

SyncBreeze

File Synchronization



User Manual

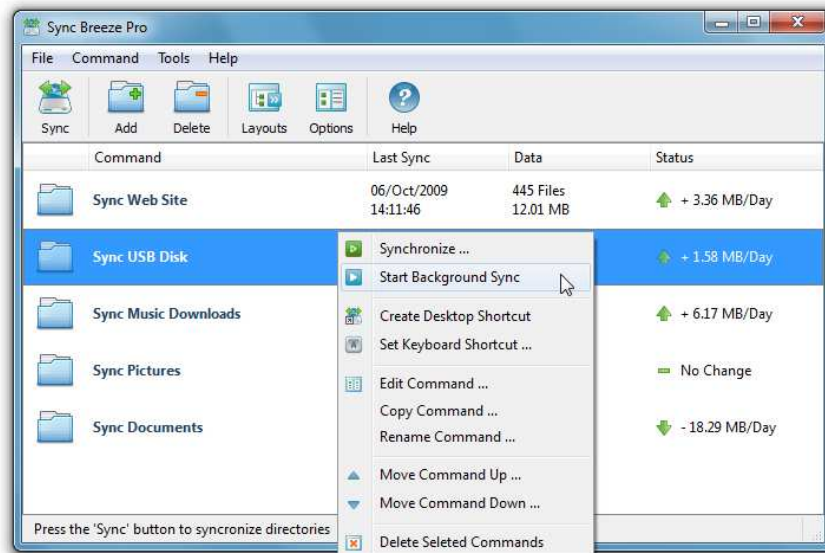
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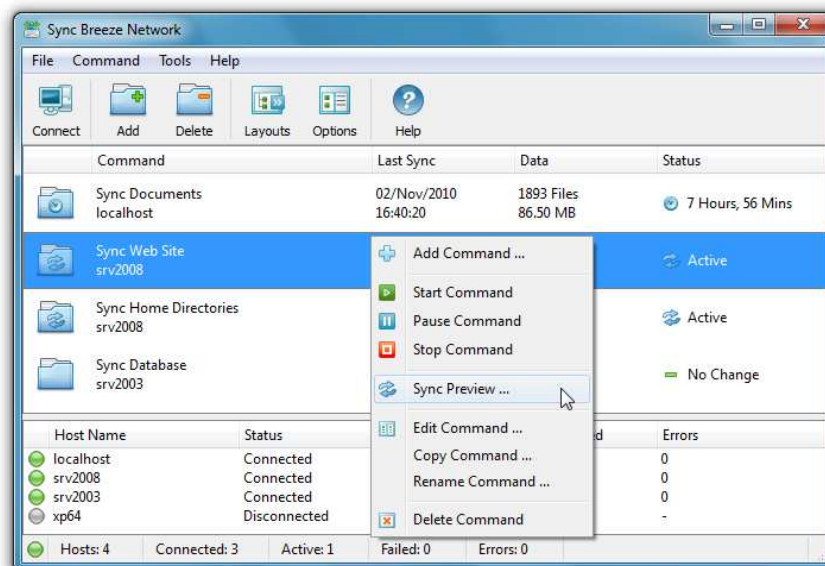
Flexense Ltd.
www.flexense.com
www.syncbreeze.com

Product Overview

SyncBreeze is a powerful, easy-to-use and fast file synchronization solution allowing one to synchronize files between disks, directories, network shares and NAS storage devices. Users are provided with four different product versions – freeware, pro, ultimate and server – designed for home users, power users, IT professionals and enterprises respectively.



SyncBreeze provides multiple one-way and two-way file synchronization modes, periodic file synchronization, compressed file synchronization, background file synchronization, real-time file synchronization, an option to synchronize specific types of files, user-selectable GUI layouts and allows one to define multiple customizable file synchronization commands making it very simple to synchronize numerous directories, disks or NAS storage devices.



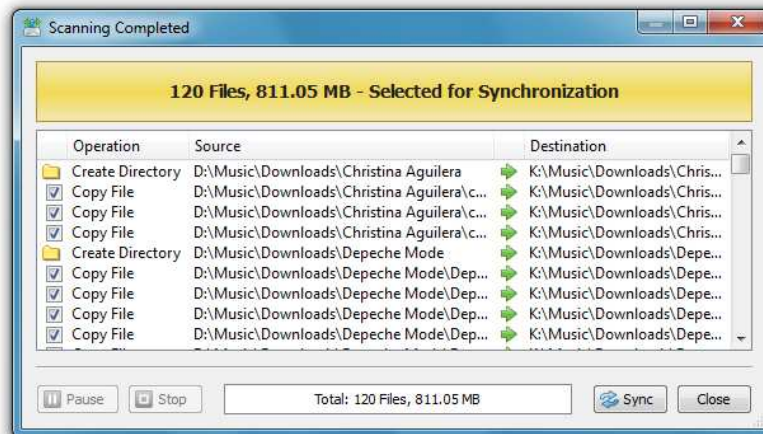
In addition, power computer users and IT professionals are provided with SyncBreeze Server – a server-based product version, which runs in the background as a service and may be controlled through the network using a network client GUI application or a command line utility. SyncBreeze Server allows one to execute multiple, simultaneous file synchronization operations, adds fault-tolerant file synchronization modes and advanced error handling options and allows one to send E-Mail notifications for failed file synchronization operations.

Synchronizing Disks or Directories

In the simplest way, in order to synchronize two disks or directories, press the 'Sync' button located in the top-left corner of the main toolbar, enter the source and destination directories and press the 'Sync' button. SyncBreeze will scan the specified source and destination directories and show a preview dialog with a list of all files that should be synchronized.



The synchronization preview dialog shows all files that should be synchronized and allows one to manually select/unselect specific file synchronization actions. In order to see more information about a file synchronization action, select the action item, press the right mouse button and select the 'Action Properties' menu item. Once finished selecting all the actions that should be executed, press the 'Sync' button located in the bottom-right corner of the preview dialog.



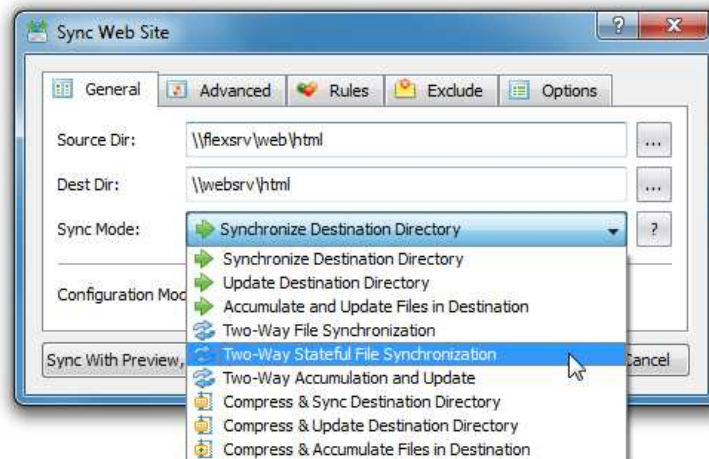
During the file synchronization process, SyncBreeze will display a synchronization process dialog showing the total number of synchronized files, the amount of synchronized storage space, the performance of the file synchronization process and the process time.

Press the 'Pause' button to temporarily suspend the file synchronization operation. Press the 'Continue' button to resume a previously paused file synchronization operation. In order to cancel the currently running file synchronization operation, press the 'Stop' button.

Once the file synchronization operation is finished, SyncBreeze will show a confirmation message informing about the status of the completed file synchronization operation. By default, SyncBreeze will try to perform as many file synchronization actions as possible without interrupting the operation on non-fatal errors. In the case that any errors will occur during the file synchronization operation, SyncBreeze will show an appropriate error message and enable the 'Errors' button allowing the user to access the error log.

Selecting the Right File Synchronization Mode

Depending on specific needs, it may be required to perform different types of file synchronization operations. For example, sometimes users may be interested in keeping all files in the destination directory even when some of them were deleted from the source directory. Another option is to perform two-way accumulation and update keeping both directories completely identical. SyncBreeze provides five different one-way and two-way file synchronization modes allowing one to perform different types of file synchronization operations according to user-specific needs and requirements.

