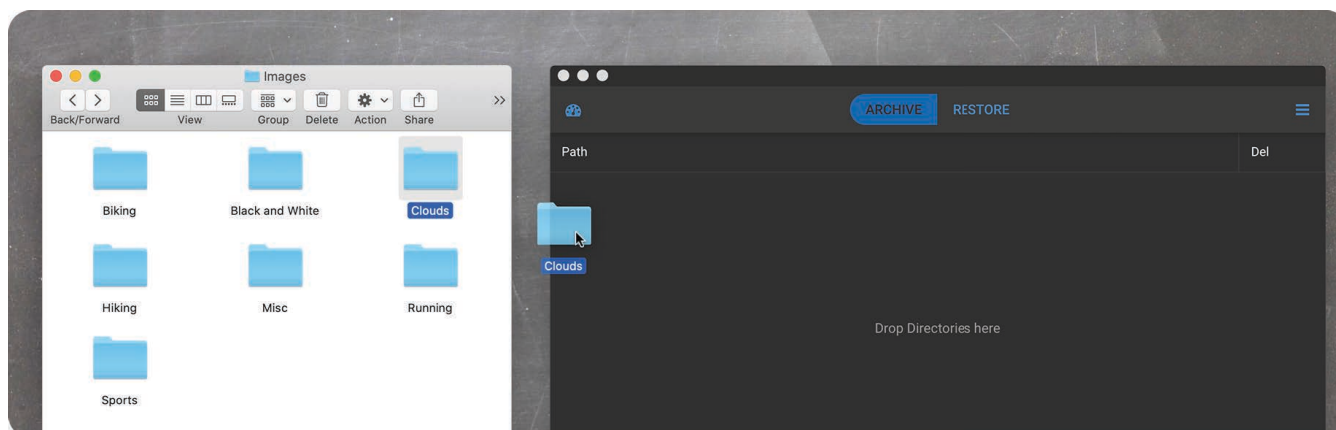


Archiware P5: Technical Guide

P5 Companion

User manual - software version 0.9.0



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Introduction

This document describes the installation and configuration procedures for Archiware P5 Companion.

P5 Companion is a desktop application for Windows, macOS and Linux that allows files from either local or shared storage to be archived/restored by simple drag-and-drop operations. Data is archived and restored via communication with a P5 Server running the P5 Archive software.

P5 Archive is able to archive files to either disk storage, LTO tape or to one of a variety of cloud storage platforms.

System Requirements

For all platforms, an installation of P5 Archive version 6.0 or later is required. These are the general Chromium requirements (on which the app is based):

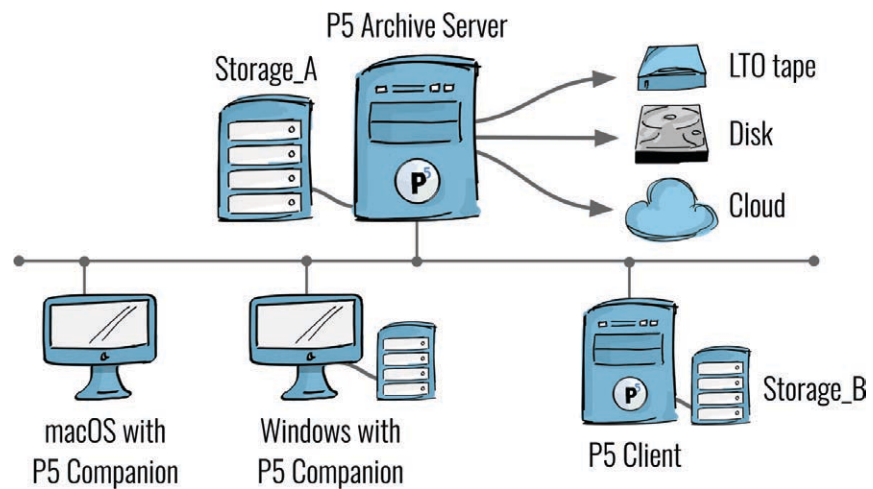
Windows	Mac	Linux
Windows 7 and later are supported, older operating systems are not supported (and do not work).	Only 64bit binaries are provided for macOS, and the minimum macOS version supported is macOS 10.10 (Yosemite).	Ubuntu 12.04 and newer, Fedora 21, Debian 8
An Intel Pentium 4 processor or later that's SSE2 capable	An 64-bit Intel CPU	An Intel Pentium 4 processor or later that's SSE2 capable
512 MB of RAM	512 MB of RAM	

Installation

Windows	Mac	Linux
Run the downloaded .exe file. The P5 Companion will automatically launch afterwards.	Double-click the .dmg file and drag the P5 Companion to the Applications folder.	Open the .ApplImage and allow Linux to add it to your Applications.

