



Synk 7 User's Guide

Decimus Software, Inc.
<http://decimus.net>
support@decimus.net

| | |
|--|-----------|
| Welcome to Synk! | 4 |
| Basic Synk Concepts | 6 |
| <i>What is Synk?</i> | 6 |
| <i>What isn't Synk?</i> | 6 |
| <i>Scripts</i> | 7 |
| <i>Synk Scripts Work Live</i> | 8 |
| <i>Monitoring Script Status</i> | 9 |
| <i>Script Settings</i> | 11 |
| <i>Specific Item Status</i> | 12 |
| Creating, Organizing, and Deleting Scripts | 14 |
| <i>Creating a New Script</i> | 14 |
| <i>Importing Scripts from Synk 6</i> | 15 |
| <i>Organizing Scripts into Folders</i> | 16 |
| <i>Deleting Scripts or Folders</i> | 17 |
| Locations | 18 |
| <i>Locations Basics</i> | 18 |
| <i>List Locations</i> | 19 |
| <i>N-Way Synchronization [PRO]</i> | 19 |
| <i>Using Locations from Your Mac</i> | 19 |
| <i>Using Locations on Other Macs Using SynkSharing</i> | 19 |
| <i>Using Locations on Other Computers Using File Sharing</i> | 21 |
| <i>Viewing and Editing Location Details</i> | 22 |
| <i>Changing an Already Configured Location</i> | 23 |
| Archiving | 24 |

| | |
|---|-----------|
| <i>Setting Up Archiving</i> | 24 |
| <i>Restoring Files from an Archive</i> | 26 |
| Exclusion | 29 |
| <i>Excluding Specific Items via Settings</i> | 29 |
| <i>Excluding Specific Items from Preview Mode</i> | 30 |
| <i>Excluding Items via Rules [PRO]</i> | 30 |
| Options | 34 |
| <i>Scanning for non-live changes</i> | 34 |
| <i>Automatically Pausing Synchronization</i> | 35 |
| Advanced Settings [PRO] | 36 |
| <i>Customizing allowed slack in modification dates</i> | 36 |
| <i>Extra files in destination (Backups only)</i> | 37 |
| <i>Conflict detection</i> | 37 |
| <i>Attribute handling</i> | 37 |
| Working with Running Scripts | 39 |
| <i>On Mode Interface Parts</i> | 40 |
| <i>Previewing proposed actions</i> | 42 |
| <i>Conflict detection</i> | 44 |

We encourage you while reading to set up a couple of test folders to synchronize and follow along, trying things out as you read about them. Doing this with test folders and extra copies you've made of some files means you don't have to worry about doing something "wrong" as you experiment.

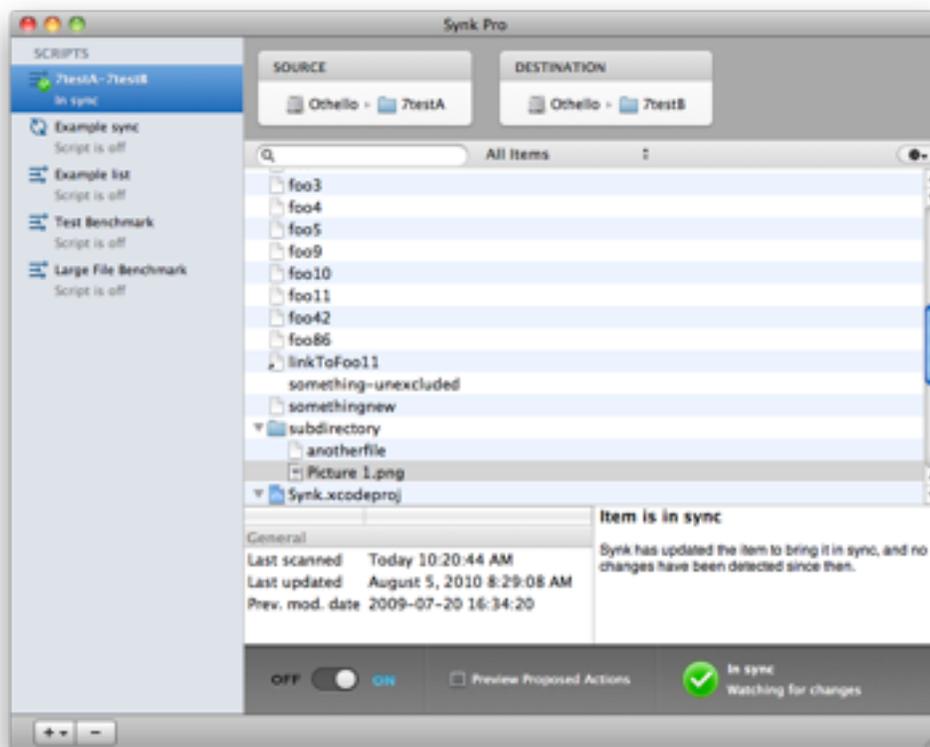
This document was originally written based on a beta (prerelease) Synk version 7.0.0. If you're using a later version, some screenshots or descriptions may differ slightly from what you see on screen. Please let us know if you find any issues with the documentation being significantly out of date!

If images/screenshots seem particularly blurry in Preview, choose Preview > Preferences > PDF and under "Define 100% scale as" choose "1 point equals 1 screen pixel."

Welcome to Synk!

So you've finally bit the bullet and become a "laptop+desktop" computer user, and need to keep your files up-to-date on both machines. Or you've realized that Time Machine backups aren't actually bootable, and want to be able to hit the ground running in the case of a failure, and restore on your own schedule. Maybe you even have a home and work computer that you want to "shuttle" data between using a flash drive.

To get started with Synk, just open it and choose one of the preconfigured script templates. Tweak the settings for your particular locations and needs, turn the script on, and Synk goes to work. Most people should just leave their scripts on all the time, and Synk will efficiently keep your data in sync, live, as it changes.



There are many ways to use Synk, and we're glad you're giving it a try. This User Guide explains some of the basic concepts of how Synk 7 works and get you off the ground.

In addition to this document, there are other resources available to help you.

Onscreen help

Onscreen help contains detailed information about accomplishing specific tasks in Synk. To open help, open Synk and choose Help > Synk Help, or click on a Help button in the application to go straight to a page about the current window.



Synk website

Read the latest news and information about Synk at decimus.net/Synk.

Support website

Find more information about solving problems, and get support by email, at decimus.net/support. If you have any feedback about this documentation or the application itself, this is also how to get in touch with us.

Help tags

If you hold the pointer over an item onscreen for a few seconds, in many cases a help tag will appear with a quick description of the item.

Basic Synk Concepts

This chapter covers the basic concepts involved in using Synk, and gives a quick overview of the application.

What is Synk?

Synk is a *file synchronizer*. It automates the process of taking two folders full of files, deciding which version is the most recent version, and updating the older version of the file to be the same as the newer one. While there are many other features in Synk, they're all in support of this basic compare-and-update functionality.

When a synchronization is happening in only one direction, that's a *backup*. It's the same underlying synchronization mechanism—checking for updated files and copying them to the other side—it's just that only the source of the backup has changed files, and only the destination of the backup receives them.

Copying only changed files is dramatically faster than copying the entire folder again, and more importantly works great in the case where file A is edited in one location and file B is edited in another, so just copying the whole folder in either direction would lose one of those changes. Using Synk, both files get updated everywhere to the latest version, regardless of where it came from.

Automating the synchronization process also means that you don't have to remember what files you've edited where. Synk figures it all out for you and reduces the chance that you'll forget about something and lose data.

What isn't Synk?

Synk is general-purpose and works on the file level, and doesn't try to understand what's *inside* the files, or tell you which files you want to synchronize. There are many, many proprietary file formats, almost always undocumented, quirky, and subject to change at any time. There are the same problems deciding where applications store files and what files are important to them. So as far as Synk is concerned, it'll work on whichever files you ask it to, but doesn't try and guess for you what files you want, and the files are just black boxes that it shuffles around.

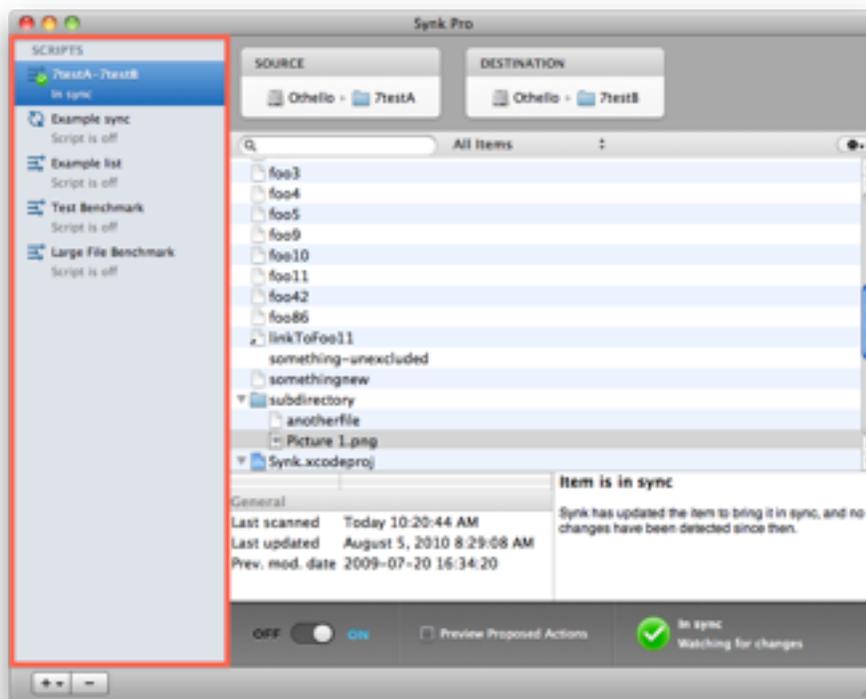
While Synk is great for backups, it doesn't burn CDs or DVDs or anything like that. Synk needs to be able to just write the updated files as it finds them, and those kinds of optical drives don't fit into the workflow that Synk uses. Besides, doing backups to hard drives are by far the most convenient way to work, and let's face it, if it's not convenient, you're probably not going to back up regularly.

Synk also doesn't provide a backup or synchronization location for you, for instance as an online subscription service. We at Decimus strongly believe in only charging you for the services you actually need from us, and think that forcing users into paying a monthly subscription fee for online storage just to subsidize the software itself is a bad practice. We handle the software side of things, and charge for that, so you can use whatever online storage option best suits your needs and is cheapest. This gives you more flexibility, and is cheaper for you in the long run. Online storage is often 10x or more cheaper when purchased directly, rather than through the overhead of a backup reseller.

Scripts

Almost all of Synk's interface involves working with *scripts*, which represent the locations that you want to synchronize, and the options describing how exactly you want it to be done.

