

Synchronizing Two or Three Remote Computers Using Smartsync Pro

Hugh Gunz

SmartSync Pro (SSP) has a great many capabilities. Here we focus on just one of them: synchronizing two or three remote computers, that is, computers which are either not connected at all, or which are connected over the Internet. Synchronizing two or more computers is trickier than it sounds, especially when the computers are remote. SSP solves the problems in the following way.¹

Suppose you are using SSP to synchronize specific folders on two computers, A and B (Figure 1). While you're editing files on Computer A, SSP tracks the changes you're making in the folders you've told SSP to synchronize. When you're ready to move to Computer B, you tell SSP to "create an update." SSP does this by creating a "package," which is a file with the extension ".ssp". You take this package file to Computer B and tell SSP to "apply" it. The application process synchronizes Computer B's folders with those of Computer A. Once the package is applied to Computer B, the synchronized folders on Computers A and B will have identical files.

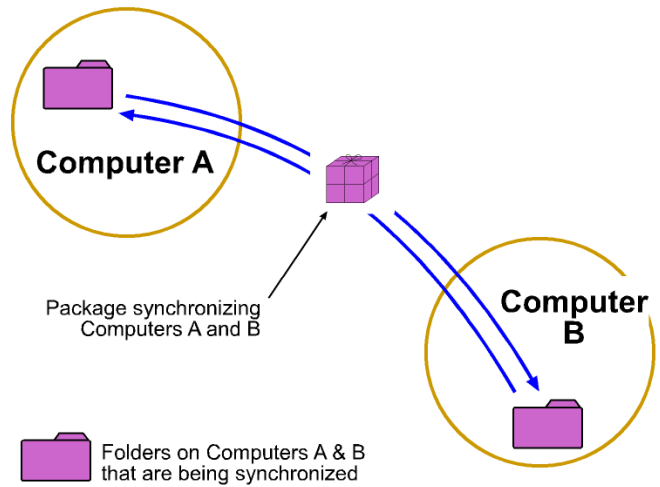


Figure 1: Synchronizing two computers

The ingenious feature of this design philosophy is that *the package only contains information about changes to files*. Even if the folders you're synchronizing contain a very large number of files, the package can be comparatively small. There's a second reason for the package being smaller than you might expect: it's actually a "zip" archive file, which saves yet more space. The only time the package is large is when you're first setting up the synchronization relationships

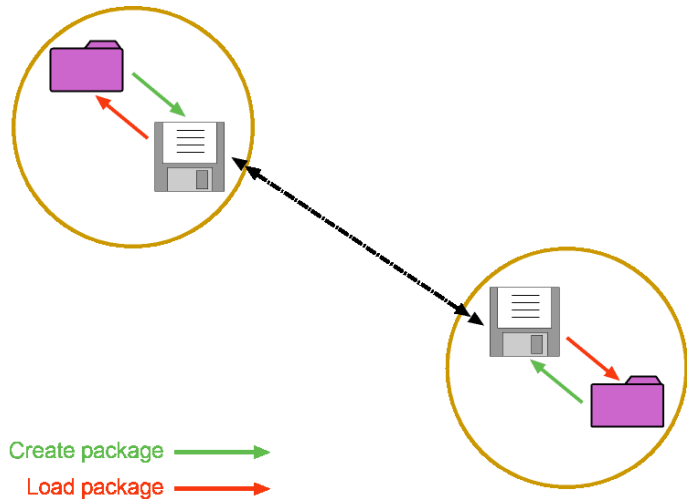


Figure 2: Using removable disk

¹These notes aren't intended to replace SSP's "help" system, but to supplement them.

(a process that is well described in SSP's "help" system).

Transferring the package between computers

SSP gives you a number of choices for transferring the package between computers: removable disks, e-mail and FTP servers. I don't deal with the e-mail option here, because I don't have any experience with this route. E-mail is only feasible if your e-mail service can cope with file attachments of the size of the packages, and if you don't need to synchronize files used by your e-mail client.

Removable media

The simplest way is to use a removable disk (Figure 2). It's unlikely that a 3.5 inch floppy disk will have enough room for the package, so you're probably going to want to use a Zip or Jaz disk, or a CDRW disk using a packet-writing technology like Roxio's DirectCD.

