UNIVERSITI TEKNOLOGI MARA

SERVER-BASED CONTENT ADAPTATION ARCHITECTURE WITH CACHING MECHANISM

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ABSTRACT

Nowadays, people manage to access the internet to watch videos online not only through desktop or laptop, but also through mobile devices such as PDA or mobile phones at anytime and anywhere. Watching videos on mobile devices has its own drawbacks which are limited resources and bandwidth. Researchers have come up with various architectural approaches in applying content adaptation to overcome those problems. In server-based on-the-fly technique, the downloading response time increase significantly due to frequent transcoding process. We propose a method by implementing new server-based architecture with caching mechanism to solve those problems. The result showed that, the downloading response time for the on-the-fly technique with caching mechanism is faster than the on-the-fly technique without caching mechanism. In conclusion, this new architecture improves the downloading response time and reduces the frequency of transcoding process.

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