

N-Sync Setup

N-Sync is a replication utility based on the rsync tool. Like rsync, N-Sync’s client-server architecture makes replication of files and folders easier from local share to remote share and vice versa (from source to destination).

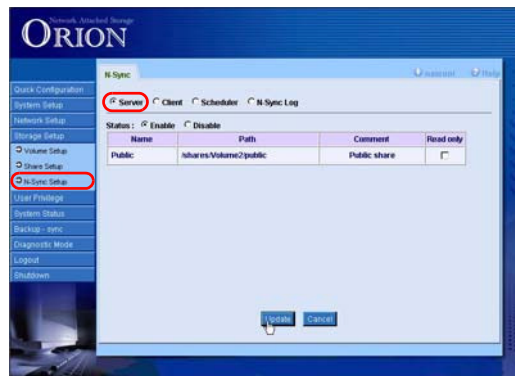
You can, as administrator, enable or disable the switch for the N-Sync server to choose to export N-Sync modules to clients. You can also choose to replicate shares immediately or via scheduler.

N-Sync setup features four utilities - **Server**, **Client**, **Scheduler** and **N-Sync log**.

Server

An N-Sync server exports shared modules to the remote N-Sync client for replication through the rsync protocol.

- **Enable:** Enables the N-Sync Server. (Only the server which is enabled will be shown in the N-Sync client list.)
- **Disable:** Disables N-Sync Server.
- **Name:** Share name of the system exported by N-Sync server.
- **Path:** Share path of the system.
- **Comment:** Description for the shared folder.
- **Read only:** If checked, allows export as read-only module to the remote N-Sync client.
- **Update:** Click to update all changes.
- **Cancel:** Click to cancel all changes.



Client

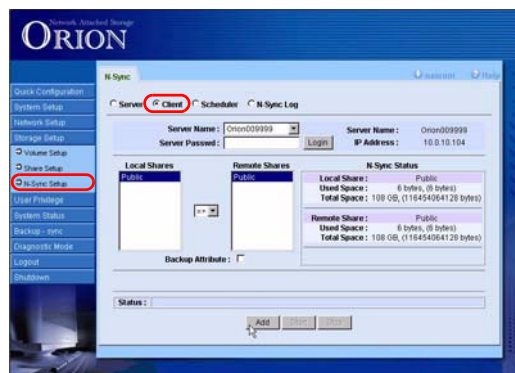
An N-Sync client is an rsync based utility that allows the administrator to replicate files/folders between local share and remote N-Sync share.

Before you can make any changes, you must log in:

- **Server Name:** Select the required N-Sync server from the drop-down box.
- **Server Password:** Enter the server administrator “nasroot” password.
- **Login:** Click to connect to the selected N-Sync server.

The following parameters will be displayed:

- **Server Name:** Displays the remote N-Sync server to which the system is currently connected.
- **IP Address:** Displays the IP address of the remote N-Sync server.



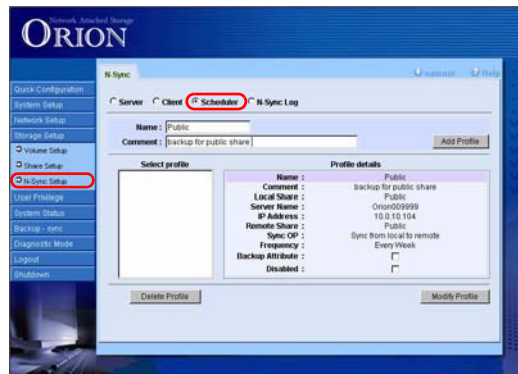
- **Local Shares:** Displays all local shares.
- **Sync-OP:** Select from the drop-down box. You can either synchronize operations including synchronization from local share to remote share (=>) or from remote share to local share (<=).
- **Remote Shares (list):** Displays all remote shares.
- **N-Sync Status:** Displays status of selected local share and remote share.
- **Used Space:** Displays the space currently used by the selected share.
- **Total Space:** Displays the total space of volume in the selected share.
- **Status:** Displays N-Sync status, messages, or returned error codes of N-Sync client.
- **Backup Attribute:** Check to enable the backup attribute.
- **Add:** Click to add a Sync-job.
- **Start:** Click to start the Sync-Job.
- **Stop:** Click to stop the Sync-Job.

