Pipeline - Explanations - Showcase television

Above our kitchen countertop you'll find a television that shows our latest ShotGrid versions and any local files that students submit. Occasionally it will also display a real-time calculated fact about our render farm usage. The system is quite simple and consists of three Python programs, two running on our Automation server and one running on a Raspberry Pi that you'll find attached to the television.

Server script

Every 30 seconds the script checks for new ShotGrid versions, if a new one is found it's transcoded to a 1920x1080 MP4 using FFMPEG. The transcoded files are placed here:

`\\nfa-vfxim-education.ahk.nl\vfxim\Showcase\transcoded_media`

The script also checks for local files, which students can place in the following folder:

`\\nfa-vfxim-education.ahk.nl\vfxim\Showcase\dump_footage_here`

These files are ingested into the transcoded media folder and then deleted from the dumping folder.

Files older than a week also get deleted by this script.

Raspberry Pi script

The Raspberry Pi script is very simple. It just gets all the files from the transcoded_media folder, shuffles them and plays them using OMX player. It's got a small extra bit of code though: Whenever a file called `instant_play.mp4` is found in the transcoded media folder, that files gets played next and then deleted. This is how the real-time render farm facts get displayed!

Render farm facts

Another Python program runs on the automation server. Roughly every 2 minutes it calculates a random fact from data gathered through the Deadline Web Service API, which gets rendered onto a video backdrop and then copied to the transcoded media folder as a file called instant_play.mp4. A bunch of facts are available, they all have a unique chance of being picked and some facts are only available on certain days of the week. You should have a look at the code on our Gitlab, it's quite fun!

Original Showcase system by Gilles Vink, rewritten by Mervin van Brakel.

Revision #5
Created 18 October 2024 11:44:53 by Mervin van Brakel
Updated 16 April 2025 09:46:51 by Mervin van Brakel