

easyRAID® NAS

Backup-sync

3-9 Backup – sync

This function will provide NAS with the ability to access client's data through corresponding network protocols, currently, we have supported SMB, AFP, NFS, and then, duplicate client's data into NAS' specified data volume as a copy of data backup. The backup-sync menu is shown in figure 3-92.

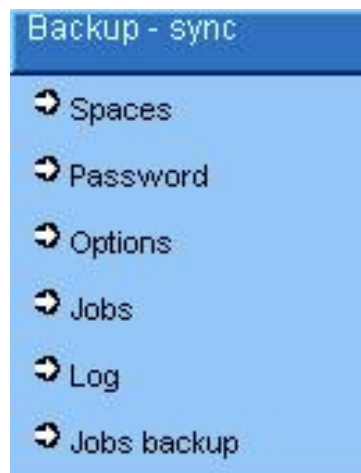


Figure 3-92 Backup-sync Menu

3-9-1 Spaces Setting

Spaces Setting is shown in figure 3-93.



Figure 3-93 Spaces Setting

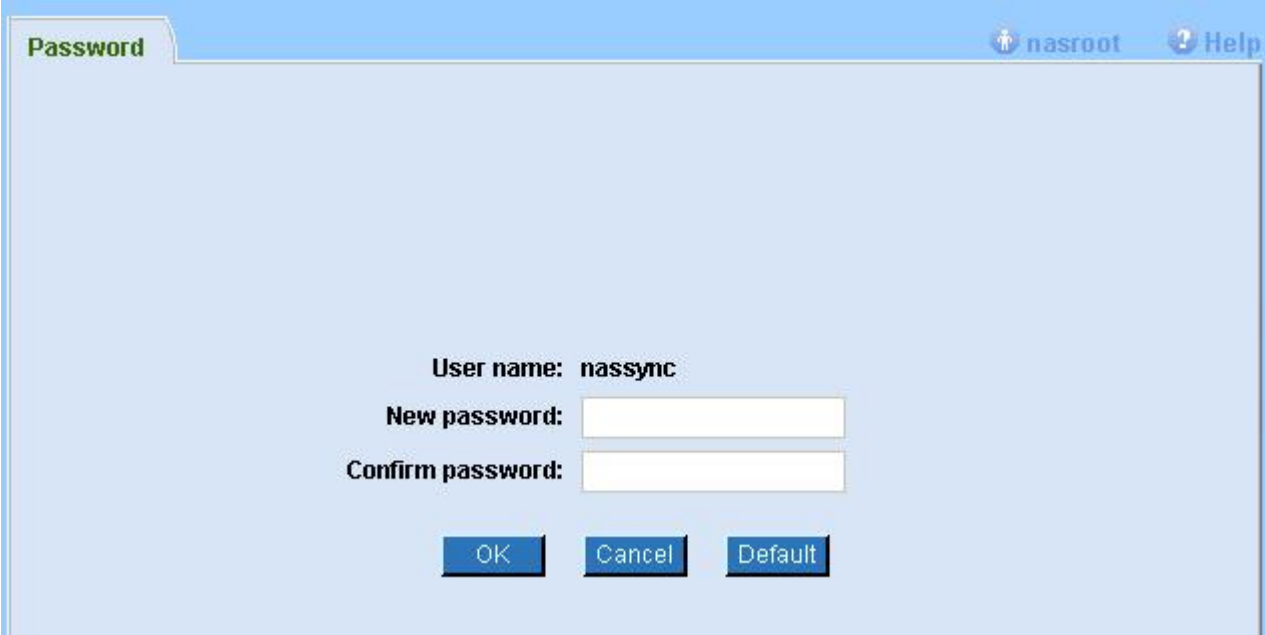
This function is only used by nasroot, and it could help nasroot to manage which volume you want to use in bsync backup. When you

have added a volume in bsync function, then all of valid users can choose and use this volume in jobs setting with destination data backup area. Thus, if you are going to use bsync backup function, at least one volume has to be selected.

- **Checkbox of VolumeX** : The available volume(s) will be appear for nasroot to choose from.
- **OK**: Submit the VolumeX checkboxes' state, please refer to section 4 below.
- **Reset** : Reset all fields to default status.
- **Back** : No changing will be made and go back to Job list page.

3-9-2 Password Setting

Password Setting is shown in figure 3-94.



The screenshot shows a dialog box titled "Password" with a light blue background. In the top right corner, there are icons for "nasroot" and "Help". The main content area contains the following text and fields:

User name: nassync

New password:

Confirm password:

At the bottom, there are three buttons: "OK", "Cancel", and "Default".

Figure 3-94 Password Setting

Figure 3-94 shows the settings screen of system user “nassync” password for Backup-sync.