Scheduler

An N-Sync scheduler periodically runs N-Sync jobs that are described by profiles. A profile includes the profile name, profile comment and descriptions of the N-Sync job including local share, remote N-Sync server, server IP address, remote share of N-Sync server, Sync OP, schedule frequency, and whether the profile is enabled or disabled. As the administrator, you can create, delete or modify a profile. When you need to change the profile details, there are four modification steps.

Creating a new profile

- **Name:** Enter a new profile name.
- **Comment:** Enter a comment for the new profile.
- **Backup attribute:** Check to enable the backup attribute.
- **Add Profile:** Click to create a new profile.
- **Modify Profile:** Click to modify previous profile settings.

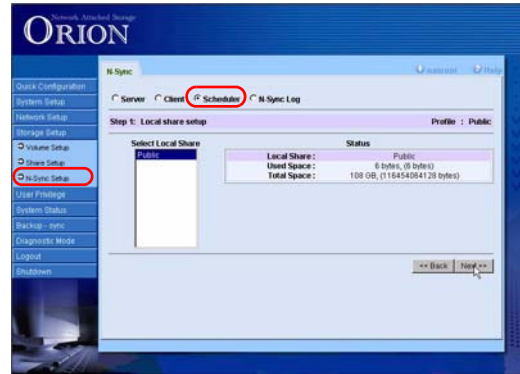


Adding a profile

Input profile name and comment then click “Add Profile” to confirm new profile added. Click “Modify Profile” and you will be taken through a series of configuration screens.

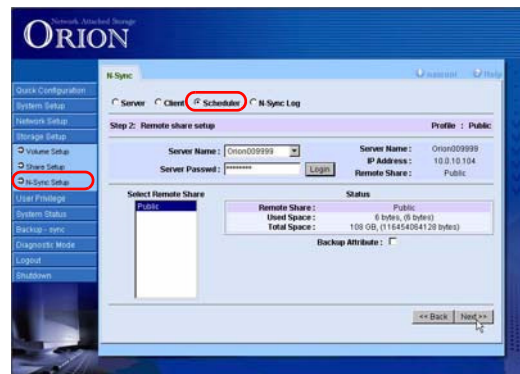
1 Local Share Setup:

- Select the target share from the ‘Select local share’ list.
- Click ‘Next’ to proceed or ‘Back’ to return to the previous screen.



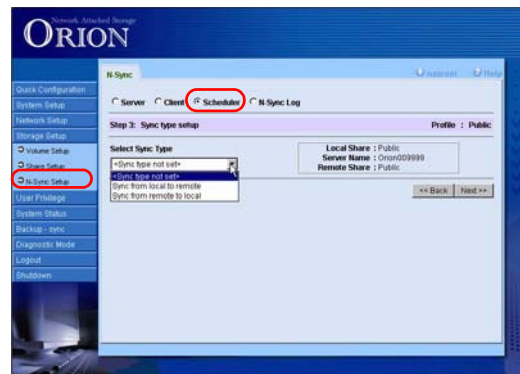
2 Remote Share Setup:

- Log in with the administrator (nas-root) password in selected N-Sync server.
- Select the target share from “Select Remote Share” list.
- Click ‘Next’ to proceed or ‘Back’ to return to the previous screen.



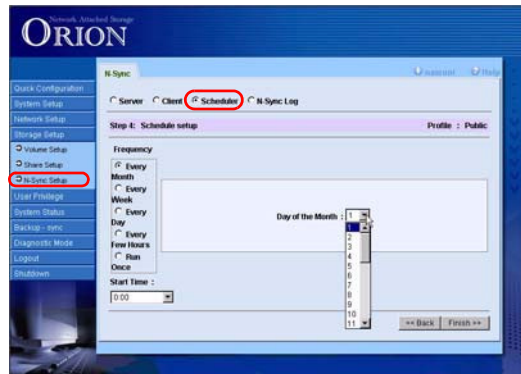
3 Sync Type Setup:

- Select Sync Type from the drop-down box.
- Click ‘Next’ to proceed or ‘Back’ to return to the previous screen.