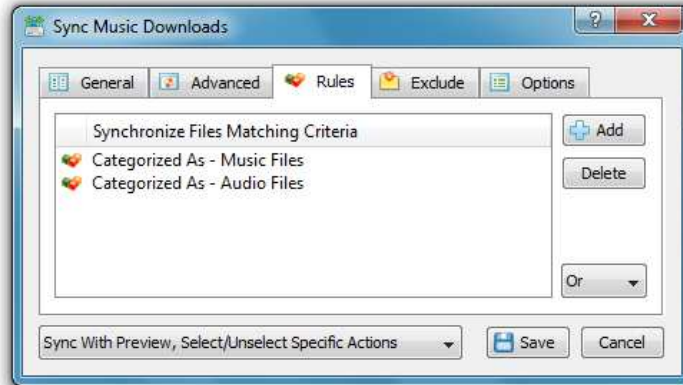


In order to change the file synchronization mode for a file synchronization command, open the file synchronization command dialog, select the 'General' tab and select one of the following file synchronization modes:

- **Synchronize Destination Directory** (one-way) - All changes made in the source directory will be propagated to the destination directory. Files deleted from the source directory will be deleted from the destination directory. All files changed or deleted in the destination directory will be restored using files from the source directory. No changes will be made in the source directory. After the file synchronization process is complete both locations will be identical.
- **Update Destination Directory** (one-way) - Newly created and modified source files will be copied to the destination directory. Files deleted from the source directory will be deleted from the destination directory. Files deleted from the destination directory will be restored using files from the source directory. Newly created and modified destination files will be kept in place. No changes will be made in the source directory.
- **Accumulate and Update Files in Destination** (one-way) - Newly created and modified source files will be copied to the destination directory. Files deleted from the destination directory will be restored using files from the source directory. Newly created and modified destination files will be kept in place. No files will be deleted from the destination directory. No changes will be made in the source directory.
- **Two-Way File Synchronization** - Newly created and modified files will be synchronized in both directions. Files deleted from the source directory will be deleted from the destination directory. Files deleted from the destination directory will be restored from the source directory. Changes may be made in both locations. After the file synchronization process is complete both locations will be identical.
- **Two-Way Stateful File Synchronization** - Newly created and modified files will be synchronized in both directions. Files deleted from the source directory will be deleted from the destination directory. Files deleted from the destination directory will be deleted from the source directory. Changes may be made in both locations. After the file synchronization process is complete both locations will be identical.
- **Two-Way Accumulation and Update** - Newly created and modified files will be updated in both directions. Files deleted from one location will be restored from the second location. Changes may be made in both locations. After the file synchronization process is complete both locations will be identical.

Synchronizing Specific File Types or Categories

SyncBreeze Pro provides power computer users with the ability to synchronize specific file types or file categories using one or more flexible file matching rules. For example, the user may specify to synchronize documents and digital images with the file size more than 2 MB.

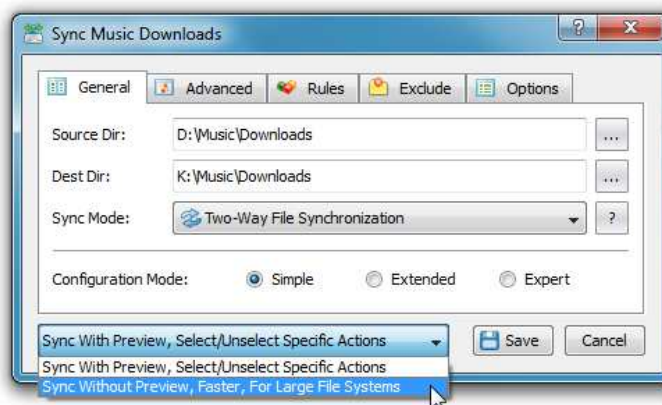


In order to add one or more file matching rules, open the file synchronization command dialog, select the 'Rules' tab and press the 'Add' button. On the 'Rules' dialog select an appropriate rule type and specify all the required parameters.

During the file synchronization process, SyncBreeze Pro will scan the entered source and destination directories and apply the specified file matching rules to all the existing files. Files not matching the specified rules will be skipped from the file synchronization process effectively limiting the operation to user-selected files only.

Synchronizing Disks or Directories without Preview

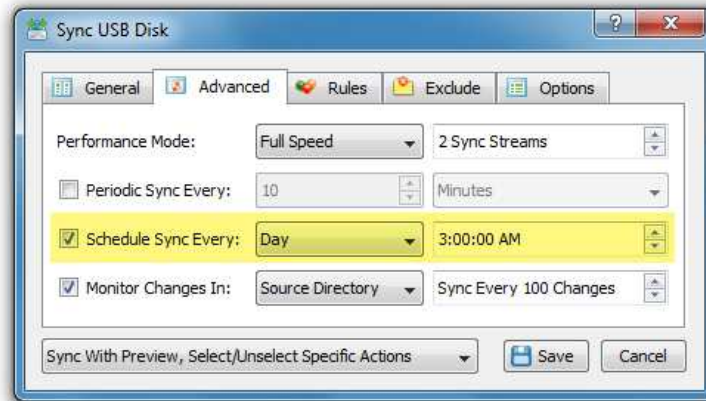
File synchronization with preview is very useful providing the user with a clear picture about what files will be synchronized. On the other hand, file synchronization with preview may be ineffective or completely inappropriate when there is a need to synchronize large directories or whole disks containing many thousands of files, especially due to the fact that none will have the time to review lists of file synchronization actions containing thousands of items.



SyncBreeze Pro provides an additional file synchronization mode, named the stream file synchronization mode, which performs file synchronization on-the-fly without showing the preview dialog. The stream file synchronization mode is especially designed for file systems containing huge amounts of files and is capable of synchronizing large directories, disks and NAS storage devices very fast and effectively. Finally, the stream file synchronization mode is ideal for automated, periodic file synchronization operations performed in the background without any user intervention.

Periodic Execution of File Synchronization Commands

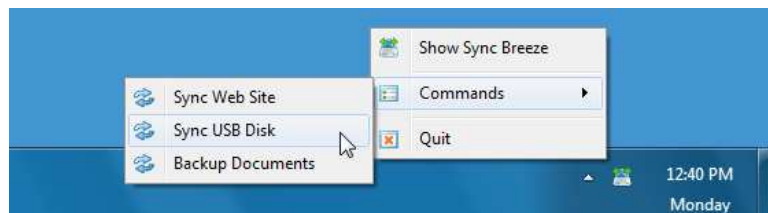
Another advanced option provided by SyncBreeze Pro is the ability to execute file synchronization commands periodically at user-specified time intervals. In addition, SyncBreeze Pro allows one to schedule daily or weekly sync operations to be performed at a specified time of the day. The major reason to execute a file synchronization command periodically is to continuously keep a frequently changing directory synchronized with a backup directory located on an external USB disk or a NAS storage device.



In order to enable periodic file synchronization for a sync command, open the command dialog, select the 'Advanced' tab, specify the time period to execute the file synchronization command in and press the 'Save' button. For all periodic file synchronization commands, SyncBreeze Pro displays the time remaining to the next synchronization. After each elapse of the specified time period, SyncBreeze Pro will start the file synchronization command in the background and mark it as 'Active' in the status field. In order to open a synchronization process dialog for an active command, click on the command item in the commands view. After finishing a periodic file synchronization command, SyncBreeze Pro will reset the command's timer to the specified time period.

Using the System Tray Icon

Background file synchronization operations are especially useful when configured to automatically synchronize one or more directories at specific time intervals. Another feature that greatly complements the background file synchronization capabilities is the ability to minimize the main GUI application to the system tray while allowing one to execute background file synchronization commands using the system tray icon's context menu.



In order to enable the system tray icon, which is available in SyncBreeze Pro+, open the advanced options dialog and select the 'Minimize to System Tray' option. With this option enabled, the SyncBreeze main GUI application will minimize itself into the system tray and allow one to execute background file synchronization commands using the system tray icon's context menu. A minimized application may be shown at any time by clicking on the system tray icon. Another option is to click the right mouse button over the system tray icon and to select the 'Show Sync Breeze' menu item. In order to execute a file synchronization command in the background, click the right mouse button over the system tray icon and select a command item in the 'Commands' context menu. Finally, in order to close the SyncBreeze application, select the 'Quit' menu item.

Background File Synchronization Commands

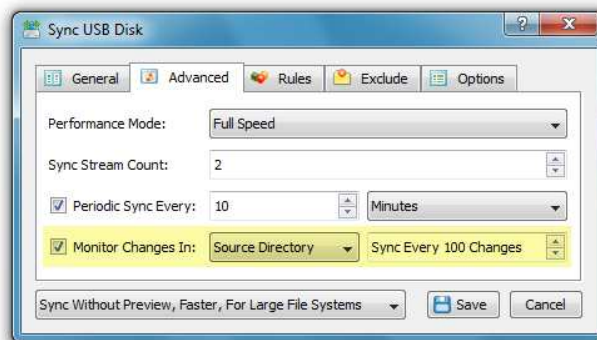
By default, when the user clicks on a sync command item, SyncBreeze starts the selected file synchronization command and executes it in the foreground. Another option provided by SyncBreeze Pro is to execute one or more file synchronization commands in the background. The main reason to execute sync commands in the background is to synchronize multiple disks or directories simultaneously thus reducing the total time required to synchronize multiple directories.