- **username** : The system default user "nassync" with backup operator usage.
- **New password** : Setting for “nassync” password.
- **Confirm password** : Confirmation for “nassync” password.
- **OK**: Submit the new password for nassync.
- **Canel** : Reset all input fields to empty.
- **Default**: Reset “nassync” password to the factory default value, 00000000.



If the NAS join into a domain or NIS, this function is not work. The domain master or NIS server will determine the password, not determine by NAS.

3-9-3 Options Setting

Options Setting is shown in figure 3-95.

Figure 3-95 Options Setting

This function is backup operating options for nasroot to setup with necessary change.

- **server list refresh interval** : The bsync backup will maintain a server list with pooling interval with default half a hour. This option could set with different time interval to refresh server list.
- **allow users select codepage** : The bsync backup can set a codepage for every single job setting. This option could determine whether the codepage selection is allowed by users or not.
- **allow users change backup target** : The bsync backup can set whether the data backup volume is changeable to other volume or not.
- **Log level** : List of log levels for backup operation. Higher log level will include those messages defined in lower level. Note, these system options are only for nasroot only. When clicking the 'modify' button to change log level, the system will check the

system space. IF the space is not enough, the log level is coming down to least mode(Level 0) automatic.

Level 0: Least information, only contains critical error messages.

Level 1: Normal information, statistics information and error messages.

Level 2: Trace directories, including each directory travelled.

Level 3: Debug information, including each file's processed.

The system default option is Level 1, since both Level 2 and 3 will contains lots of details if the source directory is extremely large.

- **Modify** : Submit the changed option for effective.
- **Refresh Now** : When click this option, the updated server list will execute immediately. And this button will change to 'Stop Now'.
- **Stop Now** : When this button shown up, It's meaning that the getting host is running now. You could click on it to stop the server list refresh and the status of server list will appear as far as the search result.

3-9-4 Jobs Setting

Jobs setting is shown in figure 3-96.



Figure 3-96 Job Setting

The screen showing all jobs configuration list with logon user belonging. With the nasroot account logon the complete details will display.

- JobID : Job ID, to identify each job.
- Owner : the logon user'd ID.
- From IP addr : The source host to be backup. It will display 20 bytes length.
- Directory : The source directory name to be backup. It will display 20 bytes length.
- Network type : List the network sharing protocol type.
- Schedules : The number of schedule items related to this job configuration.
- Status : This field will display the progress (bar and count) while job is running.
- Add : Add the setting to a new job configuration entry. The JobID will be assigned when setting is completed.
- Delete : Delete job setting with highlight job selected.
- Modify : Modify job setting details.
- Schedule : Setup schedule with highlight job selected.
- Execute : Click on this bottom with job running at once.
- Stop : While the job is running with "Execute" bottom clicked, the

“Stop” bottom will take the position and allowed to stop the backup job by click the bottom.

3-9-3-1 Job Add

Job Add setting is shown in figure 3-97.

The screenshot shows a window titled "Add setting" with a "nasroot" logo and a "Help" icon in the top right. The main area contains the following settings:

- Owner:** nasroot
- Network type:** Windows (dropdown)
- Client Codepage:** Traditional Chinese(950) (dropdown)
- From IP Addr.:** [Empty text box]
- Remote Username:** As guest, As normal user
- User:** [Empty text box]
- Password:** [Empty text box]
- Directory:** [Empty text box]
- Copy to volume:** Volume1 (dropdown)
- Method:** Update only, Synchronize

At the bottom, there are three buttons: "Add", "Cancel", and "Back".

Figure 3-97 Job Add Setting

This function will add a backup job for current logon user. Each job is identified by a JobID.

- **JobID** : This field will be generated by system automatically only when the user submit 'Add'.
- **Owner** : the logon user'd ID.
- **Network type** : User may select from supported network sharing prototols, smb, afp or nfs.
Smb : In general, this is used by Windows clients.
Afp : In general, this is used by MAC clients.
Nfs : In General, this is used by Unix/Linux clients.

There could be more than one protocol supported on client's system can use in backup sync, user can choose one of them for

backup purpose. However, for better compatibility, afp is recommend choice if it is protocol supported on client's system.

- **Client Codepage** : This field can let user to select the proper codepage of source side of client that you are willing to backup from.
- **From IP addr.** : The source host to be backup from. This field may be an IP address or a host name, however, there will be no more format checking of this field with manually input. Thus, user should verify this setting by click on the this link to select a client host. The figure 3-98 is showing after click on “From IP Addr.” With it’s details and format.