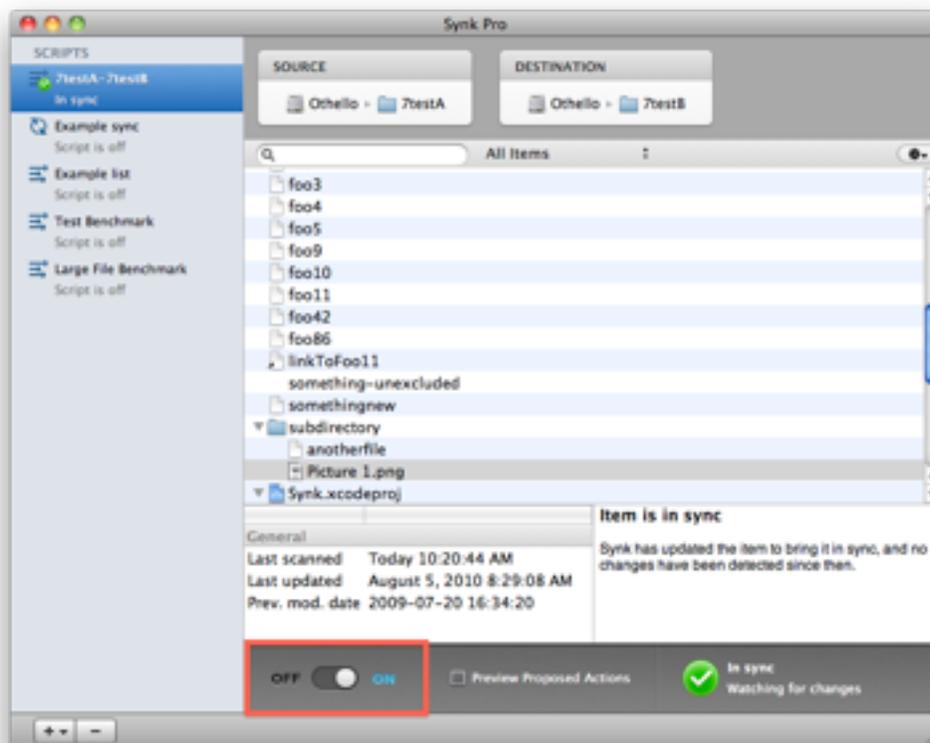
All of your scripts can be found in the left column of Synk's window:



You can create folders to organize your scripts with the “+” button in the lower left, and drag the scripts to reorder them and place them into folders. Scripts can be renamed by double-clicking on their name.

Synk Scripts Work Live

Unlike traditional synchronization tools, Synk scripts aren't things that you run once or on a schedule. A Synk script is simply either off or on. You may toggle between these modes using the switch in the dark gray control bar at the bottom of the window.



When off, you can configure the script how you like, and nothing is actually happening to your data.

While turned on (and Preview mode is off—see below), the script brings your data into sync, and then automatically syncs any future changes to your data when they happen. You don't have to do anything more. As long as the script remains turned on, your computer automatically notifies Synk when it changes your data, which then immediately syncs the changed file as necessary.

For instance, if you had a script set up to synchronize your Documents folder on a desktop and laptop computer, if you saved a slideshow document into the Documents

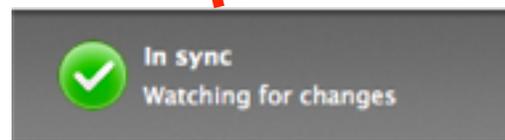
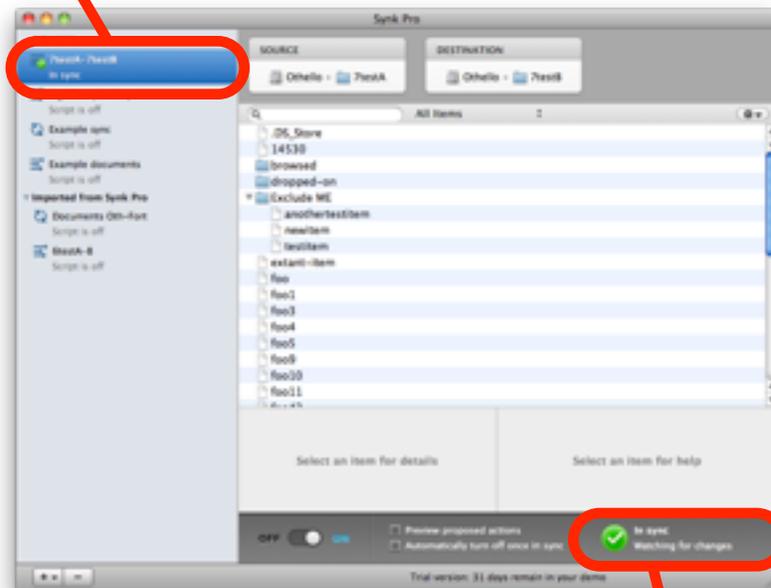
folder on the desktop, it would automatically appear on the laptop moments later. If you then opened it on the laptop, made some changes, and saved it, those changes would automatically be copied back to the desktop.

Working live not only helps prevent conflicts from the different copies of file getting out of sync over time, it also means that your other locations are always ready to go. For example, if you're synchronizing a desktop and a laptop, it means that if you suddenly need to grab your laptop and walk out the door, it's already ready; you don't have to wait to run a time-consuming synchronization before you can leave. Your backups also will always be very up-to-date, and the amount of data you'll lose in a failure is minimized—it's unfortunate to lose a week or a day of work, or even an hour, if your data is only periodically backed up.

Monitoring Script Status

Since you'll generally just set up a script, then turn it on and just leave it that way, you'll want to know how the script is doing. For instance, it's good to see confirmation that everything's in sync, or be aware when something needs your attention.

You can see your script status in three places. Two of these are in the Synk application:



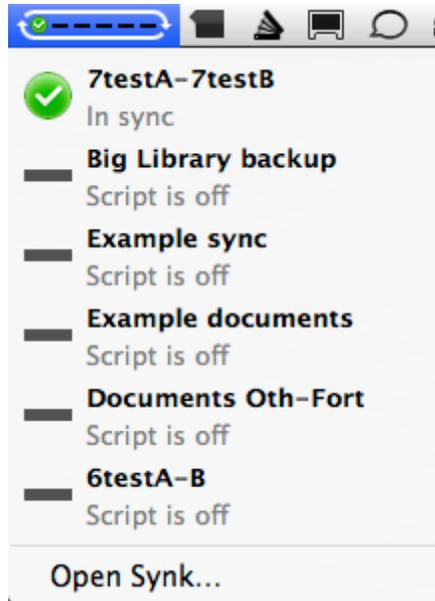
(only visible while script is on)

However, you don't need to keep the Synk application open for your scripts to be on and running, so this information is also available in the menu bar even when Synk is closed:



You can see the overall status of all of your scripts at a glance in this area. They're shown in the same order in which they appear in the regular scripts list.

If you click on the Synk status area in the menu bar, a menu appears with additional details:



Choosing any of the scripts from this menu opens Synk (if necessary) and shows the script you chose.

Script Settings

While a script is turned off, you can use the right side of the Synk window to change the locations and other settings for the script:

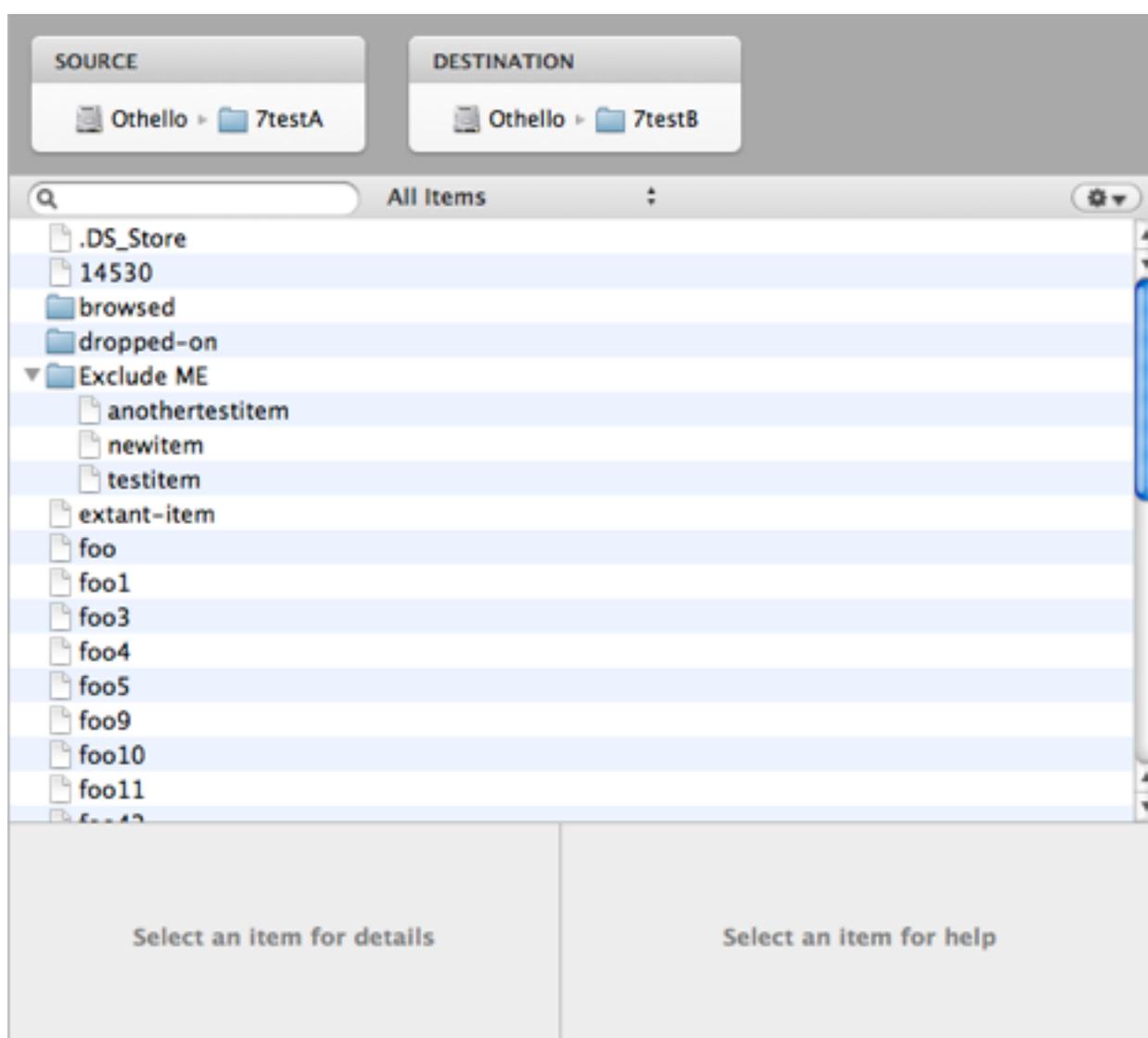


The settings are divided into several sections to allow you to focus on only the settings you're interested in at any given moment, and to explore them at your own pace. Click on the disclosure triangles at the left side of the section headers to expand and collapse each section.

The specific settings available are discussed both in later chapters and in the help files.

