Paratext 7.1 Project Sharing Manual

⚠ This document is a manual for setting up Project Sharing (Send/Receive) for a project using Paratext **7.1**. To implement these instructions, **every project user MUST be running Paratext 7.1 using their own unique Registration details**.

1. Introduction

Paratext 7 enables project teams to easily and safely share project data using a feature called Send/Receive. In order to make sharing possible, Paratext maintains a detailed history of all the changes being made to a user's project files inside a special (hidden) container called a repository. Each member of a project team has their own project repository. Inside a repository, Paratext keeps track of revisions made to every project file.

The Paratext Send/Receive functions are able to do the difficult and detailed work of transmitting and merging project repositories between team members, carefully incorporating the history of changes made in one user's repository into the repository history for another user. This allows users to work independently, but then also be able to contribute work back to the rest of the team at any time. The transfer of project data (repositories) between users can be done using a USB drive, a network shared folder, or using a UBS-managed secure Internet server.

In Paratext 7.1 we have worked hard to provide an easy-to-use interface for managing and using project sharing functions. Nonetheless, it is essential that the details in this introduction and the instructions for setting up project sharing are read and understood thoroughly before implementation.

This introduction will define some important terms and concepts.

- What is a project repository?
- What is a project copy?
- What does it mean to Send/Receive a project?
- What are project sharing roles?
- What is an Administrator?
- What is the difference between using Backup/Restore and using Send/Receive?

What is a project repository?

A project repository ...

- Is a container. It may grow to contain hundreds, or even thousands, of project copies.
- Is a historical record. It contains project copies from many specific points in time.
- May contain project copies (history) contributed by many different team members.
- Is always stored locally in a sub-folder of the project folder for a selected Paratext project on your computer. The repository folder is named ".hg". It should never be removed, or manually modified in any way.
- May also be sent to many other locations. The user may use a send operation to make a copy of the their local repository on the Internet server, a USB drive, or a network shared folder. This action of placing a repository copy in another shared location is essential for project backup and project sharing.
- Belongs to a specific person. Each user on a team has their own repository for each project they belong to. Their repository is always stored together with a reference to their Paratext Registration Name.
- Is frequently updated. Paratext will place a new project copy in the local repository at least once a day, or whenever a major change to the project data is about to take place.
- Is safe from interference from others. You can never send anything to anyone else's repository directly; they must instead receive it from a copy of your repository — this is a safety feature to limit the ways someone else can modify your data.

What is a project copy?

In the Paratext documentation the term "project copy" or "project copies" is used to refer to the storage of information about the revisions made to a project's files. In the realm of Bible translation work, the term "revision" could be confused with the task of working on revisions to an existing translation. For this reason we have used the term "copy".

If a Paratext project repository can contain hundreds of "project copies", then the term "copies" might imply that a repository will quickly become very large, and consume a lot of disk space. Fortunately, that is not the case. A project copy is really a very compact list of the changes which have taken place in the project data since the previous copy was made. The amount of disk space consumed by a project copy is very small. The effect of many copies is almost like having an infinite number of "undos" available.

In summary, a project copy ...

- Is a complete representation of all the data maintained in Paratext for a project at a specific point in time.
- Records the name of the user who made the copy and the date and time that this copy was made. A repository can contain project copies from many different users made at many different times.

Is incremental. It stores only a list of the changes to the project data so that the disk space used to store a new project copy is small.

What does it mean to Send/Receive a project?

A **Send** operation gathers up all the project copies from the local repository on your computer and copies them into another repository belonging to you (with your Paratext registration name attached to it) on a USB key, a network shared folder, or the Internet server. You can only send to a project repository belonging to you; you cannot directly alter anyone else's repository. Once the project has been sent, other team members can Receive this updated data now available in your repository into their repositories.

A **Receive** operation gathers up project copies from other people's repositories and duplicates them in your local repository.

A Send/Receive operation performs a Receive first, and then a Send.

What are project sharing roles?

Paratext 7.1 provides four different roles which can be assigned to users on a project. Different roles provide users with varying permissions to make changes to the project data.

Observer:	Can receive and view the project but can make no changes of any kind.
Consultant/Reviewer:	Can receive and view the project. Can add non-publishable notes to the project to indicate issues that need attention.
Translator:	Can receive and view the project. Can add non-publishable notes to the project. Can alter the text of any books in the project which have been assigned to them by an Administrator.
Administrator:	Can do anything a translator or consultant can. Is responsible for assigning books (or individual chapters) for editing by individual translators. Is commonly responsible for reviewing the changes made by other users and for resolving any merge conflicts which may arise.

The Administrator's role is essential for initial project sharing setup. A more detailed description of this role is outlined below.

What is an Administrator?

An "Administrator" is a project sharing role which is given to the person responsible for setting up and maintaining the project sharing activities. Initially, the Administrator assigns a role to each of the project users. Roles are used to broadly define the kinds of activities that a specific person will be able to perform on the project data — such as permission to view, edit, or add notes to, the project text. Administrators can also assign specific books and chapters to users with permission to edit the text.

An Administrator may optionally be given the responsibility for maintaining the official copy of the latest data for the project. They do this by reviewing new text changes and removing invalid changes.

An Administrator should understand how to:

- review other users' changes
- know how to work with project history
- compare texts
- view conflict notes
- resolve merge conflicts
- add/remove users, and
- change user's roles and editing assignments (per book/chapter)

⚠ All projects must have at least one person assigned the Administrator role at all times. It is possible, but uncommon, to have multiple Administrators. Most projects will have only one.

What is the difference between using Backup/Restore and using Send/Receive?

In Paratext 6, transferring text from one computer to another was done using the File > Backup and Restore features. Those procedures can still be used in Paratext 7, however, the new Send/Receive features provide a much better and safer method for backing up text and/or sharing it with others.

The old Backup feature saves the current text and figures for a project you are working with into a single compressed zip file. The Restore operation is used to read the backup zip file and add the project to another computer, or to update the existing data for the project if it is already present in Paratext. There are many ways to accidentally lose data using Backup and Restore — such as older text for a book from one computer accidentally replacing the newer text for the same book on another computer.

The new Send/Receive feature maintains the entire history of the project over time, and not just the current text. This is done incrementally, and therefore more efficiently than a user maintaining a history of backup files. This method also allows for the safe merging of edits from multiple users, compared with the old Restore feature. Using the new Send/Receive feature to backup your project to the Internet, or a USB drive or network shared folder, is therefore the recommended procedure in place of the old Backup and Restore features.

What are the dangers of using Backup/Restore once Send/Receive has been set up?

Although Send/Receive provides a better and safer method of backing up project data, some users may still choose to use the Backup feature to save another local copy of their project data, on their own computer or other media. Making additional backups like this is not problematic in and of itself, however restoring from these backups could cause problems once Send/Receive has been set up.

❗ Restoring a project from a backup overwrites the existing data with older data which then gets incorporated into the Send/Receive process as if it is new changes to the text. This will almost certainly result in merge conflicts or text being accidentally overwritten.

If you choose to make backups of your project, the recommended procedure for restoring from these backups is ALWAYS to restore to a new project. If there is any text from the restored backup which you wish to preserve in (or copy back to) the existing project, use the Compare texts tool (comparing the restored backup with your existing project) to find this text and copy it back manually. [NB: This sort of procedure is made easier and safer using Send/Receive and Project History instead of Backup and Restore.]

2. Initial Project Sharing (Send/Receive) Set-up

The following tutorial explains the steps required for setting up Paratext 7.1 project sharing in the most common configurations. This procedure needs to be completed for every individual project that you wish to share. All project users must install or upgrade to Paratext 7.1 together. Some users currently sharing numerous projects in Paratext 7.0 will likely find that coordinating an upgrade of all users for each project to Paratext 7.1 is not possible. If this presents a problem for you, please contact your Paratext support person for additional information on options for managing this situation.

Project sharing configuration involves assigning one Administrator, plus one or more additional users who are assigned other roles in the project, such as "Translator", "Consultant/Reviewer", or "Observer". Project data can be shared between users via the Administrator's computer, or by allowing all users to receive changes directly from each other (see the setup section on "configuring the flow of changes between users"). Working with multiple administrators is discouraged since it may result in (accidentally) assigning the same book/chapter to multiple users, leading to conflicts. (Review information available in the section "Send/Receive Maintenance" for detailed project sharing configuration options and tasks.)

In order to initiate sharing for a project using Send/Receive, the following is required:

- You must be a **designated Administrator** of the project. (see "What is an Administrator?")
- You must have the **latest version of the project text** within a Paratext project on your computer. (see "Getting the latest text on the Administrator's computer")
- You must have the **exact Paratext Registration Names** of all the people you wish to add to the project.
    - If you do not know the exact Paratext Registration Name of a user, ask them to start Paratext on their computer and select **About Paratext** from the **Help** menu to find their Paratext Registration Name (shown at the bottom left corner of the splash screen in Paratext 7.1).