In order to synchronize multiple directories in the background, select all the required sync commands in the command list, press the right mouse button and select the 'Start Background Sync' menu item. SyncBreeze Pro will start all the selected sync commands in the background and mark them as 'Active' in the status field. In order to open a synchronization process dialog for an active command, click on the command item in the commands view.

The process dialog allows one to pause, resume or stop any background file synchronization operation. In addition, the user is provided with the ability to dynamically control the speed of any file synchronization operation. In order to change the speed of a running file synchronization command, just set an appropriate performance mode in the 'Speed' combo box located on the file synchronization process dialog.

Real-Time File Synchronization

In addition to the standard file synchronization features available in the freeware product version, SyncBreeze Ultimate and SyncBreeze Server provide the user with advanced real-time file synchronization capabilities allowing one to monitor the source and/or destination directories and execute the file synchronization command after detecting a user-specified number of changes.



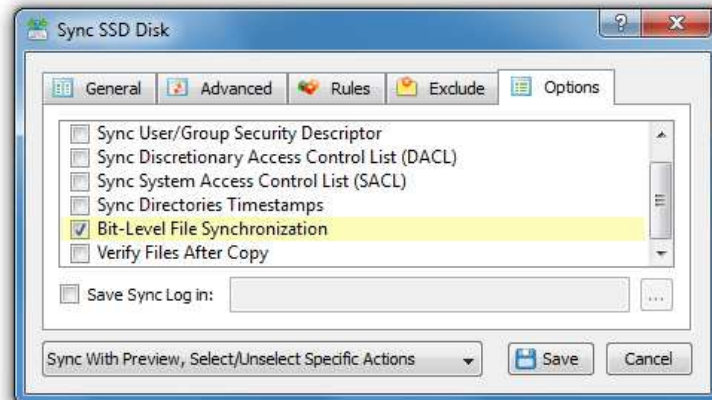
The real-time file synchronization capabilities are especially useful when the amount of file system changes is not even over time with sudden spikes of file system changes followed by periods of a low activity. In such a situation, it will be wasteful to frequently perform periodic file synchronization if nothing has changed, but on the other hand, if someone suddenly changes a large number of files, these changes should be synchronized as soon as possible.

The most balanced approach for such situations is a combination of periodic file synchronization with real-time disk change monitoring configured to execute the file synchronization command after a user-specified number of changes. In this way, if the amount of file system changes is below the threshold defined in the real-time disk change monitor, the timer will execute the file synchronization command according to the scheduled time interval. On the other hand, if there are too many changes, the disk change monitor will execute the file synchronization command before the scheduled time.

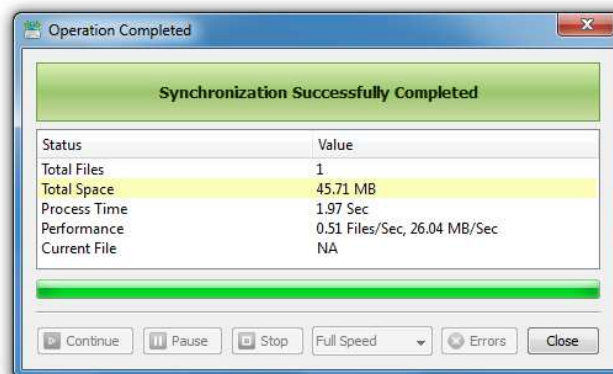
In order to enable the real-time disk change monitor for a file synchronization command, open the command, select the 'Advanced' tab and select the 'Monitor Changes In' checkbox. SyncBreeze allows one to monitor the source directory, the destination directory or both directories simultaneously. Enter an appropriate number of changes that should trigger the file synchronization command and press the 'Save' button.

Bit-Level File Synchronization

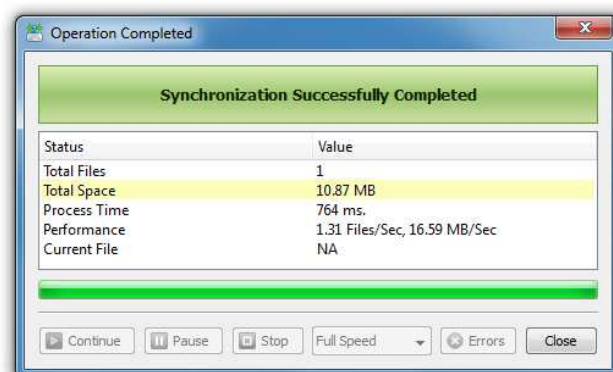
SyncBreeze Ultimate and SyncBreeze Server provide bit-level file synchronization capabilities allowing one to synchronize only changed file system clusters in each file thus minimizing the amount of disk write operations and extending the life of SSD disks.



In order to enable bit-level file synchronization for a file synchronization command, open the sync command dialog, select the 'Options' tab and enable the 'Bit-Level File Synchronization' option. When this option is enabled, for each changed file, SyncBreeze will synchronize changed file system clusters only.

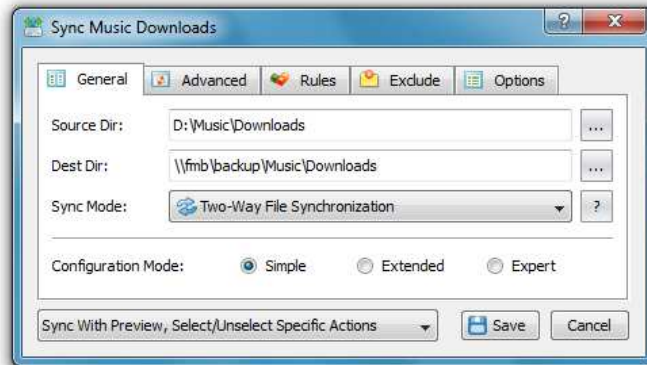


For example, let's assume we have a large 45MB Microsoft Word document file. When bit-level file synchronization is disabled, SyncBreeze will copy the whole file each time the file is modified. On the other hand, with the bit-level file synchronization option enabled, SyncBreeze will update changed file system clusters only thus significantly reducing the amount of data written to the disk and extending the life of SSD disks.



Synchronizing Network Shares Using UNC Path Names

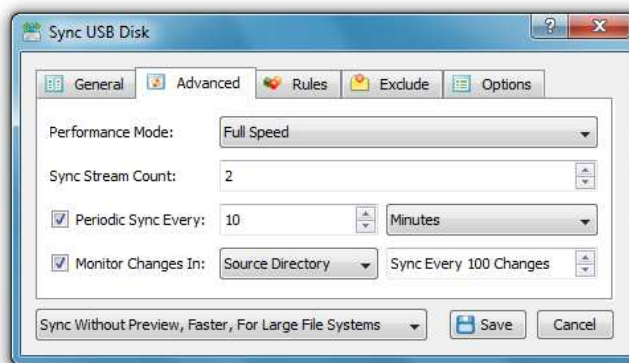
For users frequently working with multiple networked computers or NAS storage devices, SyncBreeze provides the ability to synchronize network shares using UNC path names. In order to specify the source or destination directories using UNC path names, open the command dialog, select the 'General' tab and enter the source and/or destination directories using the following format: [\\server-name\share-name\directory](#).



While working with UNC path names, please take into account that in order to be able to synchronize files on network shares and/or NAS storage devices, the user should have directory access and file write permissions for each specific network share and/or NAS storage device. If the user will not have directory access or file write permissions, the file synchronization operation will fail with one or more error messages reporting about access denied errors.

File Synchronization Performance Tuning Options

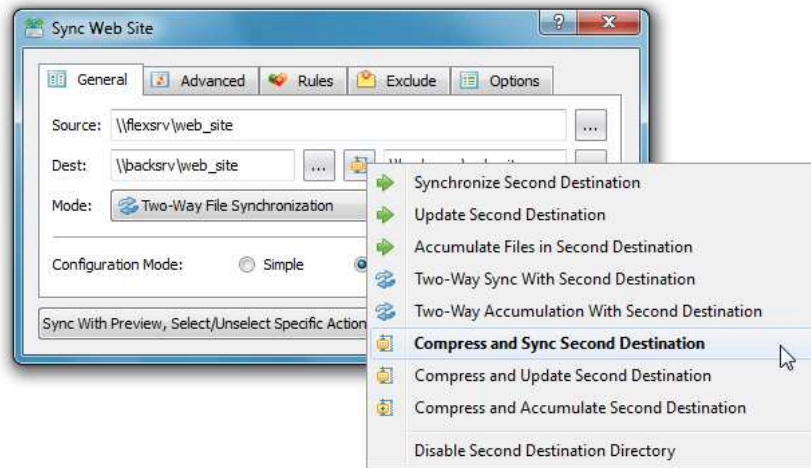
In order to increase file synchronization performance, SyncBreeze Pro provides advanced computer users and IT professionals with the ability to synchronize files using multiple file synchronization streams. Multi-Stream file synchronization significantly improves file synchronization performance when synchronizing large amounts of files between multiple disks, NAS storage devices or enterprise storage systems.



