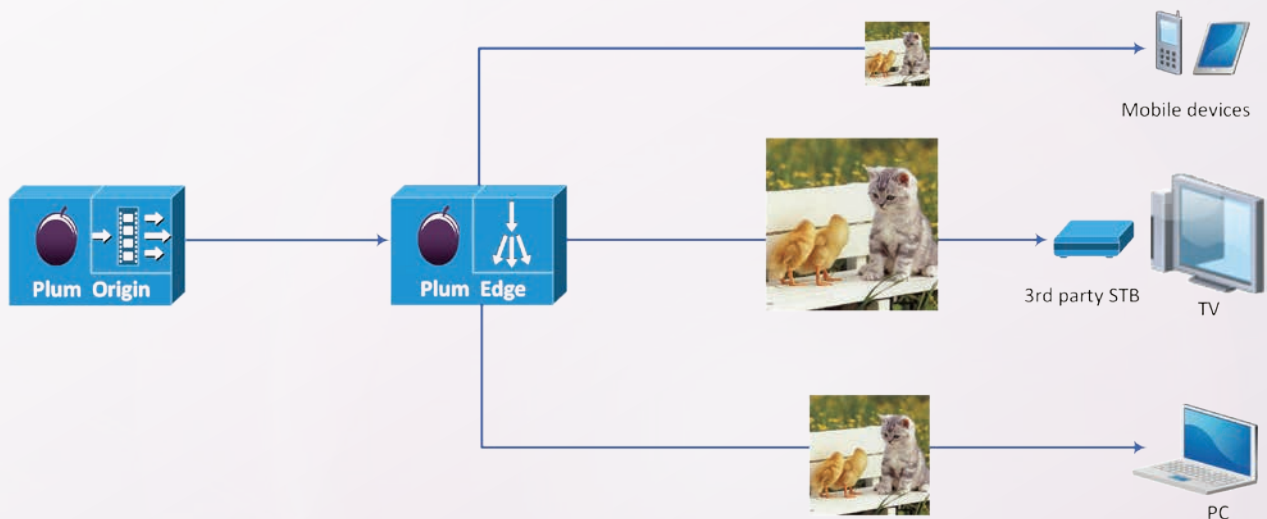




# PLUM Edge server

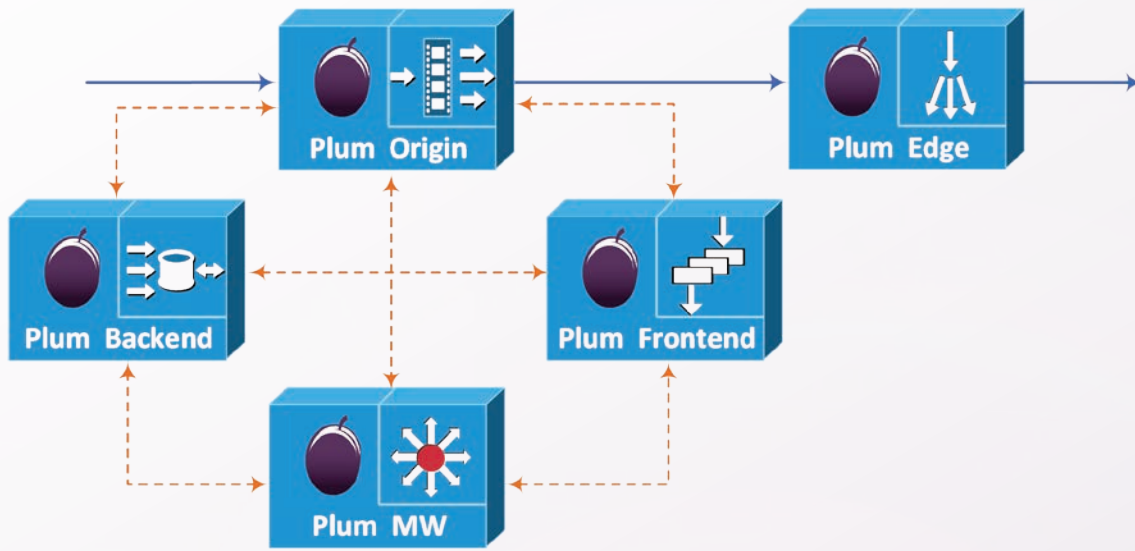
Plum Edge server is a streamer of newest generation. Using ABR, a technique for streaming of multimedia content, Plum Edge is delivering content to STB, desktop and laptop (MAC, Windows) devices, mobile and tablet devices (iOS, Android). The streamer has very simple and intuitive web interface where all the settings by administrator are done.



Scalability for Plum Edge server is achieved simply by adding another device, also an extra device can be used as a redundancy depending on operators preferences. The multiple streamers can also be used for load-balancing.