2.1 Getting the latest text on the Administrator's computer

If the project you are working with is already being shared using Paratext 7.0, or if you (the Administrator) are confident that **you already have the most up to date files for the project on your computer**, then proceed to the next section – Configuring Users, Roles and Permissions.

If a team member has been using Send/Receive in Paratext 7.0, but it has been configured only to "Receive" on their computer, please see the relevant additional information in the troubleshooting section at the end of this document before continuing with the steps below.

This procedure only needs to be done once before Send/Receive has been set up for a given project.

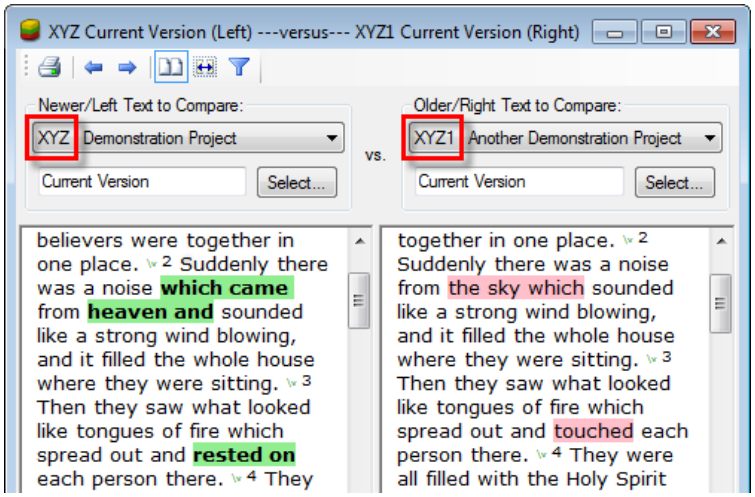
On each user's computer in the project:

1. Click in the window of the project, to make it the active window.
2. Point to **Backup Project** on the **File** menu, and select **To File...**.
3. Follow the Guide to create a backup (zip file) containing the version of the text on that computer.
4. Copy each of these zip files to a folder on the Administrator's computer.

Select **Delete entire project/resource...** from the **Project** menu to delete this project on the user's computer.

On the Administrator's computer:

1. Point to **Restore Project** on the **File** menu, and select **From File...**.
2. Browse to find the zip files from the other project computers, select one of them and click **Open**.
3. Click **New project...** to create a new copy of the project (for project XYZ call this new project XYZ1). Click **OK**.
4. Repeat this with the other zip files, creating new projects XYZ2, XYZ3 and so on (create one new project for the text restored from each non-Administrator computer).
5. From the **Tools** menu, select **Compare Texts...** to view the differences between the project XYZ and each of the individual projects XYZ1, XYZ2..., by selecting XYZ on one side and XYZn on the other side.



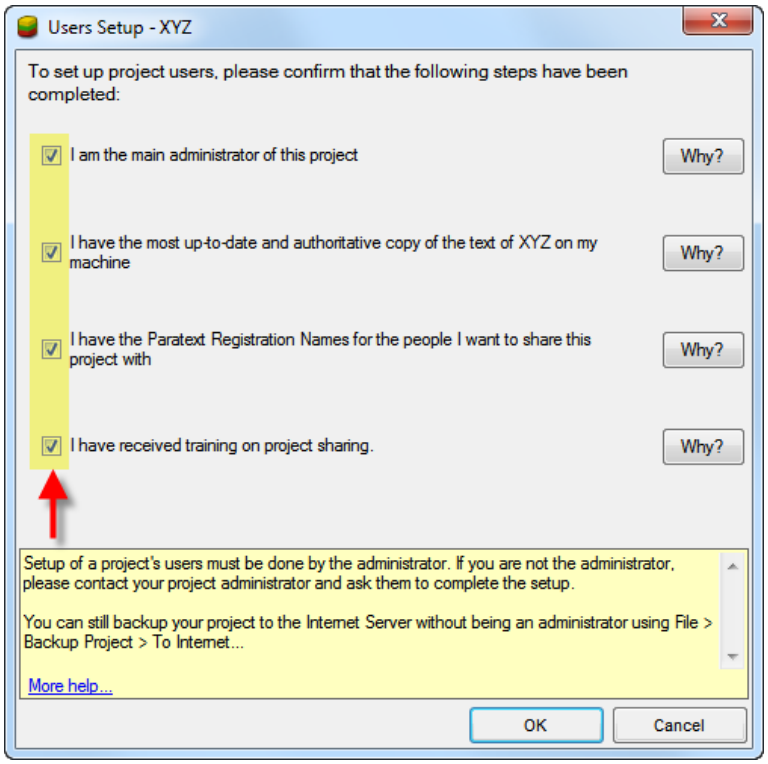
Whenever a difference is found, if the text from XYZn project is newer or better, use **Copy** and **Paste** from the **Edit** menu to transfer small amounts of text (or use the options in the right-click menu). Or, use **Copy Book(s)...** from the **Project** menu to copy whole books from one project to the other (use Copy Book(s) with caution, since this will overwrite the contents of an entire book in one project with the text of the book from the other project).

2.2 Configuring Users, Roles and Permissions

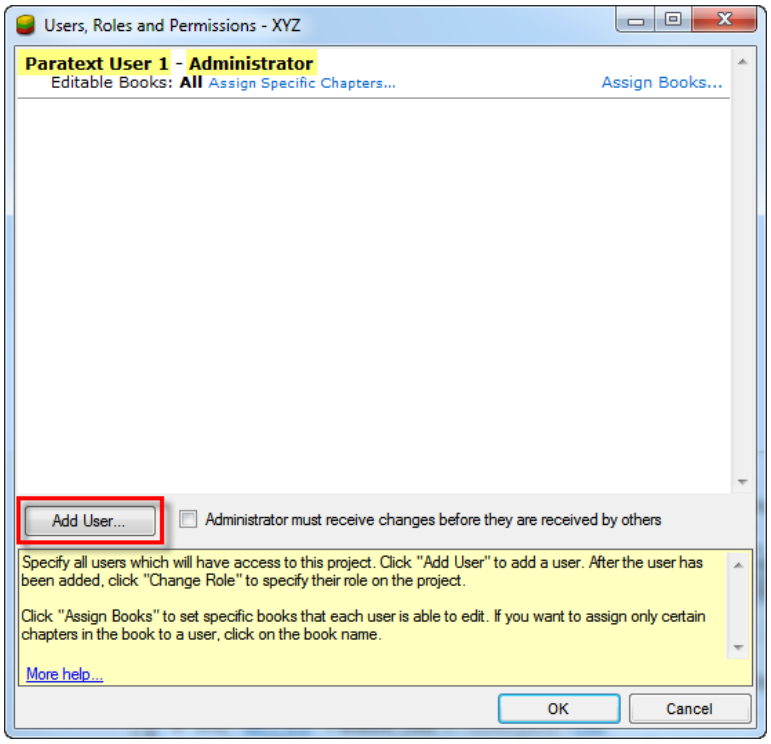
⚠ Please make sure that the following steps are only carried out on the Administrator's computer.

On the Administrator's computer:

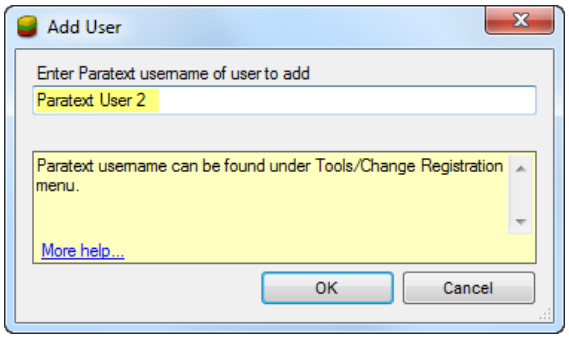
1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Users, Roles and Permissions...**.
3. Paratext will prompt you with a confirmation request dialog.
   Consider each item carefully, and **place a tick in the checkbox** beside each statement in this window to confirm that this step has been completed. Then click OK.



Next, Paratext will refresh its user information database and then you will see the **Users, Roles and Permissions** configuration dialog. In this dialog you will add users to the project team, and assign a role to each user. For users who are given a role which permits editing of the text, you will then assign specific books (and optionally individual chapters). Since this is the first time that sharing is being configured for this project, your current Registration Name will be the only name in the user list, and will be assigned the Administrator role.



4. For each person you wish to share the project with click **Add User...**.
5. Enter the user's **Paratext Registration Name**, and click **OK**.

