Unicorn Media, Inc.

Unicorn Once™

Technical User Guide

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1 INTRODUCTION

1.1 Overview

This technical guide provides the necessary information to take full advantage of the Unicorn Once™ video workflow optimization technology for mobile devices as well as method-level documentation and usage workflow, such that 3rd-party developers and integrators can use Once™ to easily syndicate video content to any of those mobile devices.

Unicorn Once™ is a robust video syndication engine layered between the Unicorn Media Room and unlimited mobile devices. Please refer to the Media Room Quick Start Guide for information and directions for using Media Room.

Some of the functionality described in this document is only available to clients who have the API feature enabled. Please contact your Unicorn Media representative if you are experiencing any difficulty getting started.

1.2 Assumption of Prior Knowledge

This document assumes prior general knowledge of API architecture and XML language. Under that assumption, it was written for Unicorn Media customers and their internal developers and integrators.

1.3 Terms

CNAME

- Short for **C**anonical **NAME**
- A record in a DNS database that indicates the true host name of a computer that its aliases are associated with

Domain

- The top level administrative designation for clients within the Unicorn Media Platform
- Clients can have multiple domains, but can only access one domain per login session
- Domains contain the client Analytics, Channels, Catalogs, Users, Ad Providers, Category Lists, Publication Rules and Rights

GUID

- **G**lobally **U**nique **Id**entifier
- A unique 128-bit number that is produced by the REST API to identify a particular component, application, file, database entry and/or user

m3u8

- A file format that stores multimedia playlists specific to Apple HTTP Live Streaming (HLS)

Web Syndication

- A form of syndication where online material is made available to multiple online sites and devices
- For the purposes of this document, web syndication refers to making web feeds available from a UM client site in order to provide an end viewer with a summary of the website's recently updated or added content

2 UNICORN ONCE™ DESCRIPTION

Layered on our patented platform technology, Unicorn Once™ is a video syndication engine service layer that permits customers of Unicorn Media to use our API methods, URL mapping and auto detection technology to ingest media ONCE and publish that content to any IP-enabled device with no major changes to your current workflow or special work-around.

Unicorn Once™ is an *extension* of Unicorn Media Room, which allows customers to monetize their media assets. For information on Media Room web service application, please see the Unicorn Media Room User Guide.

FEATURES INCLUDE:

- Supports mobile devices, iDevices, set-top boxes and tablets
- Supports Apple's HTTP Live Streaming protocol
- Provides the ability to specify a fast start parameter via URL Parameter
- Syndicates an optimal video experience to mobile set-top-box and tablet devices via automatic device detection
- Seamless integration with existing workflows; saving time and internal development costs
- Dynamic ad integration and ad targeting from any ad provider or your own inventory for mobile or iDevice content
- Real-time analytics across any platform using Unicorn Vision™ to track, measure and report on the performance of content publishing
- Provide RSTP for Blackberry device models 8530 and below

Unicorn Once™ relies on Unicorn Media Platform technology and therefore requires that customers be assigned the proper profile during account setup. If you do not have access to Media Room or are unsure of your profile status, please contact support@unicornmedia.com.

3 UNICORN ONCE™ FEATURES

Unicorn Media Platform provides an easy way to distribute your content to multiple channels.

- Manage the distribution of content to any IP-enabled device through a single interface, while enforcing business rules specific to each situation
- The syndication engine eliminates the need for writing to an API and reduces deployment times
- Accelerated mean time-to-viewing for Apple HLS by ensuring that communication between the client and the server are always of the highest possible quality
- Define the way your video displays on compatible devices by forcing a non-adaptive delivery type
- Real-time business intelligence through Unicorn Vision™ providing key data points about video content, updating playlists, replacing ads, repositioning ad breaks, etc.

3.1 Transcoding

Unicorn Media provides real-time transcoding in a one-to-many ratio to provide true syndication capability for any video content on any mobile device. Utilizing Unicorn Media Room, video assets are transcoded into multiple formats to support a wide variety of mobile devices.

Profiles

Unicorn Once™ uses device profiles to deliver content to over 4400 devices. These profiles include:

- Unicorn.Once 3GP 320 (3GP)
- Unicorn.Once H263 384kbps (3GP)
- Unicorn.Once H263 Baseline (3GP)
- Unicorn.Once iDevice Cell 110
- Unicorn.Once iDevice Cell 200
- Unicorn.Once iDevice Wifi 400
- Unicorn.Once iPhone Wifi 600
- Unicorn.Once iPhone 320
- Unicorn.Once iPhone3 256
- Unicorn.Once iPhone3 512
- Unicorn.Once iPhone4 1200
- Unicorn.Once iPhone4 800
- Unicorn.Once iPhone4 Audio 64

3.2 Automatic Device Detection

Unicorn Once™ automatically detects the type of device the consumer is using while taking advantage of your IP-based geo-location and network statistics to quickly deliver the appropriate version of your published content to your customer's device.

Unicorn Media allows you to publish your content, confident in the knowledge that it will reach any device (even legacy Blackberry devices 8530 and older), in the proper format every time, without using your internal resources.