Setup - Introduction

The data that will be archived using the P5 Companion needs to be accessible from the P5 Server where the archive plan will run. This storage needs to be either local to this P5 server or accessible via another machine that is configured as a P5 client which has been added to the P5 server's configuration. In the schematic illustration below, we have a 'P5 Archive Server' at the top, connected to a network with two workstations and another server at the bottom. The P5 Archive server has some local storage connected (Storage_A), and is able to archive to LTO tape, disk or cloud storage, depending upon the configuration of the P5 Archive plan that will be used. The computer labelled 'P5 Client' is also running the P5 software and configured as a client on the P5 Archive server, such that Storage_B is accessible to the P5 server.



The two workstation computers at the bottom left of the schematic will run the P5 Companion application. The P5 Companion runs on macOS, Windows and Linux and can be installed on as many workstations as is required, without any license restrictions. The P5 Companion will be configured to connect to the P5 Archive server by providing the IP address of the server and the ID number of the configured archive plan - more detail on this later. The archive plan must already be setup on the P5 Archive server, in advance of setting up the various instances of the P5 Companion.

Using the P5 Companion, users of the workstations will be able to select files for archive, from either Storage_A or Storage_B, since this storage is accessible to the P5 Server. In order for the workstations to have access to this storage, it would need to be shared via the network as SMB/AFP shares, or accessible via a SAN.

In addition, if the computer labelled 'Windows with P5 Companion' wishes to archive from it's locally attached storage, it would also need to install a local copy of the P5 software and be added to the P5 Archive server as another client. Therefore a P5 client license is required for each computer that will be a data source for archiving, but not for every computer that runs the P5 Companion software.

Configuration steps on the P5 Server

Adding a P5 Client



Archive → Clients → New

As explained in the previous section, you will need to configure each data source that you wish to archive from, using P5 Companion, such that it's accessible to the P5 Server. This may require installing the P5 software on additional host computers and adding Clients to the P5 Server. This process should be familiar to anyone already skilled in configuring P5.

To add a new client to a P5 Server, visit the Client section within the configuration, and click the 'new' button to add one, providing the IP/DNS name and authentication credentials.

Adding a Group



Archive → Advanced Options → Group Preferences

Since the P5 Companion application can be used to archive data from any storage location accessible by the workstation machine where it is running, the P5 Server needs to be configured for each storage location from which a user may wish to archive. This could include storage local to the P5 Server, or storage local to P5 Clients, as explained previously.

In order that the P5 Server can locate storage locations where the P5 Companion app has archived from, the group configuration is used to authorize access to data and the use of an archive plan. If data is to be processed automatically, there is often a problem with distributed data where the access path to this data is implemented differently on different host computers. For example, Windows manages hard disks by assigning letters to them when they are mounted and macOS and Linux manages all hard disks by mounting them within a tree structure. MacOS usually attaches hard disk and network volume to /Volumes and Windows on a drive letter of A-Z, while Linux has no strict rules regards where storage is mounted.

So that the P5 Companion can still archive data from this complex storage structure, there is the option in the group setting of the P5 server to store search paths in which data is looked for during an archiving job.



