



The Helix Mobile Gateway includes both the Helix Mobile Server and Helix Mobile Proxy, the core delivery and proxy-cache components of the Helix Media Delivery Platform.

The [Helix Media Delivery Platform](#) is the cross-platform, multi-format video delivery infrastructure of choice of more than 100 mobile operators worldwide thanks to its reliability, scalability and manageability.

[Helix Mobile Server](#) is the industry-leading digital media server from RealNetworks. It is optimized for delivery of all major file formats over any wireless network. Helix Mobile Server is highly reliable and offers advanced content networking capabilities.

[Helix Mobile Proxy](#) is a streaming media proxy-cache that manages media within the mobile operator network. It enables operators to pull content from the Internet and rebroadcast it with high quality and reduced latency when requested by users. Helix Mobile Proxy minimizes redundant connections for live content to reduce network traffic and improve the end-user experience.

A Powerful Combination When Deployed Together

Helix Mobile Proxy reduces bandwidth consumption by eliminating redundant requests for streamed media from Helix Mobile Server – the origin server.

Helix Mobile Proxy utilizes three media delivery methods and automatically selects the most efficient delivery method based on the type of content requested and the network configuration. Helix Mobile Proxy always maintains an accounting connection for each method.

- **Pull-Splitting**
For live requests, Helix Mobile Proxy splits the stream among the clients who request it. A single live stream is split among client connections reducing network bandwidth and increasing quality of service.
- **Content-Caching**
For on-demand requests, Helix Mobile Proxy caches the streaming media for later viewing by other clients. The cached content resides closer to client request, reducing network bandwidth and increasing quality of experience.
- **Pass-Through**
Helix Mobile Proxy passes the stream from originating server. Although pass-through does not conserve bandwidth, Helix Mobile Proxy still acts as a portal for all streaming media traffic, enabling better monitoring and security.

Additional features of Helix Mobile Gateway:

- Client requests are authenticated at the origin server
- Enforce policies on media access through selective filtering and user authentication



Helix Mobile Gateway

- Mask IP addresses of media players accessing media across the Internet
- Control inbound/outbound bandwidth, securing bandwidth for other applications

Latest Feature Advancements

- **iPhone HTTP Streaming**
Stream video to the growing iPhone audience. Supports HTTP streaming and HTTP streaming with adaptive bit rate to the iPhone and iPod touch.
- **Live Rate Adaptation (LRA)**
Improves overall end-user QoS by automatically delivering the highest bit-rate stream supported by the network at any given time. Seamlessly manages network fluctuations, such as signal strength, bearer handover and network congestion.
- **Ad Enablement**
Monetize video with enhanced ad capabilities. Insert advertisements as pre-roll, post-roll or interstitial clips. Ads are dynamically updatable, live or on-demand.
- **Server-Side Play List (SSPL) Management**
Increase end-user engagement with mobile video content by combining live and on-demand video assets in compelling and interactive ways in a single session. Playlists are dynamically updateable and may be created by content providers, mobile operators or customized by subscribers.
- **Flash Progressive Download**
Deliver Flash Video (.flv) and Flash animation (.swf) from Helix Mobile Server using HTTP progressive download.
- **Fast Channel Switching**
Allows quick changes to the media input for a continuous stream, eliminating the need to set up a separate session for each stream. This brings a more “TV-like” viewing experience to users as they “change channels” between different pieces of video content.

Product Features

- Tailored to the business needs of mobile operators and media companies
- Standards-based 3GPP Rel 5 and Rel 6, RTSP, RTP, SMIL compliant
- Designed to provision live and on-demand content reliably across distributed networks
- Advanced logging and statistics with SNMP v3 support
- Integration with billing, provisioning and customer care systems
- Multi-tiered architecture support to maximize bandwidth and scalability
- Differentiated services, QoS support
- Server-Encoder fault tolerant failover capabilities
- Server-side rate control
- Simulated live streaming
- Future proof with IPv6 support



Helix Mobile Gateway

Universal Media Delivery

The Helix Mobile Gateway works with any mobile network and supports the broadest set of formats, codecs, and protocols.

Formats	Codecs	Protocols
<ul style="list-style-type: none">• Real Media• 3GPP• 3GPP2• Flash• Windows Media• QuickTime• MPEG-4• MP3• SMIL• And more	<ul style="list-style-type: none">• H.263• H.264• AAC• AAC Plus (HE-AAC)• AMR-NB• AMR-WB• And more	<ul style="list-style-type: none">• RTSP• RTP• RBS (Helix-to-Helix)• RDT (Helix-to-Helix)• MMS (Windows Media)• HTTP• HTTP cloaking• HTTP streaming to iPhone• HTTP progressive download

Product Specifications

With Helix Mobile Gateway, you can consolidate multiple media infrastructures onto a single platform to simplify management for your operations and optimize the media experience for your customers.

Operating System	Processor	Memory	Hard Disk
Linux - RHEL 4.0 and 5.0 (Kernel 2.6)*	Intel P4 2.4 GHz	<ul style="list-style-type: none">• 512 MB per processor• 1-4 GB per processor (recommended)	100 MB (install) + Log + Media space
Windows 2003	Intel P4 2.4 GHz	<ul style="list-style-type: none">• 512 MB per processor• 1-4 GB per processor (recommended)	100 MB (install) + Log + Media space
Solaris 10	Ultra Sparc III 1.5 GHz	<ul style="list-style-type: none">• 512 MB per processor• 1-4 GB per processor (recommended)	100 MB (install) + Log + Media space

*Note: Clones of RHEL 5.0 are not officially supported.

About The Helix Media Delivery Platform

The Helix Platform includes all the tools needed to rapidly build and deploy mobile TV services to subscribers, from media encoding and asset authentication through to accounting and playback.

- **Carrier-Grade Scalability**

Helix Media Delivery Platform is specifically designed to scale and deliver content reliably across distributed networks.

- **Bandwidth Efficiency**

Maximize bandwidth efficiency and improve quality of service through multi-tier architecture enabling splitting and content caching.

Helix Mobile Gateway

- **End-To-End Quality and Reliability**
From encoder to server, from server to server or from server to player, the Helix Platform can be configured fully redundantly to provide a proven, fault-tolerant failover delivery service.
- **The Broadest Reach**
The Helix Media Delivery Platform offers proven handset interoperability and is fully 3GPP compliant delivering the broadest reach to any device including, PCs, mobile phones, smartphones, iPhones, netbooks, MIDs and other emerging devices.



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To learn more about the Helix Media Delivery Platform, please visit www.realnetworks.com/HelixPlatform.aspx

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