# RealSystem iQ Revolutionizing the architecture of digital media delivery

#### From Evolution To Revolution

In 1995, RealNetworks® pioneered the world of streaming media delivery. Since then, RealNetworks has continued to set the standard for the way people consume and deliver media over the Internet. The evolution of this medium from yesterday to today has been remarkable. Even so, the phenomenal success of the Internet has rapidly increased network congestion, and magnified the inherent problems of digital media delivery. RealNetworks and our partners have long envisioned a smarter, more robust network architecture that could make today's digital media delivery problems a thing of the past. With RealSystem® iQ, our shared vision becomes a reality.

#### Welcome to the Real World

With RealSystem iQ, RealNetworks is once again revolutionizing the architecture of digital media delivery. RealSystem iQ responds to the needs of Content Delivery Networks, Small Broadcasters, Media Developers, ISPs, and Enterprises by providing best-of-breed solutions to today's media delivery problems. These solutions represent a quantum leap in usability, flexibility, scalability, reliability, and quality derived from the enhanced efficiency and sophistication of RealSystem iQ technology.

RealSystem iQ is not just a software upgrade or the delivery system *du jour*. Its self-aware digital media network architecture makes RealSystem iQ the essential foundation for intelligent delivery of the highest quality media experience to the largest worldwide audience. And, that foundation extends beyond solving today's content distribution problems; RealSystem iQ lays the groundwork for future networks broadcasting to devices beyond the PC.

#### The Power of Neuralcast Technology

Neuralcast<sup>™</sup> Technology is what makes RealSystem iQ revolutionary. Until now, Today's World has been based on an architecture of origin and edge servers, allowing only one-way communication from the server to the player. The effectiveness of this architecture has been limited, especially during heavy use periods and has meant that internet media broadcasting was not as viable as other forms of more traditional broadcast media. That all changes now. Using Neuralcast Technology, RealSystem iQ offers satellite and terrestrial delivery between all servers in the network, essentially turning any point in a network to both an "origin" and an "edge."

Neuralcast Technology is a powerful innovation that aggregates the capacity of many servers into the power of one, creating a self-aware network where all servers talk to each other seamlessly and make instantaneous decisions about capacity sharing, optimization, and redundancy. In simpler terms, Neuralcast Technology allows all types of content to be injected into the network at any point and delivered anywhere. This unprecedented capability means the network will not only deliver a better user experience, but also provide the ability to deliver it to an enormously larger audience.

#### The inherent intelligence of the distributed architecture RealSystem iQ provides:

- up to 100% increase in performance, per server, over current levels
  - capacity fail-over in the event of equipment or network failure
- capacity allocation, dynamically responding to demand

- up to 100% reliability through use of error correcting codes in live stream distribution
- redundant paths from server to server through multi-protocol support
- live distribution that intelligently distributes the content throughout the network
- facilitated and less costly administration through on-the-fly remote configuration and monitoring

### Highest Quality Media Experience

RealSystem iQ, utilizing RealAudio® 8 and RealVideo® 8, offers unequaled Internet media quality that consumers expect. RealAudio 8, incorporating the Sony ATRAC3 format, provides the best sound at the broadest range and CD quality at 64Kbps. RealVideo 8 successfully delivers a high clarity, full-motion video experience that rivals or surpasses VHS-quality (at everyday broadband delivery rates).

#### **RealSystem Proxy 8**

RealSystem iQ also offers the benefits of RealSystem Proxy 8, a dedicated, secure streaming-media proxy cache that enables ISPs and Enterprises to reduce bandwidth requirements for content entering their networks. A key component for any Enterprise or access ISP, RealSystem Proxy 8 improves content management by:

- respecting owners' content rights through a unique server-to-proxy authentication process
- securely storing cached content and splitting live feeds
- dramatically reducing bandwidth costs
- providing efficient management of resources at any point on the network
- insuring end-users the best Internet media experience

# Responding Today, Anticipating Tomorrow

RealSystem iQ supports the businesses of today and tomorrow, and has been engineered to deliver all media types everywhere. Designed with a commitment to industry standards, and tailored to your digital media business, RealSystem iQ provides the environmental independence required today by offering:

- support for 11 operating systems
- extensible, modular architecture allowing for enhancements
- leadership in standards such as RTSP and SMIL
- QuickTime interoperability
- a single platform for carrying over 45 media types, including Flash 4 and MP3

#### All Media Everywhere

With RealSystem iQ, RealNetworks is laying the groundwork for the Internet media experiences of tomorrow. RealSystem iQ's distributed architecture is designed to extend digital media delivery to all media networks and consumer devices beyond the PC. As future applications like video-on-demand, gaming networks, and broadcasting to wireless devices become commonplace, RealSystem iQ will be there to deliver.

## Enter The Real World

The Real World is here. To empower. To facilitate. To embrace the concerns that matter to you most. To optimize your digital media business. RealSystem iQ is the only digital media network architecture essential to the intelligent delivery of the highest quality experience to the greatest worldwide audience. It's the foundation on which the digital media experiences of tomorrow will be built. With RealSystem iQ,