

*Altium*<sup>®</sup>

QUICK GUIDE

# Migrating Data From Other Version Control Systems



The development of electronic devices always involves the release of many different types of files. And these files are not static - they change as the project progresses. When filling a project with data, a user creates new files, modifies outdated files that have become irrelevant.

Managing project data is a separate task, especially for large developments where several participants with different specializations are involved in the process.

Traditionally, one way to manage data is to use a version control system such as Git or SVN (Subversion). They allow you to keep a detailed history of all changes and are suitable for collaborative work. However, the disadvantage of this approach is that these systems are general-purpose systems and do not take into account the specifics of electronics development.

# Git revision history

Commit History:

A screenshot of a Git commit history list. The list contains several entries, each with a commit message, author, and time. Callout boxes highlight specific parts of the entries:

- Separate commit:** Points to the commit message "BOMDoc added to project ...".
- Designer's comment:** Points to the commit message "Draftsman Doc added".
- Author and time of the recorded change:** Points to the author and time information "AntonAniskin committed 1 hour ago" for the "minor layout changes" entry.

The commit history entries are:

- BOMDoc added to project ... (AntonAniskin committed 12 minutes ago)
- Draftsman Doc added (AntonAniskin committed 1 hour ago)
- minor layout changes (AntonAniskin committed 1 hour ago)
- Logo Added on PCB (AntonAniskin committed 3 hours ago)
- Notes added on schematic (AntonAniskin committed 3 hours ago)
- Initial commit (AntonAniskin committed 3 hours ago)

Details of a separate commit:

A screenshot showing the details of a specific Git commit. Callout boxes highlight various elements:

- Separate commit:** Points to the commit message "BOMDoc added to project".
- Designer's comment:** Points to the commit message "T1 transformer updated from library".
- Author and time of the recorded change:** Points to the author and time information "AntonAniskin committed 1 hour ago".
- Details about modified files:** Points to the list of changed files.

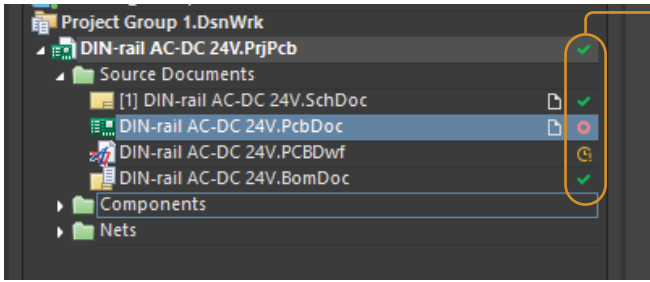
The commit details include:

- Commit message: BOMDoc added to project
- Commit message: T1 transformer updated from library
- Branch: master
- Author: AntonAniskin committed 1 hour ago
- Parent: 1 parent e32a0ce
- Summary: Showing 4 changed files with 227 additions and 0 deletions.
- Files:
  - 210 [green progress bar] DIN-rail AC-DC 24V.BomDoc
  - BIN +512 Bytes (100%) DIN-rail AC-DC 24V.PcbDoc
  - 17 [green progress bar] DIN-rail AC-DC 24V.PrjPcb
  - BIN +512 Bytes (100%) DIN-rail AC-DC 24V.SchDoc

# Storage manager panel

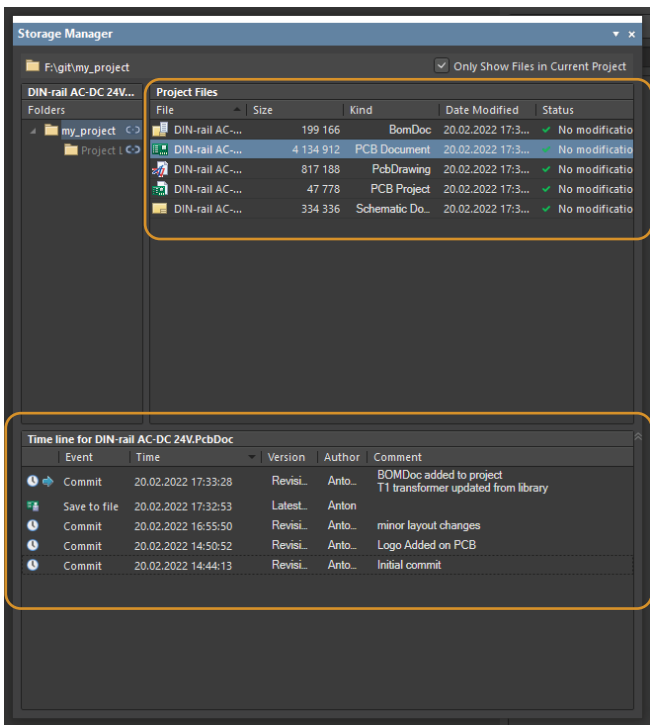
Altium Designer has built-in support for version control systems. The Project panel displays the status of your files, as well as basic **Git** or **SVN** commands (such as **update**, **commit**, etc.).