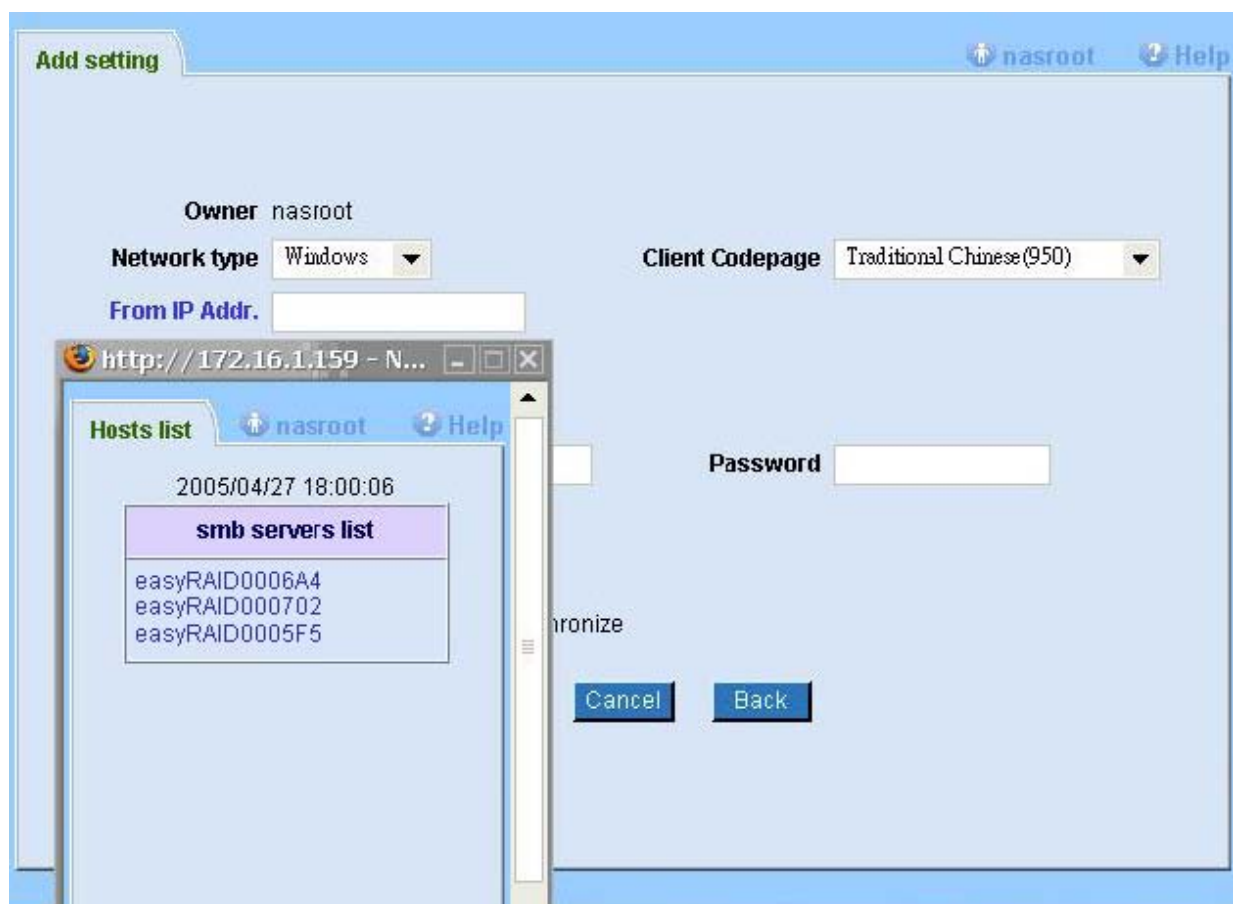


Figure 3-98 Host list

- **Remote username** : There are 2 options for this field, one is 'As guest' and the other one is 'As normal user'. If taking 'As guest' then no more user’s information is required. If taking 'Normal user', the user should also provide correct remote user ID and password to connect through remote host. Note, when network type = nfs, these 2 fields (user and password) will be comitted.
- **Directory** : The source directory name’s content to be backup. In afp/smb, it should be shared folder's name. In nfs, it will be the

export name. If the fields 'Form IP addr.' and 'Remote username' are not empty then user may click this link to select a directory to get shares list. This shares folder list function will check the two fields with valid username and password to get the share folders according to the authority with "Normal user" selected.

- **Copy to volume** : This field is to assign the volume to store the user's backup data. The listed volumes are created by nasroot in 'Add backup volume' page.
- **Method** : In backup sync, it has 2 options to provide user data backup. One is 'Update' and the other one is 'Remove procedure'.

Update: Incrementally to copy newer files/directories, which mean if a file/directory is newer in source area then the update task will renew it to destination area.