Specific Item Status

While a script is turned on, you can see detailed information about the items being synchronized in the main body of the Synk window:



You can view detailed information and help about specific items, as well as resolve conflicts, and approve proposed actions when in preview mode.

More information about using this interface is in later chapters and in the help files.

Creating, Organizing, and Deleting Scripts

This chapter describes how to manage Synk scripts.

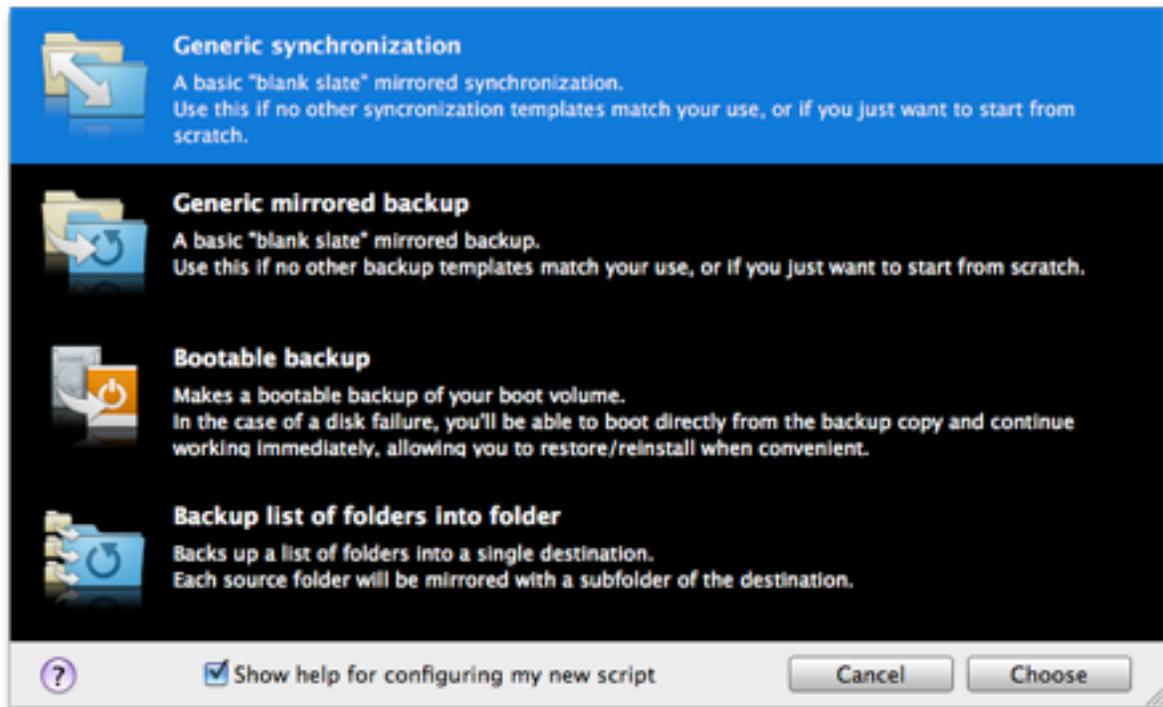
You can create new scripts from a collection of preconfigured script templates. You can also import older scripts you may have had under Synk 6.

Creating a New Script

Synk provides a number of script templates that help you get started in a number of common ways people use Synk. If none of them really match what you want to do, there's also generic backup and synchronization templates you can use to start from a blank slate.

To create a new script:

1. Open Synk by clicking its icon in the Dock, double-clicking its icon in the Finder, or by choosing Open Synk from Synk's status menu in the menu bar.
2. If you just launched Synk for the first time, the script template chooser is automatically shown. Otherwise, choose File > New Script, or click the "+" button in the lower left of the window and choose New Script from its menu.
3. In the script template chooser dialog, select the template that best matches the way you want to use this script. If no more specific script template matches your needs, the "generic" script templates are available to make basic scripts of the different types.



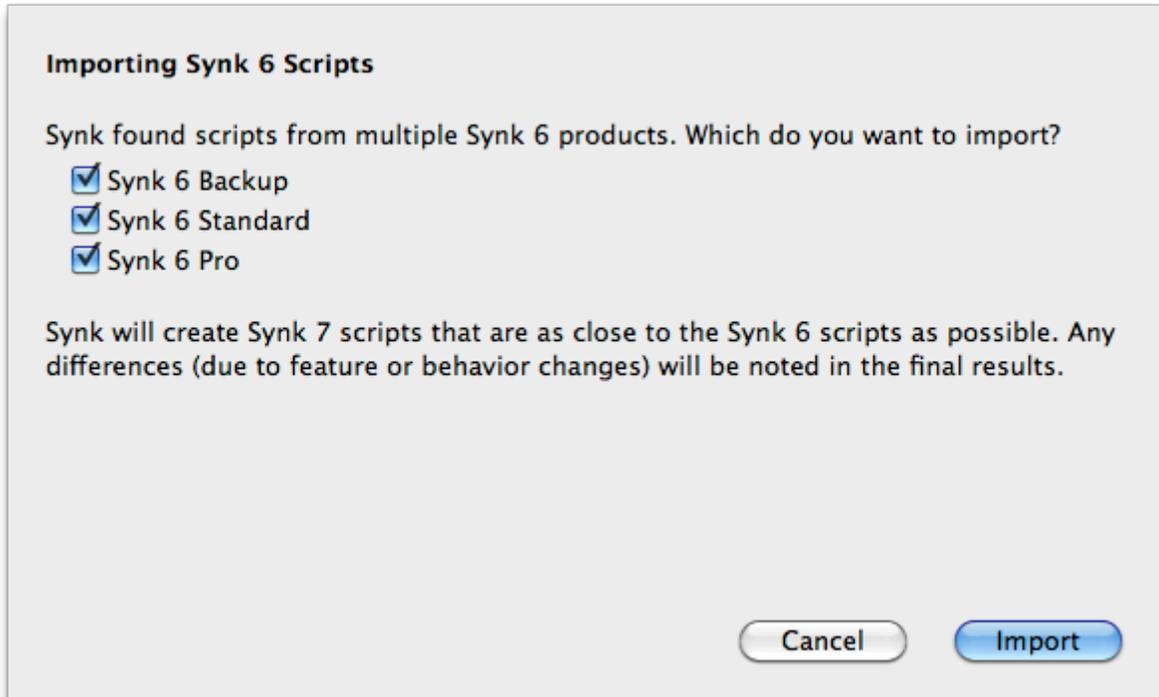
4. After selecting a template, click Choose. The new script appears in the scripts list, and can be immediately named.

Importing Scripts from Synk 6

You can import into Synk 7 most script settings from any scripts you had under Synk 6.

To import scripts from Synk 6:

1. In Synk, choose File > Import Synk 6 Scripts.
2. If you had used more than one version of Synk 6, Synk prompts you to choose the version(s) from which you want to import the scripts. If you don't want to import from all versions of Synk 6 (for instance, if you just played with the Synk 6 Pro demo before settling on Synk 6 Standard), uncheck the boxes next to the products you don't want to import from.



3. Click Import. Synk imports scripts from Synk 6, and shows a log of the results of the import.

Because Synk 7 operates different from Synk 6 in several ways, it's likely that there will be some messages about settings that couldn't be imported. For example, if you used scheduled runs under Synk 6, that doesn't really make sense under Synk 7's live operation.

4. If you are happy with the import results and don't want the old Synk 6 script files anymore, select the "Move old Synk 6 script files to Trash" option at the bottom of the results window.
5. Click Close to end the import process and return to the normal Synk window.

Organizing Scripts into Folders

If you have a lot of scripts, it can be helpful to collect related scripts into folders to make the list easier to manage.

You can create a new folder by clicking the "+" button in the lower left of the Synk window, and choosing New Folder.

Scripts and folders can be rearranged by dragging, and renamed by double-clicking their names.

Deleting Scripts or Folders

If you no longer need a script or folder, you can delete it by selecting it in the script list and clicking the “-” button in the lower-left corner of the window. Deleting a folder also deletes all scripts inside.

Deleting scripts and folders can't be undone, so be sure you really want it to be gone forever before deleting it.

Deleting a script does not affect the data the script was working on. Only the script itself is removed.

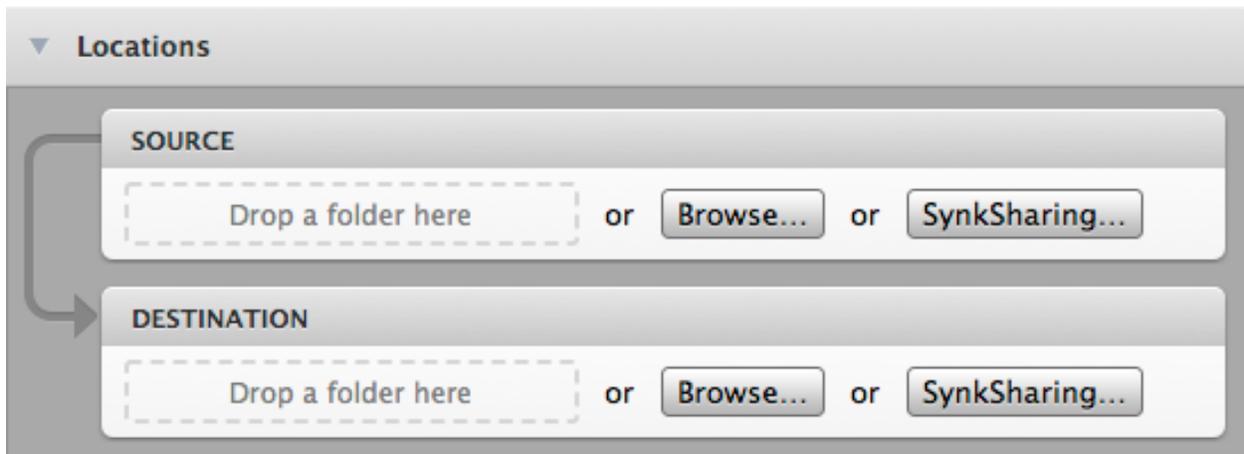
Locations

At a minimum, all scripts need to be configured with the locations you want to synchronize.

Scripts can only be configured while they're turned off. If the script is currently running, select it in the script list and turn it off using the On/Off switch in the dark gray control bar near the bottom of the window.

Locations Basics

The most fundamental setting for any script is the locations it should synchronize. You use the Locations area of the settings to configure these.

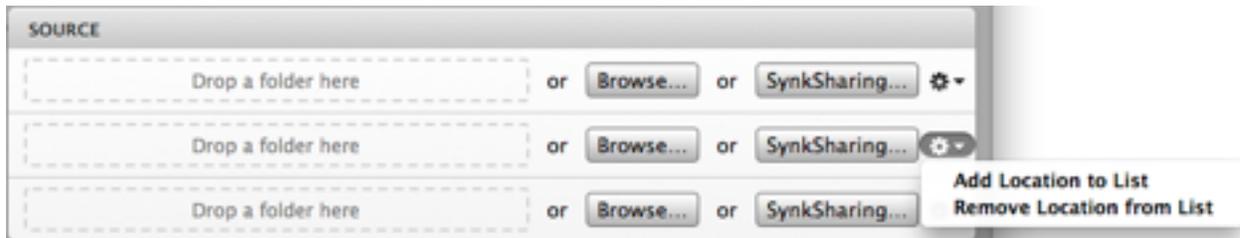


Each box represents one of the locations to be synchronized. For backups, these are titled as Source and Destination, while for regular synchronizations, they are titled along the lines of “Location N.”

