

ACH Web Interface

Alwan Color Hub Web Interface

1 Introduction

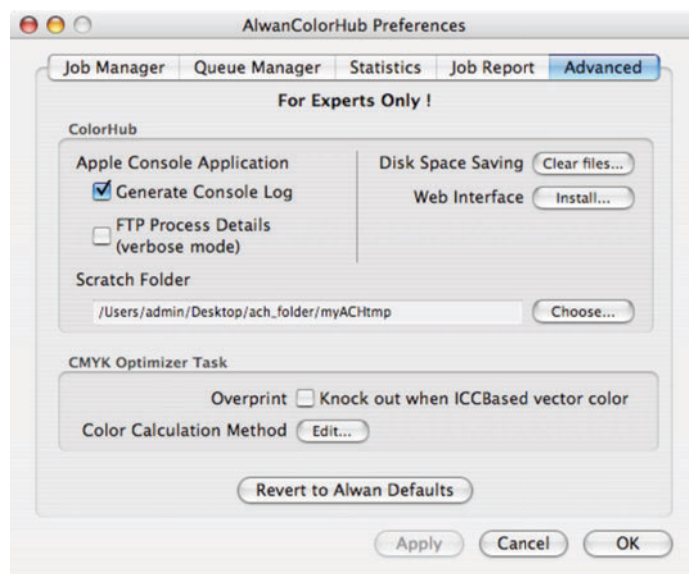
Alwan Color Hub Web interface has two main goals: visualizing and controlling jobs of the Alwan Color Hub (ACH) with a web browser.

WARNING: To install this product, you must be the administrator of your machine. If your machine is a part of a local network, please ask your network administrator before installing.

2 Auto Installation

An auto installation is available from the Preferences window as described below. Please note that further details about web interface installation or manual install are available in part 4.

- Open AlwanColorHub Preferences (AlwanColorHub -> Preferences...) and choose the Advanced tab :

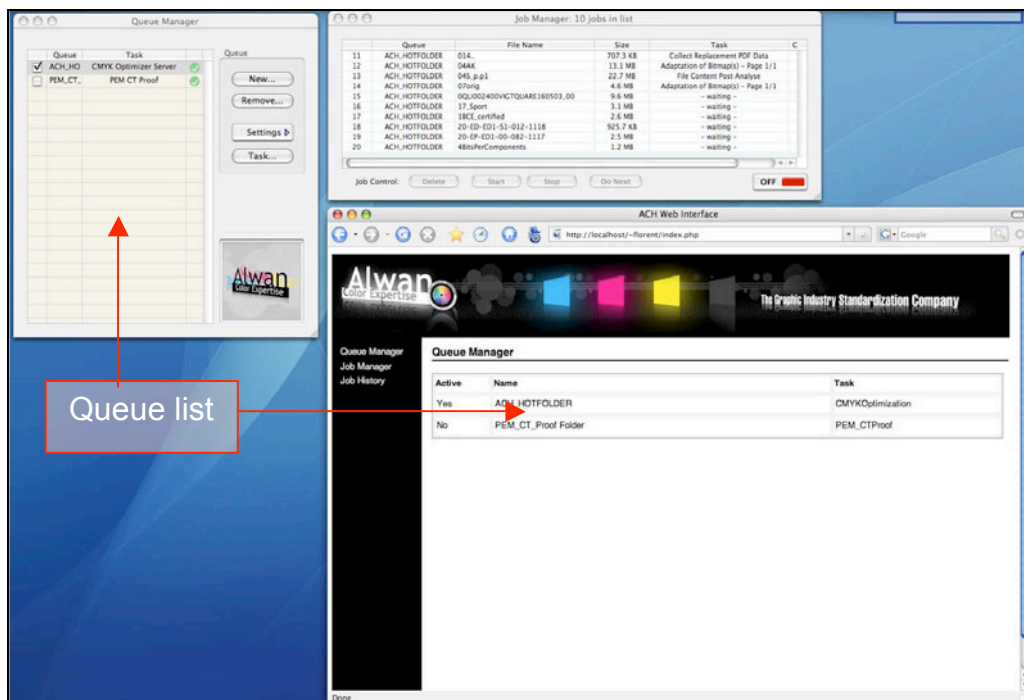


- Click on Install... button : An Installer will be launched and you will be guided through the different steps.

