Archware P5: Quickstart Guide

P5 Desktop LTO Edition
Quickstart installation and setup guide

Who is this document for?
This resource is intended for anyone without previous experience in using the P5 product suite. It will guide you through the initial steps needed to get up and running.

Those with previous experience and knowledge of P5 will find the P5 Desktop Edition is the same product set that they're already used to - just with licensing restrictions.

What is P5 Desktop LTO Edition?
It's a new bundle of P5 software, designed to bring the benefits of P5 Backup and P5 Archive to smaller businesses at an attractive price point.

P5 Desktop LTO Edition runs on a single host computer and provides backup and archive workflows for locally attached storage and a single standalone LTO drive. P5 Desktop Edition provides everything needed to both secure data through backup and archive work for the long term, all configured with an easy to use browser-based user interface.

Specifically, with P5 Desktop Edition, you can...

- back up your locally attached storage to a set of LTO tapes, so you can recover everything in the event of a failure.
- archive your selected data from your storage to LTO tapes, creating a database of ‘offline’ files with both previews and metadata viewable and searchable.
- format, read and write LTO tapes in the LTFS format for import/export. These tapes are portable and can be read/written by any LTFS-compatible system.

Note: You can omit either the Backup or Archive step below, if you do not wish to perform both backup and archive of your data.
**1 Attaching tape hardware**

A. Connect an LTO tape drive to the computer on which you will be installing P5. A SAS, Fibre Channel or Thunderbolt interface can be used to make the connection.

B. Use the relevant tool in your operating system to scan the interface that your tape drive is connected to. Ensure that you can locate an item here that matches the tape drive you have connected. **Do not proceed to the next step without establishing the OS has visibility of the tape hardware.**

**2 Install P5 and activate your license**

A. Download the P5 installer for your chosen OS here: [p5.archiware.com/download](http://p5.archiware.com/download)

B. In order to use P5, you’ll need either a trial or purchased license. Without a license, the product cannot be used. Begin by visiting the Archiware Portal website [www.archiware.com/account/](http://www.archiware.com/account/) and creating an account. Once logged into the Portal, you can obtain a trial license or register your purchased license and request a license key.

C. Visit [http://127.0.0.1:8000/login](http://127.0.0.1:8000/login), using a web browser on the machine where you installed P5, to access the web-admin interface, where the product setup and operation takes place. Input the trial or permanent license into P5 by clicking on the 'Enter License' button.

D. Once the license has been successfully entered, the Backup and Archive tabs at the top of the interface will be displayed in color. These tabs can now be used to begin configuration of the product.
Archiving requires selecting data sources, selecting your tape drive, and labelling a tape volume you have inserted into the drive.

The process of manually selecting files to be archived will be described here. It is also possible to configure a scheduled archive that runs automatically, archiving pre-defined folder(s) each time it runs. Archive can also optionally be configured to delete data after successful archive and verification, freeing up space on your storage.

A. Click on the Archive tab, at the top of the web interface, and click on the 'Start Setup Assistant' button.

B. **Setup Assistant, Step 1**: Add your standalone LTO-tape drive to P5.
   
   Click on the ‘Select Target Storage’ button and then ‘Single Tape Drive’.
   
   To add your tape drive to this list, click ‘Add Tape Drive’ to enter the 'Drive Wizard'.

C. Click ‘Next’ to perform a scan for attached tape drives. The following list should show your drive, if not, go back to Step 1 of this document. Add your drive by selecting it by name, and in the next page of the wizard, select the LTO version of the drive (e.g. LTO-7) from the ‘Drive Type’ dropdown list.
D. Continue through the wizard to the ‘Preparing the media’ step. You will now require a fresh, blank tape to be inserted into your drive. Choose to label media for Archive, and then choose your LTO drive from the list. The wizard will now exit and the LTO-tape in the drive will begin being labelled. Click on your newly added drive and click ‘Select’. Now click ‘Complete’ to move to the next step.

E. **Setup Assistant, Step 2**: P5 Archive is now set up to allow you to manually select files that you wish to be archived to tape. Click ‘Select Data to Archive’. You are now taken to the ‘Manual Archiving’ option, highlighted on the left hand side of the interface. You can return here whenever you have files to archive. See below for instructions on navigating this part of the interface.
In this step we will configure a backup of data on disks connected to your computer. This requires selecting sources to be backed up, selecting your tape drive, and labelling a tape volume you have inserted into the drive. Finally a schedule will be configured to repeat the backup daily.

A. Click on the Backup tab, at the top of the web interface, and click on the 'Start Setup Assistant' button. You will next be guided through three steps to configure the backup.

B. **Setup Assistant, Step 1:**
   Click on the 'Select Data' button. Use the browser window to select a disk or folder to back up. It is recommended that you back up entire disks, so they can be fully recovered in case of failure. Additional disks/folders can be added to the backup plan later.

