AdsML 1.0 Technical Overview

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How it fits together

AdsML is about transmitting information ("Items")
Each type of information requires a dedicated format
The Advertising Component Interactions define the information
The Envelope provides a packaging mechanism
The Processing Model provides architectural context
The Standards Matrix will provide the basis for selecting Item-level formats
Advertising Component Interactions

Descriptions of common information flows, e.g.

- Media planning
- Reservations and orders
- Publishing
- Payment

Diagrams and definitions provide clarity, enable conversations between companies
"Media planning"

- **Buyer of Advertising**
  - [AI-R] Ad Inventory Request
  - [AI-I] Ad Inventory
  - [AI-PR] Publication Plan

- **Seller of Advertising**
  - [AI-R] Ad Inventory Request
  - [AI-I] Ad Inventory
  - [AI-PR] Publication Plan

- **Publisher**
  - [AI-I] Ad Inventory
  - [AI-PR] Publication Plan

**Message:** [AI-I] Ad Inventory
## Plan Publication

### 2.4.5.1.5 Plan Publication

<table>
<thead>
<tr>
<th>Process:</th>
<th>Plan Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor:</td>
<td>Publisher</td>
</tr>
<tr>
<td>Trigger:</td>
<td>Internal business processes</td>
</tr>
<tr>
<td></td>
<td>• AI-R (Ad Inventory Request)</td>
</tr>
<tr>
<td></td>
<td>• AR-R (Ad Reservation)</td>
</tr>
<tr>
<td></td>
<td>• AO-M (Ad Order)</td>
</tr>
<tr>
<td>Purpose:</td>
<td>Create publication plans, including the determination of theoretically available ad positions in a given publication medium. Maintain records of available Ad Inventory for any given layout/edition. Service the &quot;Sell Ad&quot; process by providing information about publication's available inventory. Service the publication process by providing the publication plan and advertising placements for that edition.</td>
</tr>
<tr>
<td>Outputs:</td>
<td>• AI-I (Ad Inventory)</td>
</tr>
<tr>
<td></td>
<td>• AI-PP (Ad Placements)</td>
</tr>
<tr>
<td>Other activities or outcomes:</td>
<td>-</td>
</tr>
<tr>
<td>Notes:</td>
<td>Plan Publication receives AO-M (Ad Order) from Process Order, which is shown below.</td>
</tr>
</tbody>
</table>

Output: **[AI-I] Ad Inventory**
## Message definitions

<table>
<thead>
<tr>
<th>Short Name</th>
<th>Long Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-I</td>
<td>Ad Inventory</td>
<td>A list of available space or slots in one or more editions of a publication, with any conditions attached to them, which will be sent from the newspaper publisher or broadcast station. In some cases, the inventory can include context information.</td>
</tr>
<tr>
<td>AI-PP</td>
<td>Publication Plan</td>
<td>A template for an entire publication including the pagination and the list of available ad placements.</td>
</tr>
<tr>
<td>AI-PPL</td>
<td>Ad Placements</td>
<td>A description of the types and positions of ad placements that can be booked for the publications, adding ad book guidelines to the publication plan.</td>
</tr>
<tr>
<td>AM-A</td>
<td>Ad Material Approval</td>
<td>A message indicating whether a particular set of Ad Materials has been approved for submission to publishers. Sent by an advertiser to the production facility or agency that created the materials, in response to an Ad Materials Request for Approval message. Note that message could contain either a positive or negative response.</td>
</tr>
</tbody>
</table>
Benefits

Provides a basis for discussions between trading partners

- Vocabulary / terminology
- Message content (high level definition)
- Precise shorthand names (e.g. “AI-I”)

Defines a common choreography

- Use as the basis for system integration
- Modify as necessary for local requirements
AdsML Envelope

A container for the business information ("Items")
Metadata to support common processing
Accelerating advertising processes

Envelope Header
metadata for envelope
e.g.
- Message Sender
- Intended Recipient
- Date/Time
- Priority

Items inside the envelope (as many as desired)

Item Wrapper

Item Contents

Item Wrapper

Item Contents

Item Wrapper

Item Contents
Item Contents

Advertising data being sent between systems, in its own format, e.g.
• Available Inventory
• Ad Reservation or Order
• Ad Material
• Invoice
**Item Wrapper** metadata for the Item, e.g.
- Type ("AI-I")
- Format ("AdInvML")
- Destination
- Digital Signature
Envelopes