The **Storage Manager** panel displays the full history of changes in your project files.



Statuses of files  
(current version, local file changed, outdated file)

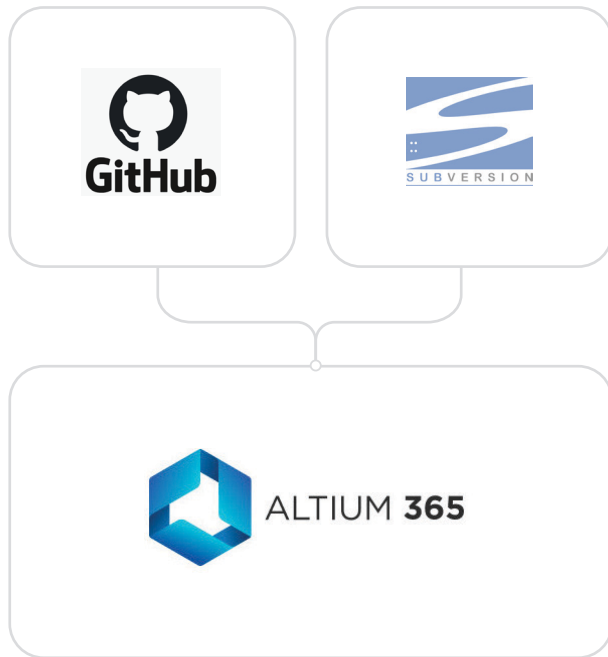
Project panel



Project files  
History with comments

Storage Manager panel

# Why migrate to A365?



Unlike other **VCSs**, **Altium 365** is the system designed specifically for managing project data.

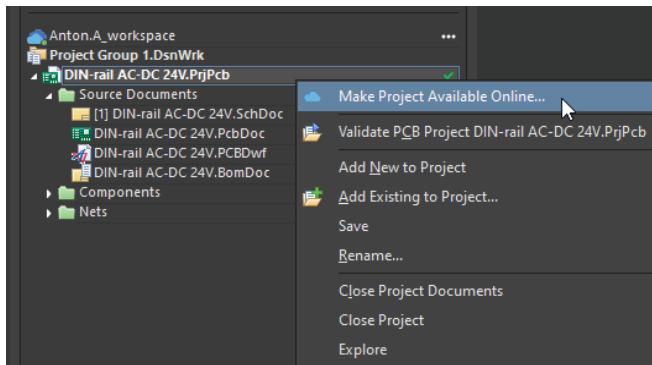
Here are some benefits:

- you can always share a complete set of project data simply by providing a link;
- **A365** provides advanced data sharing with **MCAD systems**;
- you can share comments on the project with your colleagues in the form of notes directly in the **Altium Designer** environment and using web browser;
- **A365** has a system of differentiation of user rights depending on the role;
- **A365** is a constantly developing system which gives more and more possibilities for collaborative work on projects.

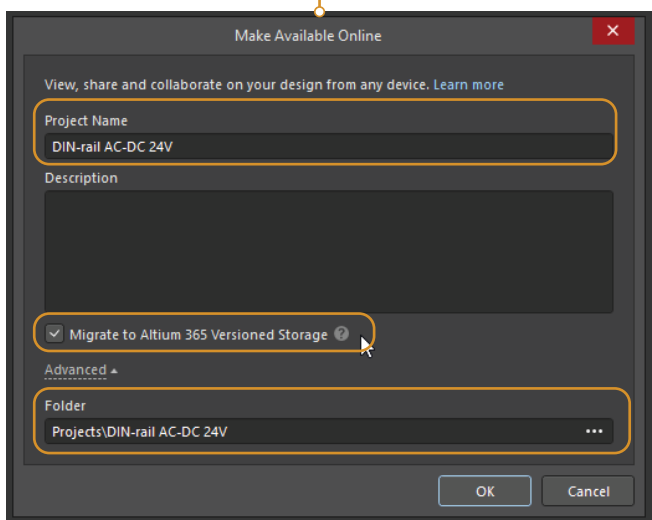
# Moving to A365

When you already have a workspace in **A365**, nothing is easier than migrating your project with its history of changes and continuing to work in the **A365** environment, using all the advantages of the platform.