3.3 Dynamic Ad Insertion

Unicorn Once™ facilitates progressive ad insertion on a per stream and/or per request basis using the URL syntax described in Section 6 URL MAPPING & CONFIGURATION of this document.

This extremely powerful technology enables you to associate and publish an ad campaign with an arbitrary set of ads at any point in the associated content stream on a per user/click basis. The permutations of ads associated with content and dynamically displayed are limitless.

4 USE CASES

4.1 Unicorn Once™ Fast Start Use Case:

Unicorn Once™ takes advantage of the HLS characteristic to not only remove some of the limitations imposed but to deliver some of the fastest HLS starts available anywhere.

- Client specifies an "`ImageMovieURL`" parameter and a "`FastStartBuffer`" parameter
- Unicorn Once™ takes the image specified in the `ImageMovieURL` and turns it into a very efficiently compressed transport stream segment at a length that is specified in the `FastStartBuffer`
    - This clip becomes a single segment which is inserted into the beginning of the HLS stream followed by the signal that we will be changing content.
- As soon as the player downloads the first segment, it believes it can initiate playback
    - Since segment is so efficiently compressed (~50KB for a 5 second buffer) the player is free to continue on and start downloading the latter segments

For Example:

Values, as low as 2 seconds, can make a dramatic difference in start-time performance. Of course even using the standard HLS behavior is not a guarantee against buffer under-run.

Be aware that the possibility still exists for the HLS buffer to be 'under-run' where the player finishes the buffer and believes it "should" have the first segment of actual content though in reality it does not.

BEST PRACTICE: Unicorn Media recommends a setting of between 4-6 seconds to prevent buffer under-run in most scenarios.

Even in very low-bandwidth situations, this technology allows you to put in a long buffer (5-10 seconds) where the user experience is that the content has started playing and the user is watching your logo, a thumbnail, a cover art image, etc. - rather than just watching the apple status wheel spin.

This approach is not required in any way. If you do not specify an image and buffer time, the standard HLS behavior will take over.

Start Time Acceleration for Apple HLS

The HLS delivery format has an inherently "long" start time when compared to UDP based "streaming" solutions that employ more aggressive 'packet forwarding' and 'proprietary bursting' technologies to fill the clients buffer quickly at stream initiation.

4.2 Typical Use Case:

HLS was designed specifically to allow for the most reliable delivery of video across high-latency, erratic mobile networks to relatively low powered handheld devices. Therefore, HLS will attempt to fill its "buffer" prior to initiating video playback.

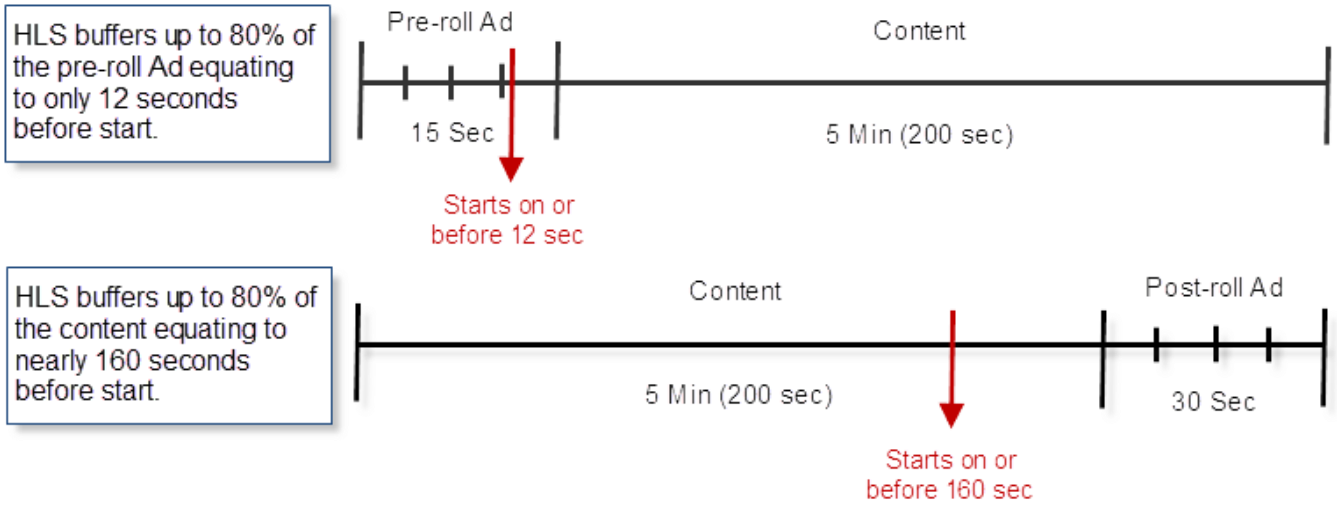
- The algorithm in iOS 4.1 (Apple) roughly equates to 3 segments worth of data prior to start

OR

- When an X-DISCONTINUITY event is in place (as there is when delivering ads into the stream) roughly 80% of the program buffers before the first X-DISCONTINUITY event

The iOS will commission whichever is *more*.

