Akamai Advanced Flowplayer® Provider v 2.3

User's Guide

(For Flowplayer v 3.2.7)

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Akamai Technologies, Inc

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Akamai Advanced Flowplayer® Provider - User's Guide

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Preface

Overview

If you would like to use the **Flowplayer®** video player component, but you want to access your content via the security and accessibility unique to the Akamai network, then the **Akamai Advanced Flowplayer Provider** is just what you need. This component is designed to offer compatibility between a Flowplayer format player and the Akamai Technologies Content Delivery Networks (CDN). With this component, you will have access to the Akamai Edge and utilize a host of other Akamai technologies, including -- but not limited to -- the following:

- **The Akamai HD Network**
- **Akamai Secure Streaming**
- **Akamai RTMP Live and Video on Demand (VOD) Streaming**
- **Akamai Player Verification**

Intended Audience

This guide is intended for use by developers familiar with the Flowplayer application who wish to use it to access content via the Akamai network (i.e., this document assumes that you are well-versed in the use of Flowplayer, as no instructions on its use are offered here).

As a developer you will be right at home. This component does not change how you would traditionally use and configure a player using Flowplayer -- You can still use all of your favorite skins, add-ons, and configurations. Best of all, this component is lightweight and easy to use.

Chapter 1. Incorporation Basics

This chapter is comprised of generic information about this component, including basic usage instructions and support information.

Basic Use of This Component

To incorporate this component into a Flowplayer format player, you would need to include specific Akamai-related syntax and metadata values as a Flash plugin directly in the player code, via the **"plugins:"** object (additional details on this functionality can be found at: http://flowplayer.org/documentation/api/plugin.html). To accomplish this, simply include an instance of this object as follows:

```
plugins:
{
   akamai:
   {
      url: 'AkamaiFlowPlugin.swf',
      <additional metadata settings>,
   }
}
```

The variable revealed as **"<additional metadata settings>"** pertains to various required and optional metadata values used to configure this component. Complete details on available metadata tags can be found in *Chapter 2: Component Configuration* on page 7. Additionally, all configuration tags, plugins, and skins available for use with the Flowplayer application will work as designed.

▶ *NOTE: This component is tested for use for Flowplayer version 3.2.7. While it may function with earlier versions of Flowplayer, they are not supported for use by Akamai (i.e., issues that may arise due to use of other versions of Flowplayer can not be addressed by Akamai Technical Support). Additional support information regarding Flowplayer can be can be found at:* http://flowplayer.org/documentation/technical-facts.html.

What is Supported?

The sections that follow offer lists of what is supported for use with the plugin (i.e., media types, features and feed types).

Supported Feed Types

- **RSS**
- **SMIL**

Supported Media Formats

- **Adobe HTTP Dynamic Streaming**
- **Akamai HD Network Live Streaming**
- **Akamai HD Network VOD Streaming**
- **Akamai RTMP MBR with SMIL**
- **Akamai RTMP Live Streaming**
- **Akamai RTMP VOD Streaming**
- **Akamai Progressive Download**

Supported Features

- **Akamai Secure Stream Authentication**
- **Akamai Metadata**
- **Akamai Player Verification**
- **Akamai Media Analytic** *(coming soon)*

Chapter 2. Component Configuration

This chapter covers the configuration of this component, including available metadata tags and examples of code generation using these tags.

Akamai Metadata Support

As noted earlier, all Flowplayer-specific tags are still supported for use in generating a player. However, when incorporating this component, various Akamai-specific metadata tags must be used in the context of the **"plugins:"** tag. The table that follows describes the Akamai-specific metadata tags available for use.

Metadata Tag	Description	Data Format
akamaiMediaData	Use this key to add a data object to the resource as metadata	Object
akamaiMediaType	Use this key to specify the media type as resource metadata. The argument should be one of the following values: • **akamai-live-streaming** • **akamai-ondemand-streaming** • **akamai-progressive** • **akamai-multi-bitrate** • **akamai-hdn-single-bitrate** • **akamai-hdn-multi-bitrate** • **akamai-hdn-adobe-http** • **unknown**	Text String
connectAuthParams	The name-value pairs required for invoking connection authorization services on the Akamai network. Typically these include the **"auth"**, **"aifp"** and **"slist"** parameters. An example of a valid string would be as follows: **auth=dxaEaxdNbCdQceb3aLd5a34hjkl3ma bbydbbx-bfPxsv-b4toa-nmtE&aifp= babufp&slist=secure/babutest**	Name Value Pair
connectAttemptInterval*	Use this key to specify the RTMP connection interval that the **NetConnectionFactory** will use for consecutive **NetConnection** attempts when trying to connect to an FMS server (in milliseconds). Default is 200 ms.	Numeric