## PLUM EDGE AS PART OF PLUM OTT SOLUTION:



Basic functionality of Plum Edge server is streaming of content to end users. When user sends request for content, that request is sent directly to the Origin server which then assigns one Edge server to the user and sends the user his IP address. Streaming of live, Timeshift, Catchup TV and PVR content is going through Edge server to the end users.

Plum Middleware (+Frontend, +Backend), Origin server and Edge server are one whole, but Transcoder can be a third party solution.

## SUPPORTED PROTOCOLS

Supported file formats for streaming of VoD:

| INPUT                     | OUTPUT  |
|---------------------------|---|
| FLV (Flash Video)         | Prefix: flv:<br>Extension: .flv   |
| MP4 (QuickTime container) | Prefix: mp4:<br>Extension: .mp4, .f4v, .mov, .m4a, .m4v, .mp4a, .mp4v, .3gp, .3g2 |
| MP3                       | Prefix: mp3:<br>Extension: .mp3   |
|                           | Prefix: ismv / isma:<br>Extension: .ismv / .isma                                  |



## Supported streaming protocols and clients:

| PROTOCOL                    | CLIENTS  |
|-----------------------------|--|
| Adobe Flash® RTMP/HDS       | Flash player<br>Adobe® AIR®<br>RTMP-compatible player<br>HDS- compatible player  |
| Apple® HLS                  | iPhone®, iPod®, iPad® (iOS 3.0 +)<br>QuickTime® player (10.0 +)<br>Safari® (4.0 + na Mac OS X version 10.6)<br>Roku® streaming devices<br>Other HLS-compatible players |
| MPEG-DASH                   | DASH-HEVC/265<br>DASH-AVC/264<br>DASH-WebM/VP9   |
| Microsoft® Smooth Streaming | Silverlight® 3 +<br>Other Smooth Streaming-compatible players  |
| RTSP/RTP                    | Quicktime player<br>Other RTSP/RTP-compatible players<br>VideoLAN VLC media player<br>3GPP-compatible mobile devices<br>STB  |
| MPEG-TS                     | IPTV STB<br>Multicast on any Silverlight-enabled desktop   |

## Supported **input** protocols and codecs:

| PROTOCOL                | CODECS   |
|-------------------------|--|
| Adobe RTMP              | Video: H.264<br>On2 VP6<br>Sorenson Spark®<br>Screen Video v1 & v2<br><br>Audio: AAC<br>AAC-LC<br>HE-AAC+ v1 & v2<br>MP3<br>Nellymoser Asao<br>Speex |
| RTSP/RTP                | Video: H.264<br>VP9<br>VP8<br><br>Audio: AAC<br>AAC-LC<br>HE-AAC+ v1 & v2<br>MP3<br>Speex<br>Opus<br>Vorbis  |
| ICY (SHOUTcast/Icecast) | Audio: AAC<br>AAC-LC<br>HE-AAC+ v1 & v2<br>MP3   |



MPEG-TS

Video: H.265  
H.264  
VP9  
VP8  
Audio: AAC  
AAC-LC  
HE-AAC+ v1 & v2  
MP3  
AC-3 (Dolby® Digital)  
E-AC-3 (Dolby Digital Plus)  
Opus  
Vorbis

### Supported **output** protocols and codecs:

| PROTOCOL                   | CODECS   |
|----------------------------|--|
| Adobe HDS                  | Video: H.264<br>On2 VP6 (only live streaming)<br>Sorenson Spark® (only live streaming)<br>Screen Video v1 & v2 (only live streaming)<br>Audio: AAC<br>AAC-LC<br>HE-AAC+ v1 & v2<br>MP3<br>Nellymoser Asao (only live streaming)<br>Speex (only live streaming) |
| Adobe RTMP                 | Video: H.264<br>On2 VP6<br>Sorenson Spark®<br>Screen Video v1 & v2<br>Audio: AAC<br>AAC-LC<br>HE-AAC+ v1 & v2<br>MP3<br>Nellymoser Asao<br>Speex   |
| Apple HLS                  | Video: H.264<br>Audio: AAC<br>AAC-LC<br>HE-AAC v1<br>Dolby Digital 5.1 Surround Sound (AC-3)<br>Dolby Digital Plus (Enhanced AC-3)<br>MP3  |
| Microsoft Smooth Streaming | Video: H.264<br>Audio: AAC<br>AAC-LC<br>HE-AAC v1 i v2<br>MP3  |
| MPEG-DASH                  | Video: H.264<br>Audio: AAC<br>AAC-LC<br>HE-AAC v1 i v2<br>Dolby Digital 5.1 Surround Sound (AC-3)<br>Dolby Digital Plus (Enhanced AC-3)  |
| RTSP/RTP                   | Video: H.264<br>MPEG-2 TS<br>Audio: AAC<br>MP3   |