

## Bulk Data Migration Using Robocopy

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### Overview

This document explains how to use Robocopy, a Microsoft Windows tool, to migrate data from a Windows file server to the Nasuni Filer. Robocopy has been bundled with Windows operating systems since the Vista and Server 2008 versions.

### Using Robocopy to copy data to the Nasuni Filer

Robocopy is a Windows command line tool. To migrate data to the Nasuni Filer using Robocopy, follow the steps below:

1. Identify the data set you want to migrate to the Nasuni Filer.
2. Create or locate a share on the Nasuni Filer to write your data set to.
3. Run `cmd.exe`
4. Run the command below from the source server's command line:  

```
robocopy <source> <Filer share> /copy:datso /mir /fft  
/r:0 /w:0 /secfix /mt:20 /xo /xf thumbs.db *.mp3  
/log+:filename.log /nc /ns /np /ndl /nfl /tee
```

Robocopy switches include the following.

`/copy:datso`: Specifies the file properties to copy:

d: Data

a: Attributes

t: Time stamps

s: NTFS access control list (ACL)

o: Owner information

`/mir`: Mirrors a directory tree

`/fft`: Assumes FAT file times, important when copying data to the Nasuni Filer

`/r:0`: Number of retries on failed copies (default is 1,000,000)

`/w:0`: Wait time between retries (seconds) (default is 30)

`/secfix`: Fixes file security on all files, even skipped ones

`/mt:20`: Creates multi-threaded copies with N threads (default is 20).

`/xo`: Excludes older files

`/xf thumbs.db *.mp3`: Excludes files that match the specified names or paths

`/log+:filename.log`: Writes the status output to the specified log file (appends to the existing log file)

`/nc`: Specifies that file classes are not to be logged

`/ns`: Specifies that file sizes are not to be logged

`/np`: Specifies that the progress not be displayed

`/ndl`: Specifies that directory names are not to be logged



`/nfl`: Specifies that file names are not to be logged  
`/tee`: Writes the status output to the console window, as well as to the log file

NOTE: In some situations, you might experience some failed copies with an "error 5: Access is denied" message. In this case, one workaround is to omit the attribute information.

NOTE: Full details on Robocopy syntax and options are available here:  
<http://technet.microsoft.com/en-us/library/cc733145.aspx>

### **Robocopy and the Nasuni Filer cache**

If the amount of data you are migrating to the Nasuni Filer is larger than your Nasuni Filer cache, Robocopy will completely fill your Nasuni Filer cache during your data migration. When the Nasuni Filer cache is full, Robocopy writes will fail until the Nasuni Filer successfully snapshots recently written data.

### **Conclusion**

Robocopy is an effective tool for migrating data from a Windows file server to the Nasuni Filer. If you have questions about this document, contact Nasuni Technical Support.

### **Contacting Technical Support**

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Technical Support is available 24/7/365 for full production clients.