

CP Archive App

Manual

17.03.2016

Version 2.0.5

1. Introduction

This paper describes the installation, configuration and usage of moosystems' [CP Archive App](#), which allows archiving items and collections from within the Media Asset Management system [Cantemo Portal](#) to disk or tape using the Archive module of [Archiware P5](#).

We assume Portal is already set up and running.

2. Backups and Liability

This module doesn't replace a backup system! Please make sure you implement a decent backup strategy for your online data. The vendor of the CP Archive App is not liable for any data loss you might encounter. We especially recommend to regularly back up the Archiware P5 Archive index, the Cantemo Portal database as well as thumbnails, proxies and keyframes generated by Portal.

Please back up your original files, too.

3. Requirements

With CP Archive App version 2.0 we drop support for legacy Portal and Archiware versions.

CP Archive App version 2.0.0 requires Portal 2.0.0 or later and Archiware P5 Archive 5.3 or later.

4. Changelog

Version 2.0.5

release date: 17.03.2016

- Requires Portal 2.3.x.
- Fixes displaying archive icons in collection view if items are offline.
- Fixes hiding archive and restore menu entries in collection view if current user is not in CPArchiveApp group
- Archiving items across multiple pages in collection view is possible, now (including archiving entire collections.)

Version 2.0.4

release date: 03.03.2016

- CPAA uses a single session id when talking to P5, now.

Version 2.0.3

release date: 24.02.2016

- Fixed timezone issue in GMT timezone when updating “Archived at” and “Restored at” fields of items

Version 2.0.2

release date: 22.02.2016

- Archiving and restoring items from within collection view works again.
- Archiving and restoring from bin menu works fine again.
- Not creating duplicate items after restore to auto-import storages anymore, when file paths contain empty spaces or non-ASCII characters.

Version 2.0.1

release date: 01.02.2016

- Archiving and restoring thousands of items from the Portal UI works fine, now.

Version 2.0.0

release date: 18.01.2016

- Now requires Archiware P5 Archive 5.3 or later and Portal 2.0 or later.
- No need to enter Portal credentials in CPAA configuration panel anymore.
- Installer sets order of md fields in archive group to avoid order warnings in Portal log.
- Users can now set the value of metadata field “Always keep original online” in item metadata to “yes” to prevent CPAA from removing the Original item from online storage. Especially suited for template files and other items which are always needed online and should still be kept in a safe archive.
- When adding a file to a P5 archive selection, now uses “addfile” instead of “addentry” to better deal with incremental archives in situations where Rules Engine 2 moves Original shapes to new location after restore from archive.
- Caching tape information to reduce number of requests to P5.
- Archiving and restoring items spread across multiple search results pages is now possible.

Version 1.9.2

release date: 19.10.2015

- Fixed restoring collections

version 1.9.1

release date: 24.08.2015

- Fixed restoring files to paths which include empty spaces (this bug was introduced with CPAA 1.9)
- supports rearchiving restored files to incremental archive plans in P5 5.2.1

version 1.9

release date: 03.07.2015

- Supports Archiware P5 archive plans with path prefixes in their index. This is especially important as in earlier P4 versions path prefixes were set by default, and if you upgraded from P4 to P5, path prefixes were preserved. Until P5 5.1.9 a restore from P4 or P5 always defaulted to the original path, since P5 5.2 it defaults to the same path like in the index. If you set up a fresh P5 5.2 archive plan, by default it doesn't use path prefixes in the index. CP Archive App v1.9 always restores files to their original path, no matter if you use a path prefix in your index.

version 1.8

release date: 17.06.2015

- When AUTO_IMPORT was set up for a Portal storage and media archived with Archiware P5 and Final Cut Server had been migrated to Portal, under certain circumstances a restore created a duplicate item in Portal. This has been fixed with this version.
- doesn't matter anymore which network interface uses the licensed MAC address.
- In admin section passwords are displayed as asterisks.
- minor changes

version 1.7

release date: 05.09.2014

- Log item id when skipping archiving of an item due to missing original file.
- New serial number system, which supports handling of maintenance contracts as well as expiring trial keys. You need to request a new serial number key for your existing installation if you want to upgrade to version 1.7. The new key is free within the first year of your original purchase. After that you can purchase a maintenance contract to receive the updates.

version 1.6

release date: 30.07.2014

- Installer preserves existing cpaa.db. This is important when you let CPAA automatically remove files from your online storage x days after archiving them on tape.
- Better handling of special characters in file names when firecon /Archiware P5 archived media have been migrated from Final Cut Server
- Now notifications look the same like other Portal notifications.
- minor bug fixes

version 1.5

release date: 17.06.2014

- Fixed a bug, where in the Portal log unnecessary information for each online item appeared during page reload
- Renamed UI buttons to "Restore from P5" and "Archive To P5" to play nicely with other archive apps
- Only display last 1000 lines of cpaa daemon log file in admin section

version 1.4

release date: 21.04.2014

- Supports archiving longer lists of up to 1000 single items from the Portal UI, now. If you want to archive more items in a batch, it's recommended to collect them into a collection and then archive the collection.
- Automatic archiving supports unlimited item numbers, now.
- Installing the CP Archive App doesn't set ACLs on the Archive group anymore. This allows to display item metadata when controlling user access to metadata groups within Portal.
- Deals with ' character in file names of archived files migrated from Final Cut Server.

