



An Application of Timed Metadata



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Why did we connect 'subtitles' and 'timed metadata'?

Subtitles (captions in the USA) are a targeted form of 'Timed Metadata' - In fact, subtitles in their simplest form contain text which is timed to video.

So, subtitle preparation and management tools are very suitable for preparing metadata other than subtitles which needs to have an association to media time.

In this POC, we have used XML snippets in place of the subtitle text.

Second Screen Proof of Concept

The demonstration shows the application of Screen's product suite to a generic end-to-end Second Screen Proof of Concept.

Products used include:

- WinCAPS Quantum for Timed Metadata preparation
- Polistream for Timed Metadata playout
- Plasma Gold for Metadata transform
- Plasma Gold for Content management
- Plasma Gold for Content Publishing

The demo highlights just one possible application of these products in the Timed Metadata domain; there are many other applications...imagine the possiblities!



POC description - Inputs

For the POC we are using a Cinegy Air playout engine (big thank you to Cinegy for the loan) to playout Video/Audio content as DVB over IP, and to automate Polistream. The demonstration is a looping fully scheduled channel consisting of 10 programme parts separated by simulated 'advert' breaks.

For each programme part and advert, web content was prepared (in this case sets of images), and put into Plasma Gold.

For each programme part and advert, a timed metadata file was prepared using WinCAPS Quantum (as a subtitle file).

Example metadata content:

<content type="now" prog="Brooklyn1"/>

<content type="bio" name="Brooklyn1a"/>

<content type="text">

Fifty People Brooklyn places the

question 'Where would you wish to

wake up tomorrow'

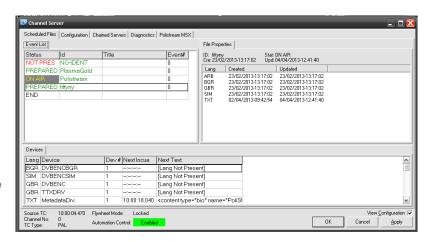
</content>

<content type="bio" name="Brooklyn1b"/>

Playout

The 'Metadata' files are tagged as a stream 'TXT' and sent through SSConvert to become part of the multi-language subtitle files transmitted by Polistream.

The Metadata is played out and published using HTTP Post to Plasma Gold as a separate XML file per 'subtitle'.



Processing

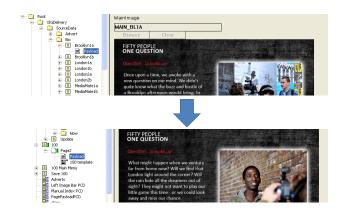
Polistream's publishing module adds top and tail to make a valid XML snippet:

The XML files are read by Plasma Gold's XIG (XML Input Gateway), which applies an XSLT function to produce XML which controls Gold:

The reading of the XML also triggers a script in the Gold Script server to take other actions (e.g. the shuffling of the content in the left panel).

The XML provided to Gold, along with the script, copies relevant content from pre-prepared content slots in Gold, into an 'onair' slot in Gold.

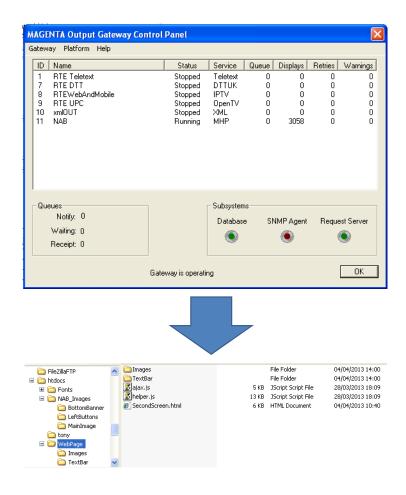
This results in the new content being published on the output, which could be Web Output, HbbTV, XML, MHEG-5, MHP, Mobile web, teletext, Open TV, or other publishing schemes.



Publishing

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Client

For the POC, the output is a simple web page. This is designed for display on tablets, but works equally well in PC browsers.

The browser is polling a very small file on the web page every 2 seconds to trigger updates in this simplistic scenario.