3 The interface

3.1 Start Page / Queue Manager

- First launch ACH as usual.
- Then launch your favorite Web Browser (Safari, Firefox...).
- Type the following url in the address bar: **http://localhost/~yourLogin**
(your MAC IP is 192.168.0.95 and your login name is john , the Web Interface will be available at http://192.168.0.95/~john/)
- The web interface should appear as follow:



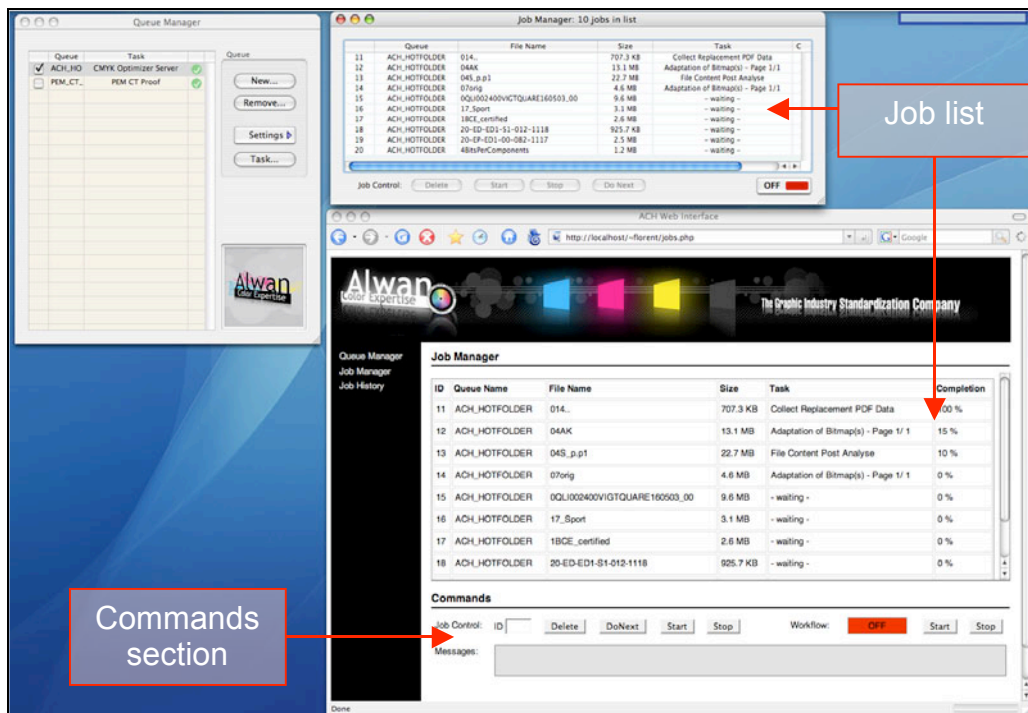
This is the **Queue Manager** page showing the queues.

If you see this message: “*QueueList.plist is missing!*” restart ACH and reload the page. If the message is still there, check the file **DirectoryList.plist** is configured as described in section **Erreur ! Source du renvoi introuvable.**

3.2 Job Manager

If you click on the **Job Manager** link in the black navigation bar, it leads you to the screen below.

Within this page, you monitor and control the activities of all jobs in all queues, as you would do in your ACH Job Manager.



3.2.1 Single Job Command

To delete, raise the priority, start or stop a job, please follow this steps:

- enter the ID of the Job you want to manage
- press the button with the name of the action you want to perform
- a confirmation is displayed in the *Messages* frame