version 1.3

release date: 26.03.2014

- Supports incremental archiving (only rearchives an item if it's not available on tape in the same form. Requires Archiware P5 v5.1.2 or later)
- automatically creates group "CPArchiveApp" in Portal
 - only members of this group can archive and restore items from within Portal using the CP Archive App
- automatically archives assets x days after item creation or x days after an item has been restored from the archive
- Fixes a problem, when Portal auto-ingests files with ampersands in the filename. Works as expected, now.
- Display logs in Portal UI
- updated manual

version 1.2

release date: 05.03.2014

- During installation, length of Archive related metadata fields will be set to 5.000 characters
- deals with ampersands and other strings in file names which need to be escaped in xml structures
- more efficient memory imprint
 - got rid of get_file_handle.py
 - set close_fds=True when invoking nsdchat
- fixed an issue, where race conditions could happen during archiving and restoring
- hitting "archive" or "restore" in the Portal UI gives you immediate feedback

version 1.1

release date: 04.01.2014

- CP Archive App avoids duplicate item generation when restoring to auto-ingest storage

version 1.0

release date: 26.11.2013

- when a job in P5 gets cancelled, related items can be restored or archived later on without the user receiving the message “Nothing to archive.”
- uses the same unicode normalization like the CP Migration Tool to deal with non-ASCII character in filenames of fiprecon migrated items
- minor bug fixes

version 0.9

release date: 01.11.2013

- deals with standalone tape drives which don't provide tape barcode information
- deals with [and] in filenames
- Logging: changed “Creating online shape for item” to “Creating original shape for item”
- deals with items migrated from Final Cut Server using the CP Migration Tool, if they have been archived using fiprecon and P5
- archiving files from Portal works with read-only Portal storages, now

version 0.8

release date: 18.10.2013

- improved update mechanism (install preserves configuration data of existing CP Archive App installation)

version 0.7

release date: 08.08.2013

- archives items which are of type binaryComponent
- deals with multiple md groups in asset xml to present archive icon in UI

5. CP Archive App and CP Migration Tool

In case you want to migrate an existing fiprecon / P5 based archive from Final Cut Server, you can use the CP Migration Tool to do that. Before you migrate an existing fiprecon / P5 archive, make sure the CP Archive App is up and running.

In addition, you need to make Portal and Archiware work with temporary disk storage, which Final Cut Server used for archiving. Read more in the CP Migration Tool [manual](#), which can be found here, and read this article: <https://moosystems.com/restoring-media-from-p5-archive-to-portal/>.

6. Setting up Archiware P5

We assume Cantemo Portal is up and running. In most environments the P5 Archive module will run on a dedicated machine to move the archive and restore load away from the Portal machine, but in less busy environments it's possible to run P5 on the same machine like Portal.

In this section we describe relevant aspects of both scenarios.

6.1. Basic P5 installation on Portal machine

No matter if P5 runs on the same machine as Portal or on a dedicated machine, you will need the P5 binaries on your Portal machine, as the CP Archive App uses them to send archive and restore commands to P5.

In case you already run P5 on an external machine, make sure you download the exact same P5 version number from the Archiware servers. If you upgrade the main Archiware server to a newer P5 version, make sure you update P5 on the Portal machine, too.

You can grab a demo license for Archiware P5 from their website.

Install P5 (as root):

```
mkdir -p /usr/local/aw
cd /usr/local/aw
tar xvf /home/cantemo/awpst520.tgz # (or wherever you stored the downloaded file)
./install.sh
```

```
ArchiWare PresStore Installation Menu
```

```
-----
```

```
1)      Install or configure the application server
```

```
99)     Quit
```

Your choice: 1

As you see above, choose 1) to start the P5 server. This is only necessary, if you want to run the P5 server on the same machine as Portal.

If P5 runs on an external machine, type "99" instead.

If you decide to run P5 on this machine, make sure you don't use the default port 8000, as this is already being used by Portal. If nothing else except from Portal runs on your server, port 8001 should be free:

```
Please enter free TCP port for the 'lexsrv' server.
Note that you must enter a free and valid TCP port.
We will not check whether the port is ok to use or not.
```

```
TCP port for the 'lexsrv' server [8000]: 8001
```

```
Arranging for server to start/stop at power cycle
  start: added S99lexx to /etc/rc.d/rcX.d, X=( 3 4 5 ).
  stop:  added K01lexx to /etc/rc.d/rcX.d, X=( 0 1 2 6 ).
Start the PresStore software now (y/n) [n]: y
Starting PresStore application servers, be patient...
  lexsrv pid: 13137 (version "5.1.2" running)
  lexsrv url: http://10.0.2.149:8001/login (use web-browser to connect)
Started 1 from 1 application servers.
```

```
ArchiWare PresStore Installation Menu
```

```
-----
```

- 1) Install or configure the application server

- 99) Quit

Your choice: 99

```
[root@centoscp15 aw]#
```

6.2. Archive Plan Setup

In P5 you need to set up an Archive plan, so that we can archive media from Portal to that plan and later restore data from that plan.