The gray arrow between the boxes indicates how files are copied between the locations. As backups only copy from the source to destination, this arrow is one-way for backups, while regular synchronizations have a two-way arrow.

List Locations

If you chose the script template to back up a list of locations into subfolders of the destination, you can add and remove items from the list using the Action (gear) menu on the right side of each item's row:



You can also drag-and-drop folders from the Finder above and below rows to directly insert them into the list.

N-Way Synchronization [PRO]

Synk Pro supports N-way synchronization; that is, synchronizing more than two locations together. (For backups, this means N destinations for the one source.)



Click the “+” button in the top-right of a location box to insert a new location. To remove a location, click the “-” on the location you want to delete.

You can't remove the source of a backup, or drop below two locations. The “-” button does not appear when you can't remove a location.

Using Locations from Your Mac

Most scripts involve at least one location on your computer, either from the internal hard drive or an external USB or Firewire drive.

To define a location as a folder on your computer, do one of the following:

- Drag the folder from the Finder to the “Drop a Folder” area for that location.
- Click the Browse button for the location. Synk shows a standard Open dialog; browse to a folder and click Choose.

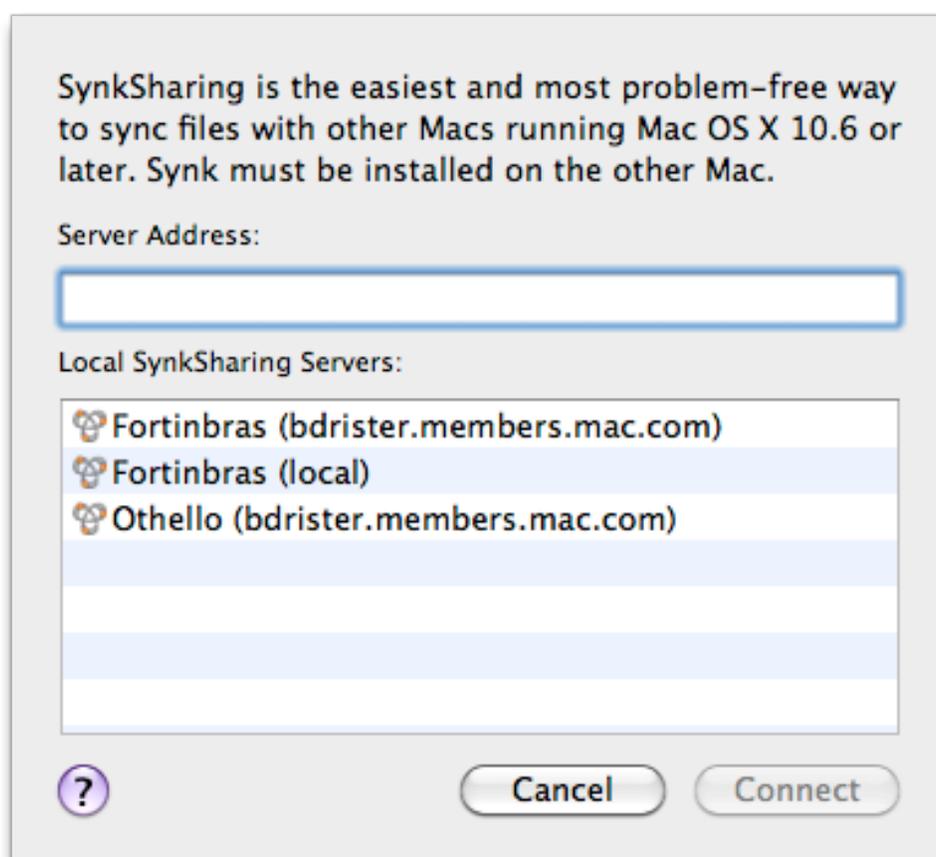
Using Locations on Other Macs Using SynkSharing

If a folder you want to synchronize is on another Mac you control running Mac OS X v10.6 Snow Leopard or later, SynkSharing is the best and easiest way to synchronize with the remote machine.

In this section, the “local” Mac is the one where you’re setting up the Synk script, and the “remote” Mac is the one where the other folder you want to synchronize is located.

To define a location using SynkSharing:

1. Install Synk on the remote Mac, if you haven’t already done so. This doesn’t have to be a fully-licensed copy of Synk—the demo version is fine—but you should launch it at least once to go through the initial setup process.
2. On the local Mac, click the SynkSharing button for the location you want to define. Synk shows the SynkSharing location selection dialog.



3. If the remote Mac is on the same network as the local Mac, or you’ve set up Apple’s Back to My Mac or another wide area Bonjour provider, the remote Mac may show up in the Local SynkSharing Servers list.

Choose the remote Mac from the list if it appears, or enter its network address in the Server Address field. Click Connect.

Synk shows a dialog with a secret passcode, and contacts the remote Mac for authorization.

4. On the remote Mac, a SynkSharing window appears.



5. Enter the passcode shown on the local Mac, a nickname to show in the location list, and select the folder you wish to share in the Shared Location box, as described in the previous section. Click Grant Access.

The location is now set up to connect to the remote location via SynkSharing.

Using Locations on Other Computers Using File Sharing

If the computer on which the folder you wish to synchronize is located is not a Mac, isn't running Mac OS X v10.6 or later, or you don't have administrator privileges on it, you can still synchronize with it using traditional file sharing.

Setting up the server end of file sharing depends on the details of the server, and is beyond the scope of this document. On a Mac, these settings may be found at Apple Menu () > System Preferences > Sharing. Consult the computer's documentation for full details, or check with the server's administrator.

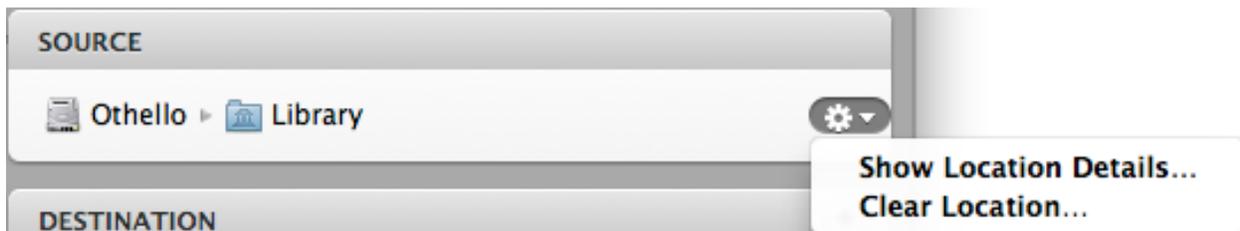
After file sharing is set up on the server, connect to the server by doing one of the following from your local machine (where you're running Synk):

- If the server appears under Servers in a Finder window's sidebar, click on it there and choose the shared volume to log on.
- Otherwise, in the Finder, choose Go > Connect to Server. Enter the server's network address, and click Connect. Follow the system's prompts to log on to the server.

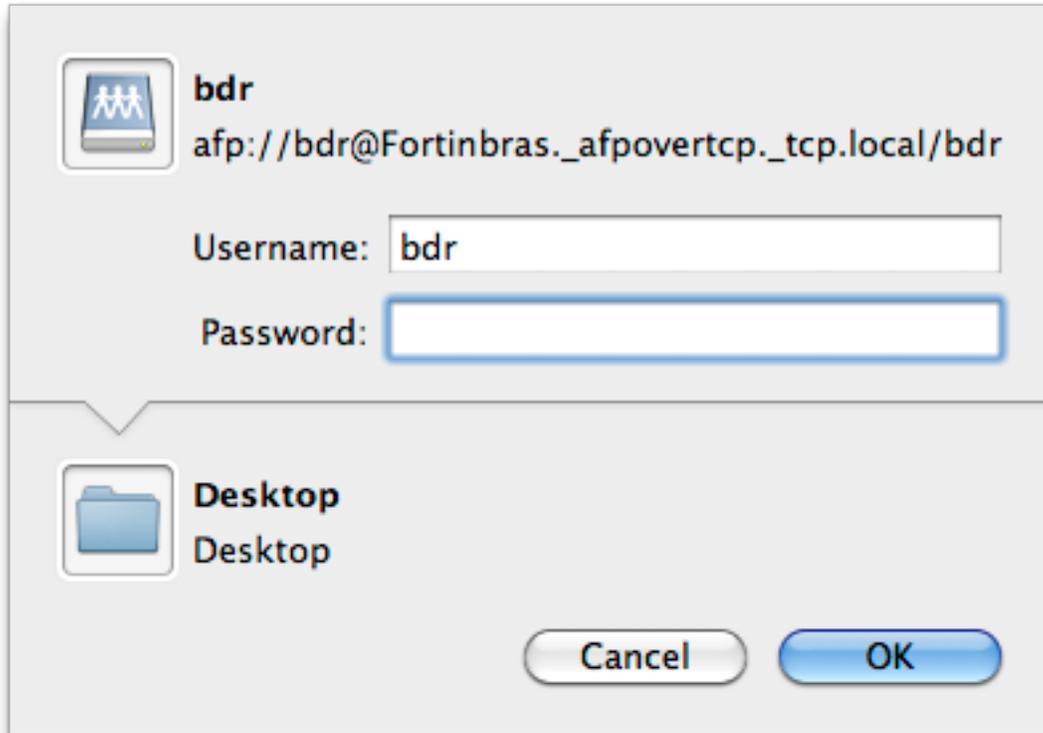
After you have the file sharing volume open in the Finder, you can define a folder on that volume in Synk just as you would a folder on your own computer. Just follow the instructions from earlier, under "Using Locations from Your Computer."

Viewing and Editing Location Details

After a location has been defined, an action menu is available on the right side of the location's row:



If you choose Show Location Details from this menu, Synk opens a dialog box showing how it finds the location:



The form and contents of these details vary depending on the type of location; the screenshot above is from a location set up using AFP file sharing, and shows the network address of the file sharing server, an optional username and password Synk should use to connect to the volume if necessary, and what folder on the volume should be synchronized. Different information and configuration options are shown if the location is a local folder, uses SynkSharing, is located on a disk image, or other situations.

Changing an Already Configured Location

After a location has been configured, you can choose Clear Location from the action menu on the right side of the location's row. This clears the folder previously used for that location, allowing you to set a new folder for the location.

Archiving

Synk's basic operation produces identical copies of the same data in multiple locations. All of the locations are kept current with changes as time goes on.

Sometimes, you're interested in how files *used to be* as well. Nearly everybody has at some point deleted a file they knew they'd never need again, just to end up needing it shortly thereafter. Or perhaps you've made some significant changes to a file, and several days later decided that it was actually better the way it was before.