For Example:



5 UNICORN ONCE™ CONSTRUCT CONSIDERATIONS

Unicorn Once™ utilizes a proprietary URL construct to take advantage of the features described above. You configure this URL through a programmatic URL generation method that you customize for your particular business needs. This URL employs the Unicorn Media syndication engine to distribute content, insert, target and track ads and collect analytics according to your specifications.

```
Host/Service/DeliveryType/RequestedFileType/DomainGUID/ApplicationGUID/MediaItemGUID/VirtualFileName?AdParams&Params
```

5.1 Information Gathering

Several pieces of information are needed to take advantage of the Once™ URL construct including:

- The Unicorn Once™ URL **Host Name** of once.unicornmedia.com or a CNAME pointing to the host name
- The **Service** variable to specify the use of the Unicorn Media Dynamic Permutation Layer
  - The only value currently used here is the "now" variable
- Decide if your media **Delivery Type** will be 'stitched' for multiple images, 'adaptive' for HTTP streaming or 'od' (on demand) to be used with Auto Links
- Choose your **Requested File Type** from mp4, m3u8 or 'auto' which determines delivery method according to client capabilities
- Obtain your **Domain GUID** by contacting Unicorn Media at support@unicornmedia.com
- Obtain your **Application GUID (Player GUID)** and **MediaItem GUID** through Media Room
  - These GUIDs were available in Media Room and were created when you chose which player (application) you would use in your domain
- Select an arbitrary **Virtual File Name** with a file extension that represents the requested file type
- Decide what your **Ad Parameters** will be with regard to ad position, placement and the Ad GUID
  - The Ad Position represents the number of seconds into the base asset at which to place the ad position. (Ex: 0 seconds)
  - The Ad Placement parameter represents the order of the Ad in the content if there is more than 1 Ad to be run at the time
    - It is set as a 0-based index; first element is 0, second is 1, etc.
  - Ad GUID represents how the asset being requested will be delivered to the device requesting it
- Determine your **Query String Parameters** by:
  - Choosing a URL and assigning it to a JPEG encoded image that will be used for the start time parameter
  - Deciding on a buffer amount to add for start time acceleration

StartTime must always precede EndTime. StartTime and EndTime are represented by a positive integer value in seconds, i.e. "30" for 30 seconds.

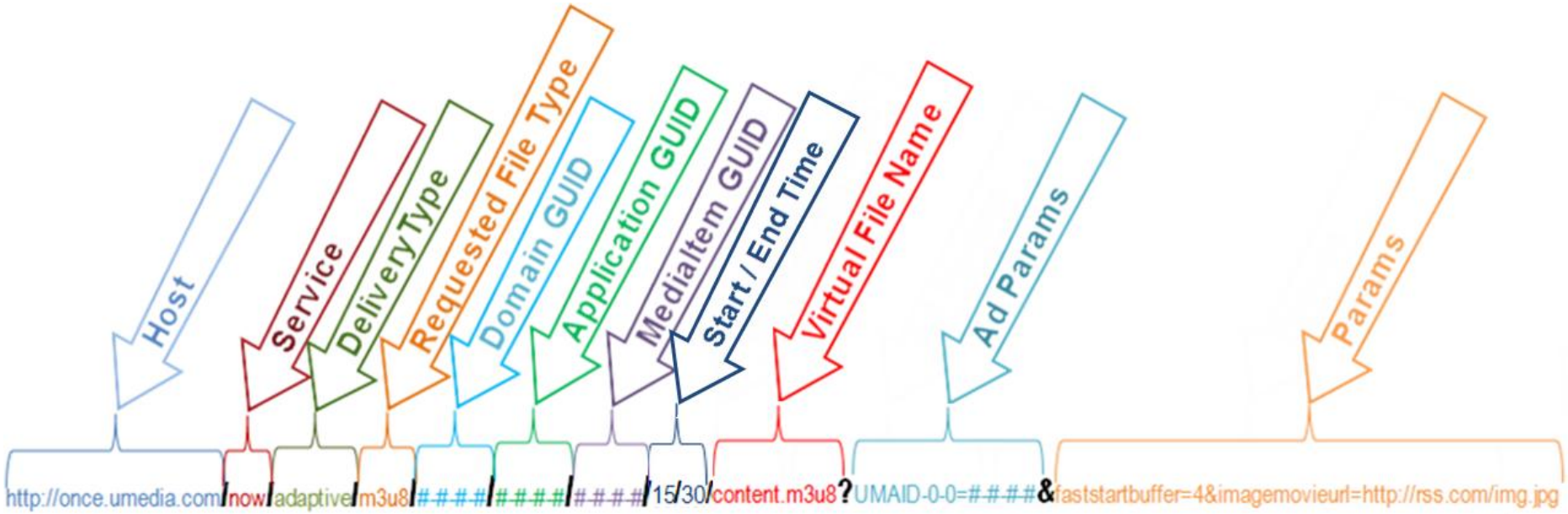
6 URL MAPPING & CONFIGURATION

6.1 URL Construct

The Once™ URL is constructed by using a programmatic URL generation method called **`GetNowAsset`**. This section will cover the URL structures and the available parameters.