You will need to remember user name and password to access this plan as well as the archive plan id. In most environments you need to be root to set up P5.

During setup, make sure you choose these archive options:

The screenshot shows the 'Archive Options' configuration window. It includes the following settings:

- Description:** PortalArchive
- Status:** Enabled
- Auto start:** Disabled
- Archive Options:**
 - Scan files before archive: Yes
 - Volume use: Append to media
 - Verify After Write: Yes
 - Delete files after archive: Do not delete
 - Archive level: Incremental
- Pre-/Post Scripts:**
 - Execute script before archive: (empty field)
 - Execute script after archive: (empty field)
 - Execute post-script always, even on job errors or exception

Scanning files before archiving them as well as verifying the archive process are very important processes in production environments (set them to “yes”), but can be ignored in your lab (set them to “no”).

We set “Delete files after archive” to “Do not delete”, so that Archiware doesn’t automatically delete files from our online storage. Deleting files will be handled by the CP Archive App instead.

IMPORTANT NOTE: If you choose to create an incremental archive job as displayed above, this can save you lots of tape storage. This is how it works: when you restore an item from tape and just read it without modifying it, another archive process later on would not write the item to tape again, but would simply remove it from your online storage instead. You will need P5 Archive version 5.1.2 or above to make this work. If you change ownership, permissions or contents of a restored file, the next archive process would write the file to tape again.

7. CP Archive App Installation

7.1. Preparation

Please get in touch with your CP Archive App reseller or send a mail to andre@moosystems.com to receive both the installer and a valid serial number file.

Please send us the MAC address of one of your Portal machine's network interfaces.

If you open a Terminal on the Linux machine, just type `ifconfig`, and it will show you the `eth0` MAC address of your machine, e.g.:

```
[root@localhost]# ifconfig
eth0      Link encap:Ethernet  Hardware Address 00:0C:29:FE:59:8E
          inet Address:192.168.241.134  Bcast:192.168.241.255  Mask:255.255.255.0
```

Please send us the part in bold, in the example this would be `00:0C:29:FE:59:8E`

7.2. Installation

Open the Terminal and `cd` into the same directory like the zip file and the serial number file:

```
[root@localhost Documents]# ls -al
insgesamt 13344
drwxr-xr-x.  3 cantemo cantemo    4096 18. Jul 18:04 .
drwx----- 23 cantemo cantemo    4096 18. Jul 14:20 ..
-rw-r--r--.  1 root    root      13647087 18. Jul 14:26 CPArchiveApp_2.0.0.zip
-rw-r--r--.  1 root    root         45 18. Jul 18:04 sn.txt
```

Unzip the installer:

```
[root@localhost Documents]# unzip CPArchiveApp_2.0.0.zip
```

(Replace the filename with your current version's filename.)

Now move the serial number file into the installer directory, change into that directory and invoke the installer:

```
[root@localhost Documents]# mv sn.txt CPArchiveApp/
[root@localhost Documents]# cd CPArchiveApp/
[root@localhost CPArchiveApp]# ./install --portal_user=admin --portal_pass=admin
Successfully connected to Portal installation.
You are installing CP Archive App.
Binary's parent dir is /home/cantemo/Documents/CPArchiveApp.
Found serial number file.
Creating metadata fields in Portal.
Seems like we successfully created necessary archive metadata fields in Portal.
Successfully copied /home/cantemo/Documents/CentOS_CPArchiveApp/CPArchiveApp to its final destination.
Successfully copied /home/cantemo/Documents/CentOS_CPArchiveApp/cpaa to its final destination.
```

Successfully copied /home/cantemo/Documents/CentOS_CPArchiveApp/etc_init_d/cpaas to its final destination.
Successfully copied /home/cantemo/Documents/CentOS_CPArchiveApp/sn.txt to its final destination.
Successfully copied /home/cantemo/Documents/CentOS_CPArchiveApp/CPArchiveApp/img/ArchiveIcon.png to its final destination.
Successfully copied /home/cantemo/Documents/CentOS_CPArchiveApp/CPArchiveApp/img/Archived.png to its final destination.
We add cpaas to init.d.
Now we restart Portal. This can take a few minutes
portal: stopped
portal: started
Please configure the CP Archive App in the Portal admin section.
Then type 'service cpaas start' to start the CP Archive App.

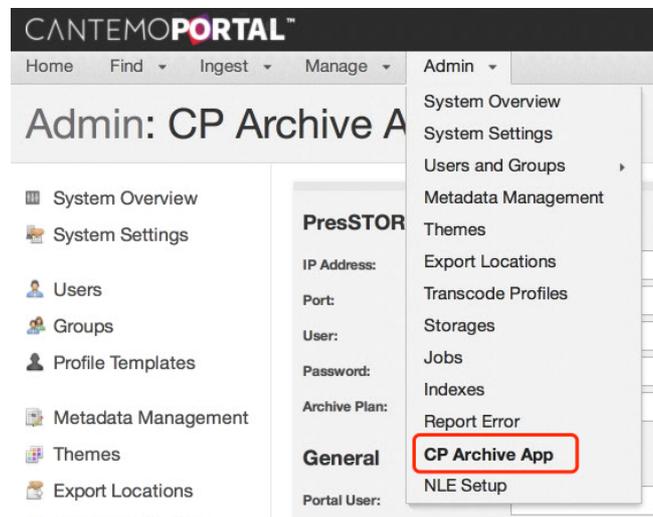
Make sure to replace “admin” with the actual user name and password of your initial Portal admin account.

