

## Send-receive and backing up your data

### *Draft*

One thing computer users need to think about is how to backup their work so that the work is not lost if their computer is lost, destroyed, or suddenly fails to work. A good backup plan would include making several copies of your data in various locations, even one or more remote locations so a disaster destroying your entire office would not destroy all copies of your work.

The usual approach for this is a special program that makes copies of your files on an external hard drive, or USB drives, and makes the remote copies by sending data over the Internet somewhere else. The Paratext send/receive tool is actually doing all of this already, if your project is shared. Send/receive over the Internet stores a copy of your project on the Paratext archive server, located in North America, as well as keeping a copy on everyone's computer that is doing send/receive. If you are not using send/receive to the Internet, you still have multiple copies of your project, one on everyone's computer, plus on the USB drives or network folders you use for doing the send/receive.

In the event you need to replace your computer, the usual backup approach is to restore all your files onto the new computer from your backup software. This can cause problems for Paratext shared projects. The best way to restore your shared Paratext project onto a replacement computer is to do a send/receive in Paratext.

Why is restoring files with backup software so problematic? The project repository, that stores the project history, includes for every file a system of hidden and binary files that express how that file has changed over time. If you were to restore just the main file without the project history files, you would have a project with no history.

Another possible problem with restoring a project I discovered doing an experiment one time. I took a test project, and copied the entire Paratext project folder to a different location, simulating a backup. Then to simulate a computer disaster, and subsequent restoring of the files, I deleted the project folder from "My Paratext projects", then copied the copy I had made back into "My Paratext projects." When I started Paratext after this, all seemed well and the project books were there. But I found when I did a send/receive this project, the send/receive server now stored this project as a new project with the same name. My changes went to my new project, but my team members would be connecting with the old project. I'd never see their changes, and they would never see my changes, until one of us would have asked Paratext support what had happened, and Paratext support would have seen that we didn't really have one shared project anymore. Somehow the copying of files outside of Paratext changed the identification of the project so it was treated as a new one.

So remember, if your project is shared, and you have to replace your computer, use send/receive to get a new copy of your shared project, instead of using the restore function of your backup software. Sharing the project is backing it up. You can use other tools for backing up if you wish, if you think you can never have too many copies of your valuable work. But don't use the restore file option from your backup software, or the Restore Project from File command in Paratext, unless the shared project has totally been lost from everyone's computers and the Internet server (an unlikely possibility).

Paratext includes a backup tool, the Backup Project to File command found on the File menu. This tool dates from Paratext 6, before Paratext had the ability to send/receive, and is not recommended for shared projects. Using the backup tool to make a copy of your project files will not harm your project, but using the Restore tool to restore from a backup zip file can damage your project. If you use the Restore function to copy the project to a new computer, you will be warned that using Restore on a shared project is not advised. If you persist, you will find the project you have restored is no longer shared, and you will be unable to share this project with the other members of your team, because you will be told they already have a project with the same name. As I said above, if you need to get a shared project copied to a new

computer, the best way is to use send/receive.

If you do not use the send/receive to the Internet, and would like to make sure your data has been copied to a location in a different country, you can use backup software to make copies of the "Shared Paratext Projects" folder on your USB or your network folder that you use for send/receive, then arrange for those backup files to be stored in a remote location. In the event that all of your local copies of the project are lost, you can use the restore function of your backup system to make a copy of the "Shared Paratext Projects" folder from your backup, then use send/receive in Paratext to retrieve a new copy of the project(s) from that folder.