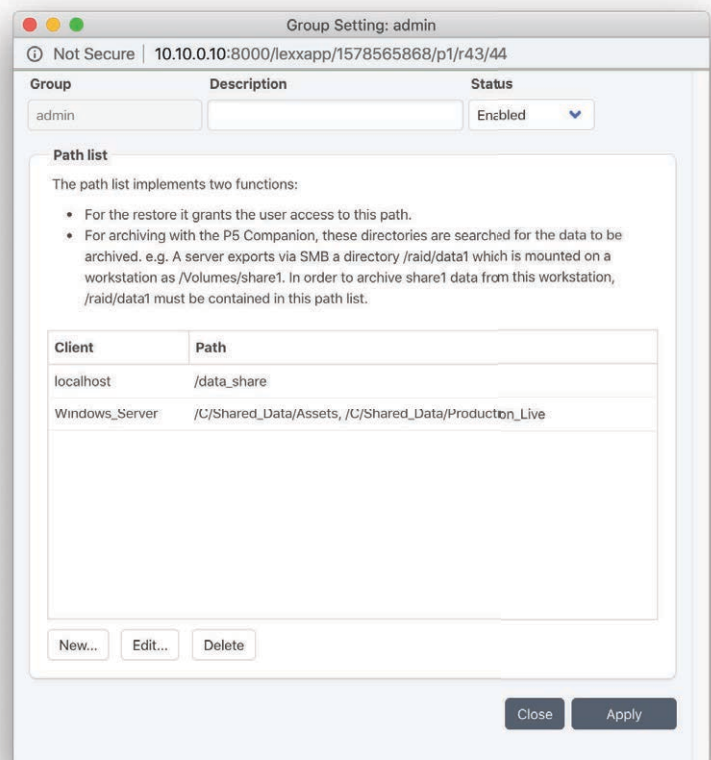
An example to illustrate the complexity

A Linux server exports directory /data/shares/vol1 as a network volume called 'BigData'. This volume might be mounted on a Mac under /Volumes/BigData and mapped to drive Y: on a Windows PC. This example already shows three different paths to the same data.

P5's configuration contains a 'Groups' section where these locations can be added. When configuring the P5 Companion on each workstation, a user needs to be specified on the server and the archive jobs will run under this user. This user is configured to be a member of a group, and within this group you will define these storage paths.

In our example screengrab, we are editing a group called 'Admin' which has two locations defined, one on the P5 Server (localhost) and another on a P5 Client named 'Windows_Server'. On this client, there are two possible locations shown from which data can be archived.

So that the P5 Companion can still archive data from this complex storage structure, there is the possibility in the group setting of the P5 server to store search paths in which data is looked for during an archiving job.



Adding a user



Archive → Advanced Options → User Preferences

Setup of the P5 Companion application required input of a username and password to authenticate against the P5 Server. You should therefore prepare a user for this purpose and add it to the group created in the previous step, so that it has permission to archive from the specified locations.

Adding an archive plan



Archive → Archive Plan

The archive plan contains all parameters for automated archiving. Among other items, the storage medium for archiving, the database for indexing, the access authorization for executing this plan.

In addition, there are options that determine what to do with the original data after successful archiving. If the P5 Companion is also to be used to restore archived data, it is necessary to create stub files during archiving. These stub files are placeholders for the original file and are used by P5 Companion to address and restore the original data.

Make the following modifications to your archive plan to allow use with the P5 Companion:



Archive → Archive Plan → General → Access

Assign the group created in the earlier step, that contains access to the necessary paths for archiving.



Archive → Archive Plan → Options → Access → Delete files after archive

If the P5 Companion app is to be used for restoring, the option "Delete after archiving file" must be set to "Delete files and create stubs".