In case you already have an older CP Archive App installation in place, the installer process will preserve your existing configuration.

8. Configure the CP Archive App

8.1. CP Archive App config panel

Open the admin panel of Portal to configure the CP Archive App:



Set up the CP Archive App:

The screenshot shows the 'Admin: CP Archive App: Settings' page in the CanTEMOPortal. The page has a dark header with the logo and navigation links (Home, Dashboard, Find, Ingest, Manage, Admin, Help). A search bar and user status ('You are logged in as admin | Logout') are also visible. The main content area is divided into a left sidebar with navigation options and a main settings panel. The sidebar includes links for System Overview, System Settings, Users, Groups, Profile Templates, Metadata Management, Themes, Export Locations, Transcode Profiles, Storages, Jobs, Indexes, Report Error, Comments, CP Archive App, and Logs. The main settings panel is titled 'Admin: CP Archive App: Settings' and contains three sections: 'P5 Server', 'General', and 'Path Mapping'. The 'P5 Server' section has input fields for IP Address (127.0.0.1), Port (9002), User (root), Password (masked with dots), and Archive Plan (10001). The 'General' section has input fields for 'Delete Online Files X Days After Archiving' (0) and 'Archive Online Files X Days After Creation' (0). The 'Path Mapping' section has an 'Add Mapping' button and a 'Save' button.

Enter the IP address of the P5 server (127.0.0.1 in our case). The P5 port number is 1001 higher than the number you set up during the P5 setup. In our case this is 9002, in most cases where P5 runs on an external server, this will be 9001, though.

P5 username and password can be the credentials of any user with the permissions to fully control P5.

The archive plan id is the one you just set up in P5.

IMPORTANT NOTE: if you change any setting in the CP Archive App setup panel after the initial setup, you need to manually restart the daemon by invoking the Terminal on the Portal machine and typing:

```
service cpaa restart
```

A very important setting is “Delete Online FILES X Days AFTER ARCHIVING”. If you set this to “0”, when archiving, the CP Archive App will delete files from your online storage immediately after storing them on tape. This should be the default usage scenario.

In some environments, though, users need to restore files quite often within the first 90 days, e.g. after initial archiving. If you set this value to “90”, the CP Archive App will still store items on tape immediately when you archive them, but a copy with the metadata status “Online and Offline” will stay in the original place, so that restoring them is much faster than fetching them from tape. After 90 days the CP Archive App will remove them from disk, though. As the CP Archive App not only leaves the original file in place before final removal, but also relates it as a file to the Portal asset, Auto-Ingest can still be activated for the storage on which the file resides.

“Archive Online Files X Days After Creation” does the following: if set to “0” (which is the default value), this does nothing. If set e.g. to “14”, each item will automatically be archived 14 days after it has been added to Portal. Automatic archiving gets triggered every night at 2am, searches for archive candidates and tells P5 to archive them. Simple as that. Please read how to customise this feature in section 8.5 Automatic Archiving - Advanced.

In the path mapping section, you need to enter the paths of your Portal storages on the left side and the paths, P5 uses to access these storages on the right side.

If both Portal and P5 run on the same machine or run on separate machines but mount the same central storage in the same mount point, you don’t need to configure path mapping. The CP Archive App will simply try to use the same file path with P5 like with Portal.

If P5 runs on another OS or just uses other mount points than the Portal machine, you can tell P5 how to map these different mount points.

IMPORTANT NOTE: If at a later point in time you need to move one of the devices mapped here to other storage, try to preserve the mount points on both your Portal and your P5 machines. If you need to change the mount points, you need to symlink the old mount points to the new mount points on both the Portal and the P5 machine.

If e.g. Portal mounted the Library storage at /srv/Library and now you move it to /mnt/portal/Library, you need to enter

```
ln -s /mnt/portal/Library /srv/Library
```

as root on the Portal machine’s command-line.

Same applies to the P5 machine, in case it’s a separate server.

Now save your settings and start the daemon in the command line:

```
service cpaa start
```

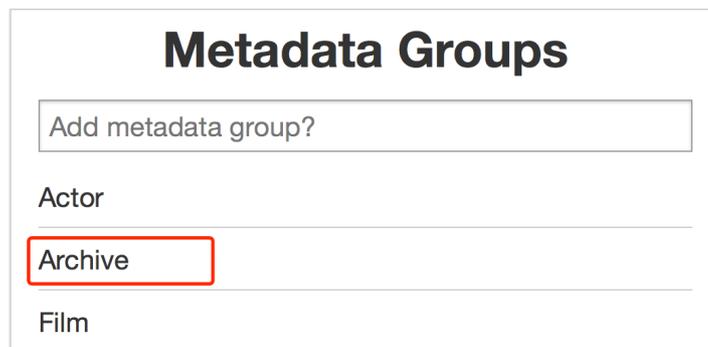
Verify that the daemon starts like expected by reading its logs:

```
[root@localhost CentOS_CPArchiveApp_1.0]# tail -f /usr/local/cpaa/daemon.log
2013-07-18 20:56:18,362 - We are running CP Archive App version 1.0.
2013-07-18 20:56:18,362 - Found serial number file.
2013-07-18 20:56:18,363 - Starting up with valid license.
2013-07-18 20:56:18,363 - Creating CPAA database.
2013-07-18 20:56:18,393 - Server port is 56902.
2013-07-18 20:56:18,398 - Press Ctrl+C to stop this application.
```