Once connected to the workspace, select **Make Project Available Online** from the context menu of the active project



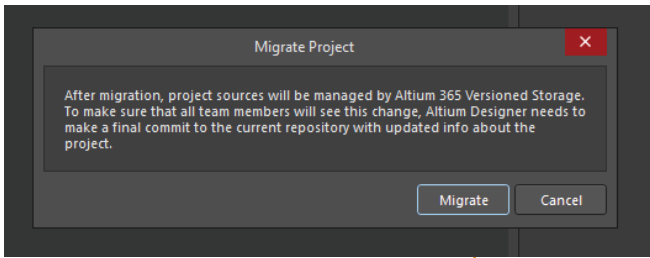
Step 1



Step 2

In the opened window, edit the project name (if necessary), select the location directory, and tick the **Migrate to Altium 365 Versioned Storage** checkbox. Click **OK**.

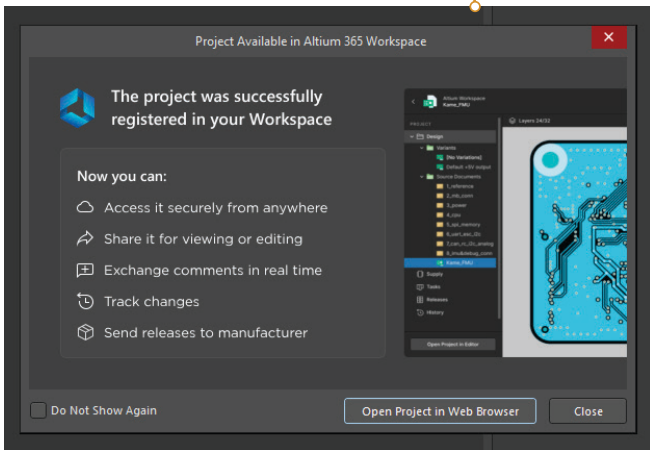
Note: the project name, description and placement directory can be changed later in the workspace.



After you click **Migrate**, **Altium Designer** will make some changes to the project file (with service information) and commit all the files to your current **Git** (or **SVN**) repository

Step 3

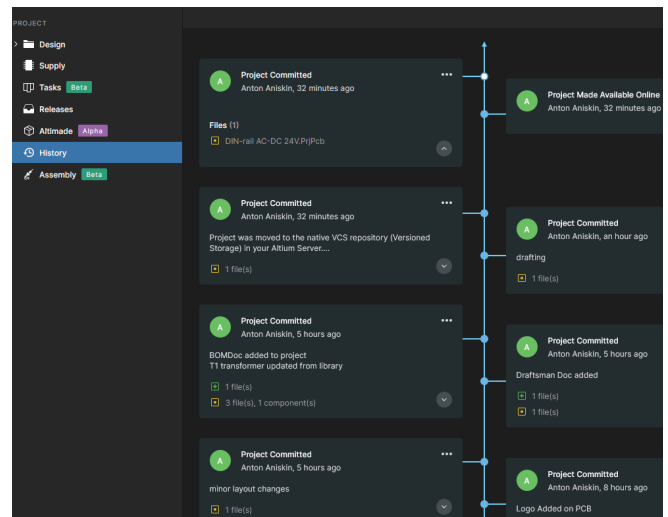
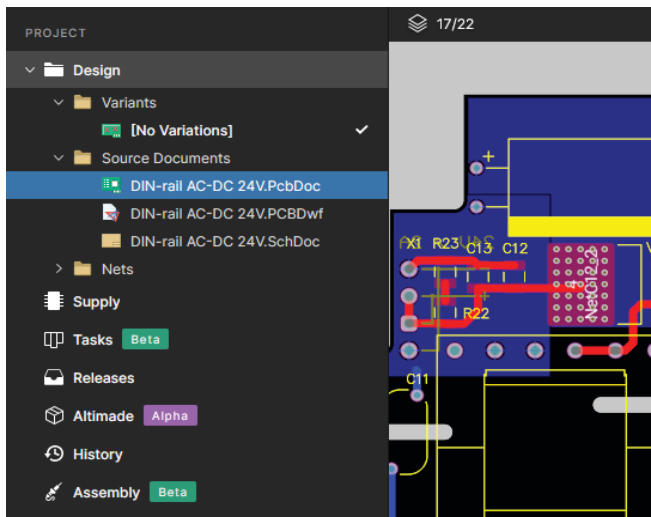
Commit history will show a commit with the following content:



The successful migration process will result in the window offering you to open your project in the workspace in the browser.