In order to enable multi-stream file synchronization for a sync command, open the command dialog, select the 'Advanced' tab and set an appropriate number of file synchronization streams. Take into account that multi-stream file synchronization is optimized for multi-disk, RAID and networked configurations and it is not recommended to use it when synchronizing directories located on the same physical disk. In addition, users required to synchronize files on running, production systems are provided with the ability to execute file synchronization commands slowly thus minimizing the performance impact on running applications. In order to change the speed of a file synchronization command, open the command dialog, select the 'Advanced' tab and select an appropriate performance mode in the 'Speed' combo box.

Synchronizing With Tertiary Destination Directories

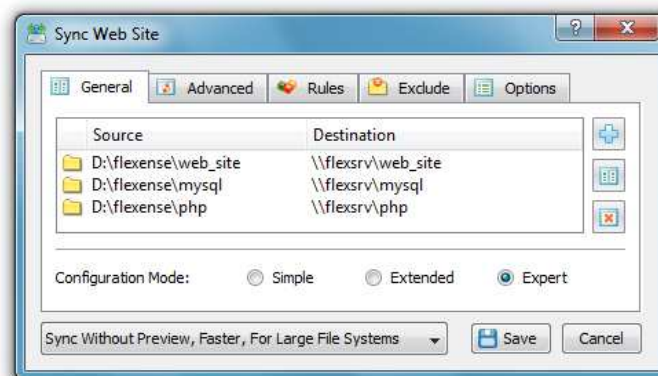
Sometimes, when backing up very important information, it may be required to synchronize a single source directory with two destination directories, potentially located on different physical disks, computers or storage devices. Making a third copy of important files significantly reduces the risk of losing the important information in the case that one of the backup copies will be destroyed by a catastrophic hardware failure.



SyncBreeze Ultimate allows one to define a tertiary destination directory for any file synchronization command. In order to configure a tertiary destination directory, open the command dialog, select the 'General' tab, select the 'Extended' configuration mode and specify a tertiary destination directory. During runtime, SyncBreeze will first synchronize the source directory with the first destination directory and after that with the tertiary destination directory.

Synchronizing Multiple Directory Pairs

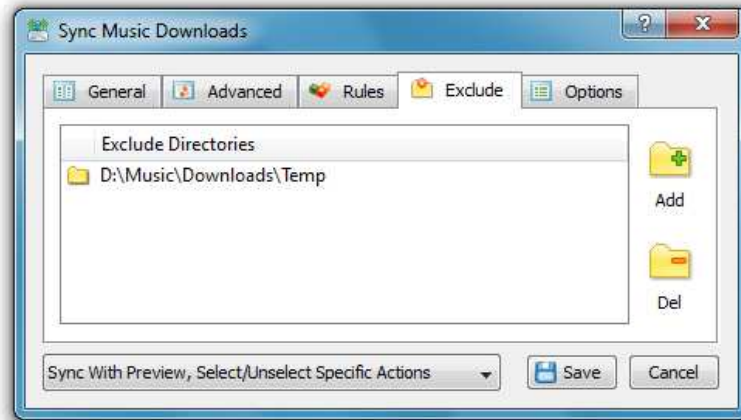
One of the most useful features provided by SyncBreeze Ultimate is the ability to synchronize multiple directory pairs in a single file synchronization command. In order to specify multiple directories for a file synchronization command, open the command dialog, select the 'General' tab, select the 'Expert' configuration mode and add all the required directory pairs.



For each directory pair, the user is provided with the ability to specify a source directory, a destination directory, an optional tertiary destination directory and the file synchronization mode that should be used for this specific directory pair. During runtime, SyncBreeze will synchronize all directory pair sequentially, one after one, in the same order as the directory pair were defined in the command dialog. In order to change the order of the specified directory pairs, select a directory pair item, press the right mouse button and select the 'Move Up' or 'Move Down' menu item.

Excluding Subdirectories from File Synchronization

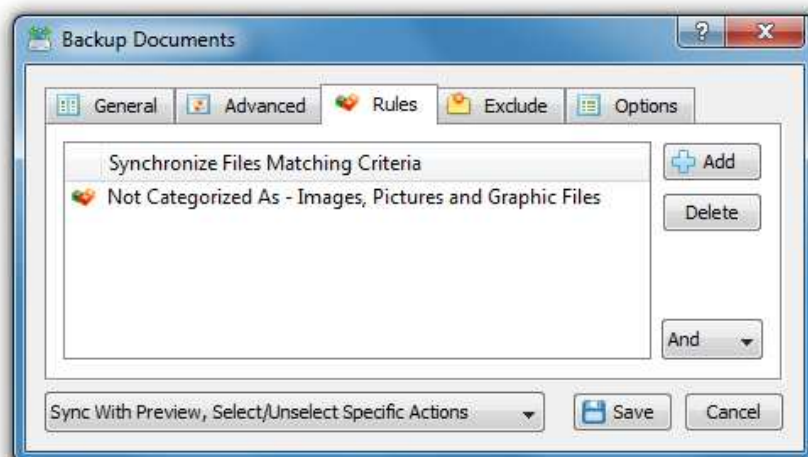
Sometimes, it may be required to exclude one or more subdirectories from the file synchronization process. For example, if you need to synchronize two directories excluding one or two special subdirectories, you may specify the top level directories as the source and destination directories and add the subdirectories that should be skipped to the exclude list.



In order to add one or more directories to the exclude list, open the file synchronization command dialog, select the 'Exclude' tab and press the 'Add' button. Keep in mind that exclude directories are case sensitive and should be specified with the same case as stored on the disk. All files and subdirectories located in the specified exclude directory will be excluded from the file synchronization process. Select an exclude directory and press the 'Delete' button, to remove the selected directory from the exclude list.

Excluding Specific Files or File Types

SyncBreeze provides the ability to exclude specific files or file types using one or more file matching rules. For example, in order to exclude all images and picture files, open the file synchronization command, select the rules tab and add the 'Not Categorized as Images and Picture Files' file matching rule.

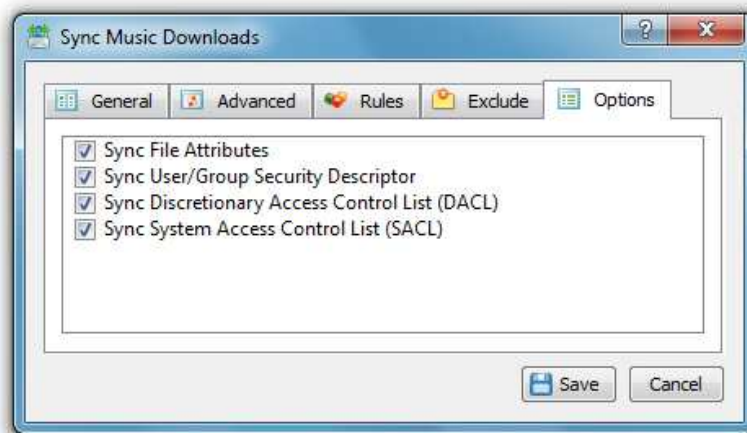


Multiple types of file matching rules excluding files by the category, file name, extension, location, etc. may be added to any file synchronization operation allowing one to effectively exclude specific files or file categories. During the file synchronization process, SyncBreeze will exclude files according to the specified file matching rules.

Advanced File Synchronization Options

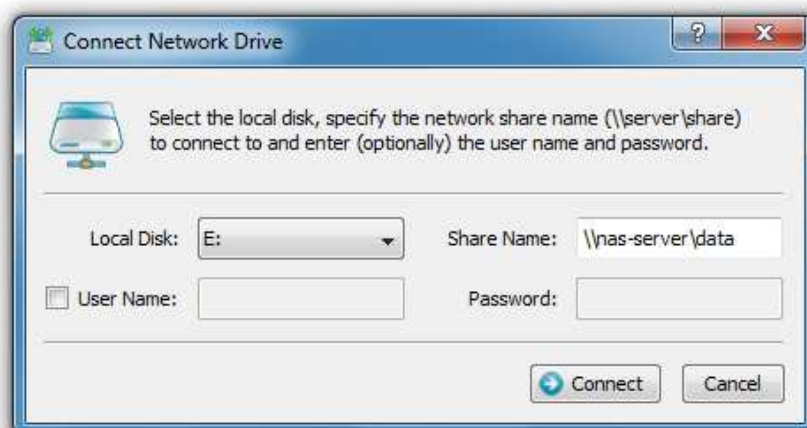
The 'Options' tab provides the user with the ability to control the following file synchronization options:

- Sync File Attributes - this option instructs SyncBreeze to copy file attributes when synchronizing files between directories.
- Sync User/Group Security Descriptor - this option (SyncBreeze Pro only) instructs to copy files' ownership information when synchronizing files between directories.
- Sync Discretionary Access Control List (DACL) - this option (SyncBreeze Pro only) instructs to copy files' DACLs when synchronizing files between directories.
- Sync System Access Control List (SACL) - this option (SyncBreeze Pro only) instructs to copy files' SACLs when synchronizing files between directories.



