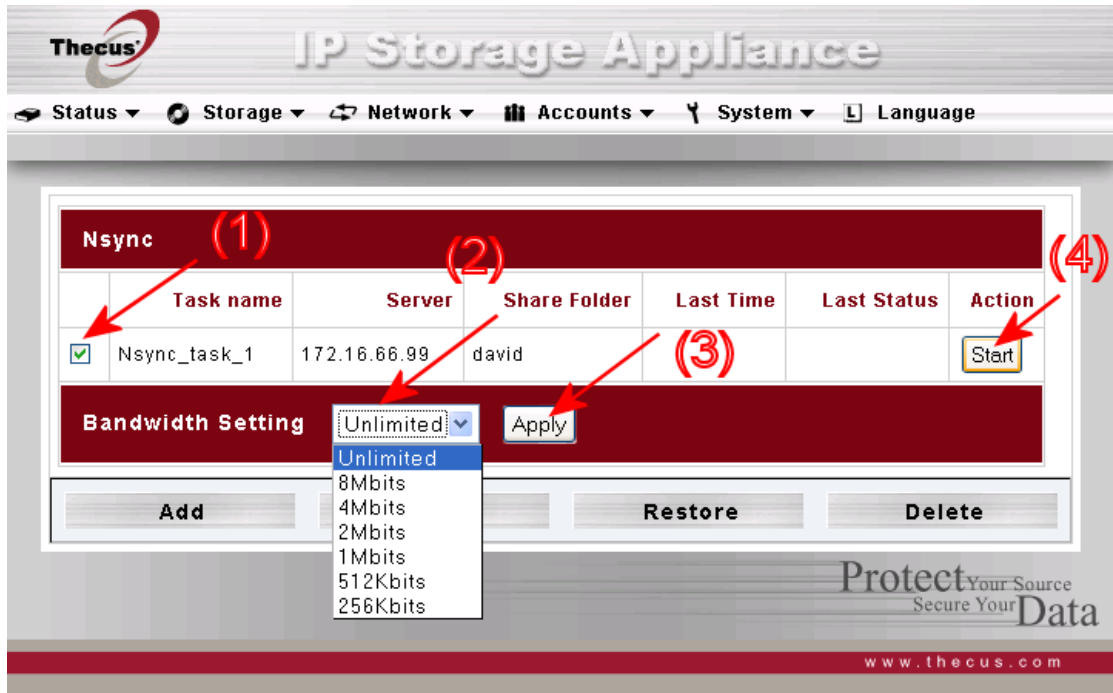
Authorized Username on Target Server: to put files on to the FTP server, you should have a user account that has full permission to the login folder. Please note that user account **john** is on the FTP Server (172.16.66.99), not on Source N4100 (172.16.66.88).

Test Connection: to make sure the authorized user account works well.

Schedule: scheduling the task, if necessary.

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2) Apply Bandwidth Limit to the task and start it.



3) The status is indicated on **Last Status** column. By clicking it, you will see the details.





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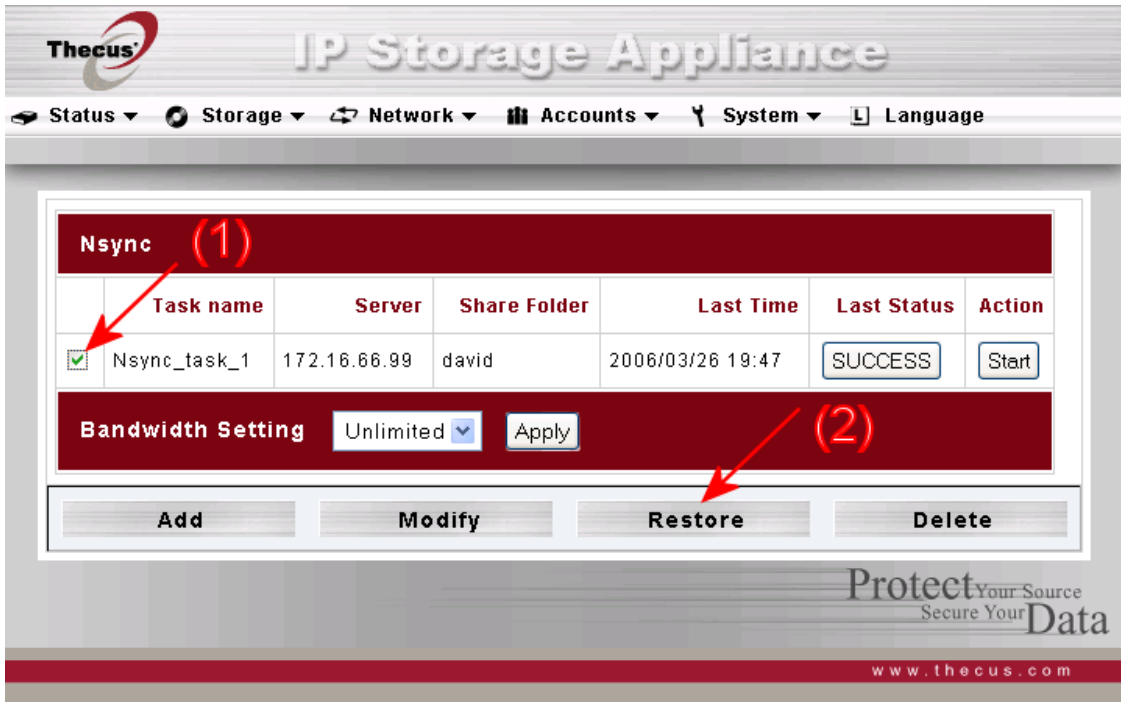
In progress	
Task Name	Nsync_task_1
IP address	172.16.66.99
Start Time	2006/03/26 19:46
Processed Files	298 /298
Status	Ext_Dsk_Enable.PNG