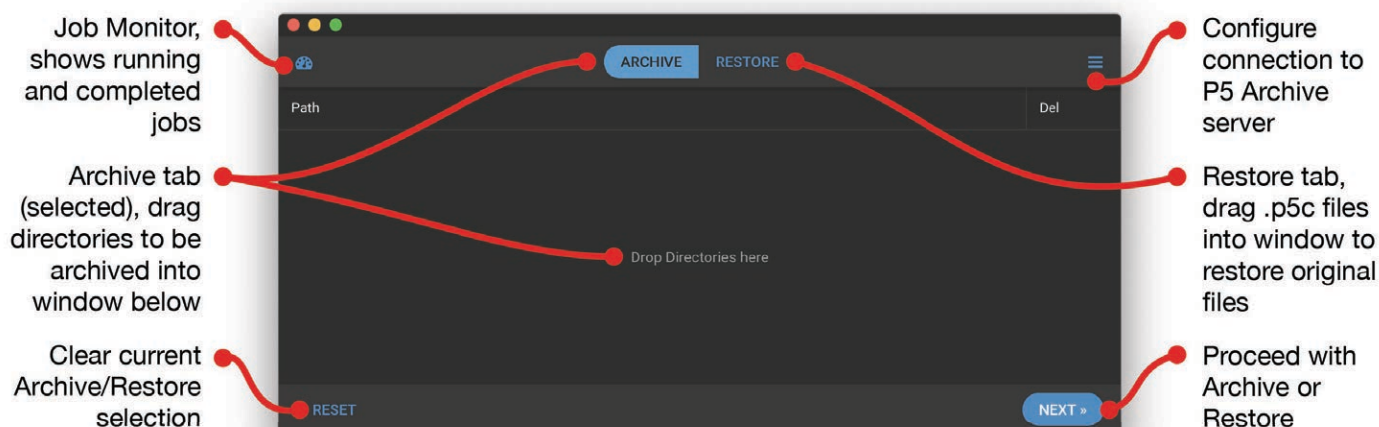
Archive → Archive Plan → Previews → User Defined Preview Generators

The P5 Companion can show metadata and previews. If previews are to be generated, a corresponding preview generator must be configured.

P5 Companion Application

The P5 Companion application is build using Electron (electronjs.org) allowing it to be cross-platform. Thus it will appear and operate mostly identically on macOS, Windows and Linux.

The general appearance of the app with functionality labelled is shown here.



Two central tabs, Archive and Restore, allow selection of files by drag-and-drop from the operating system file manager. A job monitor button (top left) reveals a list of running and completed jobs on the server, and a configuration button (top right) allows access to the settings which connect the app to the P5 Server, illustrated below.

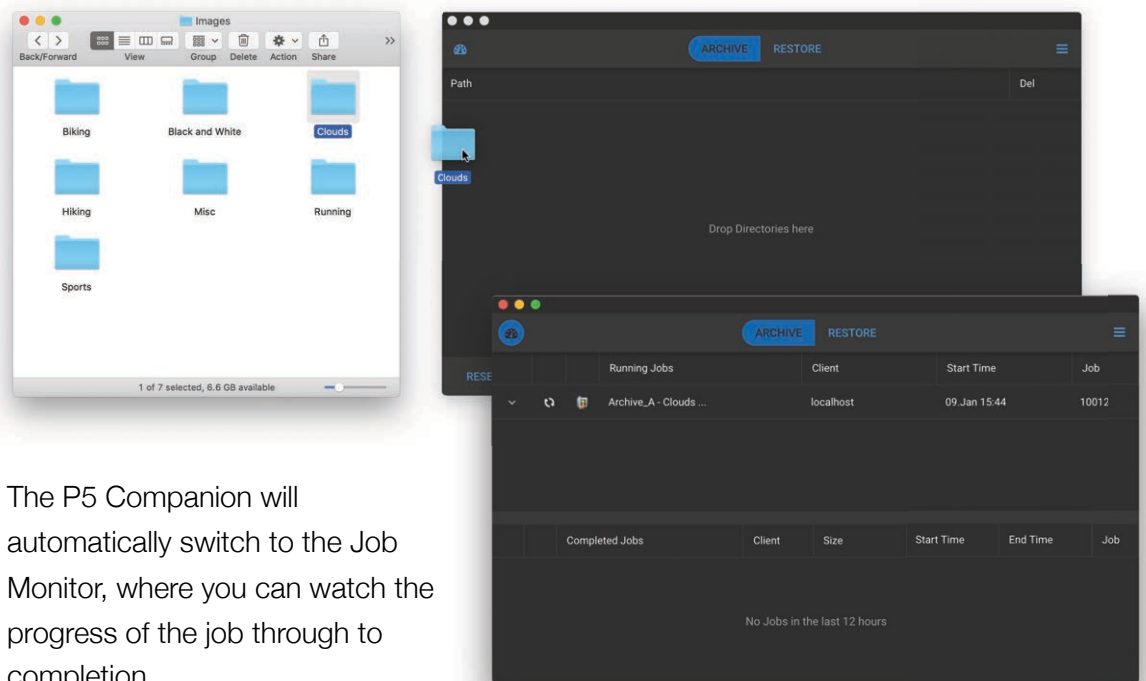
After launching the P5 Companion for the first Time, you will be asked to fill out the settings form. Keep in mind that the User specified must be a member of the group that provides access to the storage, as covered earlier in this document. The Archive Plan is specified by the ID number, visible when editing the plan. Click on Save and the P5 Companion will attempt to connect to the P5 Server. On macOS the KeyChain will possibly ask you for permission to access the "server" key, which should be allowed.