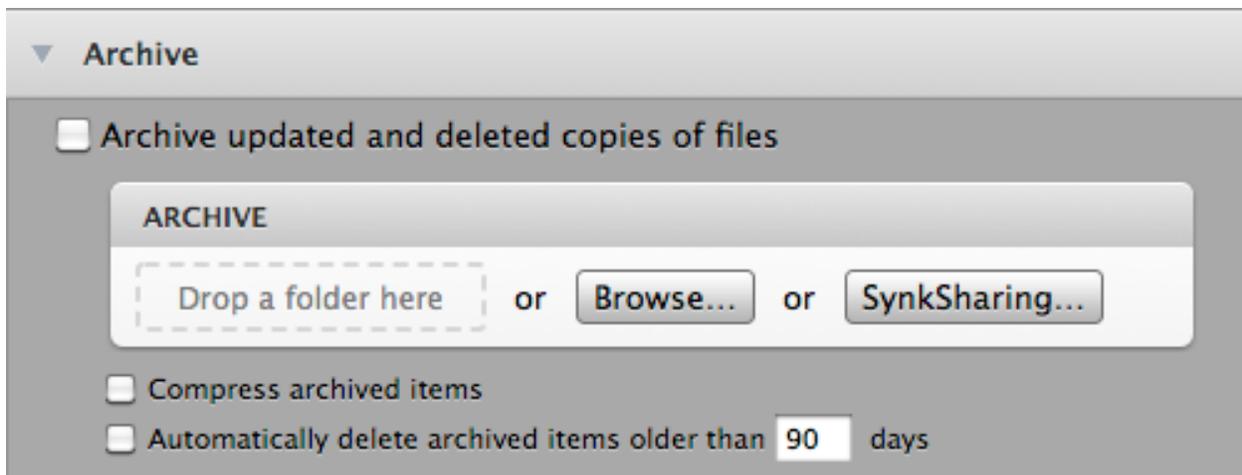
To make backups faster and keep file history in the old days of backing up to tapes, CDs, or DVDs, some backup software would make a full backup somewhere, and then make little incremental backups with only the newer copies of the files that had changed since the last full backup.

Synk takes advantage of the modern age of hard drives to work in the much more convenient opposite direction. Synk keeps a single copy that's always up to date (the actual location being synchronized), and puts the *old* copies of files into a separate *archive* location. This makes it easier to always get at the current version of your data—which is what you want most of the time—while still allowing you to dig back into history when you need it.

Setting Up Archiving

Archiving is configured in the Archive area of the settings.

Scripts can only be configured while they're turned off. If the script is currently running, select it in the script list and turn it off using the On/Off switch in the dark gray control bar near the bottom of the window.



The top checkbox, “Archive updated and deleted copies of files,” is the master control switch for enabling and disabling archiving.

Also, for archiving to work, you’ll need to define the location where you want the archived copies of files to be stored. The location box for the archive works the same as the general synchronization location boxes described in the previous chapter; see that chapter if you need a refresher on configuring a location.

Compressing Archived Items

Synk can optionally compress the files it places into the archive. This slows down the processes of inserting and extracting files from the archive, but takes less disk space in your archive, and less network traffic if your archive is located across a network.

Select the “Compress archived items” checkbox to turn on archive compression. This only affects newly archived copies of files. Any previously archived file copies will remain uncompressed.

Automatically Deleting Old Items

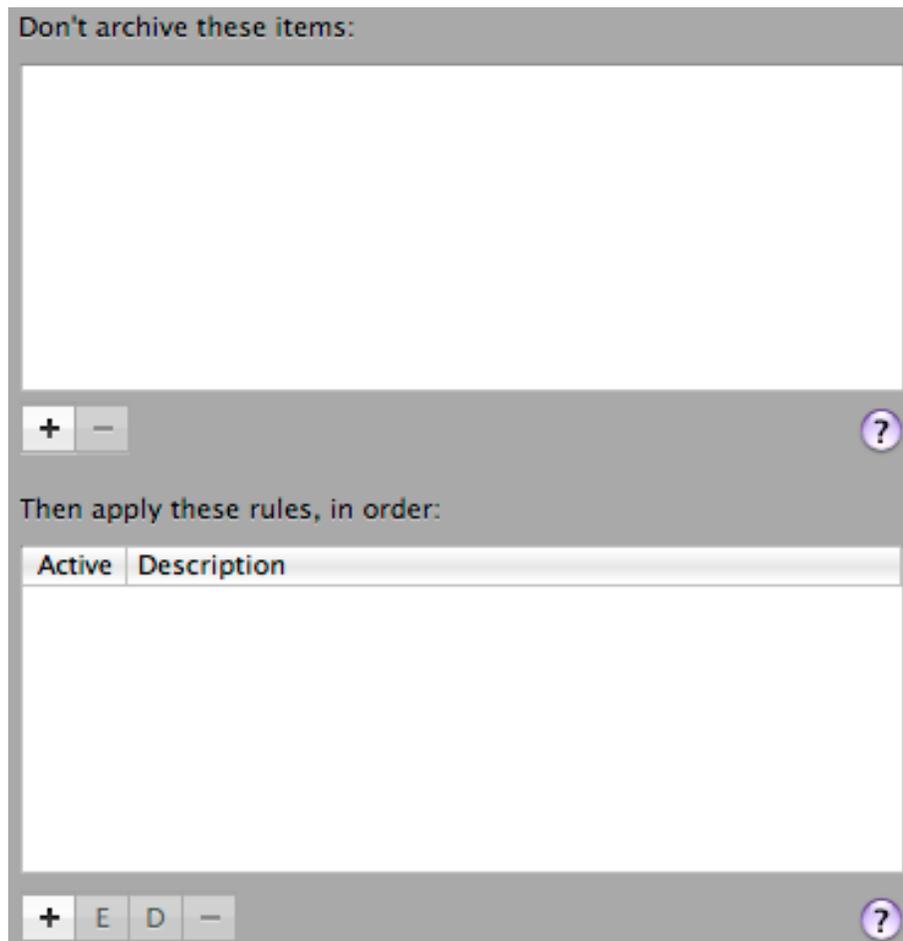
Generally, most people don’t want or need to keep the entire history of their files for all time, and that history can take quite a bit of disk space as well.

Select the “Automatically delete archived items older than N days” checkbox to have Synk do just that. Items deleted from the archive are deleted immediately, not moved to the Trash, so you don’t need to do anything else to reclaim that disk space.

Excluding Items from Archiving [PRO]

Sometimes you have a file that you want to synchronize, but don’t want it archived, often due to its size or how often it changes.

If you're using Synk Pro, you can also configure items to not archive in the Archive settings:



You can use the first area to exclude specific items from archiving, and the second area to exclude items from archiving based on evaluating rules using information about the items, like their name, file size, and type.

The interface to these settings works the same as the corresponding interface for excluding items from synchronization entirely; see the next chapter, Exclusion, for more details.

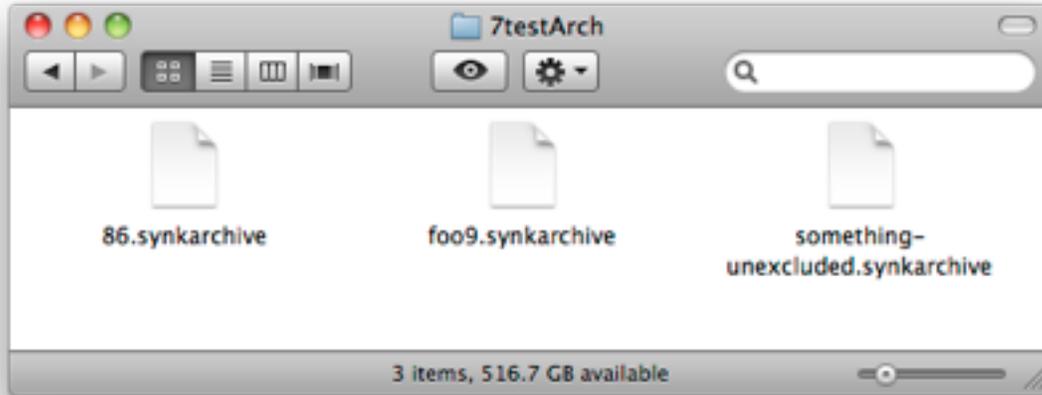
Restoring Files from an Archive

When a time comes that you need an old copy of a file, it's easy to pull it out of the archive.

To restore a file from an archive:

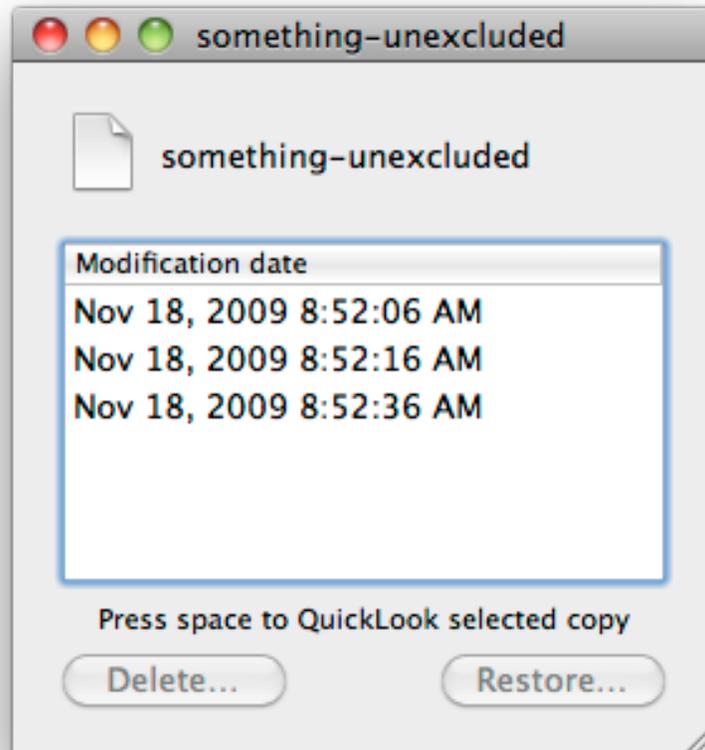
1. In the Finder, navigate to the location of the archive.

2. Navigate within the archive to the location of the file relative to the base of the synchronization. For instance, if you were backing up `~/Documents` and the file you wanted was `~/Documents/Business/Presentations/My Presentation.key`, you would look in `ArchiveFolder/Business/Presentations`.



3. Double-click the `.synkarchive` for the file you want to restore to open a window with a list of the old versions of the file present in the archive. Each version of the file is

shown by the date that version was saved to disk, usually by you when you edited it.



4. Select the version of the file you wish to restore.

For many file types, Mac OS X can provide a Quick Look preview of the contents of the file to help you pick the version that you want, in case you can't remember when you saved it. To view a Quick Look preview for a version of the file, select it from the list and press the space bar on the keyboard. While viewing the Quick Look preview, you can press the up and down arrows on the keyboard to quickly flip between the versions of the file.

5. After selecting a version of the file to restore, click the Restore button. A Save dialog appears, where you can save the restored version of the file to a location of your choosing.

