

Hammer FX-IP Features

Interfaces, Signaling and Media

- Network Interfaces
 - Rack Mount: (4) 10/100/1000 Ethernet ports
 - Software-Only Configurations: Up to (4) 10/100 Ethernet ports
- Channels and Capacity
 - Real voice prompts (provided or user-supplied)
 - 2U Rack Mount
 - T.38 Real Time Fax over IP (SIP and NCS)
 - Up to 288 channels with media, 500 signaling only
 - Capacity up to 100 cps, call rate dependent on protocol and application
 - Software-Only Configuration
 - Up to 4, 10, or 60 channels with media and signaling
 - Call rate dependent on number of channels, protocol and application
- Flexible System Configuration and Control
 - Seamless integration with Hammer TDM/IP functional and load test systems
 - Local and remote clients, Command Line Interface
- Signaling Protocols
 - Supports SIP (including IMS UE), MGCP, H.323, Cisco Skinny (SCCP), PacketCable NCS
 - UDP and TCP transport protocols
 - Mixed-protocol configurations supported
 - Highly configurable message content and sequence

Test Creation, Execution and Monitoring

- TestBuilder: The Fastest Way to Build Simple Tests
 - Industry-standard ladder diagram and call flow icons for intuitive test creation
 - Create sending and receiving side tests with no script generation required
 - Predefined tests for faster and easier testing out of the box
- Enhanced Hammer Visual Basic: Maximum Flexibility and Control
 - Flexible, comprehensive scripting environment
 - Import and modify TestBuilder scripts
 - Support for conditional branching allows users to customize test scripts
 - Import previously developed HVB scripts from other Hammer test platforms
- Signaling Editor: Customize Message Content and Sequence
 - Flexible, state-based architecture provides comprehensive negative test capability
 - Develop call flows specific to your application and devices under test
 - Create your own messages, or customize existing ones
 - Import messages from Hammer Call Analyzer™ or third-party protocol analyzers

System Options

- Voice Quality Test Suite
 - Supports industry-standard PESQ and PAMS scoring algorithms
 - Comprehensive, ITU-compliant prompt set — complete phrases use real human speech
 - VQScope simplifies degradation analysis by comparing prompt sent with prompt received

System Requirements and Specifications

- 2U Rack-Mount Chassis Configuration
 - Dual 2.33 GHz Xeon CPUs (Dual-Core), 1333 MHz FSB
 - Dual 250 GB SATA hard drives (RAID 1)
 - 2 GB DDR2-667 RAM
 - Windows 2003 Server
 - Dimensions: 3.44"(H) x 19"(W) x 27.75"(D)
 - Power (50/60 Hz): 100-127 Vac @ 12A max, 200-240 Vac @ 6A max
 - Includes rack mounting hardware

- Media Capabilities
 - G.711 A-law and μ -law; G.729AB, G.726, and G723.1 (5.3 and 6.3 kbps)
 - Tones and DTMF (including RFC 2833)
 - GSM-AMR, EVRC-0 (SIP, MGCP, NCS, H.323)
 - Up to 50 channels video (SIP)
 - MPEG-4 Simple Profile, Level 0; QCIF resolution @ 15 fps max
 - H.263/H.263+ Profile 0, level 10; QCIF resolution @ 15 fps max
 - H.263/H.263+ Profile 0, level 30; CIF resolution @ 30fps max
 - Optional Nuance speech recognition support
 - Individual channel control for all media features including play and record

- Configurable Test Scheduling and Execution
 - Test scheduling options including traffic profiles and multiple call flows
 - Per channel, mixed media test scheduling
 - Customizable phone number assignment
 - Run multiple tests simultaneously
- Real-Time Monitoring and Reporting
 - Real-time monitoring and reporting of call statistics and errors
 - Monitor activity on all channels or on a single channel
 - Comprehensive report set and data management
 - Predefined test reports for simplified test analysis
 - Export test data to other applications for customized user reports

- Advanced Speech Recognition
 - Integrated Nuance speech supports automated testing of speech-based IVRs
- Hammer Mega-Controller
 - Manage up to 10 different Hammer systems from a single point of control
 - Consolidates test data management, scheduling, and reporting

- Minimum Requirements for Software-Only Configurations
 - Intel Xeon, Pentium 4 520, or Pentium M 745 CPU
 - 40 GB hard drive
 - 1 GB RAM
 - Windows 2003 Server or Windows XP
 - 10/100 Ethernet NIC



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