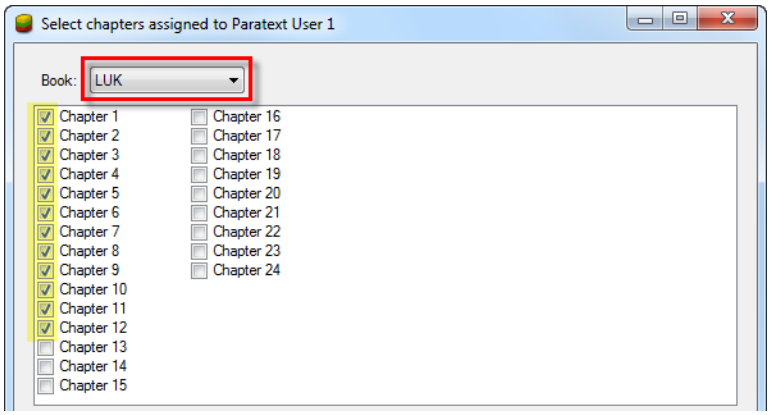


If Paratext is unable to connect with the Internet when adding a new user, you may receive a message indicating that Paratext could not verify the username you have added. This is a warning, and you may proceed, but please take extra care to be sure that the user's registered name is spelled correctly. If it is not, Send/Receive will not function properly.

7. Beside each user's name click **Change Role...**, and select their role within the project from the pop-up list:

8. Beside each user's name click **Assign Books...**.
   Select one or more books to assign to the user and click **OK**.

9. *Optional:* In order to permit a user to edit only certain chapters in each book, click **Assign Specific Chapters...**.
   Select a book from the drop-down list of books available in the project. Then **place a tick in the checkbox** beside chapters you want to assign to the user and click OK.

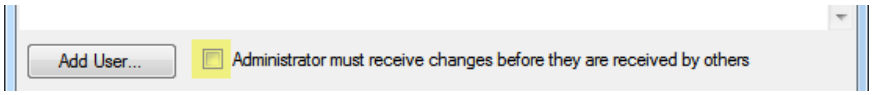


If book and chapter assignments allow editing of the same text by two different users, Paratext will highlight these assignments in red.

Normally **you do not want to assign the same book or chapter to multiple people** because if two or more people edit the same verse, it will create a merge conflict that will need to be manually resolved later. If this happens a large number of times it will be very time-consuming to straighten this out. Normally a single person would be responsible for editing a given book or chapter, and all other people would request changes by creating a project note describing the change they are suggesting.

Configuring the flow of changes between users

10. Finally, you will need to make a decision about how the changes made to the project data will be transmitted between each of the project users. This decision relates to the checkbox labelled “Administrator must receive changes before they are received by others” located below the list of Users.



    - If **unchecked** *(default)* – project changes sent by one user are immediately accessible to all other users, and will be received by them directly the next time they perform a Send/ Receive (see an explanation of how changes flow from peer to peer later in this manual).
        - Not recommended if you require all changes to be reviewed by an Administrator before being shared with others.
    - If **checked** – project changes sent by one user must first be received on the Administrator’s computer before they will be available to be received by any of the other users (see an explanation of how changes flow via Administrator later in this manual).
        - Not recommended if the Administrator will not be available regularly to perform a Send/Receive during work sessions.
        - It will be impossible for users to see changes from each other until they and the Administrator have both performed a Send/Receive operation.

11. Now click **OK** to close the Users, Roles and Permissions dialog.
12. A reminder appears telling you that you must now do a Send/Receive in order for your changes to take effect. Click **OK**.

Proceed with Initial Sending and Receiving of the Project (below)

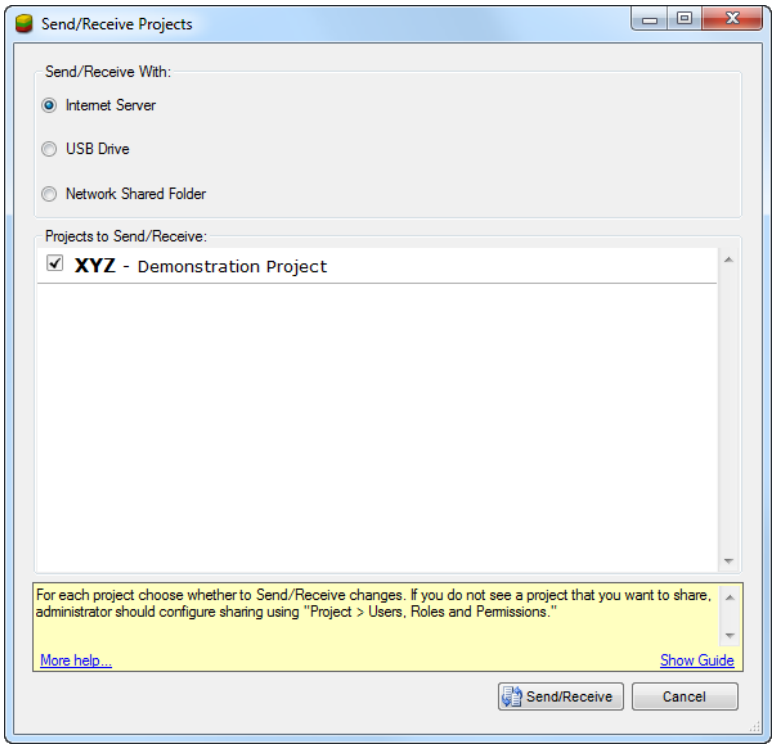
2.3 Initial Send and Receive

On the Administrator's computer:

At this point, the initial setup of project membership and user role assignments is complete. Next, the Send/Receive Projects dialog will appear. In this dialog, you need to select the location through which the sharing for this project will take place.

1. Click one of the buttons beside **Internet Server**, **USB Drive**, or **Network Shared Folder** in the "Send/Receive With" section.

Internet Server:	Share the project using a UBS-managed Internet server. A stable connection (preferably 128Kbps or greater) is required for each member of the team in order to successfully use this option.
USB Drive:	Share the project using a USB drive. The USB drive will be physically circulated and plugged in to each user's computer, and each person will perform a Send/Receive operation to this same drive. After you select this option, select the appropriate drive letter from the drop-down list of USB drives attached to your computer. A folder named "Shared Paratext Projects" will be created on the selected drive, if it does not already exist.
Network Shared Folder:	Share the project using a storage location on your local network which is accessible to each user. After you select this option, browse to the correct location on your network (it might be helpful to map this location to a drive letter.) A folder named "Shared Paratext Projects" will be created at the selected location, if it does not already exist.



In the lower half of this dialog you will see a list of projects on your computer which are currently being shared with the selected sharing device. A tick in the checkbox beside a project in this list indicates that changes in that project will be sent and received when the Send/Receive button is clicked. The new project you have just configured Users, Roles and Permissions for is automatically selected. Many users (translators) will only ever have one, or possibly two projects listed here (as in the screenshot showing the XYZ project, above). Some users, such as translation consultants or support staff may have a larger list of shared projects already appearing in this list.

⚠ In some cases, the new project in this list which you have just configured Users, Roles and Permissions for may display an additional message below it (in red text) indicating that Paratext is "**Unable to share with** <*user name*>". This will happen if Paratext has found a project on the Internet Server with the same name as the one now being shared, which is also already associated with the indicated user.

You cannot share with someone if they already have a copy of a project with the same name on the selected sharing device. This restriction is enforced in order to avoid mixing data from incompatible projects.

- You should backup the project on the user's machine if you think there is any possibility that they have data you will want later.
- Then, delete the project from their machine using **Project > Delete Entire Project**. Place a tick in the checkbox next to the label which says to "Also Remove Backup from Internet Server".

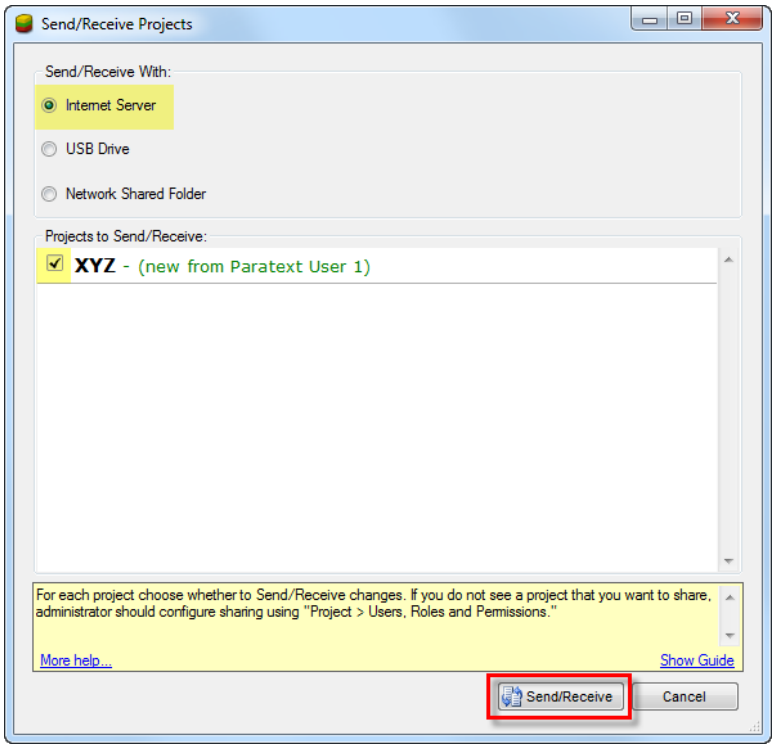
2. Click **Send/Receive**.