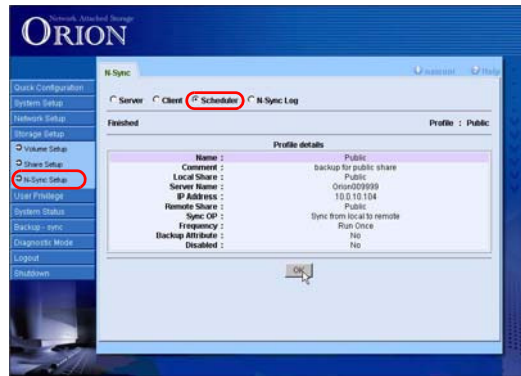


4 Schedule Setup:

- Check the synchronize frequency from the ‘Frequency’ list.
- Select the required variable from the drop down box.
- Select ‘Finish’ to end configuration or ‘Back’ to return to the previous screen.

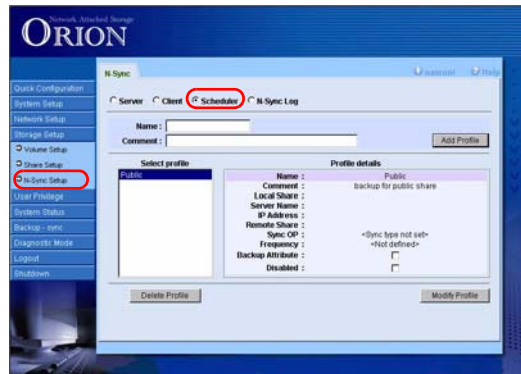


When you click ‘Finish’, the completed profile information screen will appear:



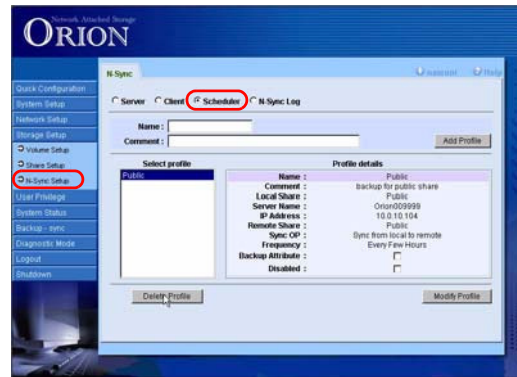
Modifying a profile

- Select the profile you wish to modify from the ‘Select profile’ list.
- Click on ‘Modify Profile’ in the main NSync Scheduler screen.



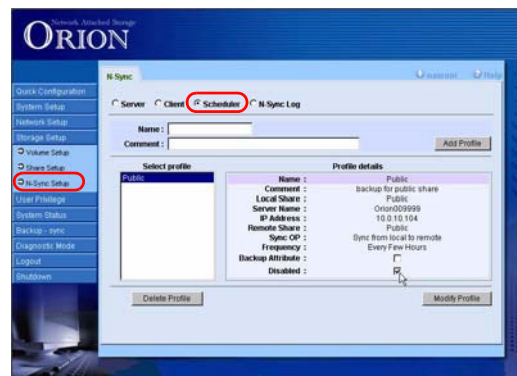
Deleting a profile

- Select the profile you wish to delete from the 'Select profile' list.
- Click 'Delete profile'.



Disabling a profile

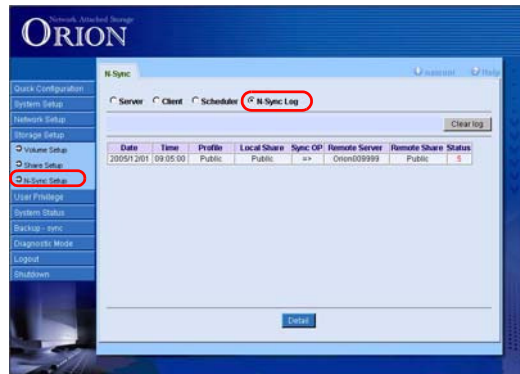
- Select the profile you wish to disable from the 'Select profile' list.
- Check the 'Disabled' box under 'Profile details'.