Exclusion

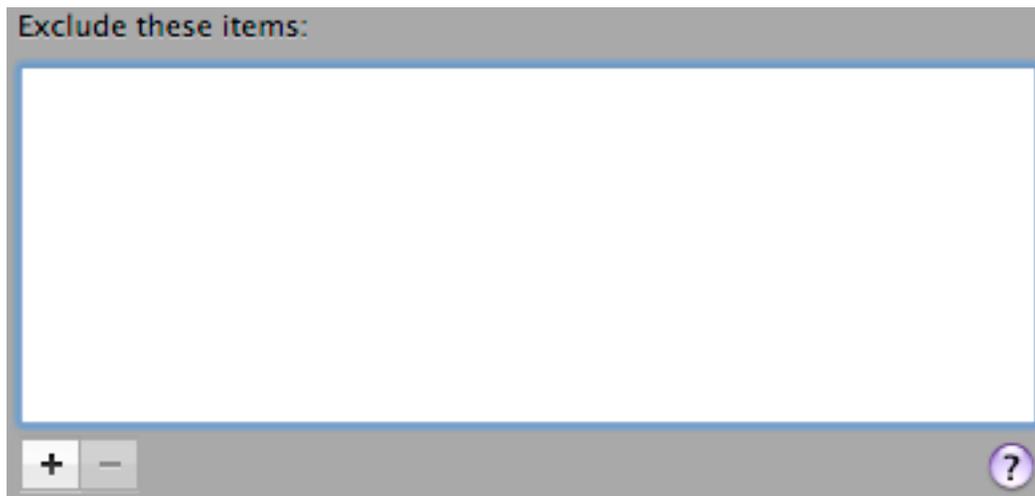
Sometimes you want to synchronize most of a folder, but there's certain items you'd like excluded from the synchronization. For instance, say you were synchronizing your Documents folder between your desktop and laptop, but don't want to synchronize some large video editing files, as they don't fit on the laptop's smaller hard drive.

You can easily exclude items from the synchronization, and Synk Pro even supports advanced exclusion control using sophisticated rules.

Excluding Specific Items via Settings

In the Exclusion area of the settings, you can specify particular items that you want excluded from synchronization.

Scripts can only be configured while they're turned off. If the script is currently running, select it in the script list and turn it off using the On/Off switch in the dark gray control bar near the bottom of the window.

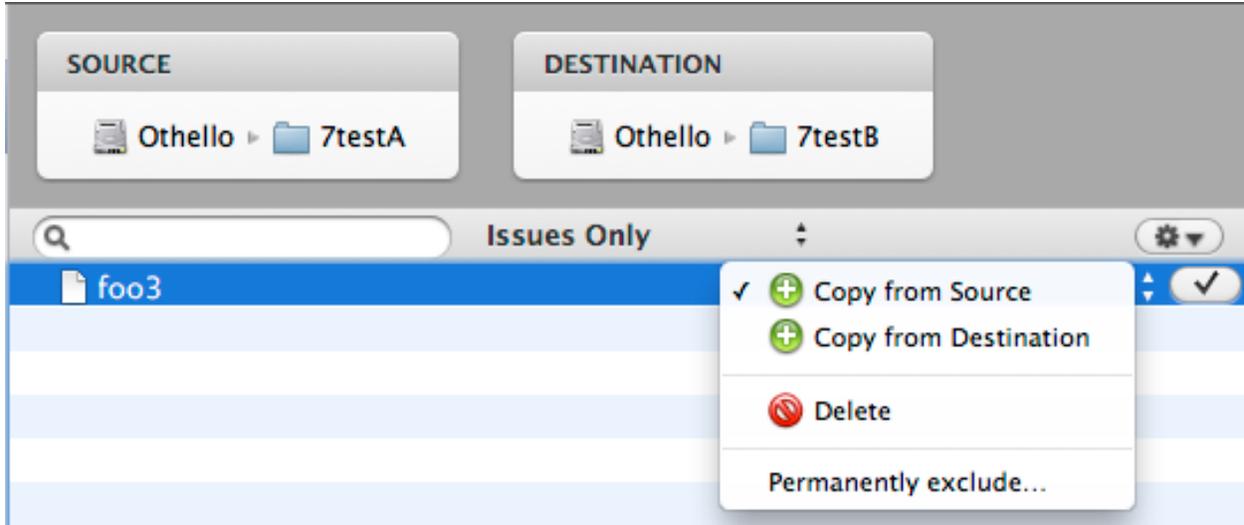


To add a file or folder to the exclusion list, do one of the following:

- Click the “+” button below the list. In the dialog that appears, navigate to and select the item you want to exclude, and click Exclude.
- Drag the item from the Finder and drop it directly into the exclusion list.

Excluding Specific Items from Preview Mode

Sometimes, when you're first setting up a script and using Preview mode, you only realize you want to exclude something when you're looking at Synk requesting to copy it. Synk streamlines this process by allowing you to choose Permanently Exclude from the action menu for items awaiting approval.



Items added to the exclusion list in this way appear in the settings list just like items you added manually via the settings itself.

Excluding Items via Rules [PRO]

Sometimes you want to exclude items based not on a specific list, but on particular *attributes* the items have. For instance, you may want to exclude all files over 1 GB, or all .vmwarevm items, regardless of where they appear.

With Synk Pro, you can express these conditions via a sophisticated rule evaluation system, restricting the synchronization to exactly the files you desire.

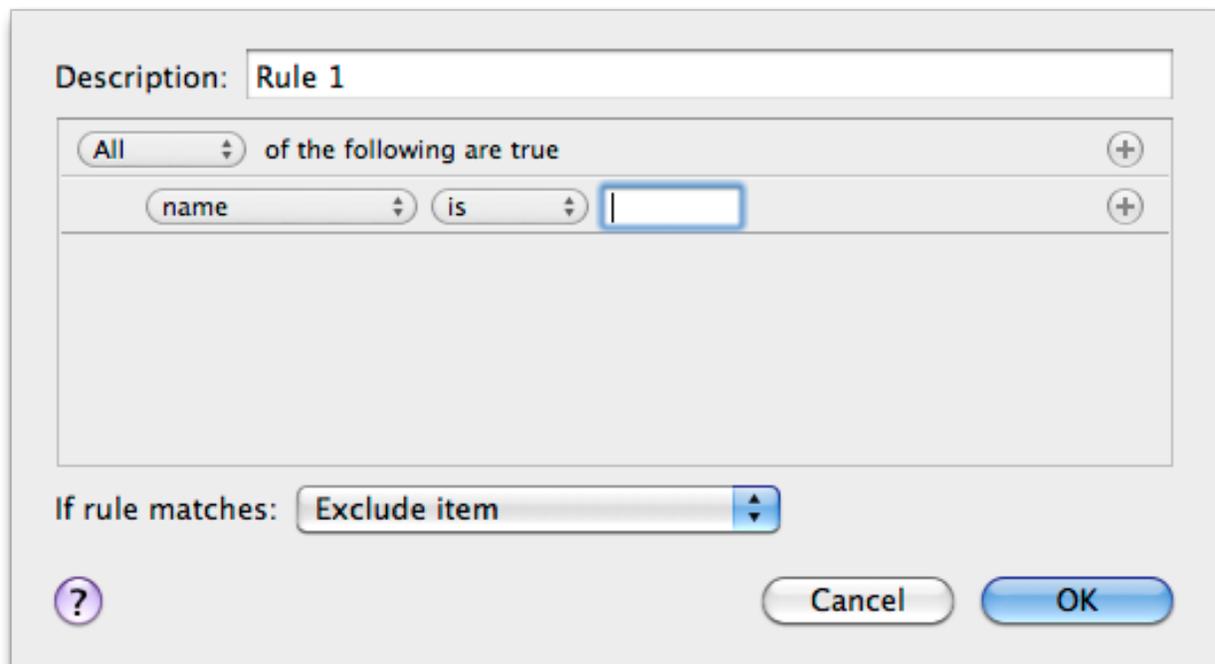


You can use the four buttons below the table to add, edit, duplicate, and delete rules, respectively.

To temporarily disable a rule, deselect the checkbox in the Active column for the rule. Synk behaves as if it isn't present in the list, without you having to actually go so far as to delete it.

Defining a Rule

When you create a new rule, or edit an existing rule, Synk shows the rule editing window:



Use the Description field to customize the description shown in the list of rules, as well as anywhere else Synk needs to identify a rule to you.

The main portion of the window is used to define the conditions in which the rule matches an item and should be applied. This uses the standard Cocoa interface for defining rules and should be fairly familiar. Use the pop-up menus on each row to define the properties of the criterion each row represents, drag rows to rearrange them, and click the “+” and “-” buttons on the right to add and remove rows.

One trick with this control that many people don’t know is that holding down the Option key on your keyboard makes the “+” button change to a “...”, and clicking it then adds a boolean combination row, like the “All/Any/None of the following are true” row that’s part of the default blank rule.

Finally, you use the pop-up menu at the bottom to choose what action is taken if the rule matches. Synk can exclude the matched item from synchronization, delete it from all locations, flag an error on the item, or just stop evaluating rules on the item and process it normally.

A Note on Hierarchy

One occasional source of confusion stems from the fact that there are inherently two different “priorities” that govern how rules interact with each other.

The most obvious, explicit priority system is that rules are applied in the order in which they appear in the list, and whatever rule matches first wins.

However, there’s also a more subtle, implicit ordering that can trip up people making complicated rules, and that’s the relationship between different items in the file hierarchy. If you exclude a folder, that folder is entirely excluded from consideration, and *rules are not evaluated on its contents*. So if you’re trying to make rules which exclude most things but selectively include a few, make sure that you remember not to exclude any parent folders of the items you want to include!

Supported Rule Criterion Types

Synk Pro supports the following criterion types for rule evaluation:

- Name: the name of the item. For example, “My Document.doc”.
- Extension: the extension of a file. For example, “doc”. Note that the period that separates the extension from the rest of the filename is not part of the extension.
- Subpath in location: the path to the item, relative to the base of synchronization. For example, if you’re synchronizing /Users/me/Documents, the subpath in location for /Users/me/Documents/Presentations/Budget Review.key is “Presentations/Budget Review.key”.
- Spotlight comments: the Spotlight comments of the item, as seen in the Finder’s Get Info window.
- Kind: the kind of file system object the item is. Supported kinds are “file,” “folder,” “symlink,” “named pipe,” and anything else is considered “other”.
- Last modified: the content modification date reported by the file system for the item.

- File size: the size, in bytes, of a file. The value of this attribute on anything besides regular files is not defined, so it's a good idea to couple use of this criterion type with a "kind" criterion to make sure it's only trusted on regular files.
- Owner's UID: the numerical UID of the item's POSIX owner, as reported by the file system.
- Group owner's GID: the numerical GID of the item's POSIX group owner, as reported by the file system.
- Finder label: the color label of the item, as set and viewed in the Finder.

Options

The Options area of the settings includes several additional ways to configure how the script is run.

Scripts can only be configured while they're turned off. If the script is currently running, select it in the script list and turn it off using the On/Off switch in the dark gray control bar near the bottom of the window.

