

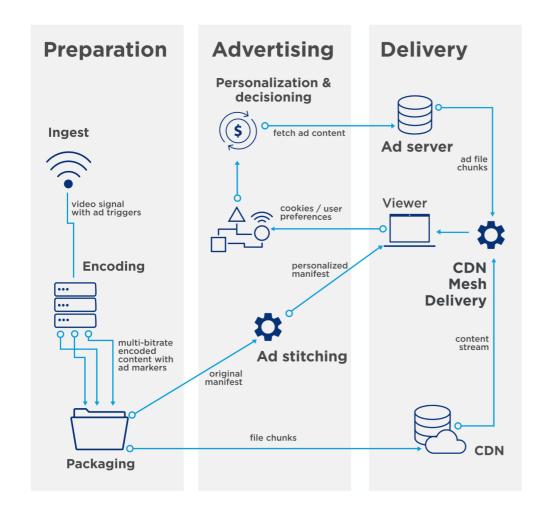
# Lumen® CDN Mesh Delivery SSAI Compatibility

# Introduction

As the use of server-side ad insertion (SSAI) grows, we monitor that CDN Mesh Delivery continues to be compatible with popular server-side ad insertion solutions. This data sheet explains how SSAI works, how CDN Mesh Delivery interacts with SSAI technologies, and the information that we need to assess whether we can handle your SSAI use case out of the box.

## **How does SSAI work?**

Server-side ad insertion, also referred to as "ad stitching" is an advertising solution based on combining video content and advertisements into the same stream at the server level. A single continuous stream arrives at the consumer device, therefore minimizing the threat of ad blocking, and offering a more TV-like experience to users. However, unlike classic television, SSAI enables providers to stitch targeted ads into a stream based on the individual viewing the content (in which case it is referred to as DAI, i.e. "dynamic ad insertion").



In the SSAI model, the call to the ad server is made upstream of the video being delivered to the user. This involves modifying the original manifest and inserting video file chunks of the ads served to each specific viewer.

When the ad stitching server detects an ad marker in the original manifest, an ad request is sent to the ad decision server. Then the original manifest is modified and ad file chunks are inserted into the stream. The technical specifications of the stitching server are therefore important to CDN Mesh Delivery.



# How CDN Mesh Delivery interacts with SSAI technologies

## Information that CDN Mesh Delivery needs

CDN Mesh Delivery works by determining the optimal source for the content on a segment-by-segment basis. Therefore, our technology needs to identify each video segment as unique and correctly source the content from either one or multiple CDNs, or a mesh network of devices. For CDN Mesh Delivery to work with SSAI technologies, the manifest containing the ad breaks must include a minimum amount of information to allow us to properly identify and deliver the advertisement and the main video content:

- A way of sequencing segments according to playback order so that we know in what way segments should be assembled to correctly play back (in practice, an HLS sequence-number tag).
- A way to know which segments should be delivered via peer-to-peer so that we can activate
  mesh-based delivery on ad segments or not, depending on your provider, implementation, and
  preferences.

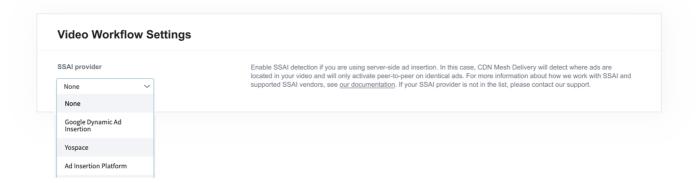
# **Getting started with CDN Mesh Delivery and SSAI**

1. Evaluate whether your SSAI-enabled stream will work out of the box with CDN Mesh Delivery by sending an SSAI-enabled test stream to your support team. Examples of providers for which CDN Mesh Delivery offers full or partial SSAI support:\*

AWS Elemental MediaTailor	Yospace	Verizon Uplink	Google Dynamic Ad Insertion	Ad Insertion Platform	Brightcove SSAI
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<sup>\*</sup>This is a non-exhaustive list; customized solutions may be provided upon request to fit your needs.

- 2. Consult our documentation for configuration to your manifest, SDK, or SSAI portal depending on your provider and target devices.
- 3. In your dashboard, enable SSAI in the Properties section by choosing your provider from the dropdown menu under Video Workflow Settings.



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