Bulk Data Migration Using the Migration Service

Overview

This document explains how to migrate data from a CIFS file server to Nasuni Filer using the Nasuni Filer Migration Service.

Nasuni Filer Migration Service

Nasuni Filer lets you move large numbers of files and directories quickly between connected file servers of various types. The Nasuni Filer Migration Service can migrate data from CIFS sources (such as Windows Server 2008) as well as NFS sources (such as Linux or Unix™). The Migration Service can move entire data sets, or only sets of data that have changed since the last migration, and preserves NTFS permissions and file ownership when used in an Active Directory environment.

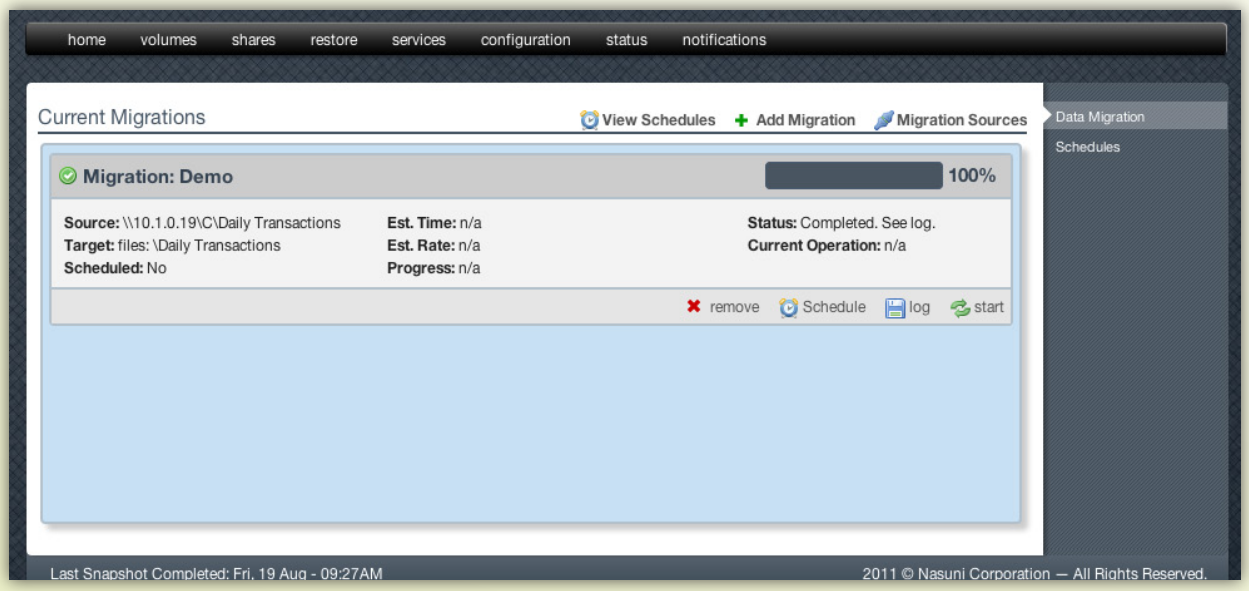
The Migration Service also lets you schedule repeated migration activities, thus allowing you to perform scheduled synchronization for files or directories between source servers and Nasuni Filer.

