

第 24 回 IT ソフトウェア翻訳士認定試験

<1次試験> 2017年6月11日（日）10：00～15：00

問題 1・2 の両方について解答のこと。選択ではありません。

<問題 1> 全文を訳して提出してください。

Figure 1 は作図しなくて結構です。訳文のみ並列に並べて下さい。

Best Practices for Creating and Deploying HTTP Live Streaming Media for Apple Devices

Introduction

This Technote describes the recommended practices for preparing and deploying your media for use with HTTP Live Streaming. HTTP Live Streaming allows you to send live or prerecorded audio and video to iPhone, iPad, and other devices including desktop computers, using an ordinary Web server. Playback requires iOS 3.0 or later on devices running iOS; Apple TV Software 4.1 or later on 2nd and 3rd generation Apple TVs; tvOS 9.0 or later on 4th generation Apple TVs; QuickTime X or later is required on the desktop.

Getting Started

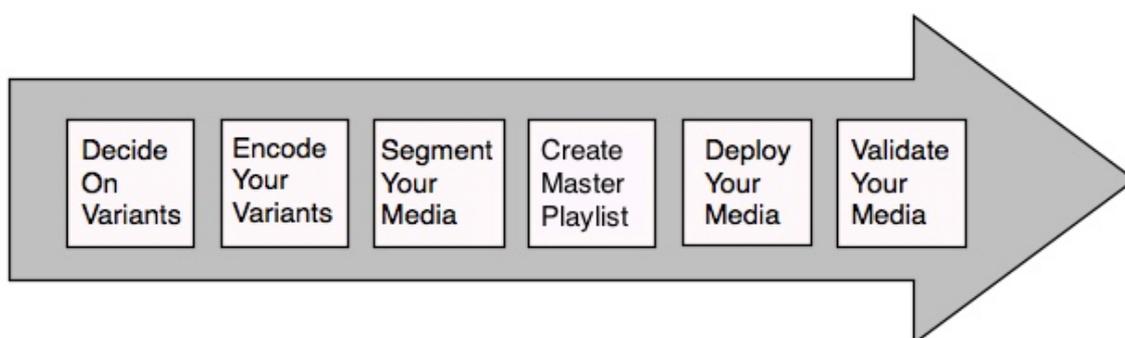
When working with video and audio a good general rule of thumb is to get the highest quality original source material possible. When you compress, very often some information gets lost or thrown away. Therefore, you should only compress material when encoding for the final destination, because each process will lower the quality. Trying to compress from already heavily compressed source material may give poor results.

Always start with the highest quality source video & audio, and make lower bit rate movies from the original source.

Workflow

The typical workflow for preparing and deploying your media for use with HTTP Live Streaming consists of the following steps. The workflow for live content is similar but requires you to create a workflow that will take care of all these steps in real-time.

Figure 1 Workflow for preparing and deploying media for use with HTTP Live Streaming.



Here's a brief overview of the different steps:

Decide on your variants

We recommend you offer multiple media playlist files to provide different encodings of the same presentation at different bit rates, rather than just a single encoding. These encodings at different bit rates are called variants. That way, the client will switch to the most appropriate variant based on the measured network bit rate. The client's player is tuned to minimize stalling of playback in order to give the user the best experience possible when streaming. If you just provide a single encoding of your presentation your users will not get the best possible experience.

You should always provide a master playlist, even if you have only a single variant. Using a master playlist enables you to communicate the codecs, resolution, and other data about the variant to the client. Also, a master playlist allows you to specify an I-frame playlist for trick play or add subtitles.

<問題 2> 全文を訳して提出してください。

So what is AI? A very different discipline from robotics, artificial intelligence is a field of computer science that mimics the natural learning process of the human brain by creating what are called artificial neural networks. For example, an AI is given a picture of a wolf and told to trawl through millions of animal photos and find other pictures of wolves. Each correct answer reinforces the AI's neural pathways, so it actually learns from experience. The software isn't specifically coded – rather the program evolves its own algorithms and uses feedback to refine the results.

These types of AIs are very good at dealing with massive amounts of data, making them invaluable for services such as fraud detection and security surveillance. Working with these huge inputs of information makes AI a power-hungry beast that devours huge computational resources.

While a robot mastermind might not occupy the next cubicle in the short term, AI has been moving into various industries since the 1990s – from finance to communications, heavy industry and even toys – constantly evolving and becoming more sophisticated.

In the last two years there has been landmark evolution of artificial intelligence. Energy-efficient computers and microchips based on the neural structure of the brain are driving the surge in AI advancement. Virtual personal assistants such as Apple's Siri and Amazon's Alexa, movie recommendation services and online customer support are all examples of artificial intelligence in services that we increasingly take for granted.

As useful as neural networks like these might be for interpreting data and identifying patterns, they lack long-term memory and struggle to perform basic computational tasks.

Harré is part of a new wave of researchers exploring the relationship between human thinking, artificial intelligence and economics. He believes that understanding human cognition will drive AI advancement – and vice versa. "The stronger the connection we can draw between economics, psychology and neuroscience – three very different fields studying humans at very different scales – the better our understanding will be in all three areas."

以上