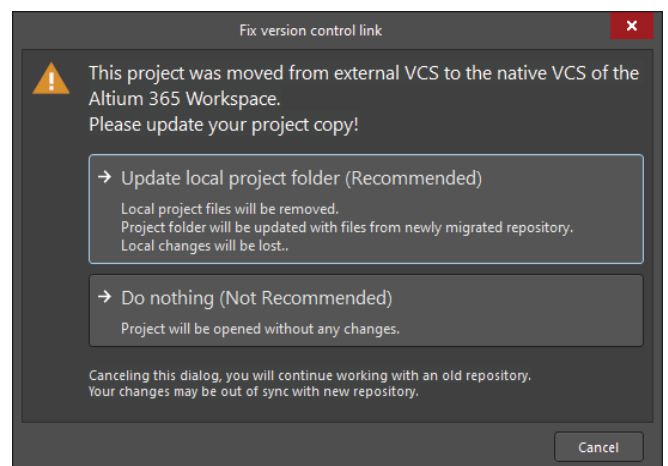
Step 4

When you open the project for viewing in a web browser, you can verify the integrity of the migrated data. And change history is fully migrated from the version control system repository. From now on, you will work in the **A365** environment.



## Important notices

- the project is completely taken over by **A365** after migration, the connection with the old repository is no longer available;
- When opening a project in an “old version” of repository (i.e. in the repository of an external version control system - on other PCs or other users), the user will be notified that it is necessary to migrate a local copy of the project to **A365** control. If the appropriate option (**Update local project folder**) is selected, this operation will be performed automatically;
- if Do nothing is selected, the user will continue to work on the project under the external **VCS**. Such a project will have no connection to **A365**.

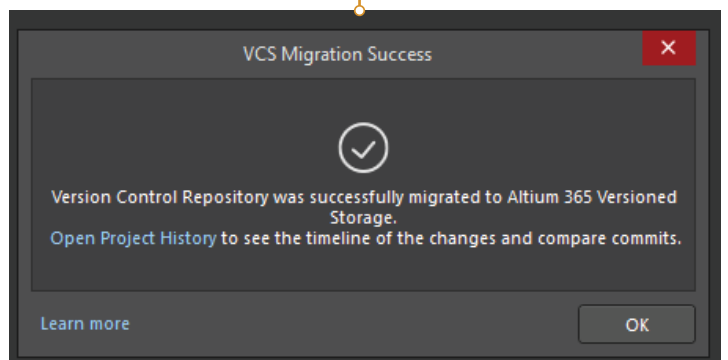
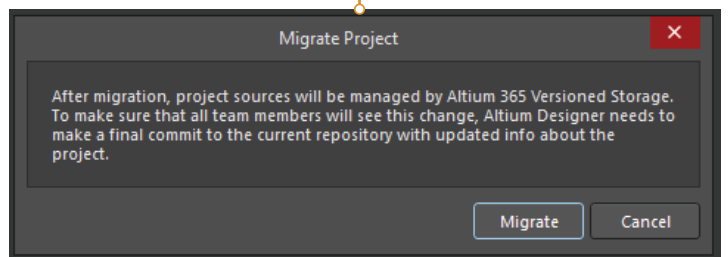
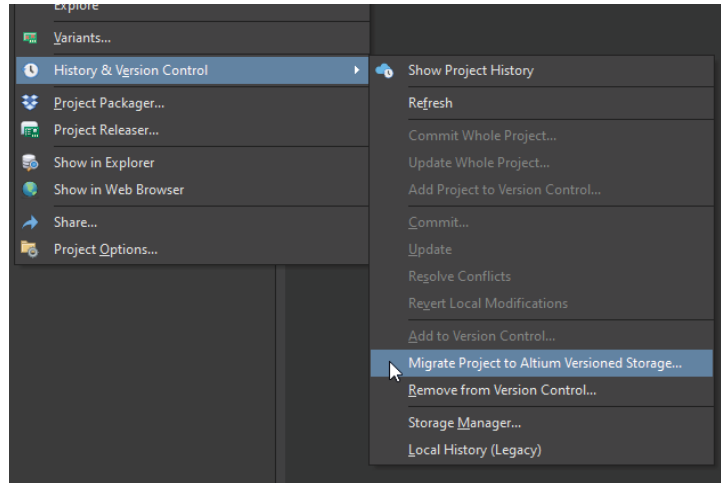
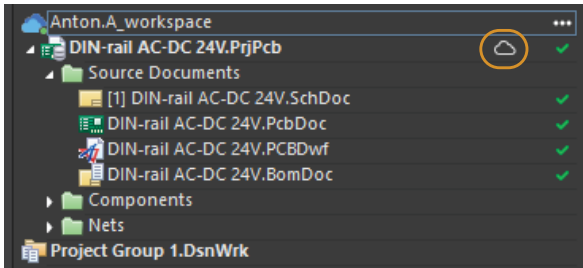