Metadata Tag	Description	Data Format
enableAlternateServer Mapping	This key enables/disables alternate server mapping for HDN 1.0 or HDN 2.0 content. Applicable arguments for this key include: • **True (enabled)** • **False (disabled)**	Boolean
enableEndUserMapping	This key enables/disables end user mapping for HDN 1.0 or HDN 2.0 content.	Boolean
enableNetSession Discovery	*For HDN 1.0 Content, Only* - Use this key to enable/disable the discovery of the Net-Session interface. Applicable arguments for this key include: • **True (enabled)** • **False (disabled)**	Boolean
genericNetStream Property	This key is used to set a property on a Net-Stream. The property will be applied just after creating the NetStream, but before the play() method is called. It will fail silently if the property does not exist on the Net-Stream. Success or failure of this metadata key will appear in the debug log. The value for this metadata key should be an object with the following properties: • **propertyName:<String>-** Define the desired property for the NetStream instance as the **"<String>"**. • **value:<true/false>** - Included to enable/disable the "propertyName" object. Set the argument to either **True** or **False**.	Object
liveTimeout	The live stream time out in seconds. If the live stream does not start playing within this time, a stream not found error is dispatched. This value overrides the default in **AkamaiNetStream**.	Boolean
mbrObject	This tag allows you to configure an MBR pro-file using a JavaScript object rather than the need to incorporate a SMIL file. Requires that the **"baseURL"** parameter in the **"Clip"** object appear as follows**: `baseUrl:"http://efvod-hdnetwork.akamai.com.edgesuite.net/"` Additionally, you can use *either* the **"mbrStartingBitrate"** *or* **"mbrStartingIn-dex"** tags to set a certain index of the MBR Profile as the default starting media resource.	Object
mbrStartingBitrate	Use this key to specify the starting bitrate value for multi-bitrate content, in kilobits per second.	Numeric
mbrStartingIndex	Use this key to specify the starting index for multi-bitrate content.	Numeric

Metadata Tag	Description	Data Format
playerVerification Challenge	*For HDN 2.0 Content, Only -* This key specifies an f4m manifest player verification server challenge and triggers the player verification procedure.	Text String

primaryToken	Denotes the primary token for the plugin to perform EdgeAuthentication against the Akamai network. This is required for Akamai HDN content, only. An example would be as follows:
	
	`1292464883_`
	`69effa3e0470b06f110eef62fbe6c5a9`
		Name Value Pair

retryInterval	The live stream retry interval, in seconds. This value overrides the default setting in AkamaiNetStream.	Numeric
retryLive	For live streams, if the primary and secondary encoders stop (crash), the plugin will attempt to restart the stream every retry interval. This value overrides the default in AkamaiNetStream.	Boolean

streamAuthParams	The name-value pairs required to invoke stream-level authorization services against streams on the Akamai network. Typically, these include the `"auth"`, `"aifp"` and `"slist"` parameters. An example of a valid string would be as follows:
	
	`auth=dxaEaxdNbCdQceb3aLd5a34hjkl3ma`
	`bbydbbx-bfPxsv-b4toa-`
	`nmtE&aifp=babufp&slist=secure/`
	`babutest`
		Name Value Pair

useNetSession	Use this key to indicate if NetSession client should be invoked by appending a prefix to each URL. Use this key to tell the class to add the NetSession prefix to a URL.	Boolean

*   *This key is currently undocumented. Use at your own risk.*

** *Look in the section, Code Example* <u>on page 10</u> *for an example of the inclusion of this tag.*

Code Example

The code that follows reflects an example of what could be added to the player code to incorporate the Akamai Advanced Flowplayer Provider:

```
clip:
{
    baseUrl:"http://efvod-hdnetwork.akamai.com.edgesuite.net/"
}
plugins:
{
    akamai:
    {
        url:'AkamaiFlowPlugin.swf' ,
        retryLive:true ,
        retryInterval:5 ,
        liveTimeout:5 ,
        connectAuthParams:'auth=connetionToken' ,
        streamAuthParams:'auth=livestreamToken' ,
        primaryToken:'<Token>' ,
        akamaiMediaType:'akamai-hdn-multi-bitrate' ,
        akamaiMediaData: '<Data object added to the resource as metadata>' ,
        mbrObject:
        [
            {src:"nelly2_h264_300@14411",  width:640, height:360,
            bitrate:"300"},
            {src:"nelly2_h264_700@14411",  width:640, height:360,
            bitrate:"700"},
            {src:"nelly2_h264_1500@14411",  width:640, height:360,
            bitrate:"1500"},
            {src:"nelly2_h264_2500@14411",  width:640, height:360,
            bitrate:"2500"},
            {src:"nelly2_h264_3500@14411",  width:640, height:360,
            bitrate:"3500"}
        ],
        mbrStartingBitrate:3500000 , --OR-- mbrStartingIndex:2 ,
        useNetSession:false ,
        enableNetSessionDiscovery:false ,
        enableAlternateServerMapping:false ,
        playerVerificationChallenge:'<Some SALT value>' ,
        genericNetStreamProperty:
        {
            propertyName:'enableAlternateServerMapping' ,
            value:true ,
        }
    }
}
```

▶ *NOTE: The baseUrl:"http://efvod-hdnetwork.akamai.com.edgesuite.net/" entry is required (as formatted, and in the position noted), when incorporating the "mbrObject" tag. Additionally, you can use either the "mbrStartingBitrate" or "mbrStartingIndex" tags in the code, but not both.*

Appendix A. Akamai Customer Support

The table below offers contact information that can be used to contact an Akamai representative for support.

NOTE: Business support services are offered Monday - Friday, 7:30 AM - 8:30 PM.

Operations Technical Support
Phone (Toll Free, 24/7):
• **1 (877) 4-AKATEC (252832)** - Click here for instructions on dialing toll-free outside the United States • **Contact your Akamai Contact Representative**
Email
• ccare@akamai.com - For routine technical support issues • specialist@akami.com - For business support requests (e.g., CP Code requests, invoicing and contact-related questions)