N-Sync Log

N-Sync log keeps records of all N-Sync jobs.

- **Date:** Displays the start date of the job.
- **Time:** Displays the start time of the job.
- **Profile:** Displays the profile name. If the log entry is generated by the N-Sync Client, this field will be replaced by '---'.
- **Local Share:** Displays the local share name of the job.
- **Sync OP:** Displays the synchronization operation of the job.
- **Remote Server:** Displays the remote server name of the job.
- **Remote Share:** Displays the remote share name of the job.
- **Status of the N-Sync job:** Displays status of the job.



'Done' is displayed when the job has been completed successfully. A failed N-Sync job is shown by a red error code. Refer to the following list for error code definitions:

- 1: Syntax or usage error.
- 2: Protocol incompatibility.
- 3: Errors selecting input/output, directories.
- 4: Requested action not supported: an attempt was made to manipulate a 64-bit file on a platform that cannot support them or a request was made that is supported by the client but not by the sever.
- 5: Error starting client-server protocol.
- 10: Error in socket I/O.
- 11: Error in file I/O.
- 12: Error in rsync protocol data stream.
- 13: Error with program diagnostics.
- 14: Error in IPC code.
- 20: Received SIGUSR1 or SIGINT.
- 21: Error returned by waitpid.
- 22: Error allocating core memory buffers.
- 23: Partial transfer due to error.
- 24: Partial transfer due to missing source files.
- 30: Timeout in data send/receive.

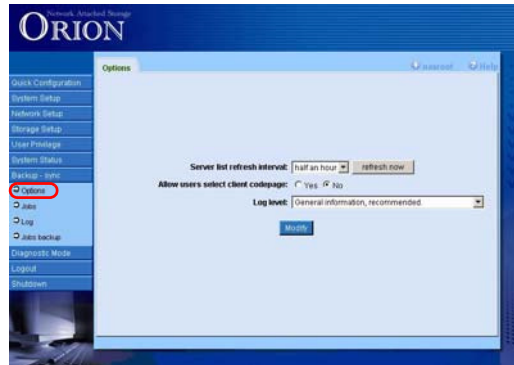
Backup-sync

This function provides the Orion 410PT NAS System with the ability to access client data through corresponding network protocols. SMB and AFP are supported.

The duplicate client data can be loaded into the system's specified data volume as a copy of data backup.

Options

- **Server list refresh interval:** Select the server list refresh interval from the drop-down menu. The default is set at half an hour.
- **Allow users select client code page:** Check to allow users to select client code page for each job.
- **Log Level:** Select the log level from the drop-down box.
 - Least, only error and statistics result.
 - General information, recommended.
 - Higher, including directories information.
 - Highest: Debug information, including all processed files.



The system default is Level 1, since both Level 2 and 3 will contain a lot of data, especially if the source directory is large.

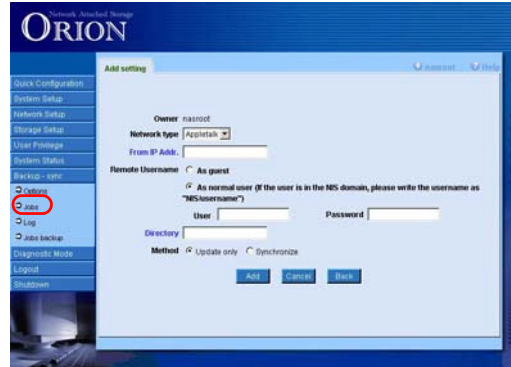
- **Modify:** Click to save all changes.

Jobs

Adding Jobs

Adding jobs will configure the backup settings for each system user. Each job is identified by a job ID, which is generated automatically.