First, you must create "profiles" on both computers. This is explained in SSP's "help" notes; make sure, in the first step of the "New Profile Wizard," you select "Synchronize with a remote computer" in the "Synchronization type" box. On each computer, once you've created the profile, select the profile and, in the bottom right of the window labelled "Transfer Package Using," click the "Local path" option. To the right of this item a box will appear: enter the path of the removable drive that you'll be using for the packages. For example, if you're using a Zip drive which is drive D: on this particular computer, then you'll enter D: in that box.

Once that's done, all you need to do to create and apply updates (i.e. create packages on the removable disk and apply these packages) is make sure that the disk is in the appropriate drive, right-click on the profile and select the action you want.

FTP servers

One server

If you have an FTP server on one of the computers and both of them are connected to the Internet, you can transfer the package over the Internet (Figure 3). Here, the FTP server is on Computer B, so the settings to use for "Transfer Package Using" are as follows:

Computer A: Set to "FTP Server." Click the "Advanced" button and then "New".

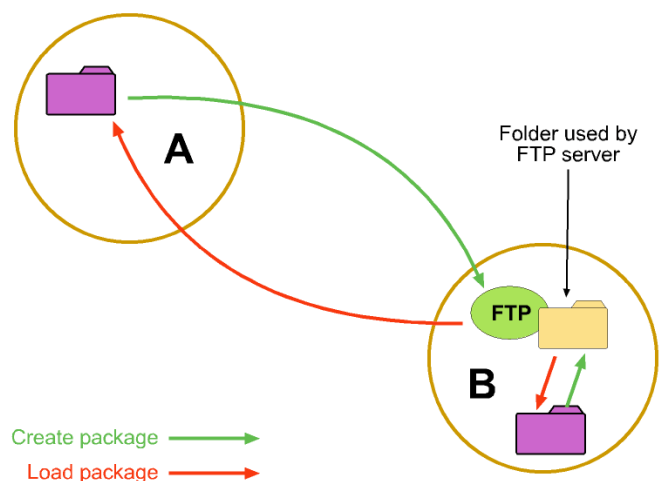


Figure 3: One FTP server

Enter the details of the server, then click “OK” and select the name of the FTP server in the “Host Name” box.

Computer B: Set to “Local Path.” Enter the path of the folder used by the FTP server.

Two servers

The one-server arrangement works well when you’re using Computer B, but it can be a bit tedious when you’re using Computer A. Before you can apply the updates, the package must be downloaded from Computer B. If the two computers are connected by a fast connection, this isn’t usually a problem. However, most domestic broadband connections have an artificial limitation introduced by the service provider, who typically severely restricts upload transmission speeds. So you have to sit and think great thoughts while the package crawls from Computer B to Computer A, which could well push you to the removable media method instead.

There’s a way around this, however, if you’ve got FTP servers on both computers (Figure 4). For example, when you’ve finished using Computer A and create an update package, you send it to the FTP server on Computer B. So when you apply the update package to Computer B you do so from a local path, namely the folder used by the FTP server on Computer B.

This solves the one-FTP-server problem because the package is being transferred from Computer A to Computer B while you’re transferring yourself from one computer to the other. So long as the Internet is faster than you, all’s well.

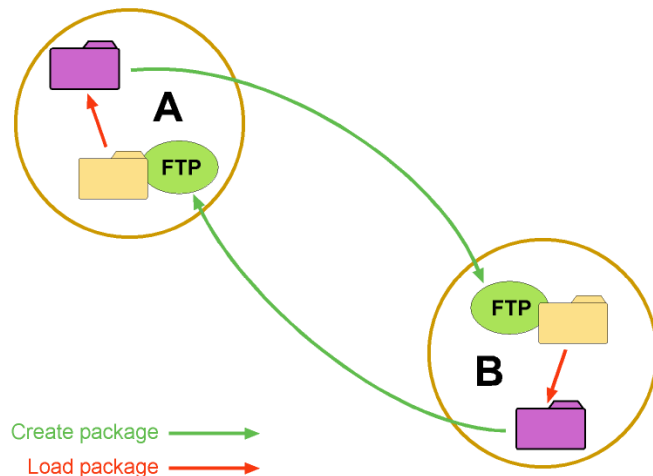


Figure 4: Two FTP servers

The downside is that, at least for now, you have to change the “Transfer Package Using” settings each time you use SSP, as follows:

Creating a package: Set to “FTP Server”, using the server on the other computer.

