SMPTE EG 2021-3:2017

SMPTE ENGINEERING GUIDELINE

Broadcast Exchange Format (BXF) — Use Cases

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Approved July 12, 2017

Foreword

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Introduction

This section is entirely informative and does not form an integral part of this Engineering Document

Broadcast Exchange Format (BXF) is a protocol for exchange of data among broadcast systems such as Traffic, Program Management, Automation, and Content Distribution. It is intended to facilitate the movement of content and its associated metadata for better management, coordination and reporting between these broadcast systems. The BXF Protocol serves as a replacement for the many proprietary interfaces in place today between vendors in these areas.

1. Scope

This EG focuses on use cases of BXF, helping implementers to better understand how BXF may be used in a variety of scenarios.

5. Use Cases (Informative)

5.1 Metadata update

Context of Use: The program management system is a repository for program scheduling information for the broadcast facility. Changes to the schedule by programming and its related metadata must be disseminated to the other stakeholders. Likewise, the traffic system maintains a list of formats that each program and/or time period uses to represent potential sales inventory. The combination of format and program schedule metadata is required to create a detailed event playlist for automation. To synchronize traffic and programming several transactions are required. This includes the process of initializing, adding, and deleting formats, programs and program schedules as well as scheduling specific title/episode information for a program.

The example below represents only one of several possible transactions. This is the updating of a traffic format structure initiated by the traffic system and sent to the programming system.

Origination System: Traffic

Destination System: Program Management

Trigger: Traffic changed the format in its system and is updating programming with the change.

Additional Stakeholders and Interests:

Traffic System – Creates format structures and needs to disseminate this data to programming when changes are made.

Program Management System – To properly time the actual length of a program, the format details are required. This informs the program department the time required for non-programming content. Programming may need to adjust the length of the program content in order to keep the total length of the scheduled program within designated parameters.

Automation User – Accurate program timings are moved further up the scheduling decision path and improve the likelihood that the program's actual aired length matches to the planned scheduled length reducing last minute changes by the engineering staff.

QC staff – Reduces the number of last minute program changes that require additional approval by QC staff**.** If programming has accurate timings during the scheduling process they can avoid program modifications that might affect a program's QC status.

Preconditions: A session has been established.

Main Success Scenario:

Format Change or Update:

1. Traffic changes a format in their system and sends Programming the change that is the complete format structure including the changes made.

2. Programming accepts the format change and updates its records and replies back to track with a reply indicating that the update was successful.

Failure or other issues:

3. The format may already be in use on the schedule and changes to the format do not automatically get applied to all future dates. It is up to the scheduling or traffic system to cast the format change onto the schedule and send the schedule changes that this generates. If programming does not recognize the format in its system, then it can respond that the format was not updated or it can assume it needs to add the format as a new record. This would result in a different reply to the traffic system.

4. Use Case ends.

Example: Traffic changes an existing Format and sends the Program Management System the changes.

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