Synchronize: It will do the update procedure first then get rid of directories/files differ from destination area after compare with source area.

- **Add** : Add the setting to a new job configuration entry. The JobID will be assigned after confirmed.
- **Cancel** : Reset all fields with empty entry.
- **Back** : No changing will be made and go back to job listing.



If the NAS has joined to a domain or NIS, you must also create a user account 'nassync' in joined domain or NIS for backup-sync function with identical password of 'nassync' user account in NAS system – otherwise the backup-sync function will not work.

3-9-3-2 Job Delete

Job Delete setting is shown in figure 3-99.



Figure 3-99 Job Delete Setting

User may delete a backup job with own by logon user. If logon as nasroot account then all backup jobs are able to be deleted.

- **Job ID** : This is job ID that you want to delete.
- **From IP Addr.** : The host information in this job.
- **Directory** : The share folder name in this job.
- **Ok** : Submit to confirm delete this job.
- **Cancel** : Click this bottom if you have change your mind.

3-9-3-3 Job Modify

Job Modify setting is shown in figure 3-100.

The screenshot shows a 'Modify setting' dialog box with the following fields and values:

- Owner:** nasroot
- ID:** 2
- Network type:** Windows
- Client Codepage:** Traditional Chinese(950)
- From IP Addr.:** 192.168.3.102
- Remote Username:** As guest, As normal user
- Name:** administrator
- Password:** [masked]
- Directory:** test
- Copy to volume:** Volume2
- Method:** Update only, Synchronize

Buttons at the bottom: Update, Cancel, Back.

Figure 3-100 Job Modify Setting

- **Owner** : the logon user'd ID.
- **JobID** : The field is ID of this job.
- **Network type** : User may select from supported network sharing protocols, smb, afp or nfs.
 - Smb** : In general, this is used by Windows clients.
 - Afp** : In general, this is used by MAC clients.
 - Nfs** : In general, this is used by Unix/Linux clients.

There could be more than one protocol supported on client's system can use in backup sync, user can choose one of them for backup purpose. However, for better compatibility, afp is recommend choice if it is protocol supported on client's system.

- **Client Codepage** : This field can let user to select the proper codepage of source side of client that you are willing to backup from.
- **From IP addr.** : The source host to be backup from. This field may be an IP address or a host name, however, there will be no more format checking of this field with manually input. Thus, user should verify this setting by click on the this link to select a client host. The figure 3-98 is showing after click on "From IP Addr." With it's details and format.

- **Remote username** : There are 2 options for this field, one is 'As guest' and the other one is 'As normal user'. If taking 'As guest' then no more user's information is required. If taking 'Normal user', the user should also provide correct remote user ID and password to connect through remote host. Note, when network type = nfs, these 2 fields (user and password) will be omitted.
- **Directory** : The source directory name's content to be backup. In afp/smb, it should be shared folder's name. In nfs, it will be the export name. If the fields 'Form IP addr.' and 'Remote username' are not empty then user may click this link to select a directory to get shares list. This shares folder list function will check the two fields with valid username and password to get the share folders according to the authority with "Normal user" selected.
- **Copy to volume** : This field is to assign the volume to store the user's backup data. The listed volumes are created by nasroot in 'Add backup volume' page.
- **Method** : In backup sync, it has 2 options to provide user data backup. One is 'Update' and the other one is 'Remove procedure'.
 - Update**: Incrementally to copy newer files/directories, which mean if a file/directory is newer in source area then the update task will renew it to destination area.
 - Synchronize**: It will do the update procedure first then get rid of directories/files differ from destination area after compare with source area.
- **Add** : Add the setting to a new job configuration entry. The JobID will be assigned after confirmed.
- **Cancel** : Reset all fields with empty entry.
- **Back** : No changing will be made and go back to job listing.

3-9-3-4 Schedules

Schedule setting is shown in figure 3-101.

