



Pipeline Web Service v2.1 control API

Record only

Programming Interface

This API applies to *Pipeline Control for Mac v2.2* (or later) and *Pipeline Control for Windows v2.0* (or later).

The Pipeline web service API enables the ability to remotely start and stop captures through the Pipeline Record & Automation document engine. The Pipeline Record & Automation document type will allow recording to be controlled manually through the user interface or through simple HTTP web service commands described below.

Each Pipeline Record & Automation document publishes a web service that allows media clips to be recorded using a simple HTTP based commands set.

- A clip can be scheduled for recording up to 6 hours before the start time.
- If a start time is not specified the clip begins recording immediately.
- If an end time is not specified the clip will record for the maximum duration of 9 hours.
- A clip will remain in the active list up to 4 hours after recording has ended.

The Pipeline Record & Automation document window provides controls that allow the user to select the video format, number of audio channels, media file format, etc. The Pipeline Record & Automation document window also contains an additional control that allows the user to enter a TCP/IP port number for the web service

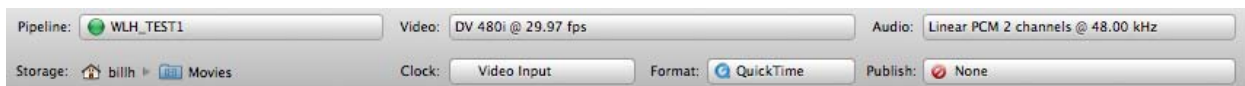


Fig.1 – Setup controls

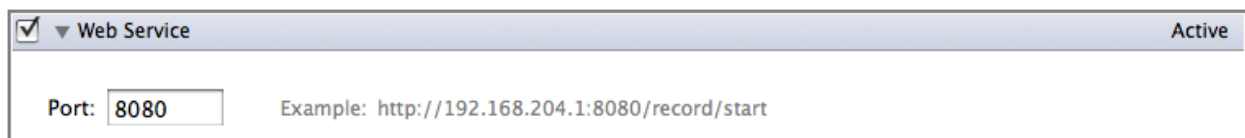


Fig.2 – Web Service port

When a Pipeline Record & Automation document is placed into an active state the web service will begin listening for requests on the selected port. The user will be warned if the port is in use by another Pipeline Record & Automation document or by some other service on the host computer.



A web service command is invoked using an HTTP GET request in the following form:

```
http://host:port/command[?parameter=value[&parameter=value]]
```

Where 'host' is the DNS name or IP address of the Pipeline host computer that the Pipeline Control software is running on, 'port' is the user assigned TCP/IP port for the active Pipeline document and 'command' identify a specific web service command. If the command requires additional arguments they are supplied as name/value pairs in the query portion of the request.

host	The DNS name or IP address of the computer running the Pipeline software, for example "localhost" or 192.168.1.2.
port	The TCP/IP port number assigned to the web service. The port number is user selectable and displayed in the Web Service configuration area of the document.
command	The web service command to execute.
parameter	A named parameter defined by the web service command.
value	The parameter value.

The web service responses consists of the normal HTTP status line (for example '200 OK' or '404 Not found') and additional information in the form of HTTP response headers. The following headers may appear in a web service response:

Time: 12:34:56:00	The current Pipeline time code.
UUID: {5b1eb65c-3018-a4cf-8134-6e1c16b378a7}	The unique identifier assigned to a clip.
Start: 01:23:45;00	The starting time code of a clip.
End: 01:23:50;00	The ending time code of a clip.
Path: /Users/Shared/Clip.mov	The fully qualified path to the file containing a recorded clip.
State: Capturing	The state of a recorded clip or the trigger engine.

See commands below for specific return data.

Steps to Issuing commands

Here are the steps for remotely controlling the Pipeline application:

1. Open a Pipeline Record & Automation document dialog. Select a Pipeline device, set the appropriate codec, resolution and audio parameters, set Format to QuickTime or TIFO.
2. Check the Web Service check box and enter the desired Port value to a port number between 1025 and 49151. Make sure that this TCP port number is open on the system.
3. Save the changes to the Record & Automation document file.
4. Press the Activate button to activate the Record & Automation document.
5. Send commands to the Record & Automation document using an HTTP GET (can be done directly via a web browser), using the IP Address and port you specified earlier:



Commands

Help

Displays a help web page describing the operation and features of the Pipeline Control web service.

This request has the following format:

http://address:port/ or http://address:port/Help

Start

Starts recording a new clip. The following parameters are supported:

This request has the following format:

<http://address:port/record/start>

Optional parameters

start=01:12:35:00	<p>Specifies the starting time code for the clip. If a start time is not specified the clip will begin recording immediately.</p> <p>Responds with '400 Bad Request' if the specified start time is more than 6 hours in the future.</p>
duration=00:30:00:00	<p>Specifies the duration of the clip. If a duration is not specified (or implied by the end time parameter) the clip will record for a maximum of 12 hours.</p> <p>Responds with '400 Bad Request' if the specified duration greater than 12 hours.</p>
end=01:42:35:00	<p>Specifies the end time code for the clip. If an end time is not specified (or implied by the duration parameter) the clip will record for a maximum of 12 hours.</p> <p>Responds with '400 Bad Request' if the specified end time results in a clip duration greater than 12 hours.</p>
name=myclip	<p>Specifies a name for the clip. If a clip name is not specified a random name is generated. In either case the appropriate file extension is automatically added to the file name.</p>



	Responds with '400 Bad Request' if the name contains invalid characters.
path=/Users/Shared	Specifies the path to a folder where the clip should be recorded. If a folder path is not specified the clip will be recorded in the storage folder associated with Record & Automation document. Responds with '400 Bad Request' if the folder does not exist.

Stop

Stops recording and/or removes a clip from the active list. The following parameters are supported:

This request has the following format:

<http://address:port/record/stop>

uuid={5b1e...78a7}	The unique identifier of the clip to stop. If a clip is not specified ALL clips are stopped and removed from the active list. Responds with '404 Not Found' if the specified clip is not in the active list.
--------------------	---

Status

Requests status information for a clip. The following parameters are supported:

This request has the following format:

<http://address:port/record/status>

uuid={5b1e...78a7}	The unique identifier of the clip to interrogate. If a clip is not specified in the request the response contains the UUID of each clip in the active list. Responds with '404 Not Found' if the specified clip is not in the active list.
--------------------	---