The screenshot shows the 'IP Storage Appliance' web interface. At the top, there is a navigation bar with 'Status', 'Storage', 'Network', 'Accounts', 'System', and 'Language' menus. Below this is a section titled 'Nsync' containing a table of tasks. The table has columns for 'Task name', 'Server', 'Share Folder', 'Last Time', 'Last Status', and 'Action'. One task is listed: 'Nsync_task_1' on server '172.16.66.99' at share folder 'david', with a 'Last Time' of '2006/03/26 19:47' and a 'Last Status' of 'SUCCESS'. A red arrow points to the 'SUCCESS' status. Below the table is a 'Bandwidth Setting' section with a dropdown menu set to 'Unlimited' and an 'Apply' button. At the bottom of the task list are buttons for 'Add', 'Modify', 'Restore', and 'Delete'. The footer of the interface includes the slogan 'Protect Your Source Secure Your Data' and the website 'www.thecus.com'.

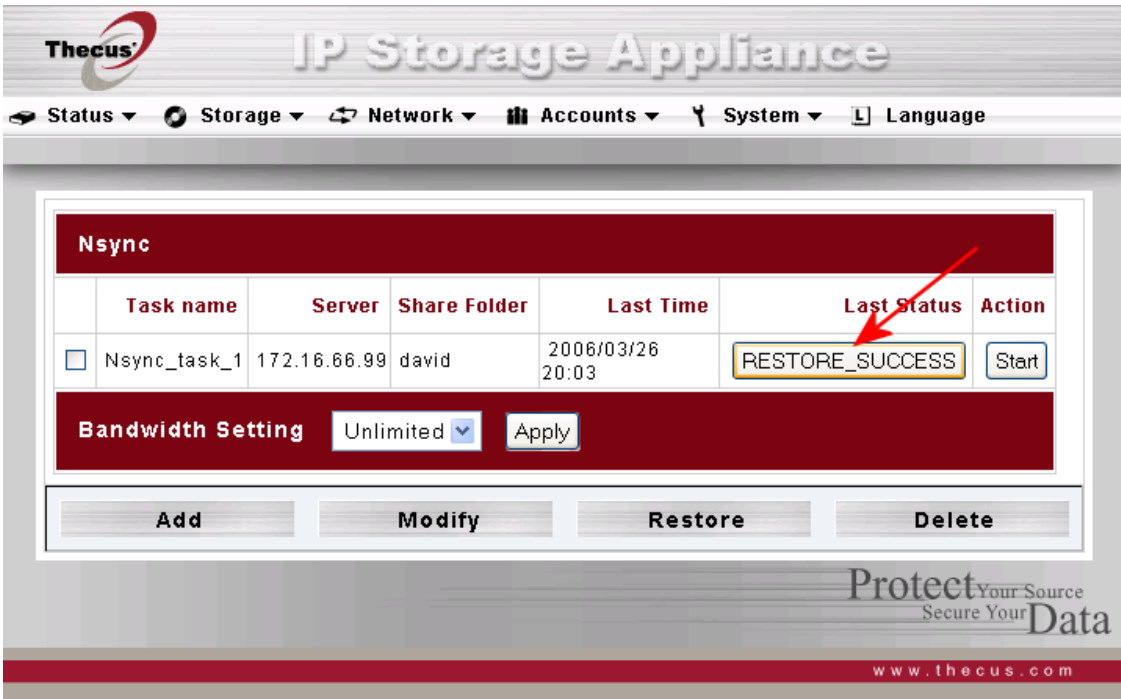
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2006/03/26 19:46:09 N4100 : Network Synchronization: Task Nsync_task_1 has started.	

3-3. Restore Backup Data

1) Check the box of the task you want to restore, and then click **Restore** button.



2) The status is indicated on **Last Status** column. By clicking it, you will see the details.





Nsync Log
2006/03/26 20:03:28 N4100 : Network Synchronization: Task Nsync_task_1 has been RESTORE_SUCCESS.
2006/03/26 20:02:30 N4100 : Network Synchronization: Task Nsync_task_1 has started.

4. Nsync Troubleshooting

4-1. Filename and FTP encoding

Basically Nsync uses FTP to synchronize files and subfolders to another FTP server. So you have to make sure the file and folder names are without strange characters such as “/ \ : * ? ” < > | [] = + ; , ‘ ”. In addition, both Nsync Source N4100 and Nsync Target server should have the same FTP encoding. In case not, the restored files and subfolders may have their names changed.

4-2. Incremental Backup

Nsync task will create an incremental backup backup on Target Server. It means if you deleted subfolder A and add B subfolder on the Source N4100 then executed the task, the backup subfolder A will existed still, and copy subfolder B on Target Server. Which means system would keeping all of data on Target Server, and copy new add or changed file while task executed to saving bandwidth & time, also a complete file back on the Target Server.

4-3. Restore Nsync Task

Restoring an Nsync task will restore the whole folder to the last status. It means all files synchronized to Target Server will be completely copied back to the source folder. Not only changed files are copied.

4-4. Data Security on Target Server

In case the synchronized files on Target Server were modified or deleted by other user accounts that have full permission to the backup folder, the Nsync restore process will copy modified files back and may miss some deleted files.

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