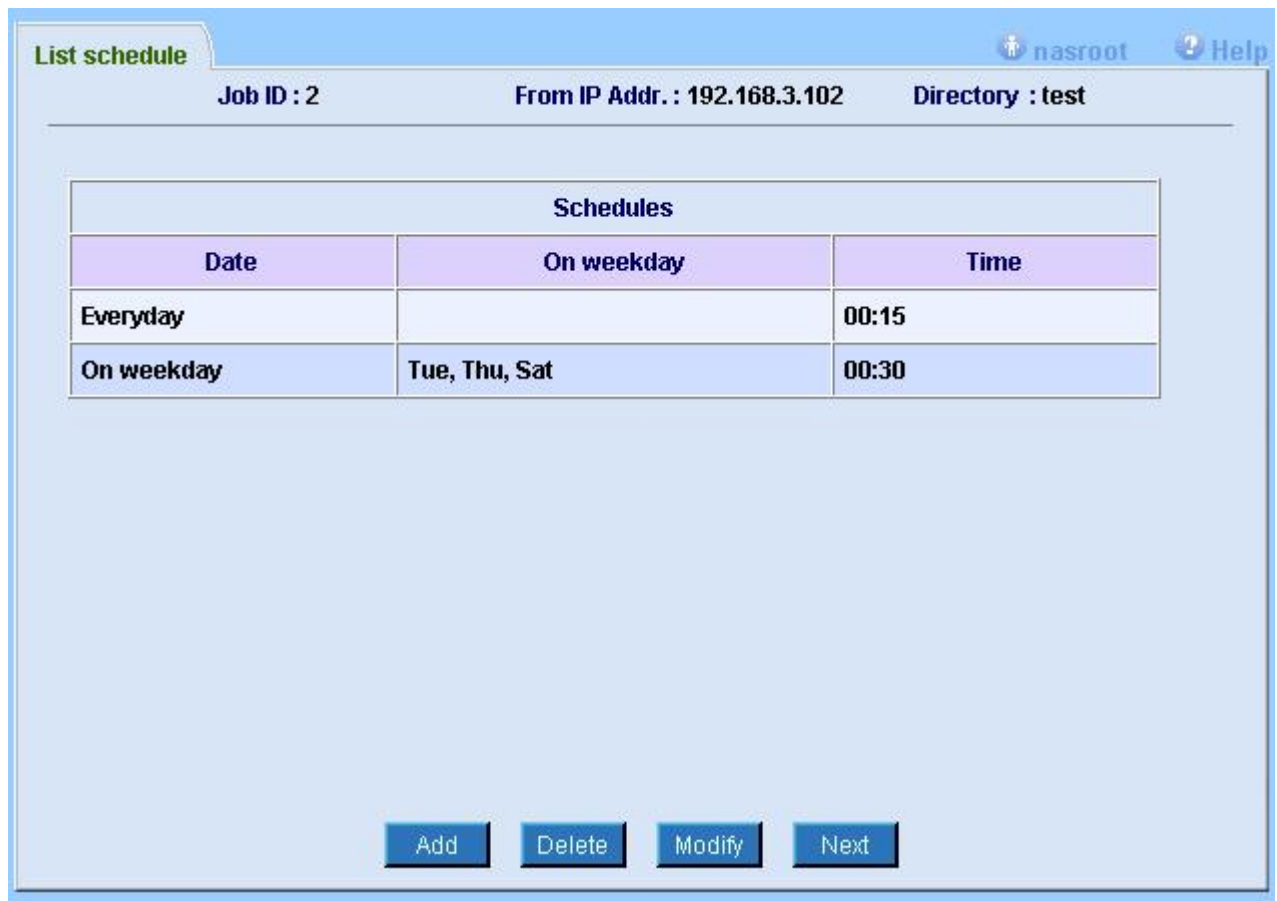


Figure 3-101 Schedule Setting

When a job setting is added, the GUI will then hint the user to configure the schedule. A schedule consists frequency and time, that is when(in a day) and how often a job will be triggered.

Frequency: Currently, we support everyday and weekday for job frequency. If user choose weekday, as a consequence, he/she has to choose weekdays.

Time: Internally, the time of a day is sliced into 288 portions with each 5 minutes, however, the GUI will still show hour/minute for the user to pick a time.

The relationship between Job and schedule is one-to-many, that is, a job configuration could contains more than one schedule, a schedule corresponds to only one Job.

- **Job ID** : This is this job ID that you selected.
- **From IP Addr.** : This is the backup information in this backup job.
- **Directory** : This is the share folder name in this job.
- **Date** : This is the date of backup job schedule.
- **On weekday** : This is the weekday of backup job schedule.
- **Time** : This is the time of backup job schedule.
- **Add** : This function will add a new schedule to this job.
- **Delete** : This function will remote the schedule that you select

from this job.

- **Modify** : This function will modify the schedule that you select.
- **Next** : Go back to job listing.

3-9-3-4-1 Schedules Add

Adding schedule setting is shown in figure 3-102.

The screenshot shows a window titled "Add schedule" with a blue header bar containing "nasroot" and "Help" icons. Below the header, the following information is displayed:

Job ID : 2 **From IP Addr. :** 192.168.3.102 **Directory :** test

Date: Everyday
 On weekday Sun Mon Tue Wed Thu Fri Sat

Time: 0 ▾ 0 ▾

At the bottom, there are three buttons: **OK**, **Cancel**, and **Back**.