Base URL Map:

Host/Service/DeliveryType/RequestedFileType/DomainGUID/ApplicationGUID/MediaItemGUID/StartTime/EndTime/VirtualFileName?AdParams&Params



6.2 Location and Service Segment Variables

URL Map: Host/Service/

Example: `http://once.unicornmedia.com/now/...`

Parameter	Type	Description
Host	String	• "once.unicornmedia.com" • CNAME pointing to "once.unicornmedia.com"
Service	String	• "now" specifies that we will be using our dynamic permutation layer (DPL) to service your request • This is the only variable currently available

6.3 File Type Segment Variables

The typical combinations are Stitched/mp4, Adaptive/m3u8 and od/auto. However, you can force video to play through certain profiles by using od/m3u8.

URL Map: Host/Service/**DeliveryType/RequestedFileType**/DomainGUID/ApplicationGUID/…

Stitched URL Map: …/**DeliveryType/RequestedFileType**/DomainGUID/ApplicationGUID/**ProfileGUID**/

Examples:

`http://.../`**`adaptive/m3u8`**`/4989f8db-9187-49ca-86ff-e2cd53429cd4/35217a08-d9db-469f-aec0-7c88406a0c60/63598604-cb88-44f8-bc47-d207af3b7b4a/...`

`http://.../`**`od/auto`**`/4989f8db-9187-49ca-86ff-e2cd53429cd4/35217a08-d9db-469f-aec0-7c88406a0c60/63598604-cb88-44f8-bc47-d207af3b7b4a/...`

`http://.../`**`stitched/mp4`**`/4989f8db-9187-49ca-86ff-e2cd53429cd4/35217a08-d9db-469f-aec0-7c88406a0c60/`**`c2364425-2267-4eaa-b800-ef544bdd3da3`**`/63598604-cb88-44f8-bc47-d207af3b7b4a/...`

Parameter	Type	Description
DeliveryType	String	Values include: "adaptive": • m3u8 File Type ONLY • Content is delivered via HTTP Live Streaming • Used for devices that support HLS; primarily iDevices "od": • Auto and m3u8 File Types • Delivery will be determined by the client hitting the URL • Used with Auto and m3u8 Links "stitched": • mp4 File Type ONLY • Multiple images with overlapping fields are combined prior to delivery to client • Used when content will be delivered to devices that do not support HTTP Live Streaming • A ProfileGUID will be determined by the auto handler

Parameter	Type	Description
RequestedFileType	String	Possible values include “mp4”, “m3u8” and “auto”. • “auto” means that the delivery method will be determined depending on the capabilities of the client. So it could mean different file types, profiles, etc.

Force Specific Profiles with m3u8 Links

If you plan to serve video to m3u8 compatible devices exclusively and want to ensure a particular profile is used, you can force the content to use a certain profile by using m3u8 links.

URL Map:
Host/Service/**DeliveryType/RequestedFileType**/DomainGUID/PlayerGUID/ProfileGUID/AssetGUID **/Version/StartTime/EndTime/**…

Examples:
`http://.../od/m3u8/bb5da21e-8232-45e8-8008-0f2437e13063/f0a7d899-22ed-4851-9ba9-2b279169f994/8c913e59-c00a-4d37-925b-27b6ed698fcc/dbc72135-3eb6-48d9-aa76-160266d84bb9/0/0/59/FILE.m3u8`

There are several key points to be aware of when forcing specific profiles:

- The delivery type should be ‘od’ instead of ‘adaptive’
- The GUID order in the URL must be Domain GUID, Player GUID, Profile GUID, MediaItem GUID
- `Version`, `StartTime`, and `EndTime` MUST be included, be in the order shown here and directly follow the GUID list to avoid Runtime errors
    - Start and End time must be in seconds
      Examples 0/0/15 = Version 0, Start at 0 seconds and Finish at 15 seconds
- The Virtual File Name must have the ‘.m3u8’ extension

6.4 GUID Segment Variables

The Domain GUID is obtained through Unicorn Media support. The Application GUID, which is referred to as the Player GUID in Media Room, and the MediaItem GUID are both available in Media Room.

URL Map: /…/DomainGUID/ApplicationGUID/MediaItemGUID

URL Map: /…/DomainGUID/ApplicationGUID/ForeignKey

Example: `http://.../4989f8db-9187-49ca-86ff-e2cd53429cd4/35217a08-d9db-469f-aec0-7c88406a0c60/63598604-cb88-44f8-bc47-d207af3b7b4a/...`

Parameter	Type	Description
DomainGUID	String	The GUID of the Customer Domain in the Unicorn Media system.
ApplicationGUID	String	The Player GUID for the application in which to record metrics and enforce business rules obtained through Media Room REST API.
MediaItemGUID or ForeignKey	String	• The MediaItem GUID or Foreign Key for the base asset being requested (the MediaItemGUID and ForeignKey parameters are interchangeable). • This GUID will not appear if the RequestedFileType parameter is set to ‘Auto’

6.5 Segmented Video Clips

Segmented video clips must have a start time and end time defined. The parameters, StartTime and EndTime, are represented by positive integer values in seconds, i.e. "30" for 30 seconds. StartTime must always precede EndTime. The clip will start playing and end playback at the points in the MediaItem indicated by these parameters.

