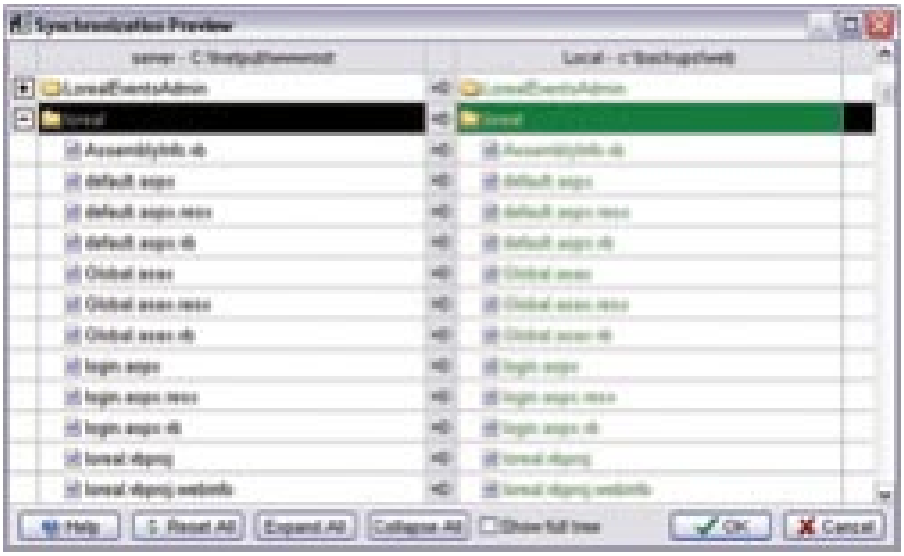
MirriM: Working the Unworkable

Have you ever wanted to perform off-site backups over the Internet but were put off by the potential bandwidth costs? With the recent release of MirriM, the time may be ripe to re-evaluate this seemingly unworkable scenario.



The synchronisation preview can be used to check a sync operation prior to executing it.

MirriM is a two-way file synchroniser that offers effective maintenance of large backups over slow network connections. Although many file synchronisers claim to support two-way file sync, this usually translates into a simplistic form of file merging, not true synchronisation.

If you've ever tried cleaning out redundant files from one location only to find that the synchroniser has gone and restored them all while you weren't looking, then you'll appreciate the difference. Instead of performing this kind of basic file merging, MirriM detects if files have been deleted from one location and deletes them from the mirror as well.

In situations where you need to keep backups of deleted or modified files, MirriM will also store as many versions as required. The versioning is also flexible enough to store either the most recent versions of a file or a range of versions from its total lifecycle.

Sync preview

The value of two-way synchronisation may be immediately clear, but if you've been burned in the past by software that deletes your data (or overwrites new versions with old ones) then some scepticism is to be expected. MirriM's sync previewing feature provides a complete list of all pending file operations, allowing you to double check that the synchronisation is doing exactly what you're expecting prior to the actual procedure.

Compress and encrypt

MirriM can perform backups over the Internet, so it provides some built in encryption to protect your data during this process. Because IP networks aren't always the most efficient, some integrated compression is utilised as well. This is standard stuff that you would expect from any Internet-based data transfer, but what makes MirriM more efficient than most is the fact that it transmits partial files whenever possible. In other words, if only a segment of a file has changed, only this modified portion is sent to the remote location. Not only does this save huge amount of bandwidth, it also inherently provides an extra layer of data obfuscation.

Two-way file synchronisation over a network is safe and fast with MirriM

Sliding windows

This partial-file synchronisation technology is referred to as "sliding window" transfer. Because a huge amount of redundant transmissions are avoided, it is possible to maintain multi-gigabyte backups using a conventional dialup connection – yes, 56kbps. Although MirriM can establish a large backup over several weeks, it is usually more appropriate to use removable media or high speed networks for this initial data mirroring. After which point MirriM can perform incremental updates to the backup over a low speed connection by only transmitting the bits and bytes that have been physically modified on disk.

This is especially impressive when you think of databases that occupy gigabytes of storage, but which only change by a few megabytes or less each day. Instead of wasting CPU cycles in compressing the entire file and then re-transmitting the bulk of it over the Internet, MirriM takes the new data and embeds it in the remote database file directly. Needless to say, this is very fast and very efficient – plus it can all be done while the file is in use. If you're worried about corrupt files resulting from these partial updates, you will be glad to know that MirriM performs 128 bit CRC checks on the mirror data to ensure its integrity prior to committing it.

SUMMARY

MirriM doesn't do a lot of things, but what it does do it does well. If you want to synchronise with an FTP site or other conventional online file storage, for instance, then MirriM isn't the answer. Instead, MirriM is a traditional client-sever application. You need to run it as a service on all machines and, because it uses port 5331, the firewalls on all sides will need to be configured appropriately.

On the upside, though, MirriM automatically overcomes time zone differences by working with a universal time stamp (UTC) to determine file modification times. Although most users will feel more at home using the GUI version, MirriM does come with a command line interface that can be integrated into batch files and automation utilities such as Windows scheduler. This also makes it easier for system administrators to configure across multiple users and locations.

Because MirriM creates the possibility for multiple users to work on a single file simultaneously, there are hypothetical permissions problems. Fortunately, MirriM will handle multiple simultaneous synchronisations, although the benefits of "sliding window" transfers will be impaired. Consequently, MirriM backups probably won't compromise your permissions system, although it might well cause you to question it – but at least you won't have to worry about your bandwidth bills while you do.

WEB SITE: http://www.mirrim.co.uk/

PRICE: UK £57.58 (Single User) £233.82 (Network Admin)