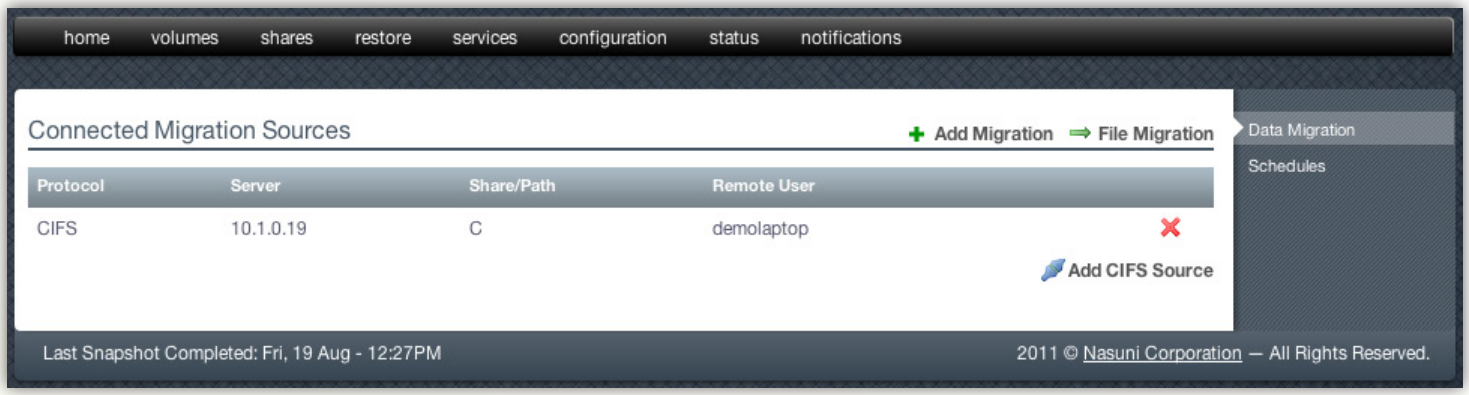
This document focuses on using the Nasuni Filer Migration Service to migrate data from a CIFS file server to the Nasuni Filer preserving the NTFS permissions set on the data across the migration. You should only preserve NTFS permissions across a data migration when both the source file server and Nasuni Filer are joined to the same Active Directory domain.

Performing a Bulk Data Migration

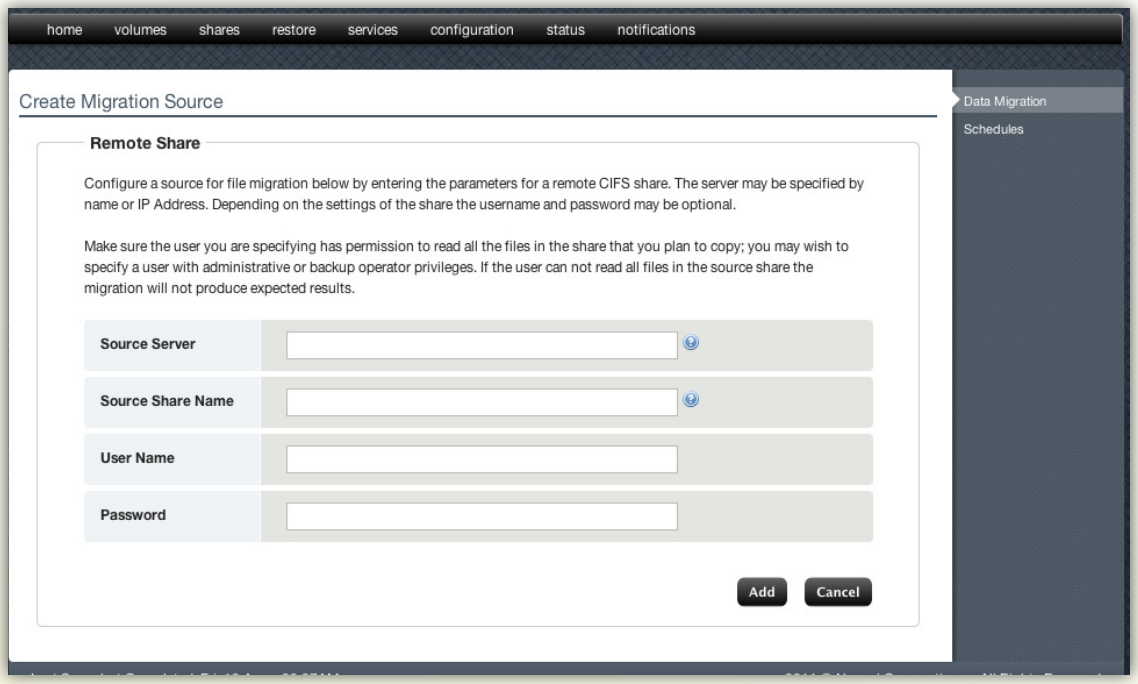
Nasuni Filer must be able to access the data to be migrated. To define a migration source for a CIFS share:

1. Click the **services** page.
2. Select **Data Migration** in the right pane.
3. Select **Migration Sources** in the top right pane.