Loading (applying) a package: Set to “Local Path”, using the path used by the FTP server.

You don’t need to do this if your FTP server software can accept a connection from the computer it’s running on. In this case, for each computer, set “Transfer Package Using” to “FTP Server” and check the “Use Alternative FTP Host for Package Loading.” Create an entry (using the “Advanced” button) for the FTP server on the local computer, and select the name of this server in the lower of the two “Host Name” boxes.

Synchronizing three computers

It's tricky, but it can be done. On each computer you set up two profiles (Figure 5), one for each of the two other computers. This means that you have three packages doing their thing, which sounds more confusing than it really is.

Creating update packages: Since each computer has two profiles, when you've finished using, say, Computer A, you need to execute a "Create Updates" command for each profile (in this case, A-B and A-C). The quickest way to do this is to put both profiles in a group (see the "help" system) and execute the command "Create Updates for All Profiles within Group."

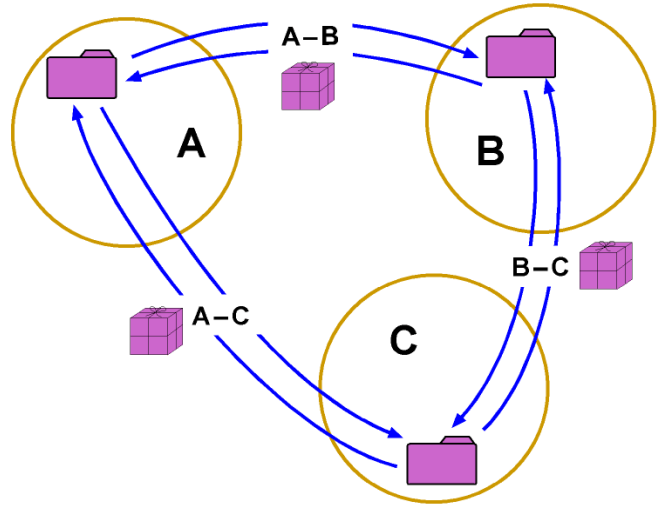


Figure 5: Synchronizing three computers

Loading update packages: They *must* be loaded sequentially. If, for example, you've moved from Computer A to Computer C, load the B-C package and then the A-C package (I don't think the order matters). If you load them simultaneously, SSP gets confused. It's not as bad as it sounds: you get used to it quickly.

For those who like demented diagrams, Figure 6 shows the connections when FTP servers are running on all three computers. Again, it's not as bad as it looks: this arrangement can work very well once you get used to it.

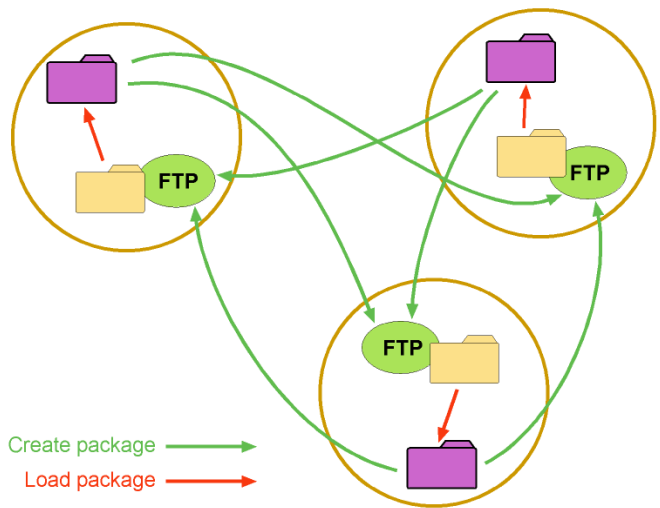


Figure 6: FTP linkages for three computers

© Copyright Hugh Gunz, 2003