

## STREAMING SERVER TECHNICAL SPECIFICATIONS

### Introduction

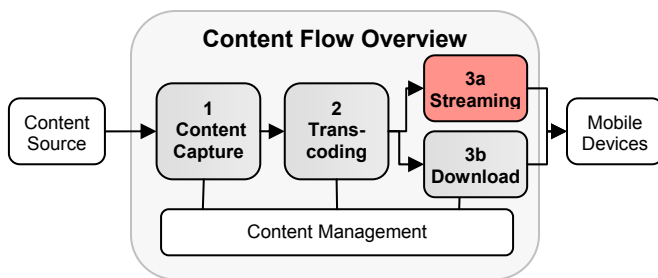
Streaming Server streams audio and video content to mobile handsets over wireless networks using 3GPP/ 3GPP2 standards.

Streaming Server can either be used as a stand-alone component or integrated to Verkata's Content Management System (CMS).

Verkata CMS provides a complete end-to-end product suite for the sourcing, encoding, delivery, management of digital media via mobile/wireless networks and devices. Verkata's products are specifically targeted for media companies and mobile operators who need to monetize media content. They are not only lightweight, scalable, and interoperable but also provide intuitive and easy-to-use user interfaces.

### Content Process Overview

Media content typically follows the following steps from origination to delivery to the web or mobile devices.



1. As the first step, Content Capture tool allows you to syndicate content from content partners. This can be either manual or automated via RSS, XML/Web Services or other techniques.
2. Content comes in a variety of formats, therefore our Transcoding Server converts the content to a format suitable for download or streaming to target mobile devices.
3. Streaming Server streams content per mobile streaming standards and protocols. Download server delivers the content to the mobile phone over the wireless link. On the mobile device, users can play content on any standards based media player.

### Features

- High speed, high quality streaming
- Supports MPEG4/H.263/H.264 encoded files
- Supports 3GPP standard streaming protocols (RTP/UDP, RTSP)
- Configurable video and audio encoding variables (e.g., frame rate, bit rate)
- Optimized video and audio delivery over wireless networks

### Input and Output Formats

- **Formats:** MPEG4(.mp4), 3GPP(.3gp), 3GPP2(.3g2), QuickTime (.mov)
- **Protocols:** RTP(RFC3550 & RFC3551), RTSP(RFC2326), HTTP(RFC2616)
- **Video:** MPEG-4, H.263, H.264
  - **Frame rate:** 1-30 fps
  - **Key frame:** Configurable
  - **Bit rate:** Configurable
- **Audio:** AMR Narrow Band, AAC, AAC+
  - **Bit rate:** Configurable
- **Resolution:** CIF (352 X 288), QCIF (176 X 144) SQCIF(128x96) QVGA(320x240) and custom

### System Requirements

#### Recommended System

- **CPU:** Intel Pentium 4 3.0GHz and above
- **RAM:** 1GB and above
- **Disk:** 80 GB and above
- **OS:** Linux 2.6 Kernel, Windows 2000 or later

### Deployment Options

Streaming server provides flexible deployment options: (i) as a hosted server, (ii) co-located at content provider's current content production site.

As a hosted server, we take the responsibility for the end-to-end delivery including the bandwidth and availability infrastructure and quality requirements. If co-located, we provide the software license and maintenance. Please contact us for more information.

### Contact us

To learn more about our products, please contact us:

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