Figure 3-102 Adding schedule Setting

This function can add a new schedule for backup job.

- **Job ID** : This is this job ID that you want to add a schedule.
- **From IP Addr.** : This is the backup information in this backup job.
- **Directory** : This is the share folder name in this job.
- **Date** : The schedule setting is supported everyday and weekday for job frequency.
- **Time** : The time of a day is sliced into 288 portions with every 5 minutes, however, the GUI will display hour/minute for the user to select.
- **OK** : Click to confirm add this schedule into this job.
- **Cancel** : Reset all fields to default figure.

- **Back** : No changing made and back to schedule listing.

3-9-3-4-2 Schedule Delete

Schedule Delete setting is shown in figure 3-103.

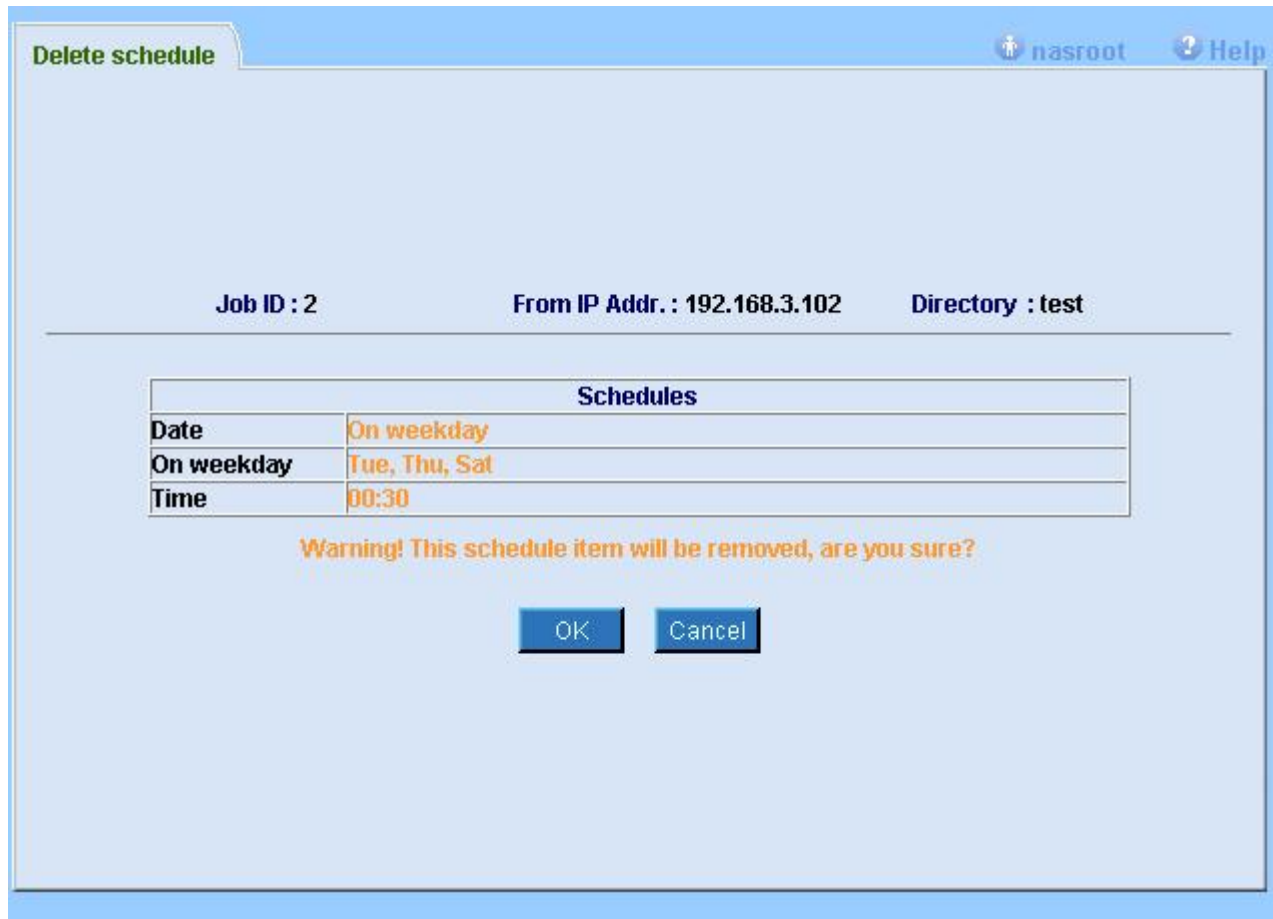


Figure 3-103 Schedule Delete Setting

This function can delete a schedule that has been setup for backup job.