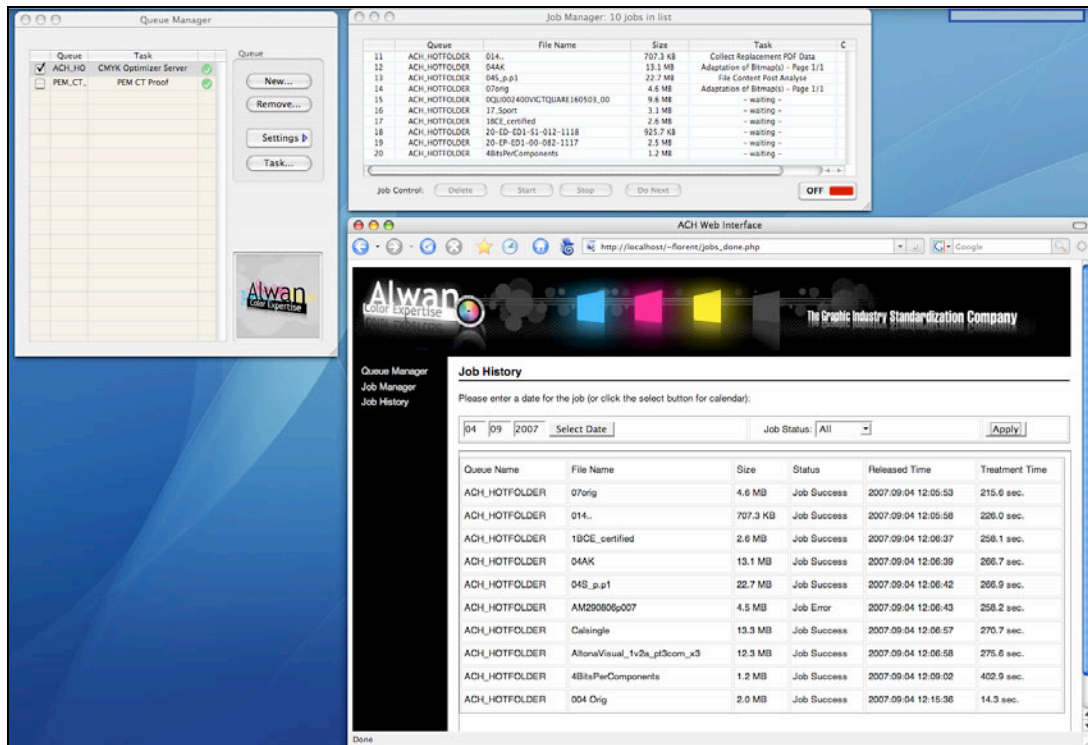
3.2.2 Global Workflow Command

To start or stop the global workflow of ACH:

- next to the *Workflow* word, press the appropriate button
- the frame next to the *Workflow* word is updated accordingly (OFF on a red background or ON on a green background)

3.3 Job History

If you click on the **Job History** link in the black navigation bar, it leads you to the screen below:



There you can consult the list of the files treated by Alwan Color Hub:

- enter a date in the three field on the left part of the screen or click on the *Select Date* button to choose a date in the calendar
- click the *Apply* button

If no job is found on this date, then an error message is displayed.

You can filter job by their final status (All, Success, Error):

- select a date as described above
- use the *Job Status* combo box to select the kind of job you want to visualize
- click the *Apply* button

4 Manual Installation

4.1 Steps summary

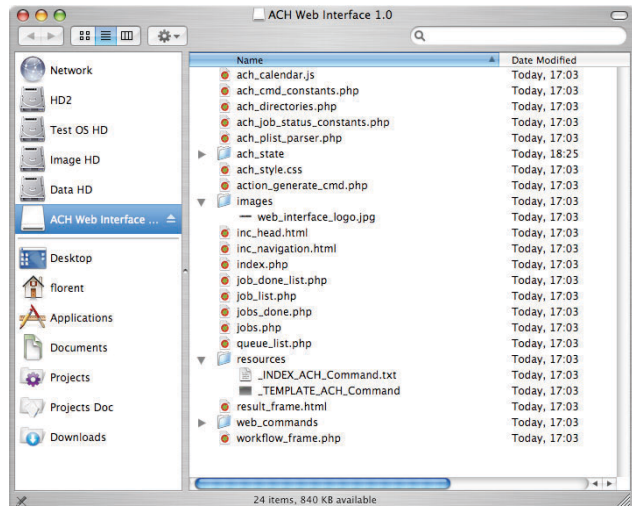
There are three steps to achieve the installation process:

- Copy the Web Interface files into the right directory
- Configure the Web Interface folders
- Configure and Activate Apache and PHP