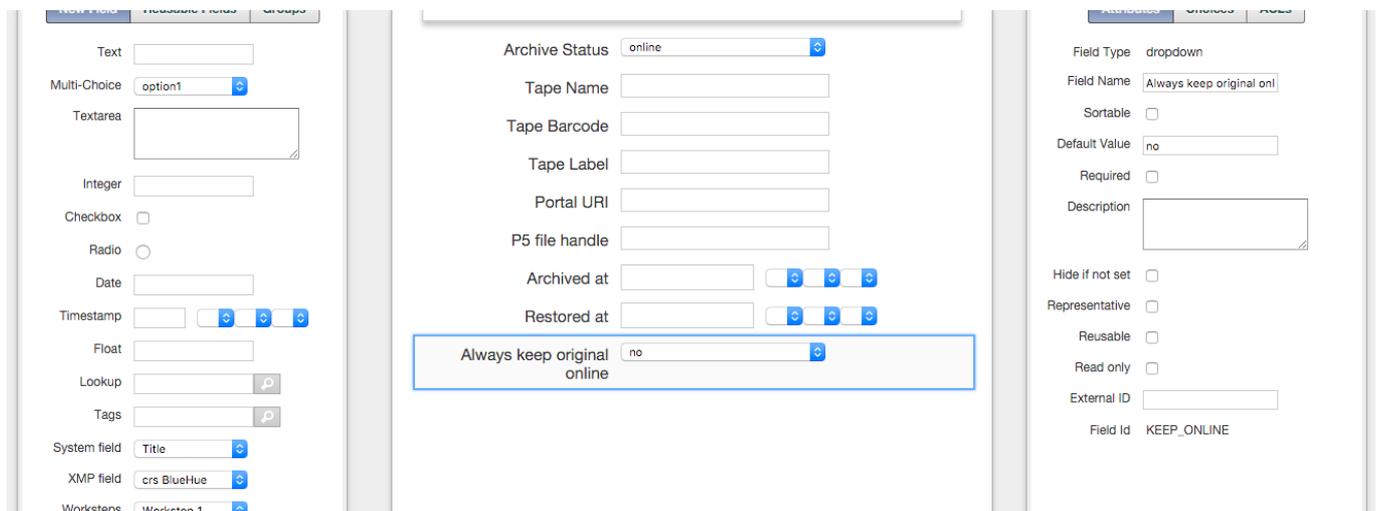
8.2. Archive Metadata

After running the CP Archive App installer, please invoke <http://10.0.2.149/vs/metadatamanagement/> (replace 10.0.2.149 with the IP address of your Portal server) to manage the metadata fields we just created to manage the archive workflow.

You will now see a new metadata group called “Archive”:



If you click on it, you will find nine new metadata fields called “Archive Status”, “Tape Label”, “P5 file handle”, “Tape Barcode”, “Tape Name”, “Portal URI”, “Archived at”, “Restored at” and “Always keep original online”:



Now select your main metadata group and add the Archive group to its root level:

The screenshot shows the 'Film' metadata editor. On the left, a sidebar has tabs for 'New Field', 'Reusable Fields', and 'Groups'. Under 'Groups', 'Archive' is listed with a plus icon. The main area is titled 'Film' and contains several input fields: 'Season', 'Episode', 'Description', 'Language', 'Release date', and an 'Actor' group containing 'First name', 'Surname', and 'Date Born'. On the right, there are tabs for 'Attributes', 'Choices', and 'ACLs'.

This screenshot shows the 'Film' metadata editor with the 'Archive' group added to the root level. The 'Archive' group is expanded and contains the following fields: 'Archive Status' (a dropdown menu currently showing 'online'), 'Tape Label', 'P5 file handle', 'Tape Barcode', 'Tape Name', and 'Portal URI'. The 'Actor' group is still visible above it.

IMPORTANT NOTE: If you add the Archive group to a subgroup of your metadata groups, the CP Archive App will not be able to update the values in the contained fields. You absolutely must keep the Archive group on the root level of your metadata groups!

