

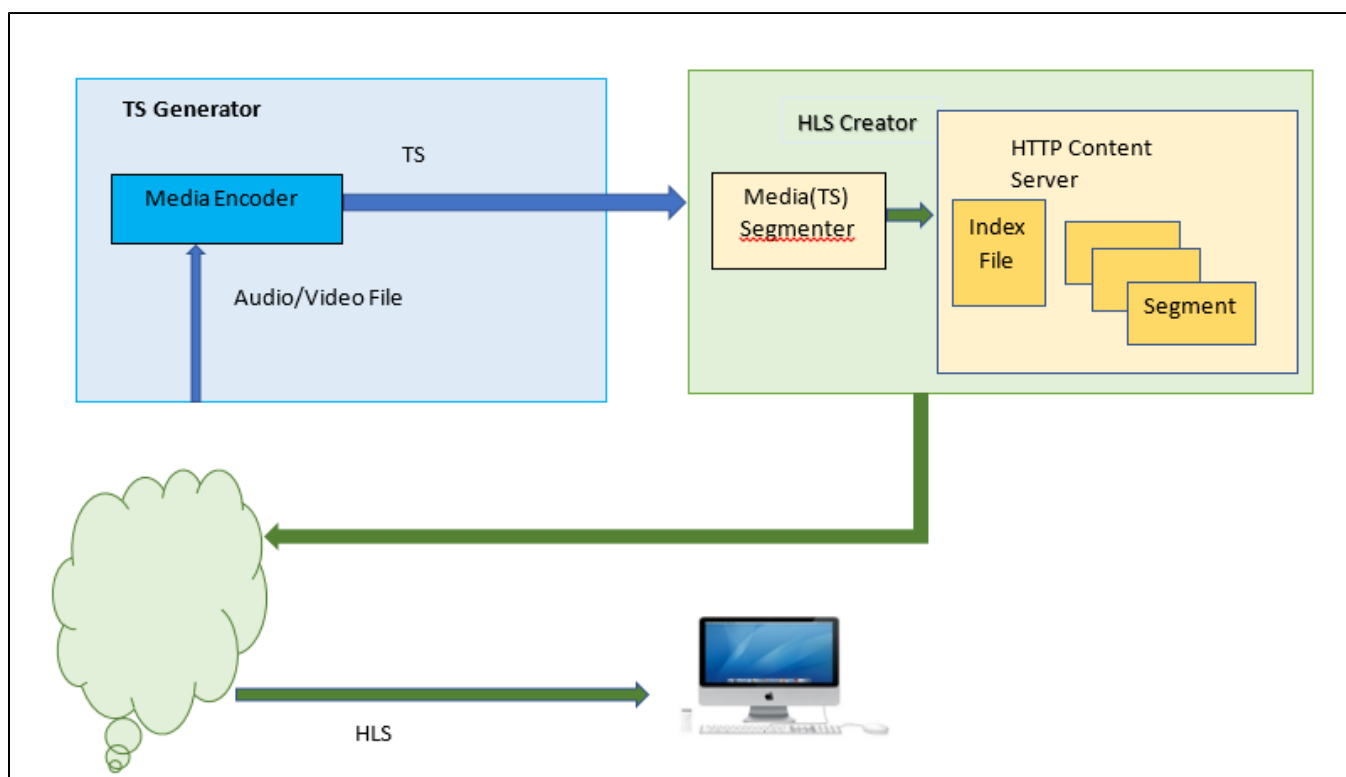
# AAMP Support in Emulator - Design

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## Introduction

Advanced Adaptive Media Player (AAMP) is an application which uses gstreamer (AAMP) to present clear/encrypted HTTP Live Streams.(HLS)

HLS is a Media Streaming Protocol used for delivering visual and audio media over the internet. HLS uses the HTTP protocol and hence users can stream media from their regular web server. To Stream HLS data,source files are encoded at different data rates and will be split into chunks with the .ts file extension and manifest file .M3U8 file is created for maintaining index for the video chunks. For example, M3U8 file may give references to online files for an internet radio station. M3U8(MP3 URL that uses UTF-8-encoding)is a computer file format for a multimedia playlist.Although originally designed for audio files, such as MP3, it is now used to point both audio and video sources



## Gstreamer Plugin Information

```

root@gemux86hyb-morty:/# gst-inspect-1.0 aamp
Factory Details:
  Rank                marginal (64)
  Long-name            Advanced Adaptive Media Player
  Klass                Demux
  Description          Advanced Adaptive Media Player
  Author              Comcast

Plugin Details:
  Name                aamp
  Description          Advanced Adaptive Media Player
  Filename            /usr/lib/gstreamer-1.0/libgstaamp.so
  Version             0.0.1
  License             LGPL
  Source module       RDK
  Binary package      aamp
  Origin URL          https://rdkcentral.com/

```

```

root@gemux86hyb-morty:/# gst-inspect-1.0 aampsrc
Factory Details:
  Rank                primary (256)
  Long-name            AAMP Source
  Klass                Source
  Description          Advanced Adaptive Media Player Source
  Author              Comcast

Plugin Details:
  Name                aamp
  Description          Advanced Adaptive Media Player
  Filename            /usr/lib/gstreamer-1.0/libgstaamp.so
  Version             0.0.1
  License             LGPL
  Source module       RDK
  Binary package      aamp
  Origin URL          https://rdkcentral.com/

```

## HLS Playback using AAMP

### Playbintest

This utility is available in /usr/bin to test aamp plugin.

```

#export WAYLAND_DISPLAY=WPE
#export XDG_RUNTIME_DIR=/run/user/0/
#export PLAYERSINKBIN_USE_WESTEROSSINK=1

#/usr/bin/playbintest http://devimages.apple.com/iphone/samples/bipbop/bipbopall.m3u8

```

gst-launch

AAMP can be tested with gst-launch using playbin.

```

#export WAYLAND_DISPLAY=WPE
#export XDG_RUNTIME_DIR=/run/user/0/

#gst-launch-1.0 playbin uri=aamp://devimages.apple.com/iphone/samples/bipbop/bipbopall.m3u8 video-
sink=westerossink

```

### WPELauncher

AAMP can be tested with WPELauncher. Please make sure environmental variables are set.

```

#export LD_PRELOAD=/usr/lib/libwesteros_gl.so.0.0.0
#export WAYLAND_DISPLAY=WPE
#export XDG_RUNTIME_DIR=/run/user/0/
#WPELauncher http://127.0.0.1:50050/player.html

```

player.html needs to be created with below content in /opt/www

```
<html><head><title>AAMP Test Page</title></head>
<body>
<video id="video"></video>
<script type="text/javascript">
var video = document.getElementById('video');
video.src = 'aamps://mnmedias.api.telequebec.tv/m3u8/29880.m3u8'
video.load();
video.play();
</script>
</body></html>
```

## DEBUG Logs

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To Enable logs, please export following

```
export GST_DEBUG=2,aamp:3,webkitmediaplayer:5
```

## Sample HLS URL

---

aamp://devimages.apple.com/iphone/samples/bipbop/bipbopall.m3u8

aamps://tungsten.aaplimg.com/VOD/bipbop\_adv\_example\_v2/master.m3u8

<aamps://mnmedias.api.telequebec.tv/m3u8/29880.m3u8>

<aamp://184.72.239.149/vod/smil:BigBuckBunny.smil/playlist.m3u8>