4. Click **Add CIFS Source**. The following page appears:



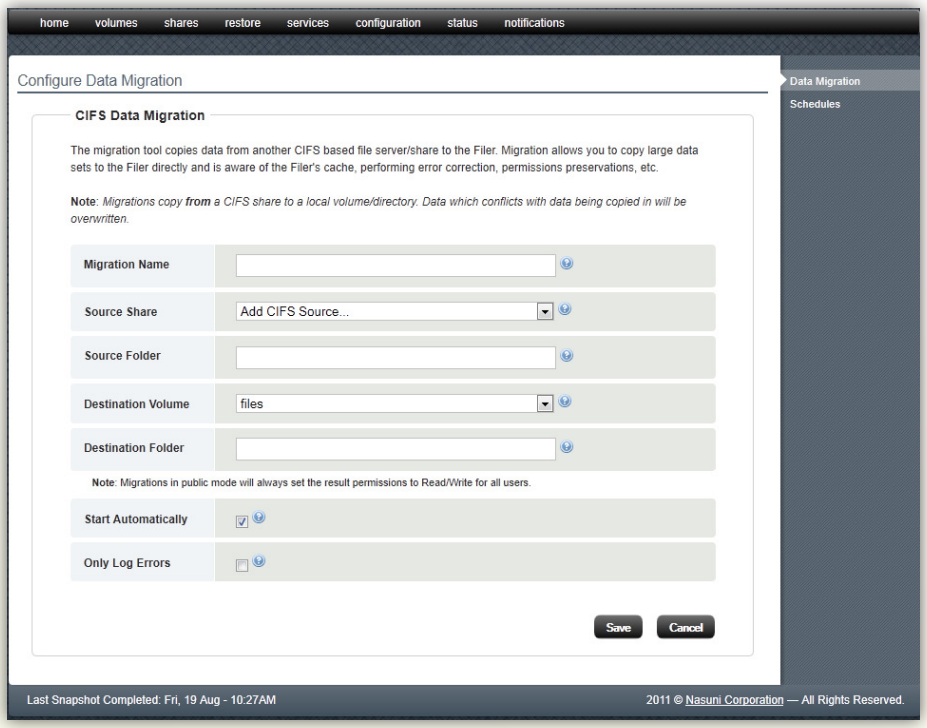
5. Enter the source server (IP address or hostname) in the **Source Server** box.
6. Enter the share name of the share to migrate data from in the **Source Share Name** box.
7. Enter the name of the user Nasuni Filer will access the source share as in the **User Name** box. This user must have permission to read the data and the security information of the data to be migrated. When using an Active Directory user the format is: DOMAIN\user name.
8. Enter the password for the user account in the **Password** box.
9. Click **Add** to add the CIFS migration source.

Once this process is complete, you have a valid migration source from which to migrate data to Nasuni Filer. You can now create your CIFS migration.

Configuring CIFS Data Migration

To configure CIFS data migration:

1. Select **Data Migration** in the right pane.
2. Select **Add Migration** in the top right pane. The following page appears.