Now the archive status of your assets will be displayed in the metadata details of each item:

Metadata Remove metadata Edit

Season

Episode

Description

Language

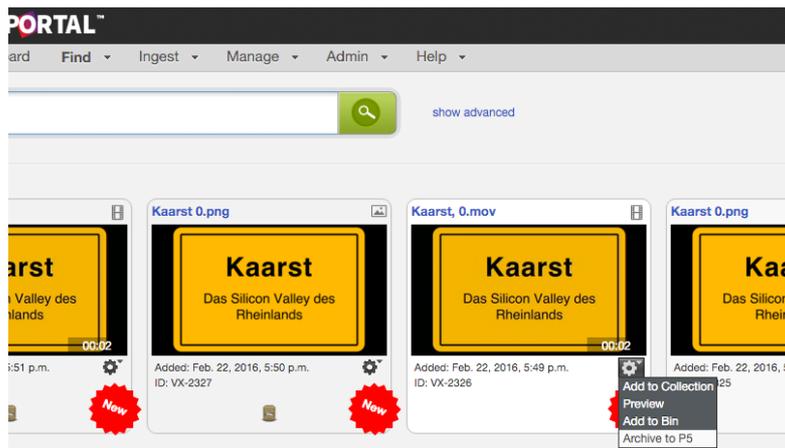
Release date

▼ Archive	
Archive Status	online
Tape Label	
P5 file handle	
Tape Barcode	
Tape Name	
Portal URI	
Archived at	

In the search results list, media which are only available on tape will be displayed with a little archive logo:



You can now start to archive a single asset:

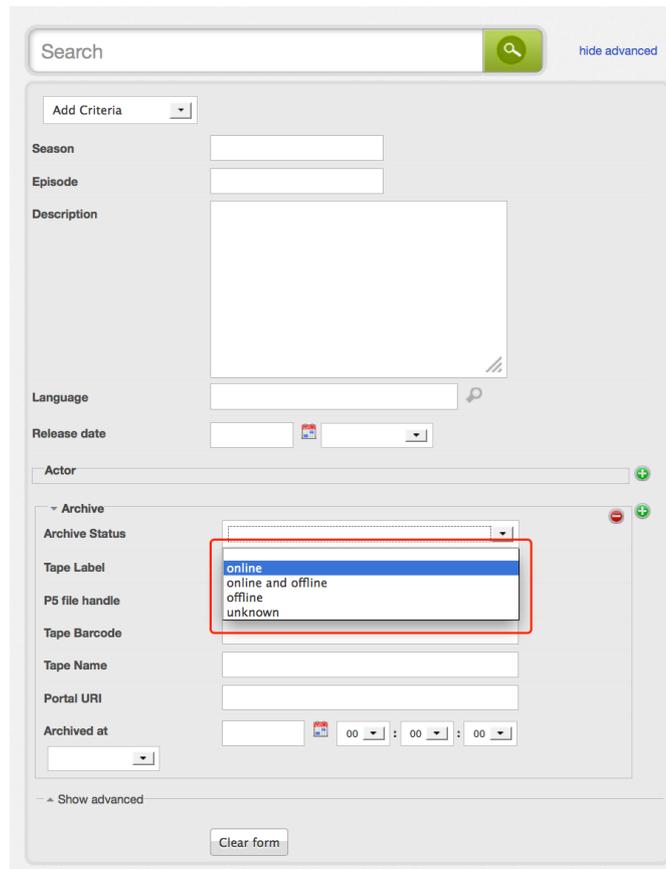


The Archive status can be one of “Online”, “Online and Offline”, “Offline”, “None” or “Unknown”.

This is what these values mean:

- “Online”: This means that you have an online copy of your media and no copy in the archive.
- “Online and Offline”: You have a copy of your original media both on your online storage and in your archive. This happens when you archive a medium (i.e. move from online storage to archive) and later restore it (i.e. copy from archive to online storage), e.g.
- “Offline”: This means you only have a copy of your media in the archive.
- “Unknown”: This status will only show up in the Portal UI if you migrate media from Final Cut Server using the [CP Migration Tool](#) and some of these assets have an unknown archive status in Final Cut Server. This defaults to “Online”, too.

If you want to search for items with a specific archive status, open the advanced search panel, choose the Archive Status you are looking for:



The image shows a screenshot of an advanced search interface. At the top, there is a search bar with a magnifying glass icon and a 'hide advanced' link. Below the search bar is a section titled 'Add Criteria' with a dropdown arrow. The search criteria are organized into several sections: 'Season' and 'Episode' (text input fields), 'Description' (a large text area), 'Language' (text input field with a search icon), 'Release date' (calendar icon and date input), 'Actor' (text input field with a plus icon), and 'Archive' (a section with a minus icon and a plus icon). The 'Archive' section is expanded, showing a dropdown menu for 'Archive Status' with the following options: 'online', 'online and offline', 'offline', and 'unknown'. The 'online' option is highlighted. Other fields in the 'Archive' section include 'Tape Label', 'P5 file handle', 'Tape Barcode', 'Tape Name', 'Portal URI', and 'Archived at' (calendar icon and time input). At the bottom of the search panel, there is a 'Show advanced' link and a 'Clear form' button.

and hit the green search icon above the search criteria list.

IMPORTANT NOTE: There might be situations where you want to archive files, but not delete their original shapes from your online storage. One use case for this might be template files, which you are using in many of your current projects (so you always want them online), but you can't afford to lose them in case your online storage goes down (so you need a copy in your archive). If you identify items like these, just set the value of the field "Always keep original online" to "yes", and CPAA will never remove the original file from your online storage when it archives the file.

8.3. Permissions

Only members of the group CPArchiveApp are allowed to archive and restore items.

After installing CP Archive App 1.3 or later no user will be allowed to archive or restore items by default. You will need to add users to the CPArchiveApp group in Portal to allow them archiving and restoring.

