

INVENTION DISCLOSURE

1. Invention Title.

Method for Simulating Video Tuning Events using Ratings Weighted Channel Selections (probability density distribution)

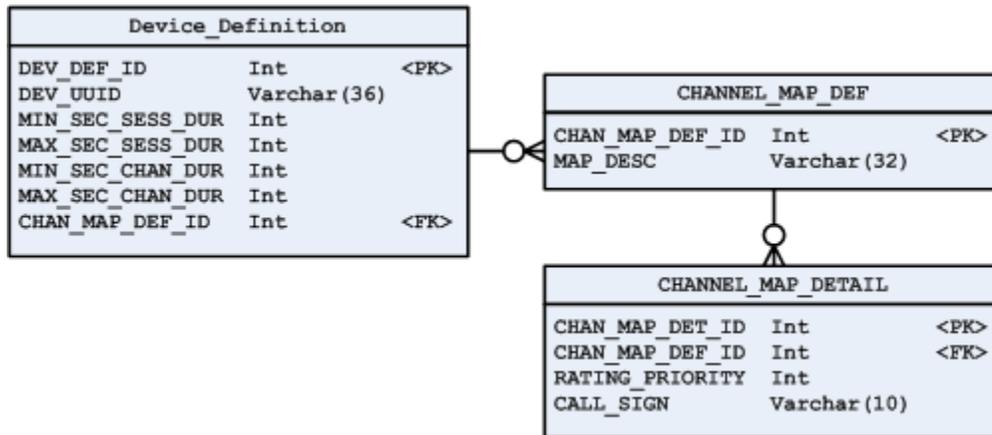
2. Invention Summary.

This describes an algorithm and data model for generating video tuning events conforming to a weighted distribution (probability density function) of channel-tuning and providing a bounded random distribution for viewing session duration and channel dwell time.

3. Invention Description.

a. Describe the invention in detail.

The relational data model is shown in the following diagram:



The algorithm is as follows:

Start of event generator algorithm:

Start the session clock, seconds from epoch;

Get the runtime configuration parameters (session and channel dwell boundaries);

Get the channel map including channel rating priorities for the device;

Set the viewing session duration (bounded random duration);

Initialize the channel session duration (bounded random duration);

Initialize the UUID for the viewing session;

Initialize the channel viewing session start time;

While not at end of viewing session duration:

Select channel, using "random weighted choice" algorithm (probability density function);

Set channel viewing session value;

Set the unique identifier for the channel viewing session;

Persist "MEDM Session Begin event";

Pause for duration of session viewing channel;

Persist "MEDM Session End Event";

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*Add session duration to channel session;
End while (end viewing session);
End of event generator algorithm.*

**b. Why was the invention developed? What problem(s) does the invention solve?
How is it better?**

Tuning events are needed for analyzing and visualizing trends and relationships in viewer video interactions. In order to develop the analytics models, data sets that reasonably correlate to actual viewer interactions are required. In lieu of having real data available that is both timely and sufficient in quantity, these models and algorithms provide the basis for programs that generate this data. This invention provides reliable and well-defined model and algorithm for simulating tuning events in support of audience measurement analytics.

c. Briefly outline the potential commercial value and customers of the invention.

This will enable software vendors to develop common tools for generating tuning events conforming to common models. The analytics of audience measurement is rapidly evolving and this invention provides a foundation of simulating common events, which are appropriately distributed.

4. HOW is this invention different from existing products, processes, systems?

We have not found any commercial models or tools that generate synthetic tuning sessions conforming to ratings-based distributions.