Paratext will display a progress dialog while the data for the project is initially sent to the sharing device. This will make the project accessible to the remaining users (translators, consultants/reviewers, observers).

On each user's computer in the project:

1. From the **File** menu, select **Send/Receive Projects...**.
   Paratext will display the Send/Receive Projects dialog.

2. Click one of the buttons to select the sharing device through which the project is being shared.



In the lower half of this dialog you will see a list of projects which are being shared with you using the selected sharing device. There may be one or more projects displayed in this list. Projects which have not yet been received on your computer will be indicated by the text "new from", plus the name of the project Administrator, in parentheses after the project short name.

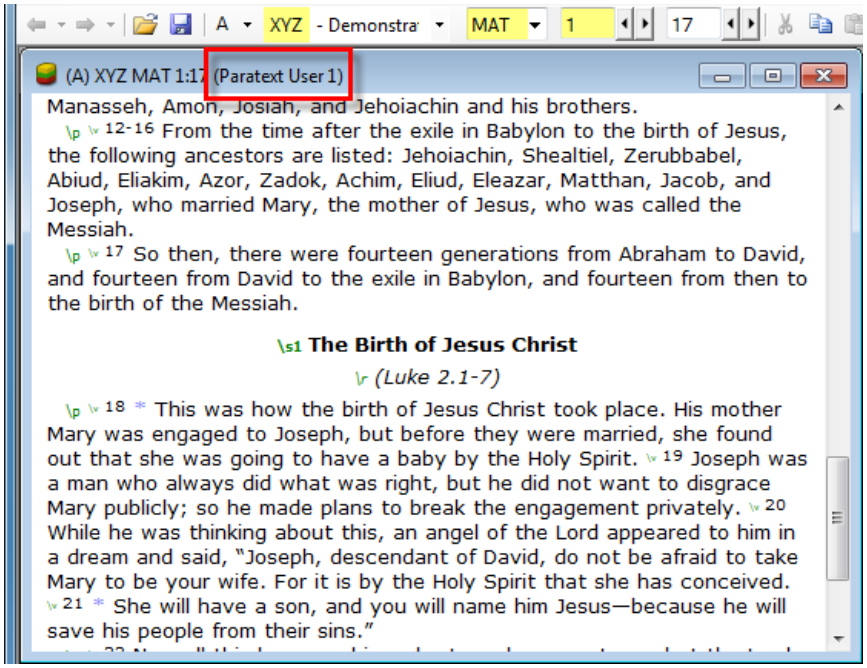
3. **Place a tick in the checkbox** next to the project(s) you wish to receive.

If the list of Projects to Send/Receive is empty, it means that no projects are being shared with you using the selected sharing device. An Administrator would need to add you as a user in the project by configuring Users, Roles and Permissions for the project and performing a Send/Receive to the sharing device.

4. Click **Send/Receive**.

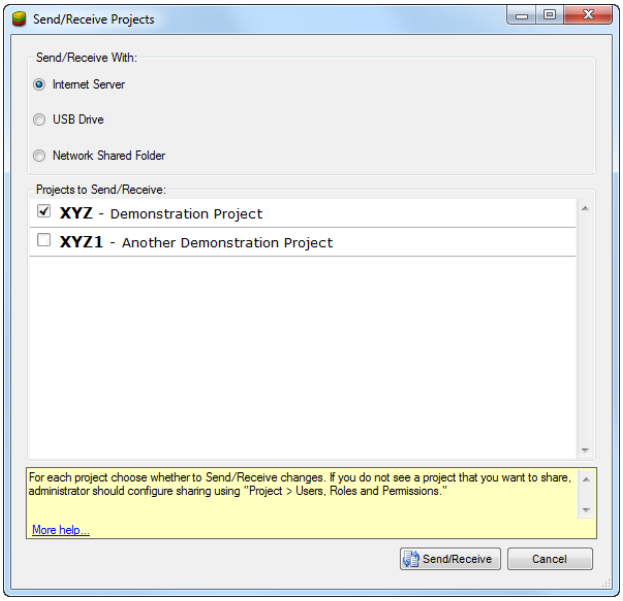
Paratext will display a progress dialog while the data for the project is being received from the sharing device.

When Paratext has finished downloading the project you will be able to open it in a project window. As you navigate to different books/chapters in the project, the title bar displays the names of users who have been given permission to edit the text. If your role does not have editing permissions, or the selected book has not been assigned to you, you will not be able to change the text.

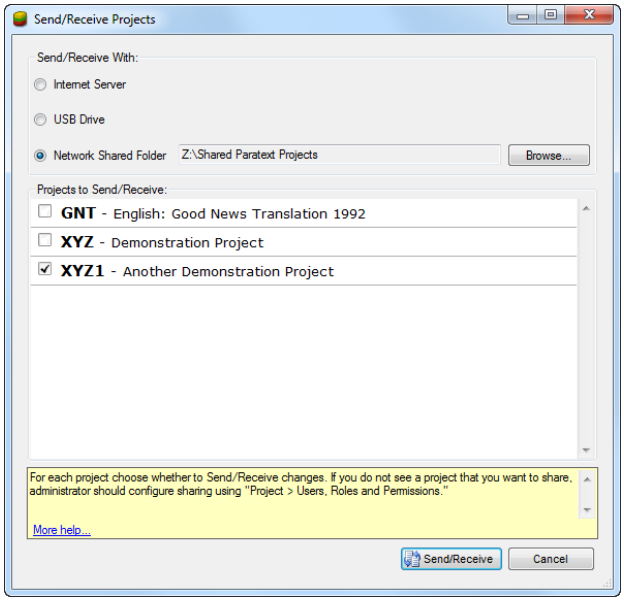


Using Different Sharing Devices

It is possible to have some projects configured to Send/Receive with the Internet server, while other projects are configured to Send/Receive with a USB drive or network shared folder. Paratext remembers which projects are configured to Send/Receive with each sharing device. If you change the "Send/Receive With" device selection in the top half of the Send/Receive Projects dialog, Paratext will update the "Projects to Send/Receive" list in the lower half of the dialog, and you will see which projects on your computer are configured to share with the newly-selected device.



*Projects shared with the **Internet Server***



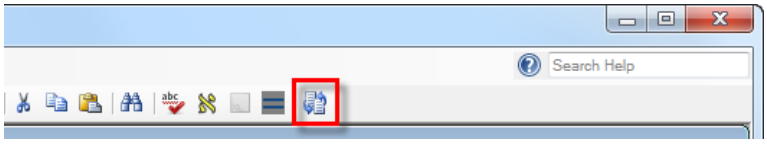
*Projects shared with a **Network Shared Folder***

Sharing one project using multiple devices

On some project teams, not every user will have the same quality or consistency of access to the Internet. In this situation it may be necessary for one or more users to regularly send and receive changes to the project text using a USB drive or shared folder, and for changes to be sent to and received from other users (or simply to be backed up) periodically using the Internet server, when a stable Internet connection is available.

3. Ongoing Send and Receive Operation

After the initial project sharing setup is complete, you can send and receive further changes to shared projects on your computer by clicking on the Send/Receive toolbar button, or clicking Send/Receive Projects... from the File menu.



Paratext will display the Send/Receive Projects dialog with the most recently used Send/Receive Projects configuration applied. At any time you can untick the checkbox beside a project in the "Projects to Send/Receive" list, which will omit that project from the send and receive process (no changes to the text on your computer will be sent to anyone else, and no changes will be received). You can resume sending and receiving changes for this project by adding a tick to the checkbox again in a future Send/Receive operation. Unselecting a project in the Projects to Send/Receive list does not remove you as a user in that project. This can only be done by the project Administrator.

Send/Receive as often as you work on the text: if possible at the beginning and end of every working session.