The settings form is a dark-themed dialog box with the following fields and controls:

- Server IP***: 10.10.0.10
- Server Port***: 8000
- User Name***: admin
- Password***:
- Archive Plan***: 10001
- Buttons**: CANCEL and SAVE

Usage - Archive

Simply Drag and Drop folders from registered volumes on the 'Archive' tab of the P5 Companion. Note that only entire folders may be archived, not individual files. When you are satisfied with your selection, click on next and optionally fill out a Metadata form. Finally with a click on the 'Archive' button, the P5 Server will access the selected files, via the paths configured earlier, and the files will be archived using the specified archive plan.

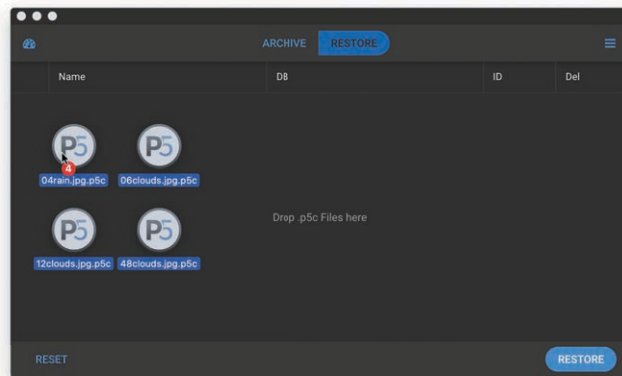
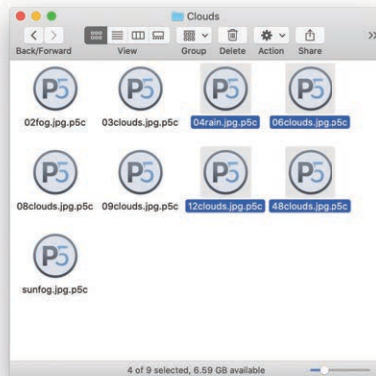


The P5 Companion will automatically switch to the Job Monitor, where you can watch the progress of the job through to completion.

Since the Archive Plan was configured to replace the archived files with 'stubs', each of the archived files will be replaced with a very small file with the .P5C file extension. These files are accepted by the P5 Companion app to restore the originals from the archive.

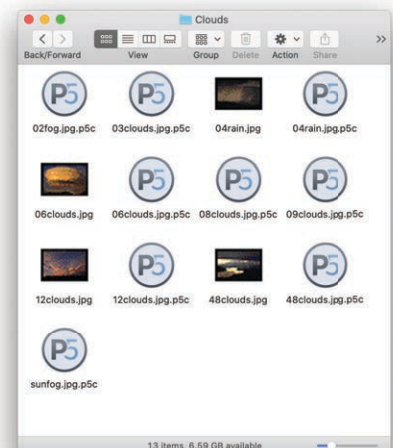
Usage - Restore

Restoring using the P5 Companion requires the use of the .P5C files. If you wish to browse the entire archive to locate data to retrieve, you should use the regular P5 web-admin interface, as documented in the P5 documentation.



Locate files you wish to restore by dragging .P5C files into the 'Restore' tab. Multiple files from different locations can be added at once. Click the disclosure control adjacent to each file to view previews and meta-data stored in the index for this file.

Click the 'Restore' button to trigger the restore job on the P5 Server. The restored files will appear in the folder alongside the .P5C files. The restored files do not replace the .P5C files, allowing re-use of the stub files. Note that the stub files can be moved to new locations on your disks, they contain a link back to the original file in the index that cannot be broken.



Known Issues

Double Clicking .p5c files on Windows does not add them to your Selection, when the P5 Companion is already running.

The connection to the Server can be lost after a longer period of idle time. To reconnect open the Settings-Menu and click on Save.