Mapping Network Drives

SyncBreeze provides the ability to map network drives directory from the SyncBreeze main GUI application. In order to map a network drive, select the 'Tools - Connect Network Drive' menu item, select a local drive letter, enter the name of the server and network share and press the 'Connect' button.

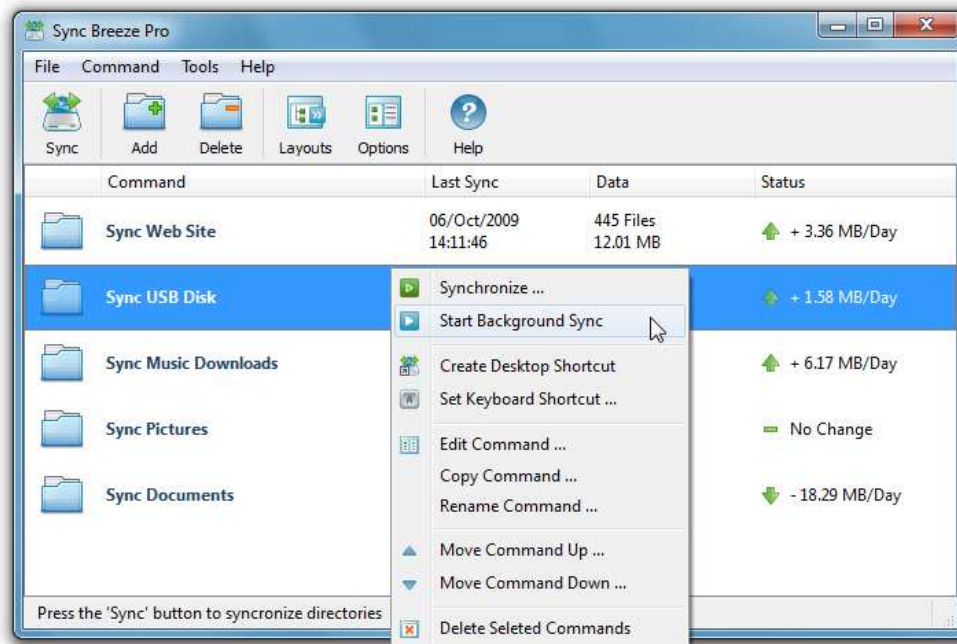


By default, SyncBreeze will try to map network shares using the current user account. In order to map a network drive using another user account, specify a custom user name and password to connect the network drive with.

Managing File Synchronization Commands

For users frequently synchronizing numerous directories, network shares and/or NAS storage devices, SyncBreeze provides the ability to pre-define multiple, customized file synchronization commands and easily execute them in a single mouse click.

In order to add a new, pre-defined file synchronization command press the 'Add' button on the main toolbar and specify a unique command name. On the file synchronization command dialog enter the source and destination directories, select an appropriate file synchronization mode and press the 'Save' button.



Now, the newly created file synchronization command may be easily executed at any time just by clicking on the command item in the commands view. For each file synchronization command, SyncBreeze shows the command name, the last synchronization time, the total number of files and the amount of data in the source and destination directories and the status trend showing how the amount of data is changing over time.

In order to edit a file synchronization command, select the command item in the commands view, press the right mouse button and select the 'Edit Command' menu item. Select one or more file synchronization commands, press the right mouse button and select the 'Delete Commands' menu item to delete all the selected file synchronization commands.

All the user-defined file synchronization commands are stored in the user-specific product configuration file, which may be exported for backup purposes and later used to restore the product configuration on the same or another computer. In order to export the user-specific product configuration to a file, select the menu 'File - Export Configuration' and specify a file name to export the product configuration to. Select the menu 'File - Import Configuration' to import a previously exported product configuration file.

Using SyncBreeze File Synchronization Server

SyncBreeze Server is a dedicated file synchronization server, which runs in the background as a service and is capable of synchronizing disks, directories, network shares and NAS storage devices in a fully automatic, unattended mode. The sync server provides the ability to define multiple file synchronization commands, periodically execute the specified file synchronization commands at specific time intervals and/or monitor the source and destination directories and automatically synchronize files and directories when a user-defined number of changes detected.



The sync server may be controlled through the network using a client GUI application or the regular SyncBreeze command line utility, which is available in the SyncBreeze Ultimate and SyncBreeze Server installations. The GUI interface provided by the client application is almost identical to the standard SyncBreeze GUI application making it very simple to manage and control file synchronization commands.

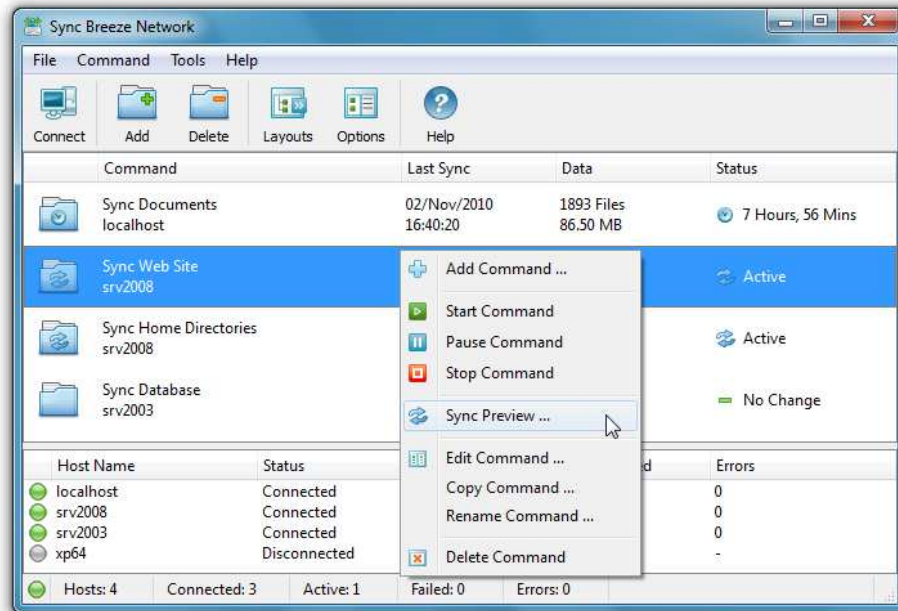
In order to connect to the sync server, start the SyncBreeze Client application, press the 'Connect' button located on the main toolbar and specify the host name (or IP address) to connect to and a valid user name and password (the default user name and password syncbreeze/syncbreeze).



Another way to control the sync server is to use the SyncBreeze command line utility, which is located in the '\bin' directory. The SyncBreeze command line utility allows one to start, pause, resume and stop file synchronization commands, view the status of running file synchronization commands and configure the server's user name, password and port number. For detailed information about all the available commands and options execute the following command: 'syncbreeze -help'.

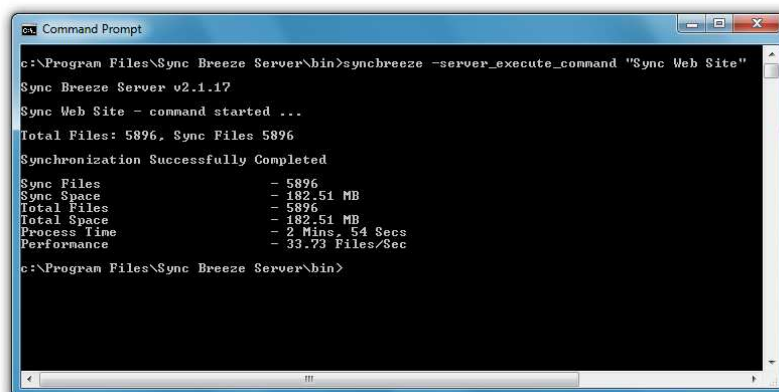
SyncBreeze Network Client Application

In addition to the client GUI application bundled in the SyncBreeze Server installation package, users are provided with a free network client GUI application, which is capable of controlling a number of SyncBreeze file synchronization servers through the network. The network client application allows one to connect to a number of SyncBreeze servers, configure file synchronization operations and manage configuration options.