C. **Setup Assistant, Step 2:** Click on the 'Select Target Storage' button.
   Click the 'Single Tape Drive' to display a list of available tape drives. If you previously added the drive while setting up Archive, you can simply highlight and select it here. To add your tape drive to this list, click 'Add Tape Drive' to enter the 'Drive Wizard'.

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**Backup Module**

Refer to video 7 in the P5 MasterClass series for further information about configuring backup.

[Backup Module](p5.archiware.com/masterclass)
D. Within the ‘Drive Wizard’, click ‘Next’ to perform a scan for attached tape drives. The following list should show your drive, if not, go back to Step 1 and confirm your operating system can see your drive. Add your drive by selecting it by name, and in the next page of the wizard, select the LTO version of the drive (e.g. LTO-6) from the ‘Drive Type’ dropdown list.

E. Setup Assistant, Step 3: Finally, choose a time of day for the backup to run. It will run daily at this time. Complete the setup assistant and you'll get a summary of the backup configuration, along with the option to start the backup now, rather than wait until the scheduled time.

![Select a Time](image)

Congratulations!

Your backup plan is now configured.

- **Backup Plan**: Backup Plan (10001)
- **Source**: localhost/Users/admin/Desktop/training folder
- **Target**: aws10
- **Start Time**: 22:00

This backup plan will run daily at the given time. Be advised, however, that the initial backup is a full backup of all data, while later backups just include changes.
Files that have been archived or backed up are added to an ‘Index’ or catalog, which tracks everything that has been written to tape. In order to restore data back to disk, it’s necessary to ‘browse’ the relevant index, locate and make a selection for restore and pick a target folder on disk where the restored data should be written.

A. Begin the restore process by clicking on the ‘Restore’ tab at the top of the web interface. Next choose either ‘Backup’ or ‘Archive’ to the left, depending upon which index you wish to browse.

B. The Backup index is named ‘localhost’ and the Archive index ‘Default Archive’. Click on either of these items to display the top level of the index on the right hand side.

C. Use the diagram below to help navigate the indexes. You can browse through the filesystem(s) that were saved, search to locate, view previews (thumbnails) and meta-data and select what you wish to restore. Note that previews and meta-data are only available in the Archive index.
In this section, we will use P5’s LTFS features to create (format) an LTFS volume (tape), and then write data to the tape and read it back again. It’s assumed that you’ve already added your LTO tape drive to P5 in one of the previous steps.

A. Insert an LTO tape into your drive. Do not use a tape that has already been labelled for use with the Archive or Backup Modules as these tapes are protected from re-labelling as LTFS.

B. Click on the ‘Archive’ tab at the top of the web-admin interface and then ‘LTFS Import Export’ to the left. You will see your drive listed with status ‘occupied’ indicating a tape is inserted.

C. Highlight the tape and click the ‘Label’ button. Provide a Volume Name and Serial Number for the new LTFS volume. If you’re not using a blank tape, select ‘Reformat tape’ to indicate you’re happy to erase any data already on the tape. Click the ‘Create File System’ button to start the label process - this takes a little time.

Watch our quick video showing how to use P5 Archive with LTFS here: [youtu.be/TD-uXpxQigg](youtu.be/TD-uXpxQigg)
D. Once labelling is complete, you’re ready to write some data to your tape. To do this, with the tape selected, click on the ‘Write’ button. You will be presented with a file browser, allowing browsing of any disks connected to your computer under ‘Local Disks’ and your home directory, under ‘Locations’. Choose a single file or folder and click ‘Select Source Folder’. Next select your target LTFS tape, including the folder with the name you gave your LTFS tape on the right hand side. Click ‘Select Target Folder’ to commence writing your selected data to the LTFS tape.

E. Reading from an LTFS tape is the reverse of writing. Highlight your tape, click the ‘Read’ button and proceed through selecting the source data from your LTFS tape followed by a target folder on a local filesystem to write to.
Monitor jobs and view logs

P5 provides two additional windows for monitoring running and completed jobs. The Job Monitor window provides ‘live’ information about jobs that are currently running, and details about jobs that recently completed. The ‘Job History/Log’ window allows viewing of all historical jobs.

A. Locate the ‘Jobs/Logs’ button, top right, and select ‘Job Monitor’. This window (shown below) displays running and scheduled jobs at the top and recently completed jobs at the bottom. Double-clicking on items in the list of completed jobs, shows the detail for that job in a separate window. Highlighting a scheduled job allows immediate execution.

B. Again, from the ‘Jobs/Logs’ button, top right, and select ‘Job History/Log’. This window allows search within given date ranges and viewing of all historical jobs that have run on this installation.