Proposed requirement for seamless transition of contents in web-based signage

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R xx : Seamless transition of contents

When a digital signage terminal plays more than one contents in sequence, the digital signage display should show seamless and natural transition between the contents. The digital signage display can use various types of transition effect in this process.

Use cases

[Transition of contents]

Monica is waiting for a bus at the bus stop. She notices a large signage display on top of a building across the street. The display is showing several 30-second advertisements in sequence. After one advertisement is finished, the transition to the next advertisement is very natural without time-loss. Monica did not notice any blinking, sudden transition, or time-loss between the advertisements.
The digital signage terminal prepares to play the next advertisement, before the current playing advertisement is over.
There can be various transition effects during the shift between the advertisements as long as Monica does not feel any discomfort in viewing.

Motivation

The advertisements shown in the web based signage system are developed in a form of a web page such as HTML5 and webapp. In case of ordinary web browser, loading of a new web page can cause blinking or delay. If this happen in the digital signage service, not only will the time be wasted but also the effect of the advertisement will be degraded.

Gap Analysis

For loading advertisement contents to the digital signage terminal's local storage, File API (http://www.w3.org/TR/FileAPI/), Cache API (http://www.w3.org/TR/offline-webapps/) and Ajax using Javascript API such as XMLHttpRequest API.
Transition effects can be realized using Javascript with CSS.