4. Reviewing Text Changes

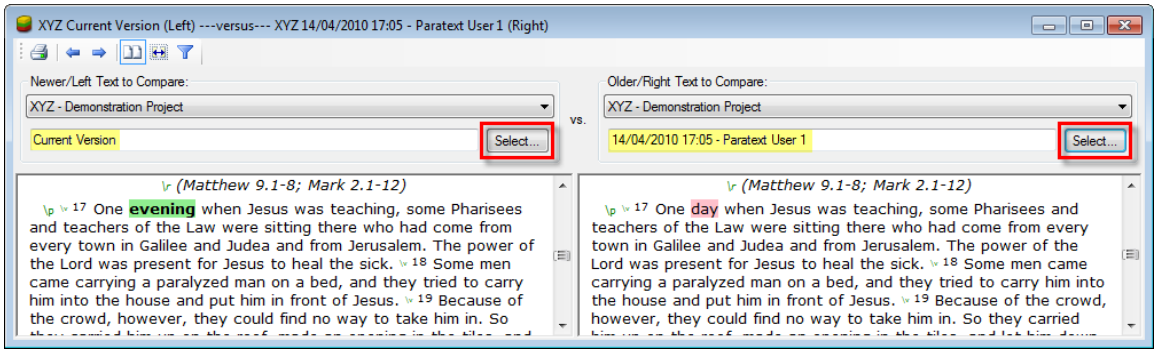
Through the Send/Receive process, the repository for a project on your computer will be accumulating a history of information about changes made to the text.

There are four ways to review the project changes:

1. From the **Tools** menu, select **Compare Texts...**

   A text comparison window will open displaying two panes of text for the selected project. By default, the left pane is used to display the newer copy of the text, and the right pane to display the older copy. You can select which project to display in each pane using the drop-down project menu (defaults to the active project at the time that Compare Texts was opened). Click on the Select button to choose a project copy (version) of the text to display for the selected project in each pane.

   Paratext will highlight differences between the two texts using one of three schemes (the Green/Red Highlight, Underline/Strikethrough, or Underline/Superscript scheme can be selected from the View > Change Display Style menu). You can navigate to the next or previous difference using the arrows in the Compare Texts toolbar.



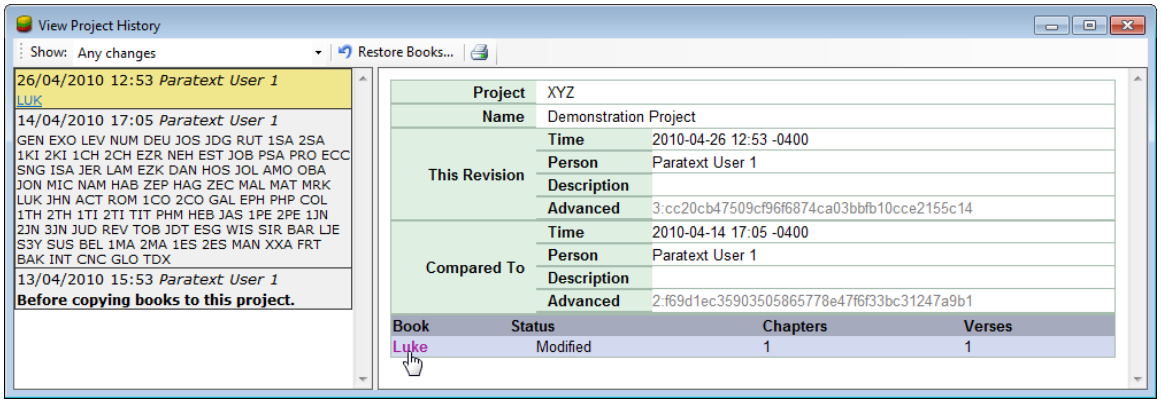
2. Right-click inside a verse (or select multiple verses and right click on the selection) and select the option to **View History for Verse**.

   A text comparison window will open which compares the current text for the selected verse with a previous version of the verse text. At the far left Paratext displays a list of versions (project copies) of the project text which contained changes within the selected verse(s).

3. From the **Project** menu, select **View Project History...**

   The View Project History window displays a list of the project copies stored in the repository for the selected project. The window is divided into two panes. In the left pane, the date, time, user name, and list of changed books are displayed for each project copy stored in the project's repository. A user may have also added a comment to a particular point in the project history. In the right pane, a change summary page is displayed for the selected project copy. The change summary presents a list of books together with the number of modified chapters and verses found when comparing the selected text revision with the previous event in the project history.

   Using the drop-down list, you can choose to show:
   - all changes in all books
   - changes in the current book
   - changes in the current chapter
   - changes in the current verse

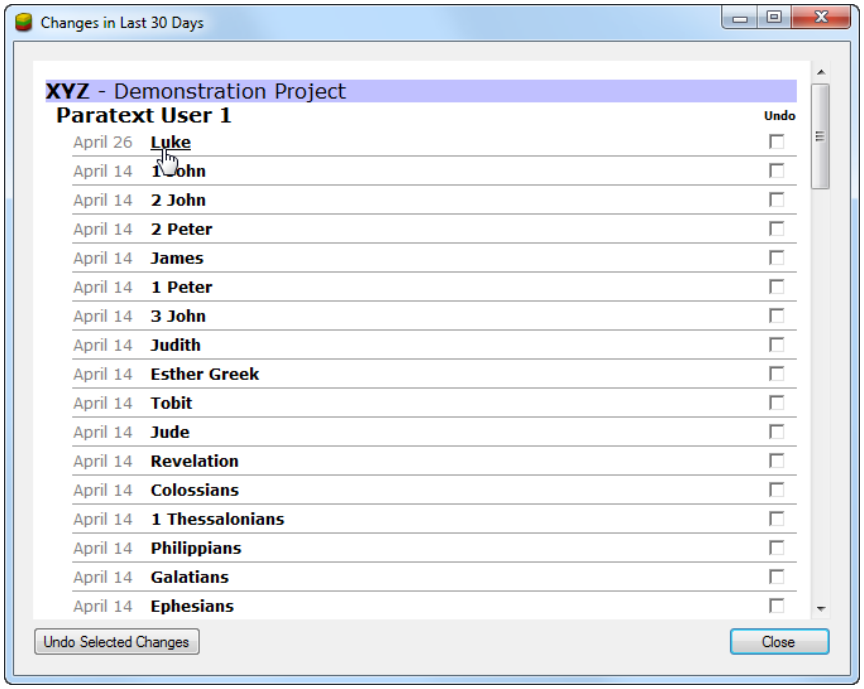


   If you click on a book name in the change summary pane, or on one of the book abbreviation links, Paratext will automatically lauch the Compare Texts tool.

4. From the **Project** menu, select **Review Recent Changes...**

   This option is only available to an administrator.

   The dialog for Recent Changes shows a list of books changed by each user within the last 30 days. Clicking on the name of a book in the list will launch the Compare Texts tool with the left and right panes configured to show changes for the selected book. You can undo the changes made to one or more books by placing a tick in the corresponding checkbox in the undo column, and then clicking on the **Undo Selected Changes** button.



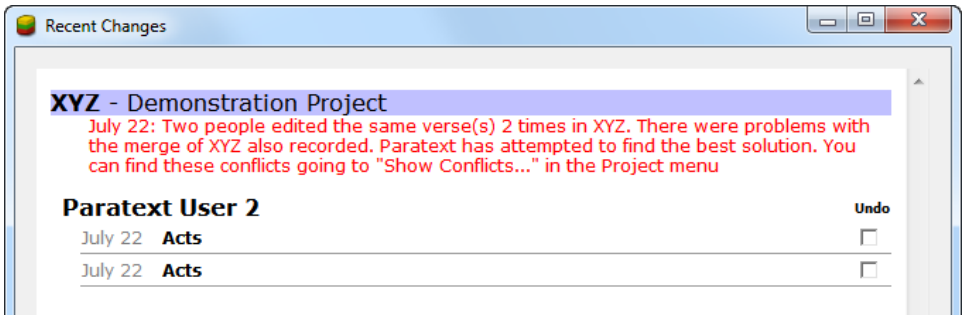
The Recent Changes dialog will open automatically on the administrator's computer to display a list of changes since the last Send/Receive, whenever a new Send/Receive is performed.

Handling Merge Conflicts

Normally, different users on a project team are assigned different books to work on, or different chapters of the same book. Paratext's Send/Receive process safely merges different users' work on different sections of the text. It is possible to configure Users, Roles and Permissions so that more than one user is able to edit the same section of text. If two people make a change to the same verse, the merging process reports a conflict. At this point Paratext checks to see who made the most changes in the chapter where the conflict occurred, and determines that this was the person who was "supposed" to be changing the text in this chapter. Paratext keeps the change from this person and saves the change made by the other person in a conflict note (a special type of Project Note), which is created by Paratext and attached to the verse. The conflict note then needs to be reviewed and resolved, usually by the Administrator.