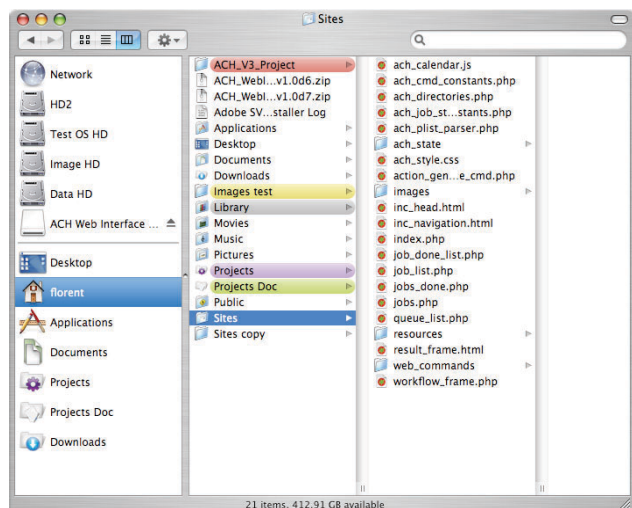
4.2 Copying the files

The Web Interface must be installed in the “**Sites**” folder of your local home folder:

- Open a Finder window
- Double click on the “**ACH Web Interface x.x.dmg**” file (where “x.x” is a version number)
- It mounts an ACH Web Interface disk that should appear on the left part of your Finder window.



- Open the ACH Web Interface folder
- Drag the content of this folder into the folder “**Sites**” in your home folder (path: `~yourName/Sites`)

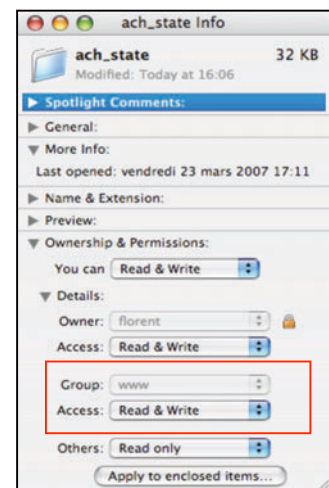


4.3 Configuring the folders for ACH

4.3.1 Folders

In the last step, you create and configure the folder that will contain the queues and jobs files:

- Launch a Terminal and type the following lines:
- **cd ~/Sites**
- **sudo chgrp www ach_state resources web_commands**
(this command is changing the group name to “www”)
- **sudo chmod g+w ach_state resources web_commands**
(this command is adding the “write” privileges to group rights)
- Close the Terminal
- Open a Finder window
- Select the **ach_state** folder in the “Sites” folder
- Type: **⌘I** or in the File menu, click «Get Info».
- You should obtain something like the window to the right:



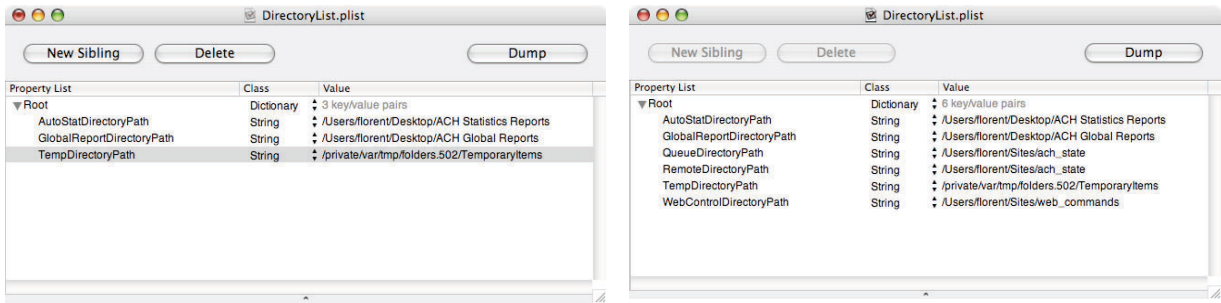
- Check also the resources folder. It should have the same group properties as the ach_state folder.

Technical note: This permissions changes allow Color Hub, which has the rights of the current user, and the Apache Server to read and write in a common directory.