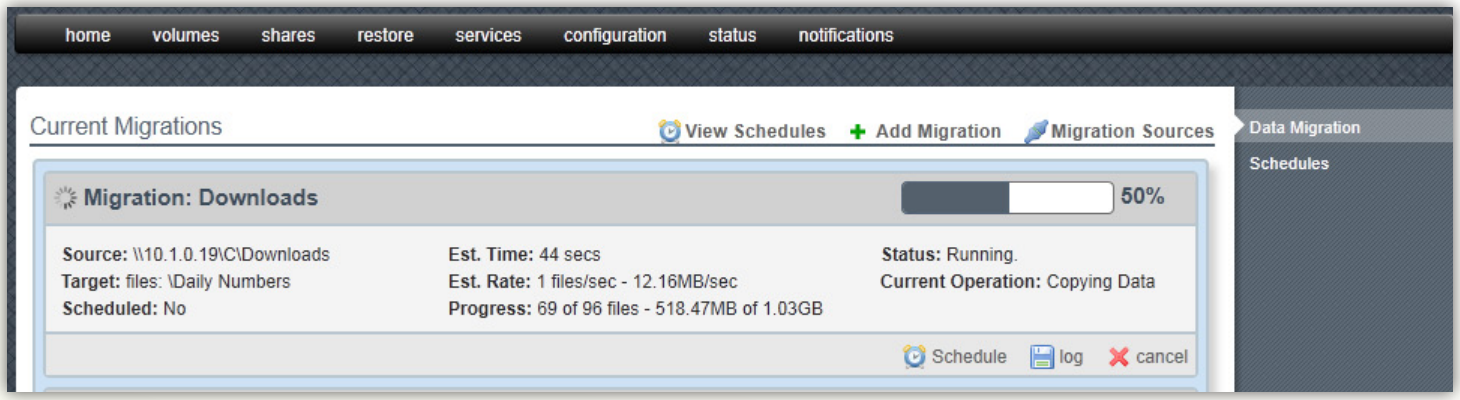
3. Enter a descriptive name for the migration in the **Migration Name** box. This is the name that the migration instance displays when added to the list of defined migration instances. For example, "Finance Folder Migration."
4. Select the CIFS migration source created above in the **Source Share** dropdown.
5. Select the data to be migrated from the CIFS migration source in the **Source Folder** popup.
6. Select the Nasuni Filer volume that is the target for the migration in the **Destination Volume** dropdown.
7. Select a folder in the Nasuni Filer volume to migrate the data to in the **Destination Folder** popup. This step also lets you create a destination folder if necessary.
8. Click the **Copy ACLs** checkbox if the source file server and Nasuni Filer are joined to the same Active Directory domain.

Caution: If you do not check this box, and the File Owner field is left blank, files and directories that are copied to Nasuni Filer will have read/write access by all users.

9. Optionally, enter a file owner in the File Owner box. After a migration is complete, if ACLs are not copied, all files copied will be owned by this user.
10. Optionally, click **Start Automatically** if you want the data migration to start immediately after the migration has been created.
11. Click **Save** to accept your selection.

Understanding the Results of a Migration Run

Once the migration has started, the migration instance displays the following information on the status of the running migration.



- **Source** - the source being used for this migration instance.
- **Target** - the location on Nasuni Filer where the files are being copied.
- **Scheduled** - whether or not the migration instance is controlled by a migration schedule.
- **Est. Time** - time estimate for when the migration will complete. This estimate can be impacted by a variety of factors and continually updates as the migration progresses.
- **Est. Rate** - estimated data transfer rate during the migration.
- **Progress** - number of files that have completed migration as opposed to the total number of files to be migrated. For example, “5000 files out of 12,000 files.
- **Status** - current status of the overall migration run.
- **Current Operation** – activity of the currently running migration instance.

Additional Migration Information

In addition to this information, you can view a migration log that contains detailed information about the state of each file included in the running migration. Click **Log** in the Current Migration page to view the log.

A migration run that completes with a failed status does not always mean that the migration instance failed to move any data. If you encounter a failed migration run, inspect the migration instance data as well as the log file.

Trademarks

UNIX is a registered trademark of The Open Source Group.

Conclusion

Understanding data migration will help you optimize the performance of Nasuni Filer. If you have other questions about the performance of the Nasuni Filer, or how it can benefit your organization, visit www.nasuni.com or contact the Product Evaluation Team at (800) 208-3418.