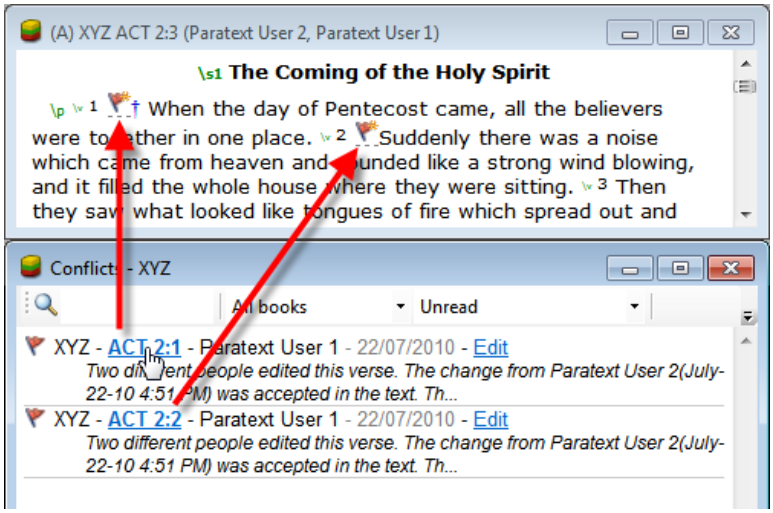
Resolving a Send/Receive merge conflict

If two people make a change to the same verse, and then perform a Send/Receive, Paratext's merging process detects the conflict and displays a warning message in the Recent Changes window. The message instructs you to find the conflict using "Show Conflicts":

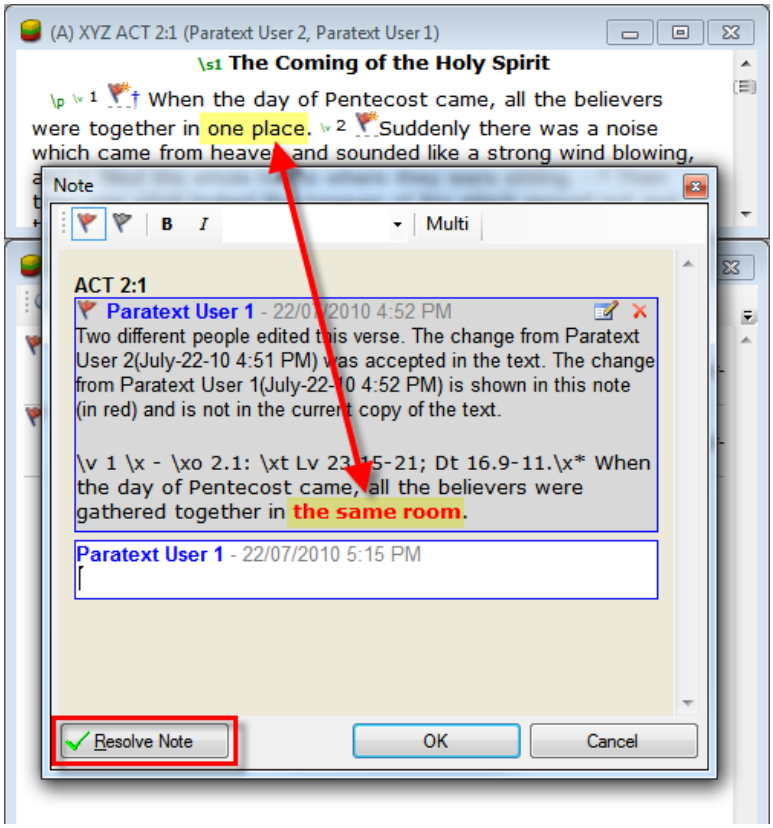


1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Show Conflicts...**
3. Paratext will display a list of projects on your computer. Select the project to show conflicts for (it should already be highlighted if it was the active window). Then click **OK**.

   This opens a Notes window, listing any references where there are conflicts.



4. For each conflict, click on the blue **reference** link. Paratext will scroll to the verse in question.
5. Next, click on the blue **Edit** link in the Conflicts window. Paratext will display the note which explains what has happened.



- One person's change is retained in the project text (the person who has made the most changes to this chapter).
- The other person's change is displayed in the note text and could be copied and pasted back into the text, if required.

6. Once you have made any necessary changes to the text in the project window, click **Resolve Note** (at the bottom left of the note editing window) in order to remove the note flag from the verse.

If your project text appears to have gotten messed up on various computers after using Send/Receive, perhaps due to incorrect editing permissions, resulting in a large number of merge conflicts, please review the steps listed in the troubleshooting section at the end of this document which will help you to fix the problem.

5. Send/Receive Maintenance

What project data is being shared by Send/Receive?

The following components of the project are shared using Send/Receive:

- Project translation text
- Project notes
    - Sharing of project notes is a very effective way to manage team communication. Notes can be used to record comments, questions, and discussions among team members, which are linked directly to the translation text. Notes can facilitate interaction between consultants and translators. Notes can record tasks and track the status of work which needs to be completed.
- Project properties and language settings (including inventory data, quotation rules and so on)
- Biblical terms renderings
- Project interlinearizer data
- Wordlist data (spelling status, hyphenation, morphology)
- Project progress information
- Figures (low-resolution versions)
- Print draft configuration files

Paratext creates a series of XML files in your project folder which store data for some of the above project components. Do not delete these files (or edit them outside of Paratext) - doing so is very dangerous. If a file is deleted from one computer, the Paratext project sharing software will understand this as a request to delete the file on all computers in the project when a send/receive is completed.

If you create a folder named "shared" (this name must be lower case) within your Paratext project folder, any content added to this folder will also be included in Send/Receive. *If you do not have a fast internet connection*, putting large files in the "shared" folder may cause you and/or other team members to not be able to successfully Send/Receive.

What is not shared by Send/Receive?

As needed, Paratext creates a folder named "local" within your Paratext project folder to contain items which will not be shared. For example, when inserting an illustration using Insert > Figure, Paratext copies the original (often high-resolution) image file to the "local" folder, and creates a low-resolution copy in JPG format within the "figures" folder.

Other Paratext-related applications, such as Publishing Assistant, may create additional folders within your Paratext project folder which will not be shared by Send/Receive.

Who can make changes to different types of project data?

In the Introduction section of this manual there is table which lists each of the project roles together with their corresponding permissions. The following table presents this information in an alternative form, showing various actions together with the project roles which can perform them.

Action	*Roles Who Can Perform*
View text:	Observer, Consultant/Reviewer, Translator, Administrator
Edit text:	Translator, Administrator
Add or update project notes:	Consultant/Reviewer, Translator, Administrator
Edit project properties:	Administrator
Edit and send other project data: (Biblical terms, wordlist, interlinearizer, project progress etc.)	Consultant/Reviewer, Translator, Administrator
Change editing assignments:	Translator (see note below), Administrator

Note (translators changing editing assignments): A translator cannot add or remove people from a project or change their role. Under normal operation a translator would not change editing permissions for a book or a chapter. However, there will be situations when a translator is out of internet or USB contact with the administrator but has a legitimate need to start editing some new material not previously assigned. For this reason Paratext does allow a translator in an exceptional situation to change the book/chapters assigned to them. When this is done Paratext displays a warning that this is an unusual practice and that a log entry documenting that they are overriding the assignment will be created.

Understanding the Flow of Changes

It can be helpful to understand how changes to the project data actually flow between the members of a team. There are two different sharing scenarios explained here.

1. Where changes flow directly from peer to peer.
2. Where the Administrator receives changes before other users.

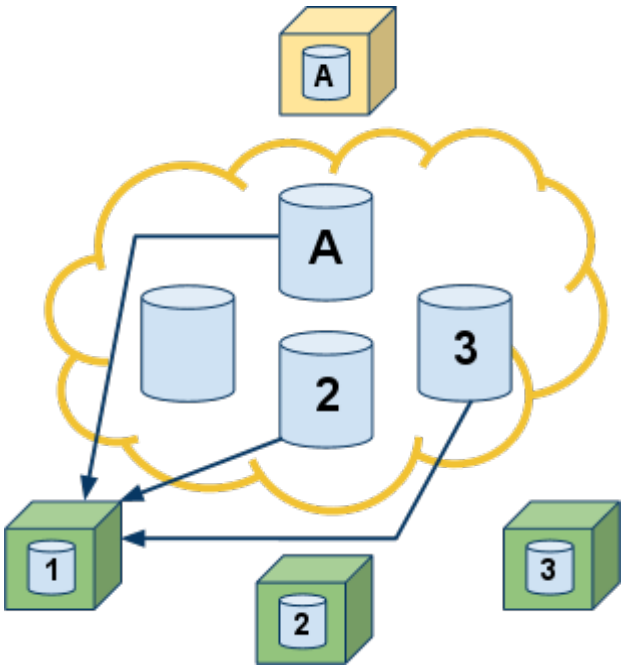
Scenario 1: Changes flow from peer to peer

In this scenario, changes made on any project user's computer are immediately available to any other user whenever a Send/Receive is performed. The actions performed by Send/Receive are the same for Administrators and other users.