4.3.2 ACH Configuration files

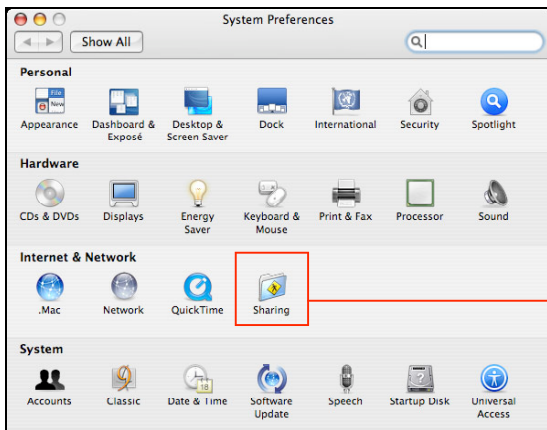
Then you change some parameters in ACH configuration files:

- Open a finder window
- Go to the folder:
~/Library/Application Support/ALWAN_ColorHub/DirectoryManagement
- And open the file **DirectoryList.plist** by double-clicking it
- Then do the following modifications:
- Add two keys:
 - o QueueDirectoryPath = ~/Sites/ach_state
 - o RemoteDirectoryPath = ~/Sites/ach_state
 - o WebCommandDirectoryPath = ~/Sites/web_commands

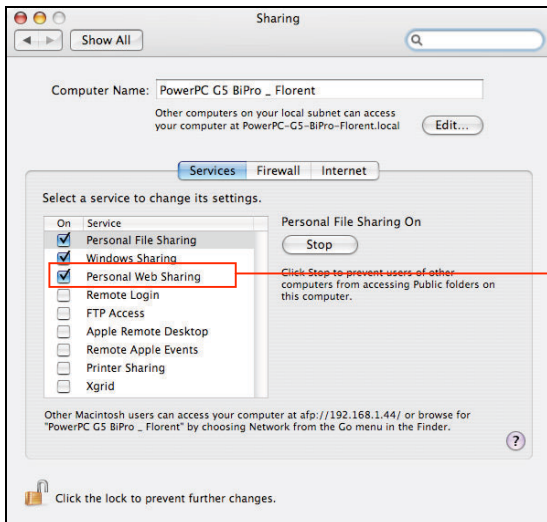


4.4 Configure and Activate Apache and PHP

Then you'll have to activate the **Personal Web Sharing** through system preferences.



Select the sharing preferences



Check the Personal Web Sharing item

Now Apache is activated. Now you will activate the PHP module:

- Launch a terminal and type the following lines:
- Under Tiger: `cd /etc/httpd` ; Under Leopard: `cd /etc/apache2`
- `sudo cp httpd.conf httpd.copie`
- `sudo pico httpd.conf`

- Find the line « **#LoadModule php4_module libexec/httpd/libphp4.so** » and remove the initial « # ».
- Then find the line « **#AddModule mod_php4.c** » and remove the initial « # ».
- **CTRL + O** then **CTRL + X** to save and quit.

Now you will need to configure PHP to remove unnecessary error display:

- In the same terminal window
- **sudo sed "s/display_errors = On/display_errors = Off/g" /etc/php.ini.default > /etc/php.ini**

Then you will restart Apache:

- Uncheck the *Personal Web Sharing* item in System Preferences.
- Check it again

Or use the following command line to restart it (you'll be asked for your password):

sudo apachectl restart

5 Appendices

5.1 Architecture

ACH Web interface is based on a PHP/Apache server and communicate with ACH by XML files (Apple p-lists).

It is composed of few PHP pages and modules. There are two main pages:

- `index.php`
- `jobs.php`

These pages uses frames for dynamic data, filled with:

- `queue_list.php`
- `job_list.php`
- `result_frame.html`

... and includes two files for header and navigation through the interface:

- `inc_head.html`
- `inc_navigation.html`

PHP modules are prefixed with *ach_*. They contain only php code. The *ach_plist_parser.php* owns functions to parse XML files into PHP arrays. The *ach_directories.php* contains the declarations of the directories used to store ACH files. The *ach_cmd_constants.php* contains constants used by both the jobs page and the *action_generate_cmd.php*. This last module is responsible for creating the commands files described later in this document.

Finally, *ach_style.css* is the style sheet for the whole interface.