In order to connect to a SyncBreeze server, press the 'Connect' button and enter the name or the IP address of the host to connect to. The network client application automatically remembers all connected hosts, user names, passwords and automatically reconnects to all available SyncBreeze file synchronization servers.

The top view displays all file synchronization operations in all currently connected file synchronization servers. Press the 'Add' button and specify a command name, to add a new file synchronization operation. Select a file synchronization command, press the right mouse button and select the menu 'Edit Command' to edit an existing file synchronization operation.

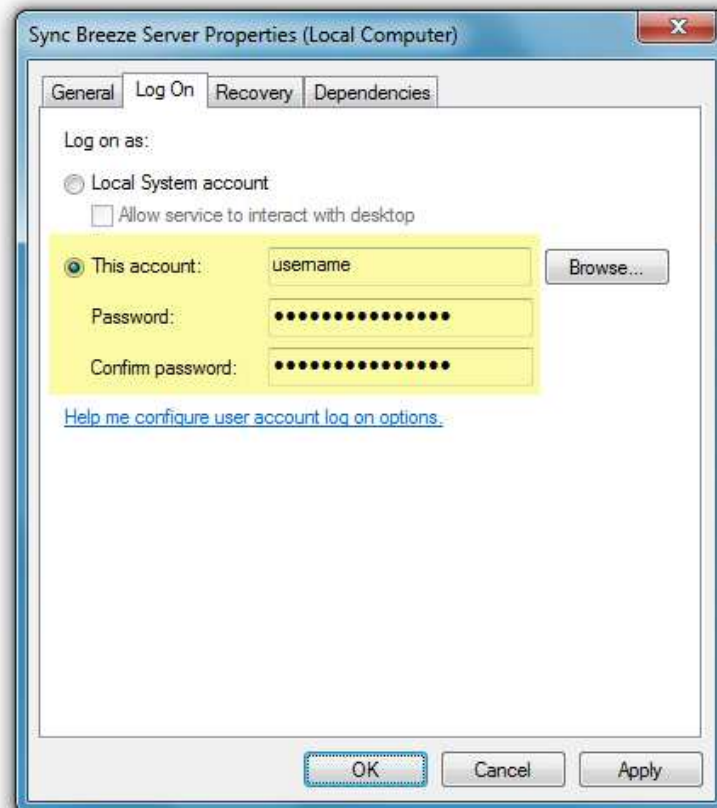


The bottom view shows a list of remembered SyncBreeze servers. For each server, the network client application displays the status, the number of file synchronization commands, the number of active commands, the number of failed commands and the number of error messages. In order to manage a connected server, select the server's item in the server list, press the right mouse button and select an appropriate management command.

Using SyncBreeze Server to Sync Network Shares

By default, the SyncBreeze file synchronization server is configured to run under the local system account, which is good to synchronize files and directories located on local disks. On the other hand, the local system account does not have permissions to synchronize files and directories located on network shares and NAS storage devices.

In order to enable the SyncBreeze server to synchronize network shares and NAS storage devices, the file synchronization server should be configured to run under a user account, which has permissions to access and write files and directories located on the required network shares.



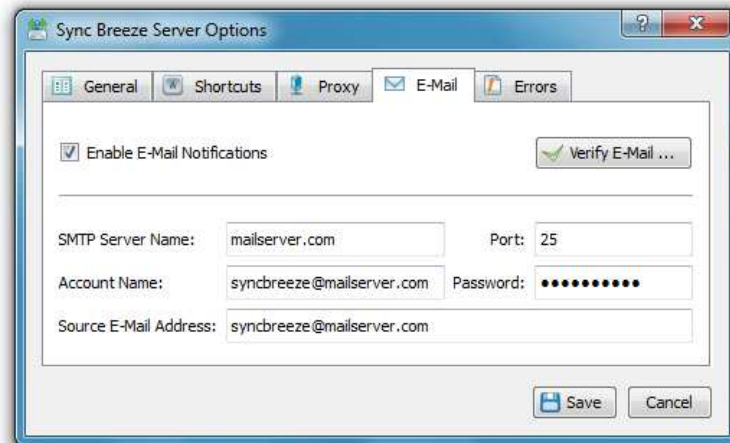
The configuration is very simple and may be performed within a couple of seconds using the following step-by-step guide:

1. Open the Windows control panel and click on the 'Administrative Tools' utility.
2. Open the Services control center and find here the 'Sync Breeze Server' service.
3. Open the 'Sync Breeze Server' service, select the 'General' tab and stop the service.
4. Select the 'Log On' tab and specify a user account to use for the service.
5. Select the 'General' tab and start the 'Sync Breeze Server' service.

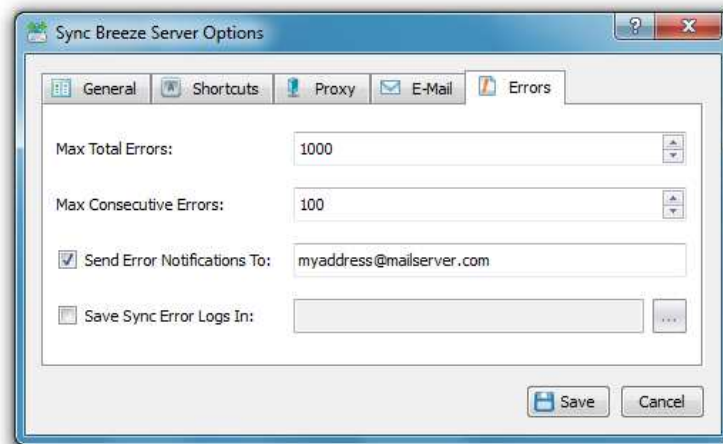
Now, the SyncBreeze file synchronization server will run under the specified user account and will have exactly the same permissions as the specified account when accessing network shares and NAS storage devices.

Sending E-Mail Notifications for Sync Errors

The SyncBreeze file synchronization server runs in the background as a service and performs all the required file synchronization operations in a fully automatic and unattended mode. In general, once configured, the file synchronization server does not require any manual intervention, but if there is no space left on the destination device or there are some other file synchronization errors, the user will need to know about such issues as soon as possible.



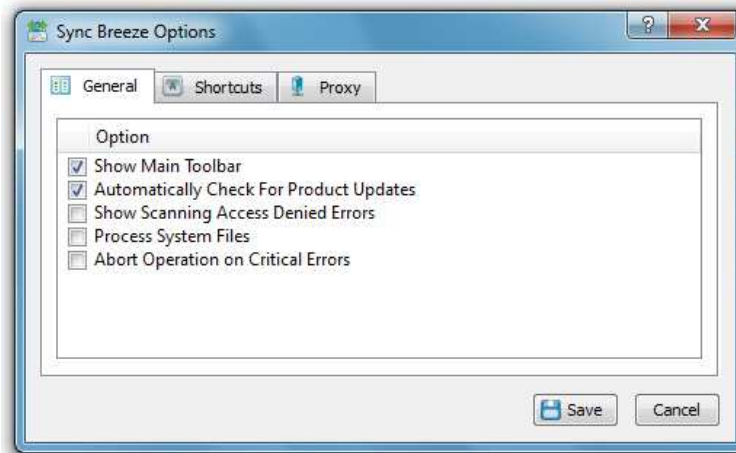
The SyncBreeze file synchronization server provides the user with the ability to send E-Mail notifications about failed file synchronization commands with a detailed description explaining the exact reason for the failure and a list of files that caused the failure.



In order to enable E-Mail notifications, open the 'Options' dialog, select the 'E-Mail' tab and specify an SMTP server host name (or IP address) and the account name and password to send E-Mail notifications through. In addition, select the 'Errors' tab, enable sending error notifications and specify the destination E-Mail address to send notifications to.

Customizing SyncBreeze GUI application

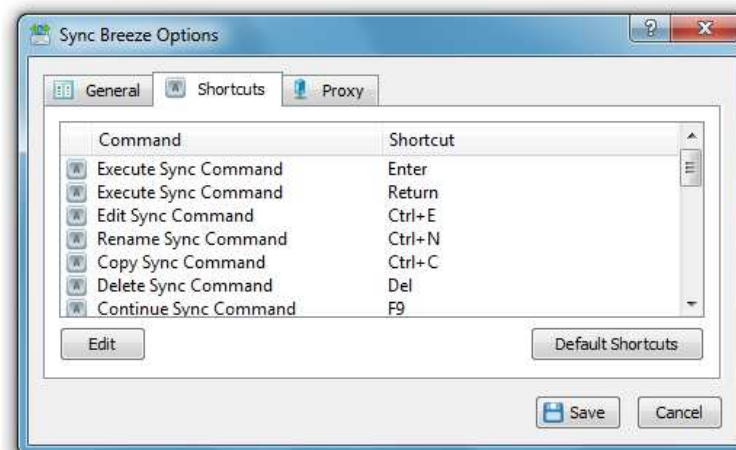
Select the 'Tools - Advanced Options' menu item to open the options dialog.