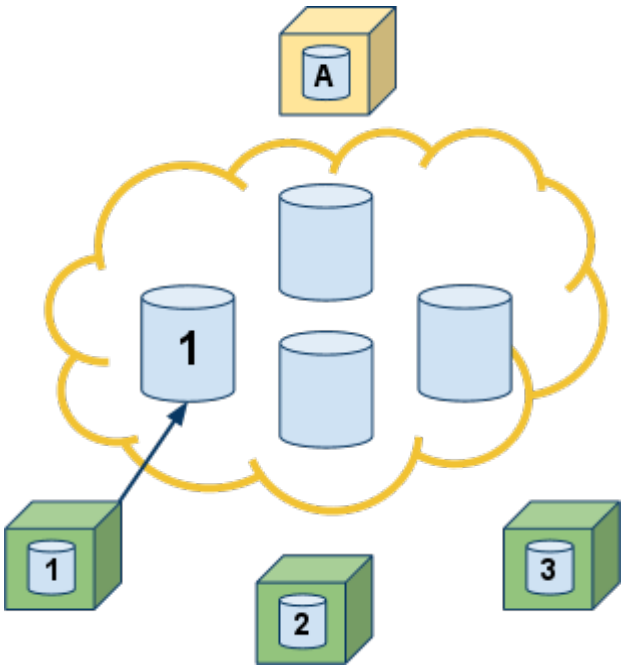
For each user or Administrator who performs a Send/Receive:

1. Paratext receives changes from each of the other user repositories stored on the sharing device and adds these to local repository of the user who is performing the Send/Receive. Changes are potentially received from multiple locations (depending on how many users are on the team, and how many have made changes).
2. Next, Paratext sends updated data in the current user's local repository to the copy of that repository stored on the sharing device. This user's changes will now be available to the rest of the project users the next time any of them performs a Send/Receive.

Note: The diagrams below are only illustrating the changes being received and sent by *one* of the project users (User "1"). A similar receive and send process would take place for each of the other users/administrator when they select Send/Receive.



1. ***Receive*** *changes from each of the other user's repositories on the sharing device (updates current user's local repository).*



2. ***Send*** *current user repository to sharing device (updates user's repository on sharing device)*

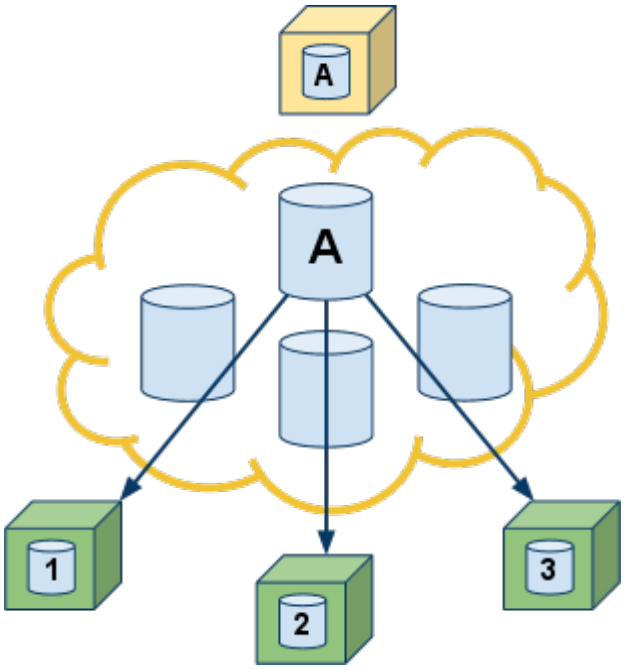
Scenario 2: Changes flow via the Administrator

In this scenario, the Administrator receives changes from the other project users first before they are sent and made available to the rest of the team. The specific actions performed by Send/Receive on the Administrator's computer are different than the Send/Receive actions on the other users' computers.

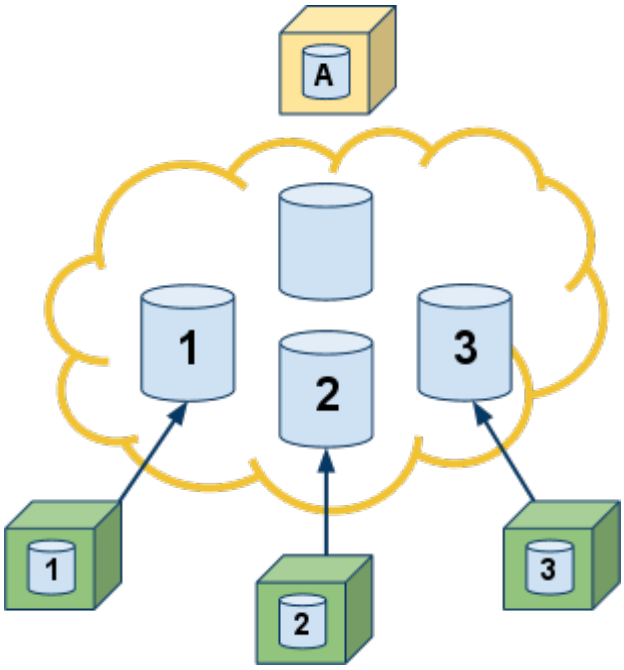
Users (any users who do not have the Administrator role)

When user's who are not an Administrator perform a Send/Receive:

1. Paratext receives any changes from the Administrator's repository on the sharing device and adds these to the user's local repository. Changes are received from only one location (the administrator) - not directly from any other users repositories.
2. Next, Paratext sends updated data in the user's local repository to the copy of that repository stored on the sharing device.



1. ***Receive*** *changes from Admin's repository on sharing device (updates user's local repository)*



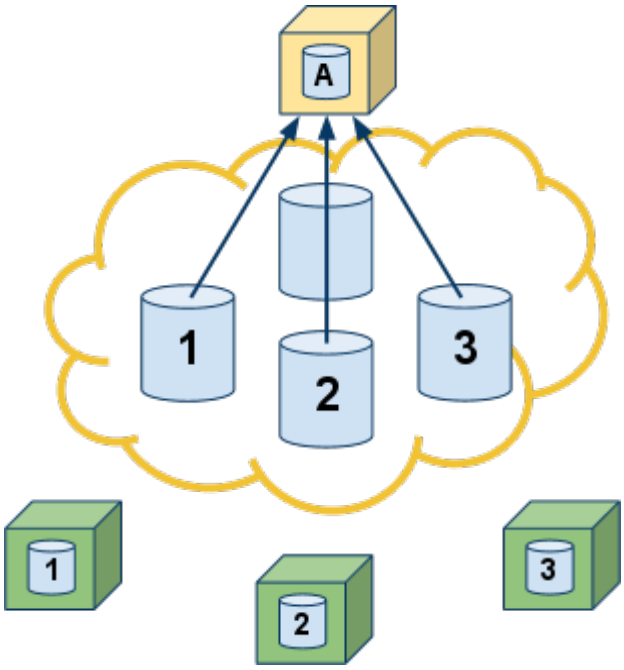
2. ***Send*** *current user repository to sharing device (updates user's repository on sharing device)*

Administrator

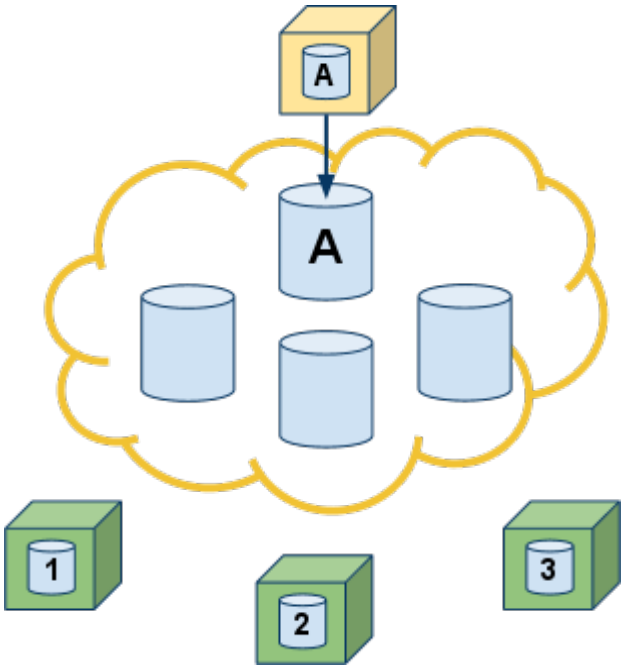
When the Administrator performs a Send/Receive:

3. Paratext receives changes from each of the other user repositories stored on the sharing device and adds these to the Administrator's local repository. Changes are potentially received from multiple locations (depending on how many users are on the team, and how many have made changes).
4. Next, Paratext sends the updated data in the Administrator's local repository to the copy of that repository stored on the sharing device.

At this point the changes collected from the other project users by the Administrator become available to the rest of team, since they can now be received from the Administrator's repository copy on the sharing device (see flow for users above).