Open the Users panel in the Portal admin section and select a user. Make the user member of the CPArchiveApp group like shown below:

The screenshot displays the 'Admin: Users: admin' page in the CANTEMO PORTAL interface. The left sidebar contains a navigation menu with items such as System Overview, System Settings, Users, Groups, Profile Templates, Metadata Management, Themes, Export Locations, Transcode Profiles, Storages, Jobs, Indexes, Report Error, Access Rules, Distribution Rules, Format, Metadata, NLE Setup, and CP Archive App. The main content area shows the user's profile for 'admin'. Key details include: Last login: March 21, 2014, 10:57 a.m.; Date joined: Feb. 25, 2014, 4:54 p.m.; First name and Last name fields; Email: user@domain.com; Staff status: checked; Superuser status: checked. A group selection section features 'Available Groups' and 'Chosen Groups'. The 'Chosen Groups' list is highlighted, showing 'Admin' and 'CPArchiveApp'. Below this are dropdown menus for 'Default group' (Admin), 'Default ingest group' (Admin), and 'Default metadata group' (Final Cut Server). A 'Change Password' button is located in the top right corner.

When a user logs in to Portal, depending on his group membership he has access to the archive and restore buttons.

8.4. Automatic Archiving - Basic

If you want the CP Archive App to automatically archive items x days after they have been added to the Portal catalog, you need to set the delay in the CP Archive App admin panel within Portal as described above. As mentioned, setting the value to zero turns automatic archiving off, so the shortest delay for archiving would be one day after adding an item to Portal.

Now you need to tell Portal when you want to automatically archive items older than x days. We recommend to do that during non-business hours, e.g. at 2am.

CentOS 6.x uses anacron to trigger services. For fine-grained automatic archiving, we recommend to uninstall anacron and use cron instead.

On the Portal machine, log in as root and type (in the Terminal):

```
yum remove crone-anacron
yum install crone-noanacron sysstat
service crond start
chkconfig crond on
```

Now open `/etc/crontab`:

```
vi /etc/crontab
```

and add the following line to the end of the file:

```
0 2 * * * root /usr/local/cpaa/automatic_archive
```

Save the file and check the logs of the CP Archive App to see if automatic archiving works well.

8.5. Automatic Archiving - Advanced

Automatic archiving by default finds all items

- which are not offline
- which have not been added to Portal within the last x days
- which have not been restored from P5 within the last x days

“X days” is the value CPAA fetches from its settings you configured in its admin panel within Portal.

In some scenarios you might want to search for other criteria than creation date or restore date. In this case, you find a file named `search_template.xml` in the folder `/usr/local/cpaa/`, which looks like this:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ItemSearchDocument xmlns="http://xml.vidispine.com/schema/vidispine">
  <operator operation="AND">
    <operator operation="NOT">
      <field>
        <name>created</name>
        <range>
          <value>NOW-5DAYS</value>
          <value>NOW</value>
        </range>
      </field>
    </operator>
    <operator operation="NOT">
      <field>
        <name>ASSET_ARCHIVE_STATUS</name>
        <value>Offline</value>
      </field>
    </operator>
  </operator>
</ItemSearchDocument>
```

```
    </field>
  </operator>
  <operator operation="NOT">
    <field>
      <name>RESTORED_AT</name>
      <range>
        <value>NOW-5DAYS</value>
        <value>NOW</value>
      </range>
    </field>
  </operator>
</ItemSearchDocument>
```

This document matches all items

- which are not offline
- which have not been added to Portal within the last 5 days
- which have not been restored from P5 within the last 5 days

If you want to set up custom search criteria, please copy this file to `/usr/local/cpaa/search.xml` and modify it to match your criteria. You find an explanation how this file might look in the Vidispine documentation.

If the file `/usr/local/cpaa/search.xml` exists, the “Archive Online Files X Days After Creation” setting from the CPAA UI does **NOT** apply.

If the file `/usr/local/cpaa/search.xml` does not exist, the “Archive Online Files X Days After Creation” setting from the CPAA UI **DOES** apply.

To test your custom search.xml file, open a Terminal on the Portal machine, cd into `/usr/local/cpaa` and type

```
./search.py
```

If your search.xml file works fine, it will tell you how many and which files could be found:

```
These items match your search:
```

```
VX-47, VX-39, VX-36, VX-35, VX-34, VX-33, VX-32, VX-31, VX-30, VX-29, VX-28, VX-27, VX-26,
VX-25, VX-24, VX-23
```

```
16 matching items found.
```

9. Where can I archive what?

Each item in the search results lists or in the collection view has an individual action gear allowing you to archive and restore assets. The menu entries are named “Archive to P5” and “Restore from P5”.

You find the same menu entries in the bin and in the upper right corner of the search results view and when a collection is open, so that you can select multiple items and trigger an archive or restore process.

10. Technical details and logging

The main work is being done by the CP Archive App daemon, which resides at `/usr/local/cpaa/main`

You can start, stop and restart it on the command-line by invoking one of these three commands:

```
service cpaa start
service cpaa stop
service cpaa restart
```

To see what the app is doing, you can read its logs on the Portal server:

```
tail -f /usr/local/cpaa/daemon.log
```

This will give you quite verbose information about what’s going on.

The same log will be displayed in the Portal UI, now:

CANTEMOPORTAL™

Home Find Ingest Manage Admin

You are logged in as admin | Logout

Admin: CP Archive App: Logs

- System Overview
- System Settings
- Users
- Groups
- Profile Templates
- Metadata Management
- Themes
- Export Locations
- Transcode Profiles
- Storages
- Jobs
- Indexes
- Report Error
- Access Rules
- Distribution Rules
 - Format
 - Metadata
- NLE Setup
- CP Archive App
 - Logs

Please reload the page to update the log view.