For auto- device detection, StartTime and EndTime will be supplied immediately after MediaItemGUID (or ForeignKey if used).

URL Map: /…/MediaItemGUID/**StartTime/EndTime**/VirtualFileName?AdParams

Example: `http://...63598604-cb88-44f8-bc47-d207af3b7b4a/15/30/content.m3u8?UMAID-10-0=c2364425-2267-4eaa-b800-ef544bdd3da3/...`

Parameter	Type	Description
StartTime	Int	The point in the video timeline where the video will start playing.
EndTime	Int	The point in the video timeline where the video will stop playback.

For Stitched, StartTime and EndTime should be supplied immediately after the required MediaitemGUID.

Stitched URL Map: …/DomainGUID/ApplicationGUID/ProfileGUID/MeidaItemGUID/**StartTime/End Time**
Examples: `http://...4989f8db-9187-49ca-86ff-e2cd53429cd4/35217a08-d9db-469f-aec0-7c8806a0c60/c264425-2267-4eaa-b800-ef54bddda3/15/30/63598604-cb88-44f8-bc47-d207af3b7b4a/...`

6.6 Virtual File Name Segment Variables

The Media Room REST API can automatically detect that a player has an Ad Campaign associated with it according to the `VirtualFileName` parameter at the end of the URL.

URL Map: /…/MediaItemGUID/**VirtualFileName**?AdParams

Example: `http://...63598604-cb88-44f8-bc47-d207af3b7b4a/content.m3u8?UMAID-10-0=c2364425-2267-4eaa-b800-ef544bdd3da3/...`

Parameter	Type	Description
VirtualFileName	String	Arbitrary file name for the request. • The value is a preference; however the file extension should accurately represent the requested file type • May help you identify the delivery format and play back properly Extensions Include: • "content.**once**" ○ The only acceptable Delivery Type for ".once" is "auto" • "content.**mp4**" • "content.**m3u8**"

6.7 Ad Serving

There are two ways to serve up and distribute ads using Once™; either through query string parameters appended to the Once™ URL or through ad campaigns associated with your player making the advertising calls. Unicorn Media also supports FreeWheel SMART XML. Contact customer support and provide your FreeWheel URL for FreeWheel integration.

Serving Ads through Query String Ad Parameter Segment Variables

If you intend to serve Ads through the Ad Parameters in the Once™ URL, you will need to specify the Ad Position, Ad Placement and Ad GUID. These Ad parameters will have a prefix of "UMAID-" with each defined parameter value separated by a dash ("-"). The parameters identify the unique ad placement in the published content as described below.

The Ad GUID is generated through the Unicorn Media syndication engine and has a foreign key and player GUID that can be associated with the Once™ URL to play dynamic ads. Therefore, when the ad server rotates through different ads based on the ID sent from the URL, a different ad will play to avoid ad play repetition.

URL Map: /…?UMAID-**AdPosition-AdPlacement=AdGUID**&AdditionalQueryParams

Example : `http://.../?UMAID-`**`10-0=c2364425-2267-4eaa-b800-ef544bdd3da3`**
`&imagemovieurl=http://aboutviral.com/wpcontent/uploads/2010/02/logo.jpg&faststart buffer=4"`

Parameter	Type	Description
AdPosition	Int	The number of seconds into the base asset at which to place the ad position. (Ex: 0 seconds)
AdPlacement	Int	The position of the ad within the break. (Ex: '2' = 3rd ad position)
AdGUID	String	The Unicorn MediaItem GUID or foreign key value for the ad asset which is obtained through the REST API or Media Room.

Examples Serving Two Ad Assets:

In each of the below examples, the first Ad in the segment has a Unicorn AdGUID of "`c2364425-2267-4eaa-b800-ef544bdd3da3`" and the second Ad in the segment has a Foreign Key value of "`34567`".

Example 1: One pre-roll and one mid-roll at 60 seconds into play:
`?UMAID-`**`0`**`-0=35217a08-d9db-469f-aec0-7c88406a0c60&UMAID-`**`60`**`-0=34567`

Example 2: Two pre-rolls:
`?UMAID-`**`0`**`-`**`0`**`=c2364425-2267-4eaa-b800-ef544bdd3da3&UMAID-`**`0`**`-`**`1`**`=34567`

Serving Ads through an Ad Campaign

Once™ uses an Ad ID to dynamically pull an Ad asset from your account automatically.