Scanning for non-live changes

While the customizing of scanning for non-live changes is a Pro-only feature, the explanation of the situation may be helpful to users of the standard version of Synk as well, to help understand how it works in certain situations.

Synk picks up most changes to your files as they happen. Specifically, any changes to the file that pass through the OS of the computer running Synk, or the computer providing the SynkSharing location, are immediately handled. However, when using network volumes connected to via standard file sharing, the remote system doesn't send these notifications to file sharing clients. (This is one of several improvements that SynkSharing provides over ordinary file sharing.)

To pick up changes that are made on locations that don't provide change notifications, Synk needs to periodically scan through the whole file structure comparing the file modification dates to locate items that have changed behind its back. Synk is reasonably efficient in doing this—it doesn't rescan anything that's been scanned recently in the normal course of events—but it's most efficient to not do this scanning at all unless it's actually needed.

Synk automatically handles enabling periodic scanning when a file sharing volume is set as a script location, but in Synk Pro you can override its decision by selecting a value from the "Scan everything for non-live changes" pop-up menu.

Automatic Handling of Periodic Scanning

In the standard version of Synk, or when Synk Pro is set to "Let Synk decide," periodic scanning is disabled unless a file sharing volume is set as a synchronization peer or backup source, in which case it performs a periodic scan roughly hourly.

Customized Periodic Scanning Intervals [PRO]

In addition to letting Synk decide when to do a full scan, with Synk Pro, you can decide exactly how Synk should perform periodic scans. You can choose between scanning never, hourly, daily, weekly, or monthly, depending on your specific needs.

Automatically Pausing Synchronization

While Synk is designed to be very efficient and has been engineered to cause no noticeable slowdown under typical workloads, some users with slow computers or networks or intensive workloads may wish to give up some of the benefits of live synchronization to reduce the amount of work going on at particular critical times.

Rather than making you manually turn Synk on and off, Synk offers several settings to automatically pause synchronization in common situations.

Pausing while the system is in use

If you select the “Don’t synchronize while I’m using the computer” option, the script works much like a screensaver, waiting for you to quit using your computer for a bit before doing any work, then automatically stopping again when you return.

Pausing at particular times of day

If you have an intensive, but unattended, workload on your machine or network, so that you don’t want Synk working during certain times even when you’re not using the machine, you can use the “Don’t synchronize between X and Y” option. For instance, you could set this to the duration of your workday to suspend operation during that time, while still allowing everything to work normally at night.

Pausing while particular applications are running [PRO]

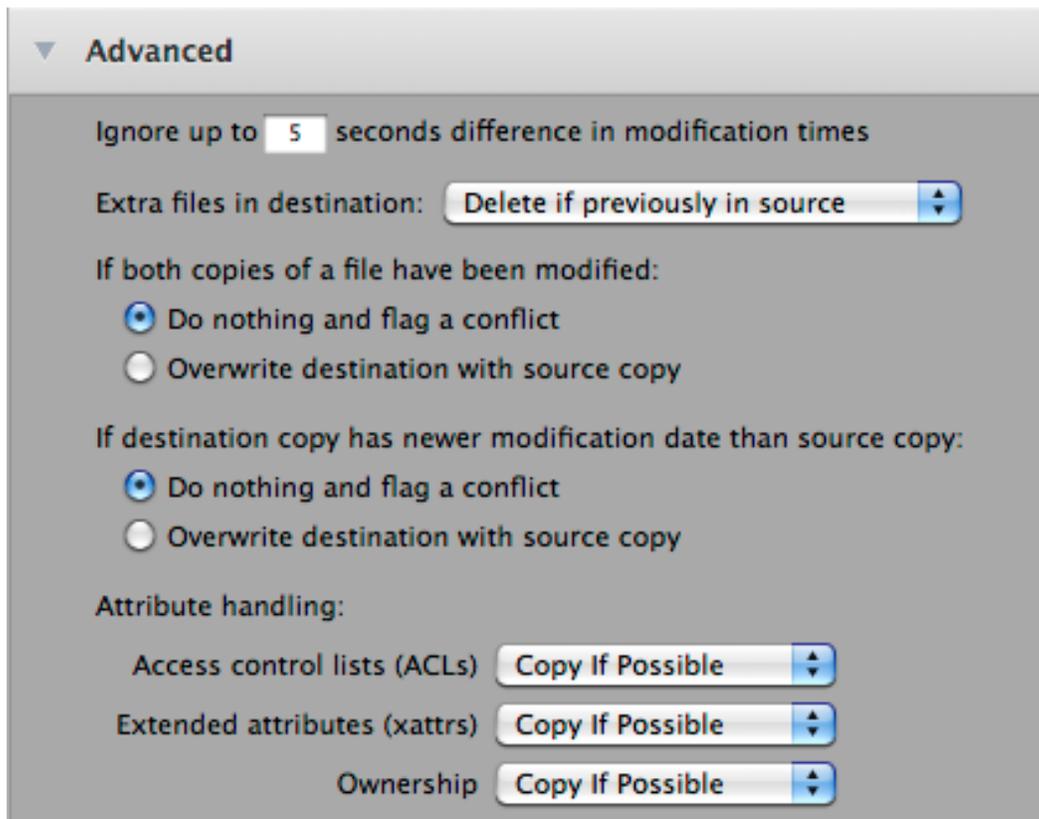
In some cases, you may know that a particular application is very sensitive to extra disk or network use, or is just indicative that you’re going to be heavily using the system. Many professional audio/video applications could fall into this category.

With Synk Pro, you can have Synk automatically pause whenever one of these applications are running, using the “Don’t synchronize while any of these applications are running” option. Just select the checkbox to turn on the option and click the “+” button to add an application to the list.

Advanced Settings [PRO]

In addition to the Pro-only settings found in other areas, Synk Pro also has a special Advanced area of the settings containing more sophisticated controls not present in the standard version of Synk.

Scripts can only be configured while they're turned off. If the script is currently running, select it in the script list and turn it off using the On/Off switch in the dark gray control bar near the bottom of the window.



Customizing allowed slack in modification dates

It's quite common for different file systems to have a different amount of resolution in how they store file modification dates. Modern sophisticated file systems typically store

modification dates down to a small fraction of a second (though exactly what fraction may vary), while older and more primitive file systems may only store it down to the nearest second or worse. This makes it unreliable to try to compare modification dates precisely, so Synk instead treats any dates that are within a certain number of seconds difference as identical.

By default, Synk treats dates within 5 seconds of each other as identical, but with Synk Pro, you can change this if you have special needs to work with your particular combination of systems.

Extra files in destination (Backups only)

When making a backup, sometimes Synk encounters files on a destination that don't have a counterpart in the source.

Synk keeps a catalog of the files that it's aware of and has seen in the source, and by default, if it had previously seen an extra file in the source, it assumes that it was deleted in the source and propagates that by deleting the copy in the destination.

Using the "Extra files in destination" option, you can also change this behavior to ignore any extra files and leave them in place in the destination, or to always delete any extra files found on the destination regardless of whether they've previously been seen in the source.

Conflict detection

By default, Synk flags a conflict and request input from you in several cases where it's unclear what action should be taken or in which copying the most recently modified file could result in data loss.

Synk Pro provides the option in the Advanced settings to disable these safeguards if you're sure that that's what you want to do.

Before using these options to make errors go away, note that this is in many ways like taking the batteries out of a smoke detector that keeps going off. It's possible that they're false alarms and just an artifact of some issue with (for instance) a faulty file sharing implementation, but you'll want to really be sure of that before you start taking away the safety net!

Attribute handling

Mac OS X supports a fairly rich set of metadata and permissions data, and in some cases you may not be able to preserve it on remote systems. This can happen because a system fundamentally doesn't support a given technology, or for security reasons, like a remote system not giving you privileges to set particular attributes.

In most cases, that's not a particularly big problem, as metadata is generally nonessential, and sending data to a server with intentionally varying permissions info is quite rare and only happens to fairly sophisticated users. As a result, Synk by default handles these types of attributes on a "best effort" basis, but with Synk Pro, you can alternatively choose to make them mandatory in a copy or ignored entirely.

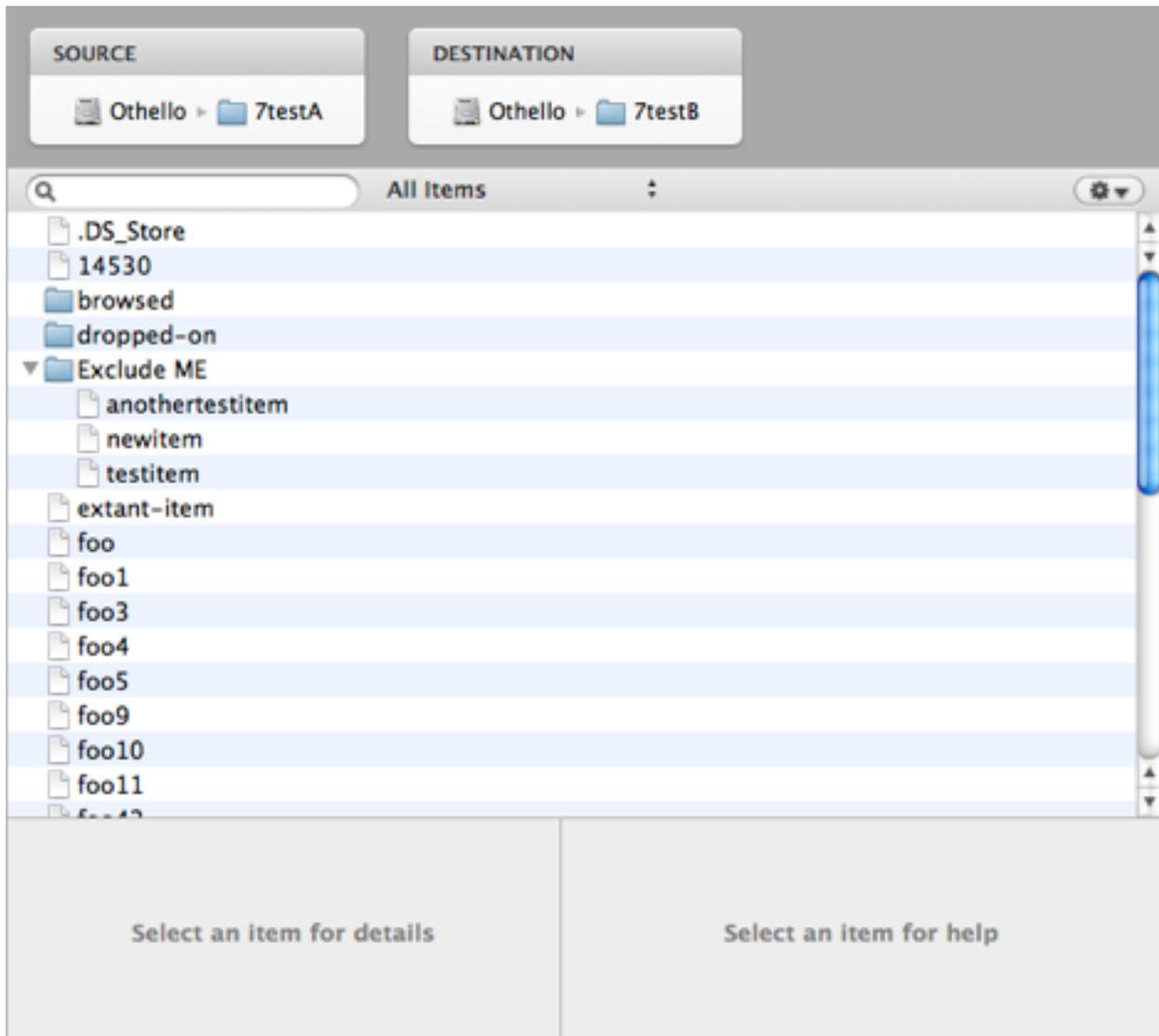
Each attribute type (ACLs, xattrs, and ownership) can have one of three policies:

- **Must Copy**: The attribute is always read from the source and written to the destination. If either of these operations fails, the copy is terminated with an error.
- **Copy If Possible** (default): Synk tries to read the attribute from the source and write it to the destination. If reading the attribute fails, Synk makes up a reasonable default value for the attribute. If writing the attribute fails, Synk ignores the error and moves on.
- **Ignore**: Synk will neither read nor write the attribute.