- **Job ID** : This is this job ID that you want to add a schedule.
- **From IP Addr.** : This is the backup information in this backup job.
- **Directory** : This is the share folder name in this job.
- **Ok** : Click to confirm delete this schedule of this job.
- **Cancel** : No changing made and back to schedule listing.

3-9-3-4-3 Schedule Modify

Schedule Modify setting is shown in figure 3-104.



Figure 3-104 Schedules Modify Setting

This function can modify the schedule that you have selected.

- **Job ID** : This is this job ID that you selected.
- **From IP Addr.** : This is the backup information in this backup job.
- **Directory** : This is the share folder name in this job.
- **Date** : The schedule setting is supported everyday and weekday for job frequency.
- **Time** : The time of a day is sliced into 288 portions with every 5 minutes, however, the GUI will display hour/minute for the user to select.
- **OK** : Click to confirm add this schedule into this job.
- **Cancel** : Reset all fields to default figure.
- **Back** : No changing made and back to schedule listing.

3-9-5 Log Setting

Log setting is shown in figure 3-95.

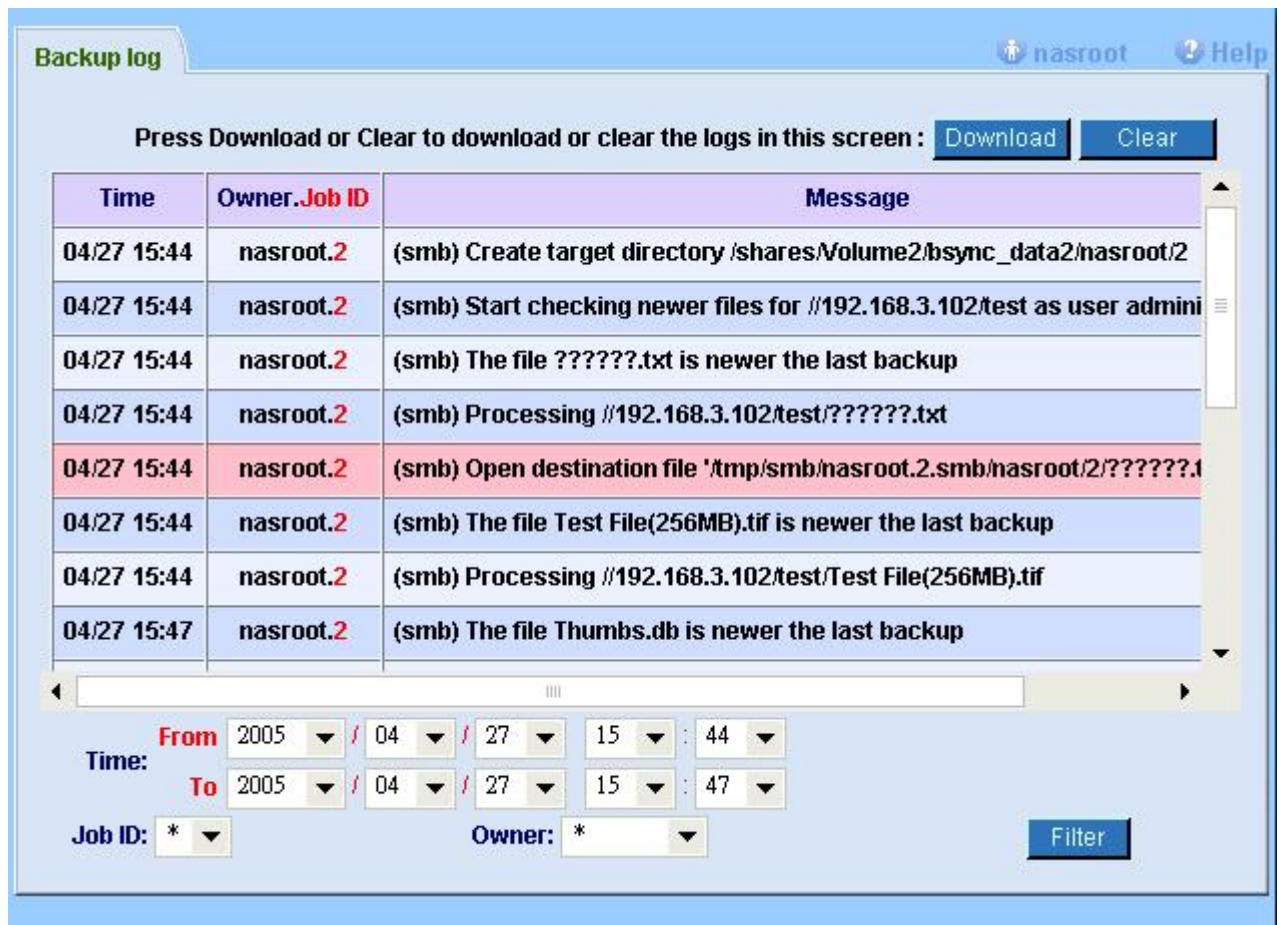


Figure 3-9

Browse operating logs and perform the download or clear action with filters of time range, user, job id.

