Gain a competitive edge: deliver on-demand enhanced services

The convergence of voice, data and Web applications enabled by new packet-switching technologies has created a significant opportunity for carriers to create and deploy highly differentiated, high-margin communication services. After all, while traditional voice and basic Internet services are generating increasingly lower margins, the demand for enhanced services such as unified messaging, voicemail, conferencing, interactive voice response (IVR), speech recognition and text-to-speech is insatiable. Built for high-speed, high-volume media processing, the Mereon 6000 Media Server enables service providers to effortlessly deploy a variety of high-margin enhanced services on standard PSTN and next-generation networks. That means you can simultaneously offer enhanced services to both existing legacy subscribers and new broadband subscribers, fully leveraging your investments.

Scalable to grow as your market grows

The Mereon 6000 is based on a modular design that allows you to add additional media or speech processing cards without any service interruption to the subscribers. The platform scales from as few as 100 ports up to 10,000 ports in a single 14RU shelf. This makes it one of the highest-density, carrier-class service delivery platforms in the industry.

Carrier-class reliability and availability

The platform’s cell-based backplane, with redundant controller cards, was specifically built to provide the high availability expected from a carrier-class platform. Designed for central office environments, the Mereon 6000 meets or exceeds all applicable NEBS Level 1 – 3 and other carrier requirements. The rack mountable shelf provides dual redundant power supplies and hot-swappable modules for less downtime, higher customer satisfaction, and ultimately higher revenue. Plus, there’s operations management support for provisioning, performance, alarms and security management.

Based on open standards

The Mereon 6000 Media Server supports all open and standardized protocols, and can be controlled by any softswitch or application server. The system is also designed to facilitate implementation of third party applications without additional changes to the software framework and promotes customization for enhanced services.

Capacity

• Media: Up to 10,000 channels
• Storage: Eight hours of internal storage, unlimited external storage
• Conferencing: Up to 1500 participants per conference call

Signaling Protocols

• Control: MGCP (RFC3435) PacketCable NCS v1.0, H.248 (Megaco), SIP (RFC 3261) and extensions, HTTP and VoiceXML 2.1
• PRI*: Q.931
• AIN*: GR-1129-CORE, SR-3511
• SALT*
• MRCP 1.0R
• XML-based video layout definition language
Services

- QOS: TOS, DiffServ*
- Overload control: ETSI GOCAP*
- SLA: Partitioning

Tone & Announcements

- Fixed tones and announcements, stand alone and programmable embedded variables, and IVR
- Support for MGCP and H.248 packages, PacketCable BAU and AAU, H.248.9 (AAS), H.248.7 (Generic Announcement), H.248.8 (Error Code), H.248.11 (Overload Control), H.248.14 (Inactivity Timer) packages
- Music-on-hold: unicast and multicast*
- Audio/video streaming* using RTSP* (RFC2326)

Mixing/Conferencing

- Independent, automatic or manual gain control on each port
- Speaker/talker identification
- Loudest N and preferred speaker
- Audio control: Lecture mode, mute/unmute
- Up to 1500 active audio participants and 300 passive audio participants
- Sidebar and whisper channels
- Audio mixing with full transcoding and tone clamp support
- Video mixing with full transcoding*, rate and size conversion
- Continuous presence
- Fixed, dynamic layout change*, per-participant layout*
- Voice activated video switching
- Up to 8 (16*) video participants in a single conference
- Video lecture mode
- Hide/Show
- Video conference recording without external hardware*
- Active speaker highlight
- Customizable foreground/background images
- Support external Video play (.3gp file) in video conference*
- XML-based video layout definition language

Record/Playback

- Audio and video record/playback to .wav, .avi*, .quicktime*, .3gp, .3g2*
- Automatic transcoding, rate and size conversion between compressed audio/video recording formats and audio/video codecs
- VCR Control (stop, pause, speed control, etc.)

Speech Recognition

- Host-based engines, MRCP controlled
- Scansoft OSR 1.0, 2.0, 3.0
- Nuance 8*
- Speaker independent and speaker verification*

Speech Synthesis

- Host-based engines, MRCP controlled
- Scansoft RealSpeak 3.0, 4.0
- Nuance Vocalizer 4*

CALEA/Lawful Intercept

- Call content IAP and DF compliant to PacketCable, IP Cablecom, Eurocable, J-STD-025B, T.678, and ETSI H13*

Audio/video features

- Voice activity detection
- Silence suppression
- Comfort noise generation
- Fax: T.4*, T.30, T.38
• Tone: DTMF, inband and RFC2833 tone detection/generation
• VoIP: RTP/RTCP (RFC 1889)
• Video: H.263 (RFC2190), H.264*, MPEG 4 simple profile level 0*, at CIF/QCIF resolution, with line rate 64 kbps to 1.5 Mbps, and up to 30 fps
• Languages: English, Mandarin, Japanese, French, Spanish, German, Russian, Portuguese, Hindi*, Dutch, Swedish, Malay, Tamil, Italian, UK English, Arabic, Korean, Thai, Bengali, Farsi, Vietnamese, Polish, Czech, TDD/TTY

Redundancy
• Redundant backplane, power and fans
• Controller: 1:1 Hot Standby (no call drop)
• Media: N+1 Hot sparing with call re-build
• Interfaces: 1:1 or 1:N, depending on interface
• Hitless Upgrade

Network management
• Interfaces: RS-232, Telnet, FTP, HTTP*, SNMP v2c and v3, command line interface (CLI), Web-enabled GUI*
• Security:
  – IPSec, SSL*, TLS*
  – SSH-1 and SSH-2
  – IKE, Kerberos*, PKINIT*

Interfaces
• Ethernet: 16 100BaseT, 4 Gigabit*
• IPv4, IPv6*, UDP, SCTP* and TCP*
• Alarm: LEDs and dry relay contacts

Development Tools
Java-based MCI (Media Control Interface) Library for rapid development of audio & video media-rich applications

Certifications
• Reliability: NEBS level 3
• Emissions: FCC Part 68
• Safety: CSA 22.2 NO. 950 - 95, UL 1950, EN 60950
• EMI: FCC Part 15 Class A, EN55022
• Telecom: GR-63-CORE, GR-1089-CORE, GR-487- CORE, GR-2914-CORE, TR-NWT 000078

Physical dimensions
• 4 RU, 24.5"Hx17.5"Wx18.2"D

Environment
• Power: -48V DC
• Temperature: 0ºC to 55ºC (operating)
• Humidity: 20% to 80% (non-condensing)

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Movius provides solutions for interactive mobile media and messaging that enable service providers, media companies and advertisers to offer a new level of personal interaction to their customers. Discover how Movius can help you drive new revenue. Visit our website at http://www.moviuscorp.com/ to learn more.