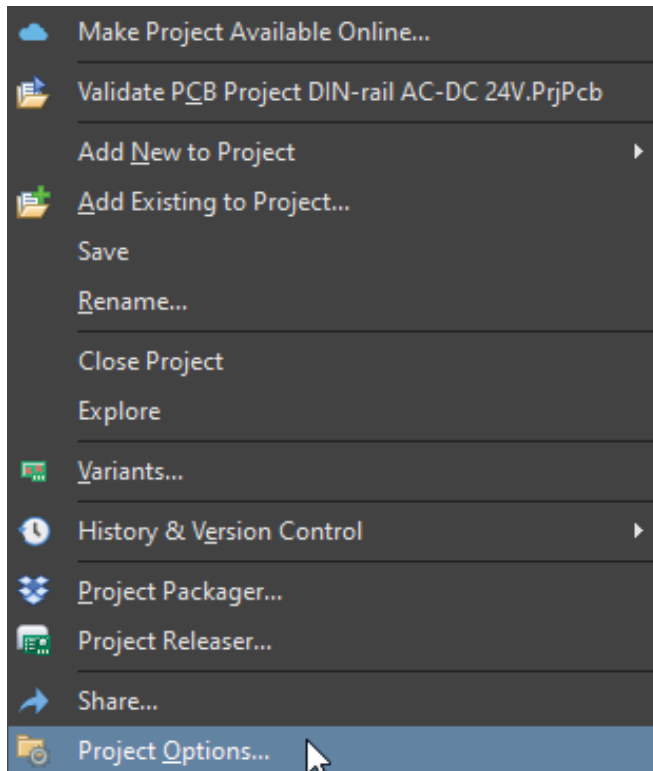
# Another cases

The project is in the **A365** workspace, but uses an external **VCS**.

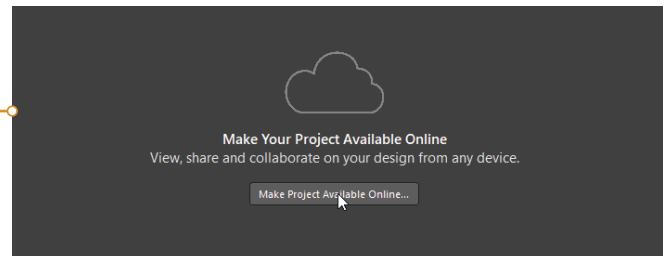
In this case, in the context menu of the project, in the **History & Version Control** submenu, select the **Migrate Project...** command.



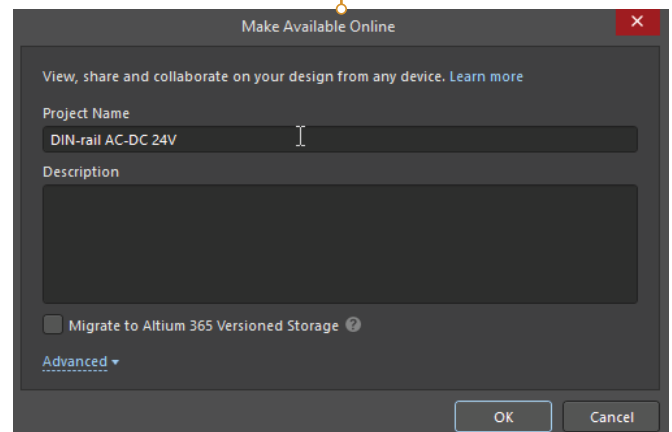
## Another cases



Make **Project Available Online** command is also available in the project properties (**Project Options** item in the context menu)



The **General** tab



This window will open

## Limitations

There are several limitations to the procedure of transferring a project from an external VCS.

For **Git**:

- Repositories that contain multiple PCB projects are not supported.
- It is recommended that the \*.PrjPcb file should be located in the root folder of the repository. A fix during migration has been proposed so that if the project file is not located in the root, you will still be able to migrate the project.

For **SVN**:

- Suppose your repository contains multiple projects after migration. In this case, a new project folder needs to be created outside of the SVN working copy as the Altium 365 Workspace storage is Git-based, and a Git repository cannot be stored inside the SVN working copy.
- Commits that include an external file relative to the project folder may not be adequately shown as only project folder-related commits are migrated.
- "File" protocol is not supported.