- **Time** : This field shows the created time of this log.
- **Owner.Job ID** : This field shows the owner of this backup job and the job ID.
- **Message** : This field shows the protocol of this backup job (like smb, afp and nfs) and the states message.
- **Time range selector** : Allows to select time range of logs to view.
- **Job ID** : Allows to select logs of Job ID to view.
- **Owner** : Allows nasroot to select logs of user to view. Not applied to normal users.
- **Filter** : The log screen will be filtered by selected time range, Job ID, Owner.
- **Download** : Download the logs filtered by selected time range, Job ID, Owner.
- **Clear** : Clear the logs filtered by select time range, Job ID, Owner

3-9-6 Jobs backup Setting

Jobs backup setting is shown in figure 3-

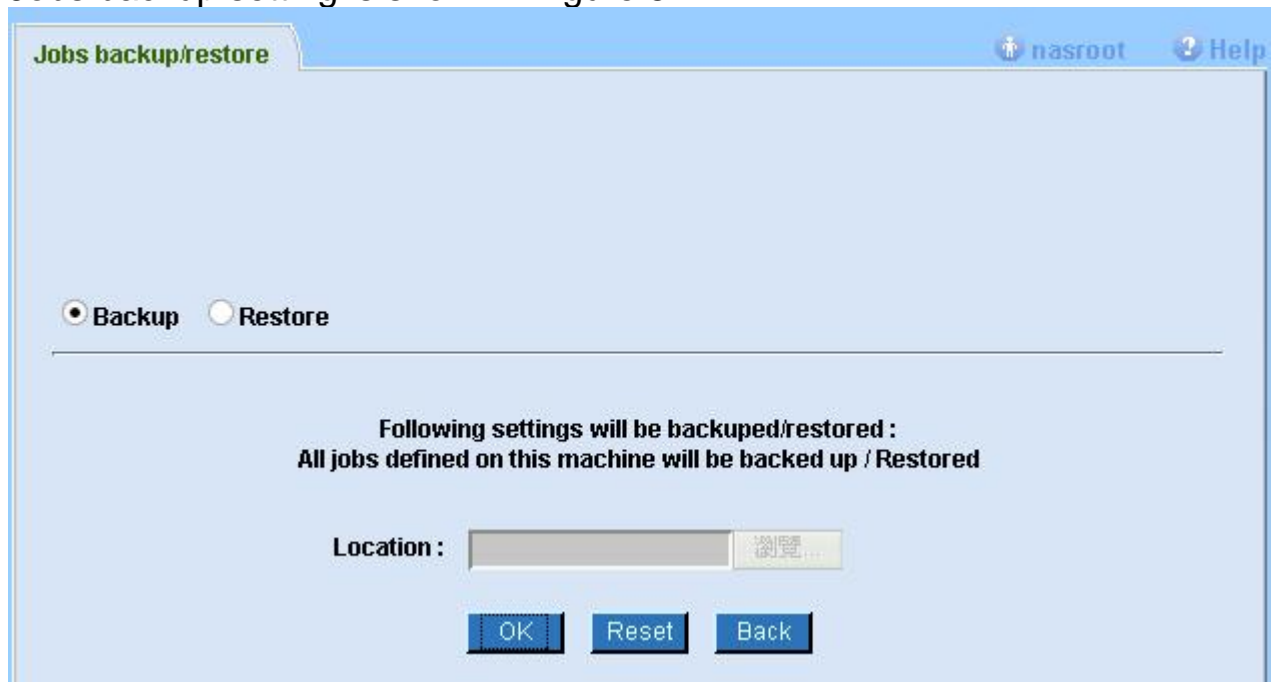


Figure 3-

This function can help you to backup/restore your configuration to/from the file that including job config and schedule config on NAS server of backup sync function.

Backup function:

This function will backup your config file on your NAS server of backup sync to path that specified.

Restore function:

This function will restore a config file from specified path that you backup earlier to NAS server.

- **Backup radio button** : Check this button if you want to download the backup configuration.
- **Restore radio button** : Check this button if you want to restore the backup configuration.
- **Location input file field** : If you check the "Restore" radio button, you need to input a file name with it's path.
- **OK button** : Click on this button while it is ready.
- **Reset button** : Clean up the location and able to re-input.
- **Back button** : No changing made and back to job list page.