The 'General' tab allows one to control the following options:

- **Show Main Toolbar** - Enables/Disables the main toolbar
- **Automatically Check For Product Updates** - select this option to instruct SyncBreeze to automatically check for available product updates.
- **Show Scanning Access Denied Errors** - select this option to see error messages when SyncBreeze is prevented to scan files in a directory
- **Process System Files** - select this option to synchronize system files.
- **Abort Operation On Critical Errors** - by default SyncBreeze is trying to process as many files as possible logging non-fatal errors in a process log. Select this option to instruct SyncBreeze to abort operation when encountering a critical error.

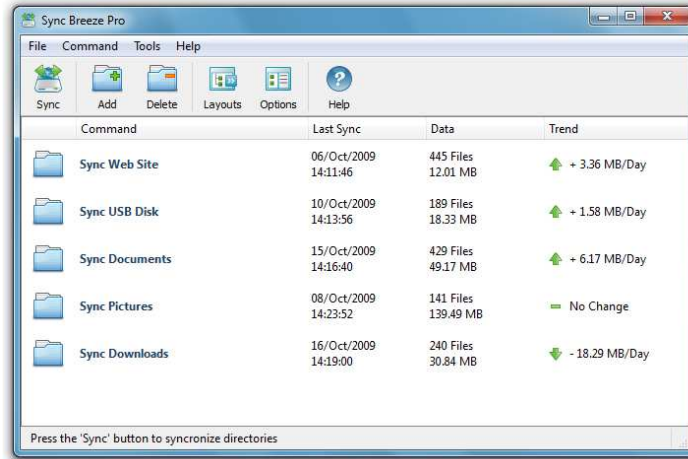
The 'Shortcuts' tab provides the user with the ability to customize keyboard shortcuts. Click on a shortcut item to edit the currently assigned key sequence. Press the 'Default Shortcuts' button to reset all keyboard shortcuts to default values.



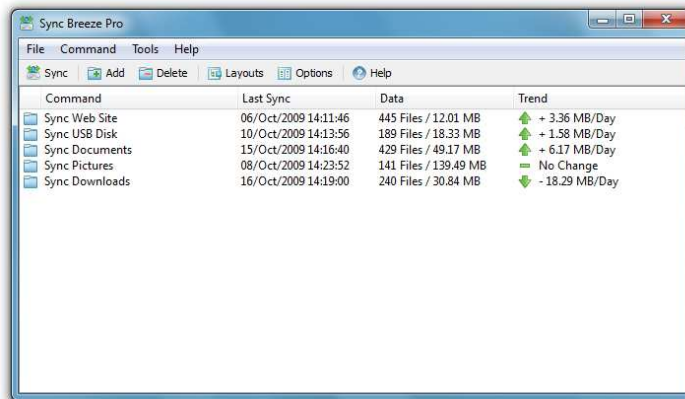
The 'Proxy' tab provides the user with the ability to configure the HTTP proxy settings. SyncBreeze uses the HTTP protocol in order to inquire whether there is a new product version available on the web site. By default, SyncBreeze detects proxy settings and connects to the Internet directly or through an HTTP proxy depending on the configuration of the host computer. Depending on a specific host and network configuration, the user is provided with the ability to connect to the Internet directly, through automatic HTTP proxy discovery or manually by entering the HTTP proxy server name and port

Using SyncBreeze GUI Layouts

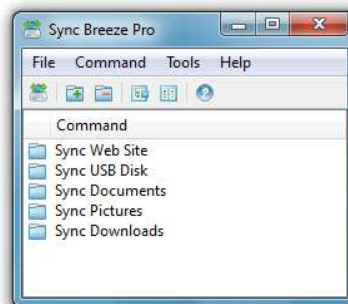
In order to improve GUI usability, the SyncBreeze main GUI application provides three user-selectable GUI layouts. Press the 'Layouts' button to switch the GUI application to the next GUI layout.



The first (default) GUI layout displays large toolbar buttons with descriptive text labels under each button and uses large icons to show user-defined file synchronization commands in the commands view.



The second GUI layout displays small toolbar buttons with descriptive text labels beside each button and uses small icons to show user-defined file synchronization commands in the commands view.



The third GUI layout displays small toolbar buttons without descriptive text labels, uses small icons to show user-defined file synchronization commands and shows the command name only for each command in the commands view.

Using SyncBreeze Command Line Utility

In addition to the GUI application, SyncBreeze Ultimate includes a command line tool allowing one to execute file synchronization commands from an OS shell window. The SyncBreeze command line tool provides power users and system administrators with the ability to integrate file synchronization capabilities into batch files and shell scripts. The SyncBreeze command line tool is located in <ProductDir>/bin directory.

Command Line Syntax:

syncbreeze -execute <Sync Command Name>

This command executes the specified file synchronization operation.

syncbreeze -sync -source <SourceDirectory> -dest <DestDirectory>

This command synchronizes files between directories, local disks or network shares.

Parameters:

-source <Source Directory>

This parameter specifies the source directory for file synchronization. In order to ensure proper parsing of command line arguments, directories containing space characters should be double quoted.

-dest <Destination Directory>

This parameter specifies the destination directory for file synchronization. In order to ensure proper parsing of command line arguments, directories containing space characters should be double quoted.

Options:

-mode <SD | SUD | SAD | STW | STA>

SD - Sets the sync-destination file synchronization mode (Default)

All changes made in the source directory will be propagated to destination. Files deleted from the source directory will be deleted from destination. All files changed or deleted in destination will be restored from source.

SUD - Sets the update-destination file synchronization mode

Newly created and modified source files will be copied to destination. Files deleted from the source directory will be deleted from destination. Files deleted from the destination directory will be restored from source.

SAD - Sets the accumulate-destination file synchronization mode

Newly created and modified source files will be copied to destination. Files deleted from the destination directory will be restored from source. Newly created and modified destination files will be kept in place.

STW - Sets the two-way file synchronization mode

Newly created and modified files will be synchronized in both directions. Files deleted from the source directory will be deleted from destination. Files deleted from the destination directory will be restored from source.

STA - Sets the two-way accumulate file synchronization mode

Newly created and modified files will be updated in both directions. Files deleted in one location will be restored from the second location. After finishing the synchronization process both locations will be identical.

-perf <FULL | MEDIUM | LOW>

FULL - Full-speed file synchronization

MEDIUM - Medium-speed file synchronization

LOW - Low-speed file synchronization

-streams <1 ... 16>

Specifies the number of parallel file synchronization streams.

-DACL

Instructs to copy files' access control lists (DACL).

-SACL

Instructs to copy files' security control lists (SACL).

-OWNER

Instructs to copy files' user/group information.

-v

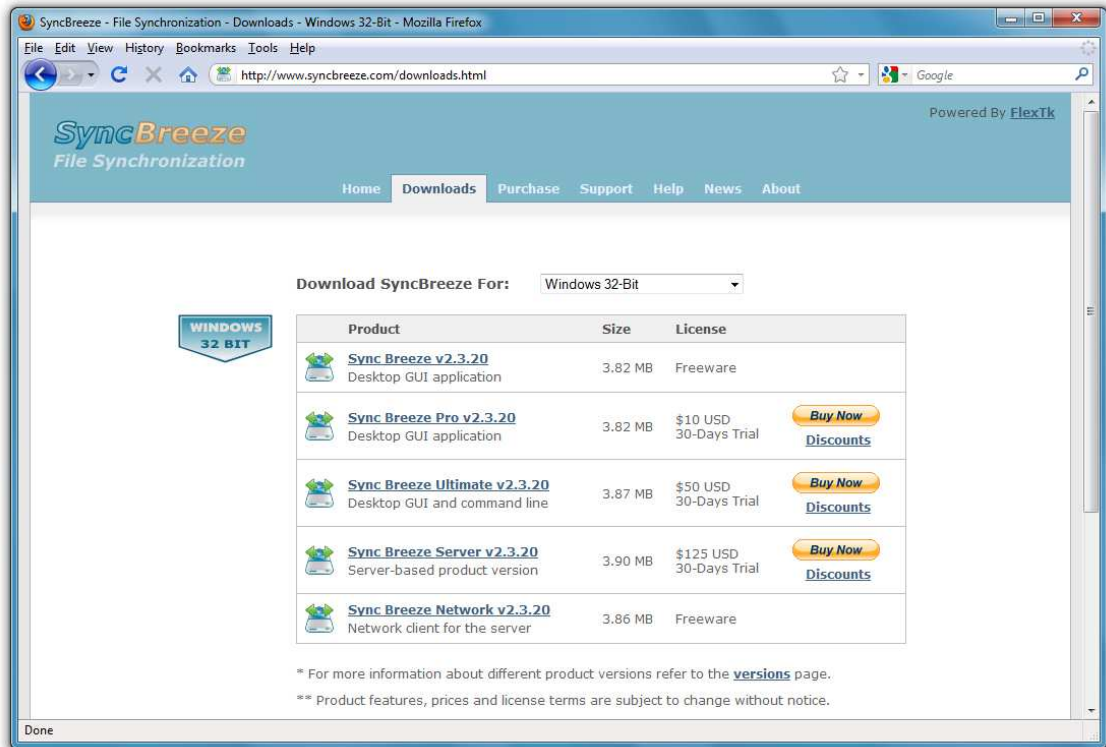
Shows the product major version, minor version, revision and build date.