- **Owner:** Displays the users ID.
- **Network type:** Select either AppleTalk or Samba from the drop down menu.
- **From IP address:** Enter the IP address of the source host from where backup is made. You may enter an IP address or a host name.
- **Remote username:** Select either 'As guest' or 'As normal user'.
 - If you select 'As guest', no further user information is required.
 - If you select 'As normal user', enter your user name and password.
- **Directory:** Displays the name of the source directory to be backed up. In afb/smb, it should be the shared folder's name. If the fields 'Form IP address' and 'Remote username' are not empty then the user may click this link to select a directory from the shared list. This shared folder list function will check the username and password to obtain the folders according to 'Normal user' authority.
- **Method:** Select either 'Update only' or 'Synchronize'. 'Update only' will incrementally copy new files/directories. 'Synchronize' will update first and then delete directories/files differing from the destination area (after first comparing with those available in the source area).
- **Add:** Click to add and save all changes. Adds the setting to a new job configuration entry.
- **Cancel:** Click to cancel all changes.
- **Back:** Click to return to the previous screen.



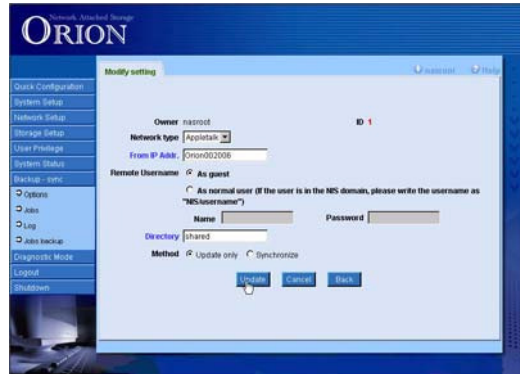
Deleting Jobs

Click 'Delete' to delete a selected job. A prompt will appear. Click 'OK' to confirm.

Modifying Jobs

Select the job you wish to modify, and click 'Modify'.

- **Owner:** Displays the user ID.
- **Network type:** Select a new network type from the drop-down box.
- **From IP address:** Enter the new IP address of the source host from where backup is made.
- **Remote username:** Select either 'As guest' or 'As normal user'.
 - If you select 'As guest', no further user information is required.
 - If you select 'As normal user', enter you user name and password.
- **Directory:** Enter a new source directory to be backed up.
- **Method:** Check either 'Update only' or 'Synchronize'.
- **Update:** Click to save all changes.
- **Cancel:** Click to cancel all changes.
- **Back:** Click to return to the previous page.

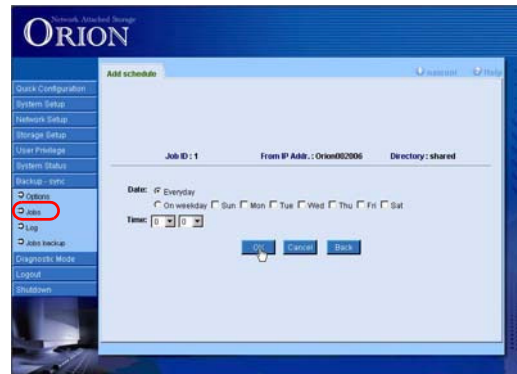


Adding Schedules

When a job setting is added, the GUI will advise you to configure a schedule for that job. The schedule is when and how often a job will be triggered.

Select a job and click 'Schedule'.

- **Job ID:** Displays the job ID number.
- **From IP Addr.:** Displays the location of the backup information.
- **Directory:** Displays the name of the share folder for this job.
- **Date:** Select the frequency of the job.
- **Time:** Select the schedule time from the drop-down box.
- **OK:** Click to confirm schedule and save all changes.
- **Cancel:** Click to cancel all changes.
- **Back:** Click to return to the previous screen.



Schedule List

This list displays all information relating to jobs and their schedules:

- **Job ID:** Displays the ID of the job you have selected.
- **From IP Addr.:** Displays the location of the backup information.
- **Directory:** Displays the name of the shared folder for this job.
- **Date:** Displays the date of the backup job schedule.
- **On weekday:** Displays weekday(s) for which the schedule is set.
- **Time:** Displays the time of the job schedule.
- **Add:** Click to add a new schedule to this job.
- **Delete:** Click to delete a current schedule from this job.
- **Modify:** Click to modify an existing schedule.
- **Next:** Click to go back to the job listing.