```
2014-03-26 11:31:14,267 - We are running CP Archive App version 1.3.
2014-03-26 11:31:14,270 - Found serial number file.
2014-03-26 11:31:14,276 - Starting up with valid license.
2014-03-26 11:31:14,276 - CAAA database file already exists.
2014-03-26 11:31:14,277 - Server port is 56902.
2014-03-26 11:31:14,284 - Press Ctrl+C to stop this application.
2014-03-26 11:31:14,434 - Checking for P5 job status.
2014-03-26 11:32:14,531 - Checking for P5 job status.
2014-03-26 11:33:14,624 - Checking for P5 job status.
2014-03-26 11:34:14,682 - Checking for P5 job status.
2014-03-26 11:35:14,766 - Checking for P5 job status.
2014-03-26 11:36:14,855 - Checking for P5 job status.
2014-03-26 11:37:14,946 - Checking for P5 job status.
2014-03-26 11:38:14,982 - Checking for P5 job status.
2014-03-26 11:39:15,039 - Checking for P5 job status.
2014-03-26 11:40:15,126 - Checking for P5 job status.
2014-03-26 11:41:15,206 - Checking for P5 job status.
2014-03-26 11:42:15,251 - Checking for P5 job status.
2014-03-26 11:43:15,307 - Checking for P5 job status.
2014-03-26 11:44:15,376 - Checking for P5 job status.
2014-03-26 11:45:15,418 - Checking for P5 job status.
2014-03-26 11:46:15,501 - Checking for P5 job status.
2014-03-26 11:47:15,584 - Checking for P5 job status.
2014-03-26 11:48:15,636 - Checking for P5 job status.
2014-03-26 11:49:15,704 - Checking for P5 job status.
2014-03-26 11:50:15,795 - Checking for P5 job status.
2014-03-26 11:51:15,888 - Checking for P5 job status.
2014-03-26 11:52:15,963 - Checking for P5 job status.
2014-03-26 11:53:16,055 - Checking for P5 job status.
2014-03-26 11:54:16,152 - Checking for P5 job status.
2014-03-26 11:55:16,237 - Checking for P5 job status.
2014-03-26 11:56:16,267 - Checking for P5 job status.
```

To display the log in the Portal UI, open Admin => CP Archive App => Logs. To update the log view, please reload the page.

Information about the CP Archive App processes running in the Portal UI can be found in the Portal log file at `/var/log/cantemo/portal/portal.log`.

11.API

If you want to run your own apps to trigger archiving and restoring, that's very easy.

The CP Archive App daemon runs on the port defined above using the Portal admin UI. It accepts requests from the localhost to localhost or 127.0.0.1 only.

This is what you need to send to the CP Archive App daemon to trigger an archive or restore process:

```
{
  "action": "restore",
  "items": [ "VX-22", "VX-24", "VX-25", "VX-26", "VX-28", "VX-29", "VX-30" ]
  "collections": [ "VX-6", "VX-9" ]
}
```

This is a JSON document, where the action can be either “archive” or “restore”. You can either send “items” or “collections” as a list of Portal ids. You can mix collections and items like seen above or send just items or collections:

```
{
  "action": "restore",
  "collections": [ "VX-6", "VX-9" ]
}

{
  "action": "restore",
  "items": [ "VX-22", "VX-24", "VX-25", "VX-26", "VX-28", "VX-29", "VX-30" ]
}
```

A little Python example script to talk to the CP Archive App daemon can look like this:

```
#!/usr/bin/env python
""" This is an example CP Archive App client, which enables you to
communicate with the CP Archive App daemon.
"""

import socket

def client(ip, port, message):
    sock = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    sock.connect((ip, port))
    try:
        sock.sendall(message)
        response = sock.recv(1024)
        print response
    finally:
        sock.close()
```

```
message = ""{
  "action": "restore",
  "items": [ "VX-22", "VX-24", "VX-25", "VX-26", "VX-28", "VX-29", "VX-30" ]
}""

client("localhost", 8002, message)
```

Responses from the CP Archive App can be:

- "PresSTORE restore job id is 10045", where 10045 is the P5 job id as a number
- "PresSTORE Archive job id is 10045", where 10045 is the P5 job id as a number
- "Nothing to restore."
- "Nothing to archive"
- "JSON error on server."
- "Can't interpret received json message. Skipping."

12. Uninstall CP Archive App

To uninstall the CP Archive App, open the installer folder you extracted in the beginning of this paper and run the uninstaller in the command-line. Before you do this, stop the CP Archive App daemon:

```
service cpaa stop
uninstall
```

After that you need to manually delete the metadata group "Archive" and the user group "CPArchiveApp".