-help

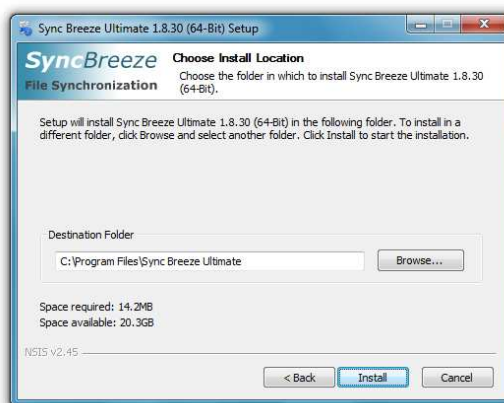
This command shows the command line usage information.

SyncBreeze Product Installation Procedure

SyncBreeze is available as a free download on the downloads page and from a large number of software directories from around the world. To be sure you are installing the latest product version check here: <http://www.syncbreeze.com/downloads.html>



SyncBreeze is especially designed to be as simple as possible. The installation procedure is very simple, requires no special knowledge and may be completed in less than 30 seconds. There is no need for any additional software. Just download the SyncBreeze installation package, run the setup program and you are done.

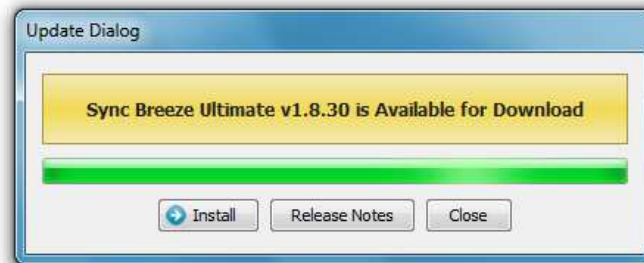


On the 'Welcome' screen press the 'Next' button. Read the end-user license agreement and press the 'I Agree' button if you agree with the license terms or the 'Cancel' button to stop the installation process.

Select the destination directory, press the 'Install' button and wait for the installation process to complete. That's all you need to do to install the SyncBreeze file synchronization utility on your computer.

SyncBreeze Product Update Procedure

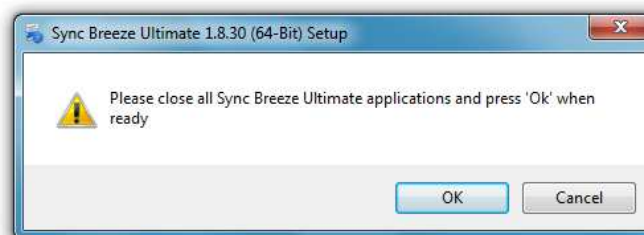
On a predefined schedule, Flexense releases bug-fixes and product updates for the SyncBreeze file synchronization utility. These product updates are uploaded to our web site and may be applied to any installed product version. Each time SyncBreeze is started, the update manager checks if there is a new product version available. If there is a new product update available, the user will see an 'Update' link in the right-most corner of the status bar.



In order to manually verify that the currently installed product version is up-to-date, select menu 'Help - Check For Updates' on the main menu bar. The update manager will connect to the update server and check if there is a newer version of the product available for download.



If there is a new product version available, the update dialog will show the version of the new product update and two links: the 'Release Notes' link and the 'Install' link. Click on the 'Release Notes' link to see more information about new features and bug-fixes provided by this specific product version. Click on the 'Install' link to download and install the new product version.



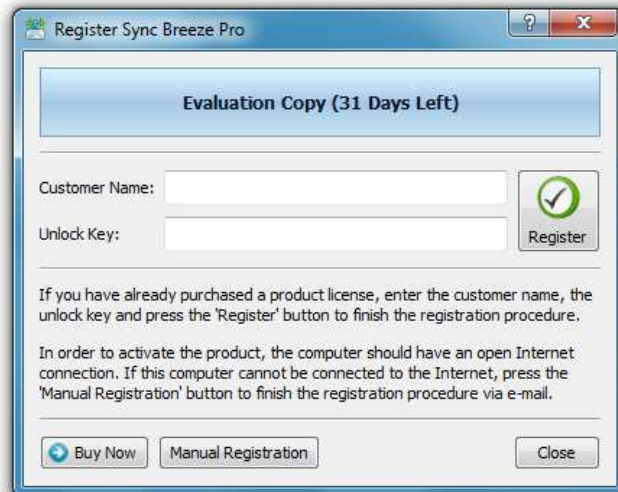
After clicking on the 'Install' link, please wait while the update manager will download the new product version to the local disk. The update package will be downloaded to a temporary directory on the system drive and automatically deleted after the update manager will finish updating the product.

After download is completed, close all open SyncBreeze applications and press the 'Ok' button when ready. If one or more SyncBreeze applications will be open during the update, the operation will fail and the whole update process will need to be restarted from the beginning.

After finishing the update process, SyncBreeze will show a message box informing about the successfully completed operation.

SyncBreeze Product Registration Procedure

SyncBreeze Pro licenses and discounted license packs may be purchased on the following page: <http://www.syncbreeze.com/purchase.html> After finishing the purchase process, wait for the following two e-mail messages: the first one with a receipt for your payment and the second one with an unlock key. If you will not receive your unlock key within 24 hours, please check your spam box for e-mail messages originating from support@flexense.com and if it is nor here contact our support team.



After you will receive your unlock key, start the SyncBreeze GUI application and press the 'Register' button located in the top-right corner of the window. On the register dialog, enter your name and the received unlock key and press the 'Register' button to finish the registration procedure.

Supported Operating Systems

32-Bit Operating Systems

- Windows XP
- Windows Vista
- Windows 7
- Windows Server 2003
- Windows Server 2008
- Windows Storage Server 2008

64-Bit Operating Systems

- Windows XP 64-Bit
- Windows Vista 64-Bit
- Windows 7 64-Bit
- Windows Server 2003 64-Bit
- Windows Server 2008 64-Bit
- Windows Storage Server 64-Bit

SyncBreeze System Requirements

Minimal System Configuration

- Supported Operating System
- 500 MHz or better CPU
- 256 MB of system memory
- 25 MB of free disk space

Recommended System Configuration

- Supported Operating System
- 2 GHz or better CPU
- 512 MB of system memory
- 25 MB of free disk space

SyncBreeze Product Versions

Features	Free	Pro	Ultimate	Server
Maximum Number of Files	500K	5M	50M	500M
Maximum Storage Capacity	2T	20T	200T	2000T
Maximum Number of Sync Commands	3	10	100	1000
Multiple File Synchronization Modes	Yes	Yes	Yes	Yes
File Synchronization with Preview	Yes	Yes	Yes	Yes
Support for Unicode File Names	Yes	Yes	Yes	Yes
Support for Long File Names	Yes	Yes	Yes	Yes
Support for UNC Network Path Names	Yes	Yes	Yes	Yes
Support for ACLs and Security Attributes	No	Yes	Yes	Yes
Support for System Tray Icon	No	Yes	Yes	Yes
Stream-mode Sync without Preview	No	Yes	Yes	Yes
Option to Sync Specific File Types	No	Yes	Yes	Yes
Multi-Stream File Synchronization	No	Yes	Yes	Yes
Periodic File Synchronization	No	Yes	Yes	Yes
Background File Synchronization	No	Yes	Yes	Yes
Performance Tuning Options	No	Yes	Yes	Yes
Tertiary Destination Directories	No	No	Yes	Yes
Fault-Tolerant File Synchronization	No	No	Yes	Yes
Compressed File Synchronization	No	No	Yes	Yes
Multi-Way File Synchronization	No	No	Yes	Yes
Real-Time File Synchronization	No	No	Yes	Yes
Bit-Level File Synchronization	No	No	Yes	Yes
Advanced Error Handling	No	No	Yes	Yes
Command Line Utility	No	No	Yes	Yes
Runs in the Background as a Service	No	No	No	Yes
E-Mail Notifications for Failed Operations	No	No	No	Yes
License	Free	\$10	\$50	\$125