If you intend to serve Ads through an Ad Campaign associated with a player, there are no Ad Parameters required for the URL. The REST API will automatically detect that the player has an Ad Campaign associated with it according to the `VirtualFileName` parameter at the end of the URL.

If the Ad Campaign has an associated Ad Server, Once™ will send a request to the Ad Server to retrieve the Ad data. The Ad Server will return XML data containing an Ad ID that should match the foreign key of the video within your Unicorn Media account. If the foreign key and Ad ID match, Once™ will load the media asset.

6.8 Ad Tracking

Unicorn Once™ facilitates ad tracking by instantiating 'hits' to supplied ad URLs. Each ad has its own URL and therefore the number of hits to a certain URL translates to the number of times the ad associated with it was viewed.

Ad tracking is specified by appending the Once™ URL with the Ad Parameter query string described above as well as two other ad defining keys. All three parameter segments in the proper order are necessary to receive tracking information. They are: '**UMAID-a-b=e**', '**UMATU-a-b=**' and '**UMTT=a-b**'.

URL Map: /… VirtualFileName?**UMAID-AdPosition-AdPlacement=AdGUID& UMATU-AdPosition-AdPlacement= &UMTT**

Example: `http://.../content.once?`**UMAID-0-0=85256b9c-1163-44b2-abc3-1cc41088dcc6**`&`**UMATU-0-0=**`&`**UMTT=1800-http://website.com/pcf/count/actname=adcomplete/fcid=6/&UMTT=0-http://website.com/pcf /count/FCID=6/size=VIDEO/passback=/?Device=Roku%2fDVP-2.9%2b (012.09E01553A&Genre=featured&Rating=PG_13&s=r&site=pcf&Title=The%2BCourage%2Bto%2BLove&Type=0**

UMAID-a-b=e

This query string, as described in Ad Serving above, consists of the Ad Position, Ad Placement and GUID. The value for this key is the GUID which is the Media Item GUID of the ad.

Value Segment	Type	Description
Ad Position	Int	The number of seconds into the base asset at which to place the ad position. (Ex: 0 seconds)
Ad Placement	Int	The position of the ad within the break. (Ex: '2' = 3rd ad position)
Ad GUID	String	The Unicorn MediaItem GUID or foreign key value for the ad asset which is obtained through the REST API or Media Room.

UMATU-a-b=

This query string consists of the Ad Position and Ad Placement as well, yet there is no value for this key. Instead it designates the third query string, UMTT, for use as each tracking URL must have a time that it is going to be called.

Value Segment	Type	Description
Ad Position	Int	The number of seconds into the base asset at which to place the ad position. (Ex: 0 seconds)
Ad Placement	Int	The position of the ad within the break. (Ex: '2' = 3rd ad position)

You must define each parameter value for both of these query string keys separated by a dash ("-"), as shown in the examples below, where the variables represent the point in time in seconds during the main asset when the ads should play.

NOTE: *If you have multiple ads and are concerned with position and play order, you would enter 0, 1, etc. in these segments to order the ads properly. If you are not concerned with the play order, you can leave them as zeros (0).*

UMTT=a-b

This query string consists of the point in time (in seconds) during the ad play that the URL should be called and the URL or a list of URLs to call that the tracking event should call at the specified point in time.

Value Segment	Type	Description
Ad Position	Int	The point in time (in seconds) during the ad play that the URL should be called
Tracking URL	String	The URL that the tracking event should call

NOTE: *Be aware that stitched/mp4 file types will hit all the associated URLs at once so the tracking hit data is detailed by asset rather than by ad. However, adaptive/m3u8 file types have playlist associated so each URL is hit as it is viewed providing tracking granularity.*

Independent Tracking with umxbeacon

This method lets you set up a beacon in the Once™ URL to track plays independent of UM analytics. When the query string is appended with `umxbeacon={encoded URL}`, Unicorn Once™ will strip out the encoded parameter, decode it and beacon to that decoded URL.

The URL in the beacon:

- ***MUST be URL encoded***
- ***MUST be the last UM query string parameter in the URL***

URL Map:
/…/MediaItemGUID/VirtualFileName?**umxbeacon=encodedURL**

Example: `http://...63598604-cb88-44f8-bc47-d207af3b7b4a/content.once?`**`umxbeacon=http%3A%5F%2Fumrss.com%3Fkeyone=111`**

Parameter	Type	Description
umxbeacon	String	Decodes the encoded URL value set in the umxbeacon parameter and redirects to the next handler

6.9 Ad Caching

Unicorn Once™ provides an ad caching feature designed to make it easy for you to get Ads that are delivered from your external Ad Provider into the Unicorn Ecosystem.

The Unicorn Once™ AdCache component will recognize whether or not an ad being served to your customer through your ad server is currently present within your account on our system. If Once™ determines that the ad is not contained within our system; it will automatically ingest the ad and cache it for proper delivery.

Ad Caching allows the GetNowAsset (described below) to stitch the ads into Once™ content automatically. In this way we eliminate the need for you to manually ingest the ads you plan on serving into the Unicorn system.