5.2 Files

The Web interface is communicating with ACH thanks to some XML files:

- **QueueList.plist**: This file describes the queues defined in ACH.
- **JobManager_Current.plist**: This file describes the jobs currently being processed by ACH.
- **JobManager_ColumnID.plist**: indicates the columns to be displayed in the jobs page.
- **JobManager_Done / JobManager_Done_yyyy_mm_dd.plist**: Each of these files contains a list of jobs treated by ACH on a specific date. The suffix indicates the date.
- **ACH_Command_xxx.plist**: XXX is the index of the file. These files contain command to be executed by ACH.

The first file is placed in the QueueDirectoryPath, the other files reflecting the state of ACH are placed in the RemoteDirectoryPath and the command files (last item in the list) are placed

in the WebCommandDirectoryPath (see section **Erreur ! Source du renvoi introuvable.** for more information on the directories used by ACH Web Interface).

Below are some examples of the XML files used to communicate between ACH and the Web interface:

JobManager_Current.plist:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>FlowON</key>
  <false/>
  <key>Jobs</key>
  <array>
    <dict>
      <key>Completion</key>
      <string>0 %</string>
      <key>File Name</key>
      <string>L39p006</string>
      <key>ID</key>
      <string>1</string>
      <key>Queue Name</key>
      <string>Hot_Folder_1</string>
      <key>Size</key>
      <string>3.9 MB</string>
      <key>Task</key>
      <string>- waiting -</string>
    </dict>
    <dict>
      <key>Completion</key>
      <string>0 %</string>
      <key>File Name</key>
      <string>LIT06_01</string>
      <key>ID</key>
      <string>3</string>
      <key>Queue Name</key>
      <string>Hot_Folder_1</string>
      <key>Size</key>
      <string>607.9 KB</string>
      <key>Task</key>
      <string>- waiting -</string>
    </dict>
  </array>
</dict>
</plist>
```

JobManager_ColumnID.plist/

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>TitleList</key>
  <array>
    <string>ID</string>
    <string>Queue Name</string>
    <string>File Name</string>
    <string>Size</string>
    <string>Task</string>
    <string>Completion</string>
  </array>
</dict>
</plist>
```

QueueList.plist

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>QueueList</key>
  <array>
    <dict>
      <key>ErrorFolder</key>
      <string>~/Desktop/ACH_HOTFOLDER/JobError</string>
      <key>InFolder</key>
      <string>~/Desktop/ACH_HOTFOLDER</string>
      <key>OutFolder</key>
      <string>~/Desktop/ACH_HOTFOLDER/JobSuccess</string>
      <key>QueueActive</key>
      <true/>
      <key>QueueKind</key>
      <string>JobPrefs_CMYKOptimization</string>
      <key>QueueName</key>
      <string>ACH_HOTFOLDER</string>
    </dict>
    <dict>
      <key>ErrorFolder</key>
      <string>~/Desktop/Hot_Folder_1/JobError</string>
      <key>InFolder</key>
      <string>~/Desktop/Hot_Folder_1</string>
      <key>OutFolder</key>
      <string>~/Desktop/Hot_Folder_1/JobSuccess</string>
      <key>QueueActive</key>
      <true/>
      <key>QueueKind</key>
      <string>JobPrefs_CMYKOptimization</string>
      <key>QueueName</key>
      <string>Hot_Folder_1</string>
    </dict>
  </array>
</dict>
</plist>
```

ACH_Command_005.plist:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>Delete</key>
  <string>10</string>
</dict>
</plist>
```

JobManager_Done_2007_08_27.plist:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>Jobs</key>
  <array>
    <dict>
      <key>File Name</key>
      <string>1BCE_certified</string>
      <key>Queue Name</key>
      <string>ACH_HOTFOLDER</string>
      <key>Released Time</key>
      <string>2007:08:27 16:35:43</string>
      <key>Size</key>
      <string>2.6 MB</string>
      <key>Status</key>
      <string>done</string>
      <key>Treatment Time</key>
      <string>24.8 sec.</string>
    </dict>
    <dict>
      <key>File Name</key>
      <string>1BCE_certified</string>
      <key>Queue Name</key>
      <string>ACH_HOTFOLDER</string>
      <key>Released Time</key>
      <string>2007:08:27 16:39:39</string>
      <key>Size</key>
      <string>2.6 MB</string>
      <key>Status</key>
      <string>done</string>
      <key>Treatment Time</key>
      <string>19.1 sec.</string>
    </dict>
  </array>
</dict>
</plist>
```