Header (information about the message as a whole)
- Globally unique Message ID
- Message Sender (including organization ID, optional address, and optional digital signature)
- Intended Recipient (similar to Sender)
- Date/Time message created
- Response required (yes/no)
- AdsML Version
- Test Flag (yes/no)
- Resend count (0-n)
- Priority (1-7)
- Properties (user-defined name:value pairs)

Items inside the envelope (as many as desired)

Item Wrapper
- Item Type (e.g. "Insertion order")
- Standard/schema (e.g. "AdConnexion")
- Version (e.g. "1.0")
- Encoding
- Encryption method
- Priority (1-7)
- Digital signature
- Properties (user-defined name:value pairs)

Item Contents
(XML document as described in the Item Wrapper)

Item Wrapper
- Item Type (e.g. "Artwork")
- Standard/schema (e.g. "ArtworkXML")
- Version (e.g. "1.0")
- Encoding
- Encryption method
- Priority (1-7)
- Digital signature
- Properties (user-defined name:value pairs)

Item Contents
(XML document as described in the Item Wrapper, which in turn contains or references the artwork)

Item Wrapper
- Item Type (e.g. "Invoice")
- Standard (e.g. "Invoice EDI")
- Version (e.g. "1.0")
- Encoding
- Encryption method
- Priority (1-7)
- Digital signature
- Properties (user-defined name:value pairs)

Item Contents
(EDI document as described in the Item Wrapper)
Processing model

How the information moves between systems

- Simple and complex usage scenarios
- Technical architecture
- Conformance requirements

Provides a context for the technical details

- Architecture is an example, not required
Processing overview

Existing applications generate content, e.g.
- Ad Inventory
- Booking
- Advertising material
- Invoice
Processing overview

Each piece of content is converted into an AdsML Item.
Processing overview

Items for the same recipient are combined into an AdsML Envelope...
Processing overview

…and sent to another AdsML Processor
Processing overview

Recipient validates Envelope and Items
- Structure
- Types of information
- Formats used
Based on agreement (PPA) between sender and recipient
Processing overview

Errors or “OK” go back as AdsML messages
Processing overview

Item delivery
Items are “unpacked” and their contents delivered to applications
Processing overview
Benefits of this approach

A single point of control

Data-driven validation based on the Envelope
- Known and trusted sender
- Structure and contents of envelope
- Type and format of Item-level content

Common response handling
- Acknowledgments and error messages
Advertising Standards Matrix

A ‘menu’ or ‘buyer’s guide’ of objective information about Item-level standards and formats

For each standard or format:

- The types of information that it handles, e.g. Ad Inventory, Ad Material, Ad Order...
- Supported media and ad classes
- Technical approach, production status, owner, regions used, etc.

Data gathering has just started
Questionnaires

2 Questionnaires developed for:

- Publishers
  - discover what is being used
- Standards
  - details about a standard
3.1.2. For each media that this standard supports when dealing with display ads, indicate which types of information can be sent using this standard (check all boxes that apply):

*Descriptions of the message types can be found at the end of this document.*

<table>
<thead>
<tr>
<th>Short Name</th>
<th>Message type</th>
<th>Print</th>
<th>Online</th>
<th>Broadcast</th>
<th>SMS / MMS</th>
<th>Other 1</th>
<th>Other 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>Ad Inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI-I</td>
<td>Available Inventory</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AI-PP, AI-PPL</td>
<td>Publication Plan / Placements</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>AM</td>
<td>Ad Material</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM-PART</td>
<td>Ad Material or Component</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>AM-A</td>
<td>Proof and/or Approval</td>
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</tr>
<tr>
<td>AM-CC</td>
<td>Copy Chasing</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM-FIN</td>
<td>Completion Notice</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>AM-DO</td>
<td>Delivery Order</td>
<td></td>
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</tbody>
</table>
Benefits

Support implementers
- Know what formats exist and where to find out more
- Select the best candidates for your project
- Avoid ‘reinventing the wheel’

Discover coverage gaps and overlaps
- Input to future work by AdsML or other standards groups

Encourage “natural selection” in the marketplace
You can help

If...

• you know of a standard or format being used to convey advertising information between computer systems

Fill in a questionnaire

• Download from AdsML website

Send it to technical.wg@adsml.org
Thank you

www.adsml.org

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