1. ***Receive*** *changes from user repositories (updates Admin user's local repository)*



2. ***Send*** *current user (Admin) repository to sharing device (updates copy of Admin's repository on sharing device)*

Managing Project Users

These operations can only be done by an Administrator on the Administrator's computer.

To add a user to a project:

1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Users, Roles and Permissions...**.
3. Click **Add User...**.
4. Enter the **Paratext Registration Name** of the new user and click **OK**.

> You must spell the name exactly as it appears in the user's official registration.

5. Click **Change Role…** beside the new user's name.
6. **Select the new user's role** from the pop-up list.
7. Click **OK** to close the Users, Roles and Permissions dialog.
8. A reminder appears telling you that you must now perform a Send/Receive. Click **OK**.
9. The Send/Receive Projects dialog appears. Click **Send/Receive** to share the updated user/role information with the team.

To remove a user from a project:

1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Users, Roles and Permissions...**.
3. Click **Remove** beside the name of the user. Click **Yes** to confirm the deletion.
4. Click **OK** to close the Users, Roles and Permissions dialog.
5. A reminder appears telling you that you must now perform a Send/Receive. Click **OK**.
6. The Send/Receive Projects dialog appears. Click **Send/Receive** to share the updated user/role information with the team.

To change a user's role:

1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Users, Roles and Permissions...**.
3. Click **Change Role…** beside the new user's name.
4. **Select the user's new role** from the pop-up list.
5. Click **OK** to close the Users, Roles and Permissions dialog.
6. A reminder appears telling you that you must now perform a Send/Receive. Click **OK**.
7. The Send/Receive Projects dialog appears. Click **Send/Receive** to share the updated user/role information with the team.

To re-assign books or chapters to be edited by a specific user:

Normally, the Administrator should do this. Translators can also change these assignments, which may be necessary if an Administrator is not available to make changes and perform a Send/Receive.

1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Users, Roles and Permissions...**.
3. Beside each user, click **Assign Books...**.
   Using the Paratext book chooser form, **select one or more books** to assign to the user and click **OK**.

4. *Optional:* In order to permit a user to edit only assigned chapters in each book, click **Assign Specific Chapters...**.
   Select a book from the drop-down list of books available in the project. Then **place a tick in the checkbox** beside chapters you want to assign to the user and click **OK**.

5. Click **OK** to close the Users, Roles and Permissions dialog.
6. A reminder appears telling you that you must now perform a Send/Receive. Click **OK**.
7. The Send/Receive Projects dialog appears. Click **Send/Receive** to share the updated editing assignments with the team.

To change the Administrator for a project:

Our recommendation for sharing projects in Paratext is to have one person on the team set as Administrator. Working with multiple administrators is discouraged since it may result in (accidentally) assigning the same book/chapter to multiple users, leading to conflicts. All the changes made by each project user can be reviewed by the Administrator before being passed on to the other users. At times a project team may need to change the Administrator for the project. This may happen due to a change in personnel, or a change in roles within the project.

On the computer of the *existing Administrator:*

1. Click in the window of your project, to make it the active window.
2. From the **Project** menu, select **Users, Roles and Permissions...**.
3. If the new Administrator has not yet been added to the project, add them by clicking **Add User…**.
4. Click the **Change Role…** link beside the new Administrator's name.
5. Select **Administrator** from the pop-up list.
6. Click **OK** to close the Users, Roles and Permissions dialog.
7. A reminder appears telling you that you must now perform a Send/Receive. Click **OK**.
8. The Send/Receive Projects dialog appears. Click **Send/Receive** to share the new role information with the team.

On the computer of the *new Administrator:*

1. From the **File** menu, select **Send/Receive Projects...**.
2. Follow the Guide to Send/Receive the project.
3. Click in the window of your project, to make it the active window.
4. From the **Project** menu, select **Users, Roles and Permissions...**.
5. Click **Change Role…** beside the old Administrator's name.
6. Select the user's **new role** from the pop-up list.
7. Click **OK** to close the Users, Roles and Permissions dialog.
8. A reminder appears telling you that you must now perform a Send/Receive. Click **OK**.
9. The Send/Receive Projects dialog appears. Click **Send/Receive** to share the new role information with the team.

 The old Administrator can remain as an Administrator if necessary. If you wish to completely remove the old Administrator from the project team, click Remove beside their name, and click Yes to confirm the deletion before closing the dialog.

6. Troubleshooting

How do I fix a "messed up" project text?

If your project text appears to have gotten messed up on various computers after using Send/Receive, perhaps due to incorrect editing permissions and resulting in a large number of merge conflicts, the following steps will help you to fix the problem.

On each non-Administrator computer sharing the project:

1. Perform a Send/Receive for the selected project.
2. Do not do any further editing until you hear again from the Administrator.

On the Administrator's computer:

1. Perform a Send/Receive for the selected project.
2. Review the text to fix any problems and bring the text to the desired state. If there are merge conflicts, follow the instructions provided in "Resolving a Send/Receive Merge Conflict" (above) to resolve these. To review and resolve any other changes to the text, use one or more of the methods described in "Reviewing Text Changes" (above).
3. Perform a Send/Receive for the selected project.
4. Ask all other users to perform a Send/Receive for the selected project, and confirm that they can now continue editing.

I needed to reinstall Paratext (my computer was repaired/replaced). How should I get my shared projects back?

If you have previously been using Send/Receive to share one or more projects you should restore them again onto your computer using Send/Receive from the device which was being used to share the project (USB key, network shared folder, or the Internet server). The sharing device still contains a copy of your project repository. You should not restore the project to your computer from a zip file backup and then re-join project sharing, since this may result in numerous merge conflicts which the Administrator will have to resolve.

1. From the **File** menu, select **Send/Receive Projects...**.
   Paratext will display the Send/Receive Projects dialog.

2. Click one of the buttons to select the sharing device through which the projects you are needing to restore were previously being shared.

   Next, in the lower half of the dialog, you will see a list of projects which are being shared with you using the selected sharing device. There may be one or more projects displayed in this list. Projects which have not yet been received on your computer will be indicated by the text "(new from...)", plus the name of the project Administrator, after the project short name.

3. Place a tick in the checkbox next to the project(s) you wish to receive (the projects which do not exist on your computer will automatically be selected).
4. Click **Send/Receive**.

When Paratext has finished downloading the project you will be able to open it in a project window.

I have been using Send/Receive in Paratext 7.0 but have it set to only "Receive" data for project XYZ, might this be a problem?

If it is possible that you might have edited some text, those changes will never have been sent to your repository because you were set to only Receive changes.

If your changes are important and need to be incorporated into the XYZ text on other users' computers, the project should be set up for Send/Receive as described in this manual. Your changes will be incorporated into the project text at the point of your first Send/Receive. This may result in merge conflicts which the Administrator will have to resolve.

If your changes are not important (e.g. you may have accidentally edited something and now want to get the correct text from the rest of the team), you should stop sharing the project in Paratext 7.0 and delete the project from your computer before receiving it afresh in 7.1. If you have already upgraded to 7.1, delete the repository from the server and the project from your computer using Delete Entire project. If you think there is anything in your copy of the project which should be preserved, you may want to make a backup of it before deleting.

I have a poor quality Internet connection. Can I still use Send/Receive?

Internet access is not needed to use Send/Receive if the users you are sharing with are working in the same location, or meet together on a regular basis. You can use a USB drive or network shared folder to share project(s). In this scenario, it is also possible for one member of the project team (likely the Administrator) to Send/Receive using the Internet server periodically when stable access to Internet is available – perhaps at an Internet cafe in another location (see "Sharing one project using multiple devices"). This would provide an extra offsite backup of the text.

The speed of the Internet connection is not as important as its stability. It is more important that the connection remains active and reliable during the Send/Receive process than that the process takes place quickly. However, the initial sending or receiving of a shared project will take a lengthy time to complete on a very slow connection. Subsequent Send/Receive operations will not normally take as long since Paratext only sends information about what has changed in the project data, and not a complete copy of all of the data, each time a Send/Receive is performed. Be careful with adding a large number of figures to the project, or placing files in the "shared" folder (see "What project data is being shared by Send/Receive?") if you are using Send/Receive over a slow Internet connection.

I am using other synchronization software to keep my Paratext projects folder up-to-date on two different computers I work with. Will this cause a problem with Paratext project sharing?

Yes, very likely it will. It is *very important* that you omit the Paratext projects folder (usually C:\My Paratext Projects) from any other software synchronization setups you have established. Each individual Paratext project folder contains a repository folder named ".hg" which should NEVER be removed, or manually modified in any way. Changes to project data on each computer are stored within this repository in a way that an external synchronization process will not properly recognize or maintain.

You should NOT use Mercurial software outside of Paratext to synchronize or share project data, or to operate on your Paratext repositories. This can also be very dangerous and should only ever be done by a trained supporter or Paratext developer for support purposes only.