Media Room Prerequisites

See the *Media Room V4 User Guide* for instructions on setting up the below prerequisites.

- Existing Ad Provider
- Existing Ad Campaign
- Once™ URL
- An AdCache URL obtained from UM Support Services
- An advertising Catalog (new or existing) to house items from the RSS feed

Setting Up AdCaching within Media Room

In order for the ad caching feature to function, you must add the AdCache URL obtained from UM Support Services to a new Content Sync element in your Media Room account. The URL structure looks as follows with your own Domain GUID within the URL:

`http://adcache.unicornmedia.com/AdFeed.aspx?DomainGUID`

1. Create a Content Sync Feed through the Admin module in Media Room
    a. See Create a Content Sync Feed in the Unicorn Media Room V4 User Guide for instructions on setting up a Content Sync
2. Enter the AdCache URL with your own Domain GUID into the RSS URL section of the Content Sync configuration
3. Choose the proper Advertising Catalog
4. Map the appropriate fields accordingly within the Content Sync configuration

When setup is complete, the system will automatically ingest any ads that are delivered to any viewers of your Once™ content based on the availability of the ad in the unicorn system. In other words, if attempts are made to stitch an ad into Once™ content that is not available in the UM system, the ad will be inserted into the AdCache (RSS) feed for ingestion and not played in the content until it is ingested into the chosen catalog.

6.10 Additional Optional Query String Parameters:

Start Time Acceleration

Specify an image in the `ImageMovieURL` that the engine can use to compress into a TS segment at a length that you specify in the `FastStartBuffer`. The clip becomes a single segment which is inserted into the beginning of the HLS stream followed by the signal that we will be changing content.

URL Map: /…?AdPosition-AdPlacement-AdGUID&**AdditionalQueryParams&AdditionalQueryParams**

Example: `http://.../?UMAID-0-0=AdGUID&`**`imagemovieurl=http://aboutviral.com/wp-content/uploads/2010/02/logo.jpg&faststartbuffer=4`**

Parameter	Type	Description
`ImageMovieURL`	String	URL to a JPEG encoded image for use in start time acceleration.
`FastStartBuffer`	Int	The amount of buffer to add for start-time acceleration.

RTSP Streaming Support

Forcing a Unicorn application (player) to utilize the RTSP streaming protocol is available via Unicorn Once™. When using Unicorn Once with the RequestedFileType of 'auto', the device will be detected with the appropriate file format delivered to the client using RTSP protocol, rather than HTTP. This "forced streaming" function can be useful when delivering to a known set of devices that only support RTSP streaming. Each asset to be played over RTSP should be transcoded into the Unicorn.Once 3GP 320 or other applicable profile(s) for optimal playback on targeted devices.

RTSP streaming support requires a Unicorn Customer Services to perform a configuration change on a per application (player) basis.

RTSP Streaming Protocol Support via UMPRO

It is also possible to use the UMPRO command in the Once™ URL to force RTSP streaming protocol. However, in this scenario, the profile delivered will be the one that would normally be delivered to the device requesting the asset via standard device detection. Note that this may not be the optimal profile for RTSP delivery on the targeted device.

URL Map: /… VirtualFileName?**UMPRO= rtsp**

Example : `http://.../content.once?`**`UMPRO=rtsp`**

Parameter	Type	Description
UMPRO	String	Streaming Protocol - RTSP

Temporarily Override the Standard Profile List

When the query string is appended with `umoprofiles={profileGUID}`, the associated profile will be dynamically inserted in the m3u8 to temporarily override the standard profile list for adaptive playback of an asset.

URL Map:
/…/MediaItemGUID/VirtualFileName?**umoprofiles=PROFILEGUID1,PROFILEGUID2,…,PROFILEGUIDX**

Example: `http://...63598604-cb88-44f8-bc47-d207af3b7b4a/content.m3u8?`**`umoprofiles=c2364425-2267-4eaa-b800-ef544bdd3da3,27e71340-af9c-468d-96c3-ebac95dd884d/...`**

Parameter	Type	Description
umoprofiles	String	• Overrides the standard profile list so that only the specified profile will be delivered in the m3u8 • Multiple profiles are entered as a comma-separated list GUIDs

Temporarily Add Profiles to the Standard Profile List

When the query string is appended with `umaprofiles={profileGUID}`, the specified profile will be temporarily added to the standard profile list for adaptive playback of an asset.

URL Map:
/…/MediaItemGUID/VirtualFileName?**umoprofiles=PROFILEGUID1,PROFILEGUID2,…,PROFILEGUIDX**

Example: `http://...63598604-cb88-44f8-bc47-d207af3b7b4a/content.m3u8?` **`umaprofiles=c2364425-2267-4eaa-b800-ef544bdd3da3,27e71340-af9c-468d-96c3-ebac95dd884d/...`**

Parameter	Type	Description
`umaprofiles`	String	• Ads the specified profile to the already returned m3u8 profile list • Multiple profiles are entered as a comma-separated list GUIDs

NOTE: *Be sure that if you are going to use one of these optional parameters along with the* `umxbeacon` *tracking parameter, that* `umxbeacon` *is last in the query string.*

6.11 GetNowAsset Parameter Quick Reference Table

This is a quick reference to the parameters used in creating the Once™ URL.