Working with Running Scripts

When a script is running, the main content of the Synk window changes to show detailed information about the status of the synchronization and the specific items being synchronized.

On Mode Interface Parts



Location reminders

The top area serves as a reminder of the locations being synchronized. If you don't need this reminder and want extra space for the file list, you can collapse it by dragging its bottom edge up to the top.

Filter bar

Use the filter bar, just above the main file list, to configure the file list and see exactly the items you're interested in viewing. Since large backups and synchronizations can contain well over a million items, and you probably don't have time to look at more than a couple hundred even on more moderately-sized locations, this can be extremely useful.

When you're looking for a specific item, entering text in the search field shows only items with the search text in the name, so you can filter down to a specific item very quickly.

Use the pop-up menu to the right of the search field to choose the overall classes of files you want to be shown in the list.

- **Issues Only:** Shows only the items that require your attention in some way, like errors, items awaiting your approval, and conflicts. This is the default setting, and generally a good place to leave it.
- **Issues and Activity:** Shows items requiring your attention, but also shows any items on which Synk is currently either scanning or performing some action. This is nice for those people who like to watch detailed progress info fly by, but as Synk works pretty quickly and is parallelized for high performance, if you want to interact with anything it's easier to use Issues Only.
- **All Items:** Shows everything in the locations, even items that don't have any current activity or need for attention. Best combined with the search field to narrow down the large number of items. Helpful for confirming for your peace of mind when an item was last scanned and updated.

On the right side of the filter bar is an action pop-up menu where you can perform several actions:

- **Approve All:** Used in previewing proposed actions (see below)
- **Scan Selected Item:** Requests that Synk rescan the selected item in the file list, checking its status in the different locations and determining if any action is necessary to bring it into sync
- **Scan Everything Now:** Requests that Synk rescan all of the items again

File list

The file list is the focus of the interface for running scripts, and shows a filtered view of the items that are in the locations. It's a merged list that contains the combined contents of all of the locations in one place.

Details area

When you select an item in the file list, detailed info about it appears in the details area on the left below the file list.

| General | |
|-------------------|---------------------|
| Last scanned | Today 5:01:37 PM |
| Last updated | Today 4:18:21 PM |
| Source | |
| Kind | regular file |
| Mod. date | 2010-06-22 17:01:36 |
| File size (bytes) | 0 |
| Destination | |
| Kind | regular file |
| Mod. date | 2010-06-22 15:48:57 |
| File size (bytes) | 0 |

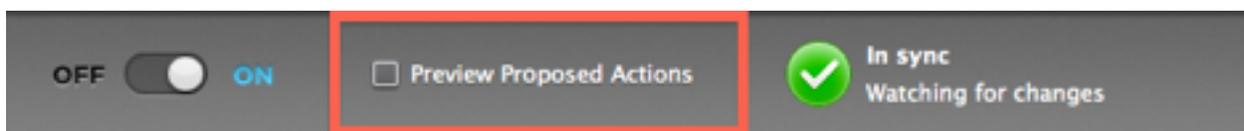
The exact information available varies depending on the state and history of the item, but can contain both general information about the synchronization state of the item in general, as well as information about the specific copies of the item in the different location.

Item help area

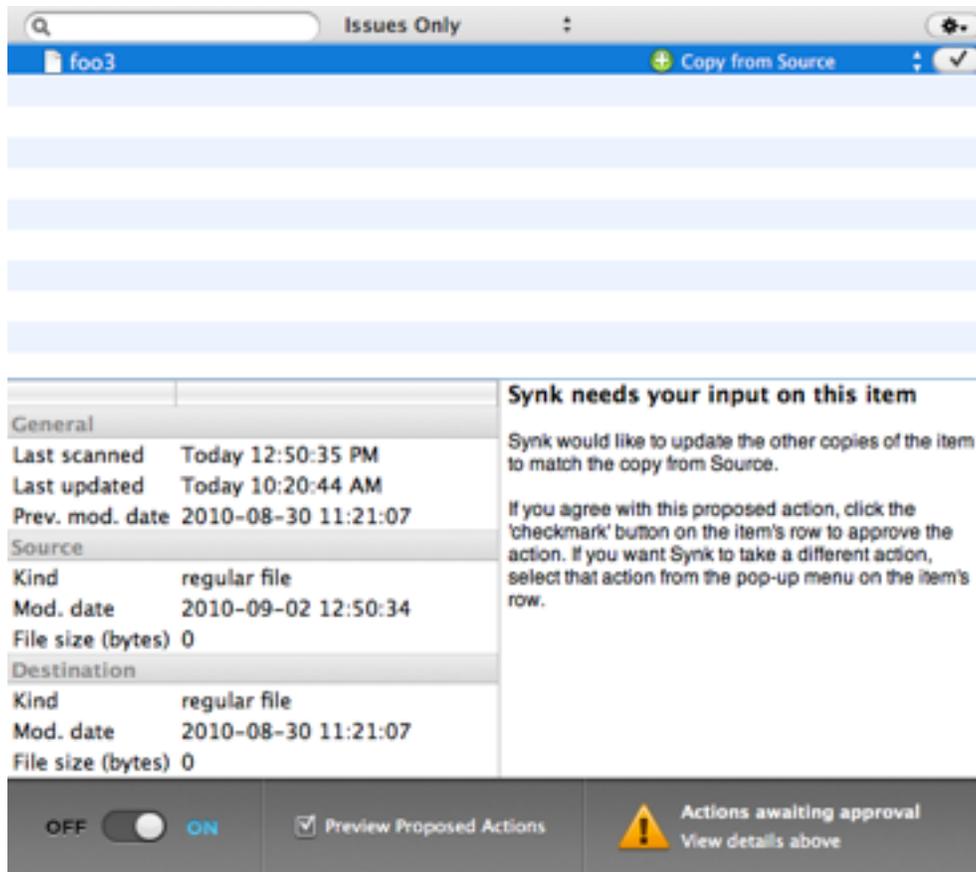
When you select an item in the file list, an explanation of its status appears in the help area on the right below the file list. Like the details area, the exact contents varies depending on what the status of the item is.

Previewing proposed actions

Particularly when you've just set up a script, or anytime you're unsure about what Synk is going to want to change in your locations, you can select the Preview Proposed Actions checkbox in the dark gray control bar at the bottom of the Synk window.



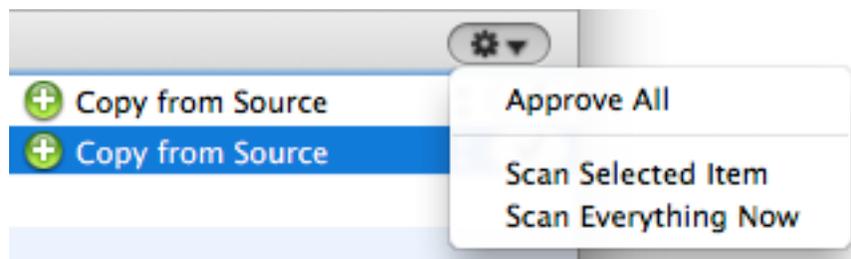
While this option is selected, Synk won't make any changes to the contents of your locations without your approval. When Synk has found a change it would like to make, the script's status changes to "Actions awaiting approval," and the proposed actions appear in the file list for the script.



Selecting one of the files in the list shows details about the item and its various copies in the left detail pane, and a description of the situation and what your options are in the right help pane.

If you agree with the proposed action, click the “checkmark” button on the item’s row to approve the action. If you want Synk to take a different action, select that action from the pop-up menu on the item’s row.

If you scan all of the files shown and agree with all of their actions, you can approve them all at once by choosing Approve All from the Action (gear) menu on the right side of the filter bar.

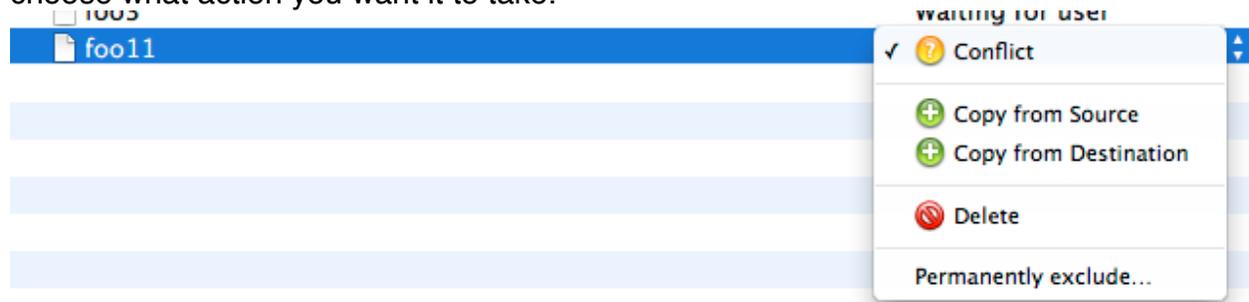


Conflict detection

There are certain situations in which the state of the files means that it's unclear what action Synk should take, or in which simply copying the version with the most recent modification date could result in data loss:

- When a file has been modified in more than one location since the last sync
- When a file has been modified in one location and deleted from another (synchronization only)
- When a file is new, but there are (new) copies in more than one location which have different modification dates (synchronization only)
- When the copy of a file in the destination has a newer modification date than the copy in the source (backup only)

By default, when Synk detects one of these conflicts, it flags it in the file list so you can choose what action you want it to take.



To resolve a conflict, examine the item details to decide on an action, then choose it from the action pop-up menu for the item. Click the checkmark button to its right to confirm the choice and have Synk start executing the action.

To resolve all conflicts in the list at once a particular way, use the Action (gear) menu on the right side of the filter bar, and choose your intended action from the Resolve All Conflicts choices.