Deleting Schedules

- Select a schedule on the ‘Schedule List’ screen.
- Click ‘Delete’.
- A prompt will appear. Click ‘OK’ to proceed or ‘Cancel’ to cancel.

Modifying Schedules

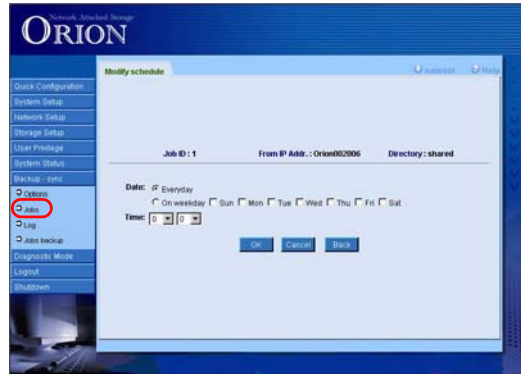
Click ‘Modify’ to open the ‘Modify Schedule’ screen:

All settings can be modified from this screen.

OK: To save all changes

Cancel: Click to cancel all changes,

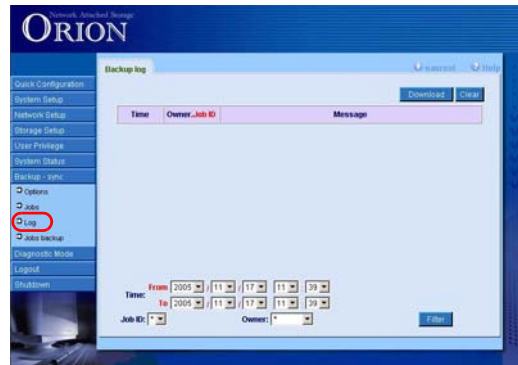
Back: Click to return to the previous screen.



Logs

You can browse operating logs, perform downloads and delete actions here, using various filters such as time, range, user, or job ID.

- **Time:** Displays the time when the job was created.
- **Owner.Job ID:** Displays the owner of the backup job and job ID.
- **Message:** Displays the backup job protocol (smb, afp, nfs)
- **Time range selector:** Displays a defined time range of logs.
- **Job ID:** Select the Job ID to view from the drop down menu.
- **Owner:** Allows nasroot to select logs to view. (Not applicable to normal users.)
- **Filter:** Click to classify log details according to selected time range, Job ID or Owner.
- **Download:** Click to download the logs.
- **Clear:** Click to clear the logs screen.

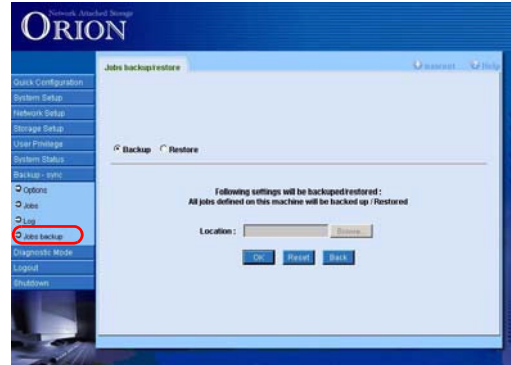


Backing Up Jobs

Click on 'Jobs backup' to save backup copies of jobs.

Allows you to backup/restore previous configurations to/from a file that includes job configuration and schedule configuration data created by the backup sync function.

- **Backup:** Select to backup your config file
- **Restore:** Select to restore a config file from a previous backup.
- **OK:** Click to backup/restore.
- **Reset:** Click to reset all fields.
- **Back:** Click to return to the previous screen.



Backup a config file

- Check 'Backup'.
- Click 'OK'. A prompt for username and password will appear.
- A second prompt will appear:



- Click 'Save' to save the backup to your local drive.
- Click 'OK' on the GUI screen.