<table>
<tr><th>Parameter</th><th>Type</th><th>Description</th></tr>
<tr><td><code>Host</code></td><td>String</td><td>• “once.unicornmedia.com”
• CNAME pointing to “once.unicornmedia.com”</td></tr>
<tr><td><code>Service</code></td><td>String</td><td>• “Now” specifies that we will be using our dynamic permutation layer (DPL) to service your request
• This is the only variable currently available</td></tr>
<tr><td><code>DeliveryType</code></td><td>String</td><td>Values include:
<table>
<tr><td>“adaptive”</td><td>• m3u8 File type ONLY
• Content is delivered via HTTP Live Streaming
• Used for devices that support HLS; primarily iDevices</td></tr>
<tr><td>“od”</td><td>• Auto File type ONLY
• Delivery is determined by the client hitting the URL
• Used with Auto Links</td></tr>
<tr><td>“stitched”</td><td>• mp4 File type ONLY
• Multiple images with overlapping fields are combined prior to delivery to client
• Used when content will be delivered to devices that do not support HTTP Live Streaming</td></tr>
</table></td></tr>
<tr><td><code>RequestedFileType</code></td><td>String</td><td>Possible values include “mp4”, “m3u8” and “auto”.
• “Auto” means that the delivery method will be determined depending on the capabilities of the client. So it could mean different file types, profiles, etc.</td></tr>
</table>

Parameter	Type	Description
DomainGUID	String	The GUID of the Customer Domain in the Unicorn Media system obtained by contacting support at support@unicornmedia.com.
ApplicationGUID	String	The Player GUID for the application in which to record metrics and enforce business rules obtained through Media Room or REST API
MediaItemGUID or ForiegnKey	String	• The MediaItem GUID or Foreign Key for the base asset being requested obtained through Media Room or REST API. • This GUID will not appear if the RequestedFileType parameter is set to 'Auto'
StartTime	Int	The point in the video timeline where the video will start playing.
EndTime	Int	The point in the video timeline where the video will stop playback.
VirtualFileName	String	Arbitrary file name for the request. • The value is a preference; however the file extension should accurately represent the requested file type • May help you identify the delivery format and play back properly Extensions Include: • "content.**once**" ○ The only acceptable Delivery Type for ".once" is "auto" • "content.**mp4**" • "content.**m3u8**"
AdPosition	Int	The number of seconds into the base asset at which to place the ad position. (Ex: 0 seconds)
AdPlacement	Int	The position of the ad within the break. (Ex: '2' = 3rd ad position)
AdGUID	String	The Unicorn MediaItem GUID or foreign key value for the ad asset which is obtained through the REST API or Media Room.
ImageMovieURL	String	URL to a JPEG encoded image for use in start time acceleration.
FastStartBuffer	Int	The amount of buffer to add for start-time acceleration.
UMPRO	String	Video Streaming
umoprofiles	String	• Overrides the standard profile list so that only the specified profile will be delivered in the m3u8 • Multiple profiles are entered as a comma-separated list GUIDs
umaprofiles	String	• Ads the specified profile to the already returned m3u8 profile list • Multiple profiles are entered as a comma-separated list GUIDs
umxbeacon	String	Decodes the encoded URL value set in the umxbeacon parameter and redirects to the next handler

7 SUPPORT & CONTACT INFORMATION

New Release delivery method/policy:

- Customers are notified via email regarding platform and feature releases
- Unicorn Media Client Services manages all major platform changes that would affect a customer's workflow via personalized communication, planning and 24/7/365 Support

7.1 Online

Home Page:	www.unicornmedia.com
Contact Page:	http://unicornmedia.com/contacts.htm
Client Services E-mail:	support@unicornmedia.com

7.2 Phone

Toll Free:	**877-8-UNICORN (877-886-4267)**
Client Support Arizona Local:	**480-214-4879**
Corporate Arizona Local:	**480-214-6464**

7.3 Hours of Operation

Client Support Services:

Standard:	**Monday – Friday, 6:00 AM – 6:00 PM** Arizona Time (GMT -7:00)
On-Call Support:	**24 x 7 x 365**
Corporate:	**Monday – Friday, 8:00 AM – 5:00 PM**

7.4 Client Services Prerequisites

New Issue:

Your support representative will ask for certain information when you call. Please have the following information available prior to contacting Client Services:

- Service name and version: Click *Help* > *About* to obtain version
- Internet Browser Name and Version (e.g. MS Internet Explorer 7)
- Screen shot or complete transcript of error received if applicable
- Description of problem
- Summation of steps that produced the problem/error
- E-mail a ZIP file containing any relevant screen shots, error messages or files to the support email above

Existing Issue:

Please have your Support Ticket number ready when you call as well as all new screenshots and steps necessary to determine the issue.