



# Dynamic Ad Insertion

## Optimize the value of your VOD assets

To meet your bottom line, the ability to monetize streaming VOD content is a must. Dynamic ad insertion (DAI) is a key element of this strategy, but the spread of ad-blocking software and the need to accommodate the growing universe of video streaming platforms and devices poses a number of challenges, limiting the ability to extract maximum value from your content.

With Encoding.com's server-side ad insertion (SSAI) technology, ad blocking and multiple viewing platforms are no longer roadblocks to success. Unlike broadcast television advertising, in which ads are pushed to the broadest possible audience, DAI solutions automatically insert – or “pull” – ads targeted to the tastes and viewing habits of individual consumers directly into the VOD stream. These ads are frame-accurately spliced into the ABR stream without gaps and buffering, greatly reducing the effectiveness of ad blocking software and preserving an optimal viewing experience. Playback constraints can even be applied, such as where content can or cannot be presented, and when it can or cannot be displayed.

As one of our many available microservices, DAI is easily integrated within the Encoding.com cloud processing ecosystem. We support the monetization of your content across all platforms, including mobile, tablet, desktop, and OTT devices.

Our API lets you preserve SCTE-35 triggers or insert new ad markers as part of the HLS or MPEG-DASH transcoding and packaging workflow, adding efficiency to your operation and ensuring delivery of revenue-generating ads to the broadest possible audience. You specify the start, end or duration of the ad location in your API request and we inject it in the manifest at the time of packaging.

Third-party VAST (video ad serving template) ad servers and CableLabs-compliant event signaling and management (ESAM) servers are used to manage ad placement opportunities, content rights, business rules and ad policies. Following our processing of your content, these servers ingest the marked manifests and then target and serve your ads to the right audience. This capability enables the delivery of your media and revenue-generating ads to every device without the complexity of developing a client-side solution.

### Simple Integration

Encoding.com offers the most mature, well-documented and feature-rich cloud encoding API on the market, simplifying the ability to move your ABR processing to the cloud. We can integrate with your CMS, MAM or post-production application, and offer XML templates for all popular devices. Our API Builder helps generate properly formatted XML files to test your JSON or XML requests before writing a single line of code.



Deliver your revenue generating content across the widest range of streaming devices



Optimize the viewing experience by eliminating gaps and buffering between your content and ads

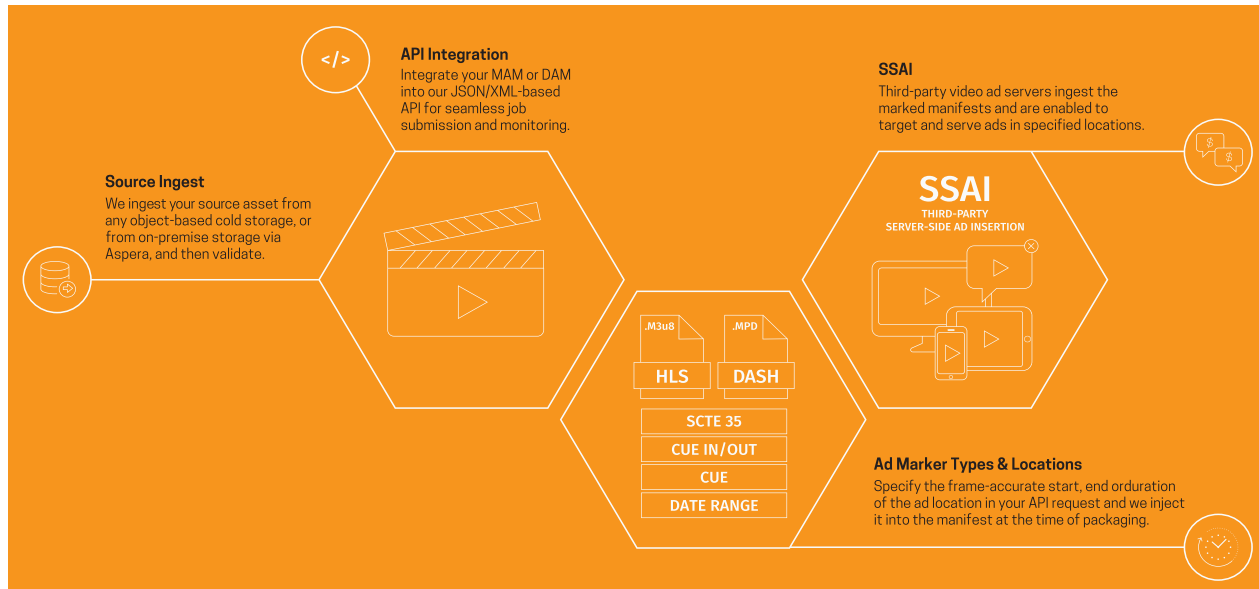


Target ads to specific viewer criteria for greater relevancy and higher click rates



Easily integrate ad insertion into your processing workflow with the Encoding.com API

## DAI Integration In The Encoding.com Abr Workflow



```

XML  JSON

<?xml version="1.0"?>
<query>
  <userid><<id>>/userid> <!-- required-->
  <userkey><<key>>/userkey> <!-- required-->
  <action>[Action]</action> <!-- required-->
  <source>[SourceFile]</source> <!-- required-->
  <format>
    <output>[advanced_hls|fmp4_hls|advanced_fmp4|advanced_dash]</output>
    <!-- multiple ad_breaks may be included -->
    <ad_break>
      <start>[StartTime]</start>
      <end>[EndTime]</end>
      <duration>[BreakDuration]</duration>
      <drop_segments>[yes|no]</drop_segments>
      <!-- multiple marker_type parameters may be included -->
      <marker_type>[MarkerType1]</marker_type>
      <marker_type>[MarkerType2]</marker_type>
      <marker_type>[MarkerTypeN]</marker_type>
      <id>[BreakID]</id>
      <!-- multiple upid_data sections may be included -->
      <upid_data>
        <segmentation_upid_type>[SegmentationUPIDType]<segmentation_upid_type>
        <segmentation_upid>[SegmentationUPID]<segmentation_upid>
      </upid_data>
      <upid_data>
        <!-- upid_data params -->
      </upid_data>
    </ad_break>
  </ad_break>
  <!-- ad_break params -->
</query>

```

## Ad Break Specification Types

### Start Options

- Seconds and subseconds (i.e., 2346.129)
- Timecode (i.e., 00:02:29;24)

### Marker Options

- Cue out/in (Default)
- SCTE-35
- Cue
- Daterange

### Multi-Job Workflows

- Specify start/end in the source URL (cue out/in marker)
- Output formats
  - advanced\_hls
  - advanced\_dash
  - fmp4\_hls
  - advanced\_fmp4 (excluding HSS)

*This API snippet is all you need to integrate DAI capabilities on Encoding.com.*

