

# RICH MEDIA CLIENT

The Rich Media Client is the rendering client and core technology of Streamezzo's Rich Media Software Suite. The software suite also includes Streamezzo WorkBench authoring software, and Streamezzo Rich Media Server the mobile service management, publishing and delivery platform.

Streamezzo's Rich Media Software Suite is a complete set of tools for developing and deploying first-rate rich media services for any mobile device.

The Rich Media Client enables mobile device users to access a range of rich media services like interactive mobile TV, digital music services, portals and dedicated real-time multimedia services. The Rich Media Client can also be used to run the entire handset user interface, or customize it with dynamic services.

## Key benefits

### **A powerful rich media framework for rendering mobile services**

The Rich Media Client is based on the MPEG/LASer Engine (including SVG Tiny) which supports rich multimedia user interfaces and services.

By synchronizing all types of media – text, vector graphics, images, audio and video – and transporting the data with streaming and incremental updates, the Rich Media Client delivers a consistent, personalized and compelling real-time user experience on all mobile operating systems.

Streamezzo's Client/Server technology means fast rendering and up-to-date local content and services for users.

The Rich Media Client is a foundation layer capable of handling all interactive, multimedia services – mobile TV, interactive services, multimedia portals, data services, etc. – on the mobile device.

### **A lightweight client for maximum reach**

The Rich Media Client is designed specifically for mobile devices. Compatible with the majority of operating systems, and having a small footprint (less

than 150KB), it enables you to offer new services to existing customers Over The Air (OTA) via SMS/WAP push and WAP download.

Services are accessible on any mobile device; no need to redevelop or modify services for existing or next generation handsets.

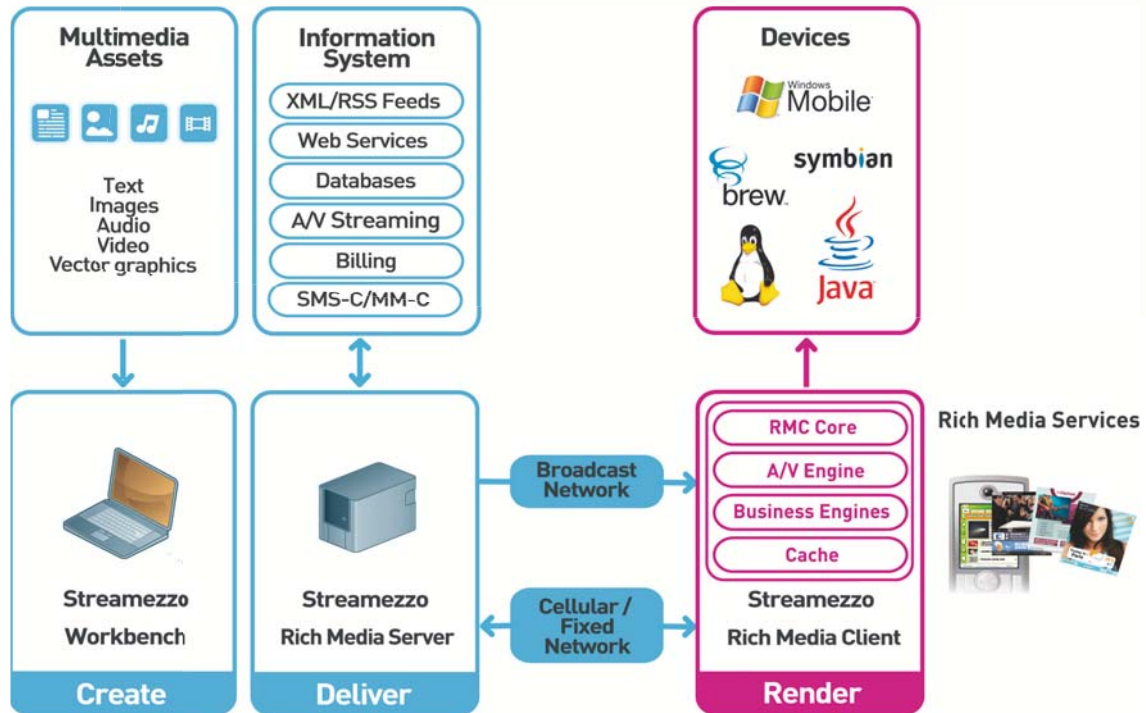
### **Portable, scalable and customizable for media services and mobile devices**

The Rich Media Client is written in C/C++ and Java. It can be easily ported to native operating systems by handset manufacturers.

The SDK and modular architecture make the Rich Media Client easy to upgrade, either with Streamezzo's business engines or your own, and it is simple to integrate with third party software to add features like OpenType fonts, 3GPP RTP/RTSP players, and DVB-H decoders.

The Rich Media Client may be also added as a plug-in to XHTML/WAP browsers to marry existing Internet mobile services with a new generation of rich media services.

## Architecture



## Key features

### Rich Media Client

- Rendering Engine: MPEG/LASer, 3GPP/DIMS, OMA/RME, SVG Tiny 1.2
- Core Engines: bitmap/vector engine, font & text engine, device/file/OS engine, audio/video codecs engine and  $\mu$ DOM engine, audio/video player for open OS
- Business engines: SMS / MMS / chat messaging, PIM (calendar/contact book), device (network & battery usage, handset time and date), file system access and OMA download compliant
- Terminal caching: scene storage on the handset
- Extensions: plug-in of XHTML/WAP browser, 3GPP RTP/RTSP players, DVB-H/DMB decoders, OpenType font (Monotype Engine) and OMA DRM compliant
- Multiple packaging: Rich Media Launcher, Rich Media Viewer or custom Rich Media Client with specific add-ons, brand personalization, Symbian certified or Java certified package
- Transport Layers: LASer/SAF over HTTP, RTP/RTSP compliant via 3GPP Players and JSR-135, DVB-H/DMB/MediaFlo ready
- Broadcast Engine : ESG/EPG Presenter

### System requirements

- 70 Kbytes to 230 Kbytes memory/card space on the device
- Operating system supported: Symbian (6, 7, 8, 9 and UIQ), Brew, Windows CE, J2ME MIDP1.0 / MIDP2.0, Doja, Linux Nucleus, C/C++ code portability on others
- SDK availability: Symbian and J2ME
- Codecs supported: MPEG-4 AAC, MPEG-4 HE-AAC, 3GPP AMR, H.263, H.264