Description

Title: Digital display method and system, digital display device and digital display server

Technical field

[0001] This description relates to digital display methods and systems, digital display devices, and digital display servers.

Background

[0002] Digital display methods are known which allow the deployment of playlists and of content to digital display devices. WO2005/015362 relates to an example of such method.

Summary

[0002a] In an aspect, the present disclosure refers to an advertisement digital display method for controlling the display of digital content items by digital display devices, comprising:

a) generating, by at least one server, playlists based on advertisement display campaigns, each playlist being intended to be read by one or more of said digital display devices, each playlist comprising at least one series of identifiers of digital content items to be read sequentially but not comprising loading addresses of digital content items or digital fingerprints of digital content items, each digital display device corresponding to one specific predetermined playlist generated by said at least one server;

b) generating, for each digital display device, by said at least one server, a download manifest comprising at least respective loading addresses of digital content items, said download manifests being larger files than said playlists and being generated less frequently than said playlists by said at least one server;

c) updating the playlists and download manifests by the digital display devices, comprising:

c1) polling said at least one server, at predetermined intervals, by each digital display device, in order to determine whether said at least one server has a new playlist corresponding to said digital display device and to determine whether said at least one server has a new download manifest corresponding to said digital display device;

c2) if it is determined that said at least one server has a new playlist for said digital display device, loading said new playlist; if it is determined that said at least one server has a new download manifest for said digital display device, then loading said new download manifest on the digital display device;

c3) if a new download manifest has been loaded from the server, determining, by said digital display device, what new digital content item(s) are referenced in said new download manifest;

c4) downloading, by said digital display device, said new digital content item(s) from the corresponding respective address(es) indicated in the new download manifest, and storing said new digital content item(s) on said digital display device;

d) reading, by each digital display device, the digital content items previously downloaded and corresponding to a playlist in effect for this digital display device and displaying these digital content items on a digital screen belonging to said digital display device.

[0002b] In another aspect, the present disclosure refers to an advertisement digital display system comprising at least one server and multiple digital display devices, wherein:

- said at least one server is adapted to generating playlists based on advertisement display campaigns, each playlist being intended to be read by one or more of said digital display devices, each playlist comprising at least one series of identifiers of digital content items to be read sequentially but not comprising loading addresses of digital content items or digital fingerprints of digital content items, each digital display device corresponding to one specific playlist generated by said at least one server;

- said at least one server is adapted to generating repetitively, for each digital display device, a respective download manifest comprising at least respective loading addresses of digital content items, said download manifests being larger files than said playlists and being generated less frequently than said playlists by said at least one server;

- the digital display devices are adapted to updating their playlists and download manifests, this updating comprising:

c1) polling said at least one server, at predetermined intervals, by each digital display device, in order to determine whether said at least one server has a new playlist corresponding to said digital display device and to determine whether said at least one server has a new download manifest corresponding to said digital display device;

c2) if it is determined that said at least one server has a new playlist for said digital display device, then loading said new playlist on the digital display device; if it is determined that said at least one server has a new download manifest for said digital display device, then loading said new download manifest on the digital display device;

c3) if a new download manifest has been loaded from the server, determining, by said digital display device, what new digital content item(s) are referenced in said new download manifest;

c4) and downloading, by said digital display device, said new digital content item(s) from the corresponding respective address(es) indicated in the new download manifest, and storing said new digital content item(s) on said digital display device;

- each digital display device is adapted to reading the digital content items previously downloaded and corresponding to a playlist in effect for this digital display device and for displaying these digital content items on a digital screen belonging to said digital display device.

[0002c] In another aspect, the present disclosure refers to an advertisement digital display device comprising a digital screen and having in memory at least:

- a playlist comprising at least one series of identifiers of digital content items to be read sequentially but not comprising loading addresses of digital content items or digital fingerprints of digital content items;

- a download manifest comprising at least respective loading addresses of digital content items;

said digital display device being adapted to:

- updating its playlist and download manifest, this updating comprising:

c1) polling at least one server, at predetermined intervals, in order to determine whether said at least one server has a new playlist corresponding to said digital display device and to determine whether said at least one server has a new download manifest corresponding to said digital display device;

c2) if it is determined that said at least one server has a new playlist for said digital display device, then loading said new playlist on the digital display device; if it is determined that said at least one server has a new download manifest for said digital display device, then loading said new download manifest on the digital display device;

c3) if a new download manifest has been loaded, determining, by said digital display device, what new digital content item(s) are referenced in said new download manifest;

c4) and downloading, by said digital display device, said new digital content item(s) from the corresponding respective address(es) indicated in the new download manifest, and storing said new digital content item(s) on said digital display device;

- reading the digital content items previously downloaded and corresponding to the playlist and displaying these digital content items on a digital screen belonging to said digital display device.

[0002d] In another aspect, the present disclosure refers to an advertisement digital display server adapted to:

- generating playlists based on advertisement display campaigns, each playlist being intended to be read sequentially by one or more of said digital display devices, each playlist comprising at least one series of identifiers of digital content items to

be read but not comprising loading addresses of digital content items or digital fingerprints of digital content items, each digital display device corresponding to one specific playlist generated by said server;

- repetitively generating, for each digital display device, a download manifest comprising at least respective loading addresses of digital content items, said download manifests being larger files than said playlists and being generated less frequently than said playlists by said server;

- allow the digital display devices to update their playlists and download manifests, this updating comprising: polling said server at predetermined intervals in order to determine whether said at least one server has a new playlist corresponding to each digital display device and to determine whether said at least one server has a new download manifest corresponding to each digital display device, and if it is determined that said server has a new playlist for said digital display device, then allowing said digital display device to load said new playlist on the digital display device; if it is determined that said server has a new download manifest for said digital display device, then allowing said digital display device to load said new download manifest.

[0003] The aim of this description is in particular to improve the efficiency of these methods.

[0004] To this end, in an example, this description proposes a digital display method for controlling the display of digital content items by digital display devices, comprising:

a) generating, by at least one server, playlists based on display campaigns, each playlist being intended to be read by one or more of said digital display devices, each playlist comprising at least one series of identifiers of digital content items to be read but not comprising loading addresses of digital content items or digital fingerprints of digital content items;

b) generating, for each digital display device, by said at least one server, a download manifest comprising at least loading addresses of digital content items;

c) updating the playlists and download manifests by the digital display devices, comprising:

c1) polling said at least one server, at predetermined intervals, by each digital display device, in order to determine whether said at least one server has a new playlist and/or a new download manifest corresponding to said digital display device;

c2) if yes, loading said new playlist and/or said new download manifest on the digital display device;