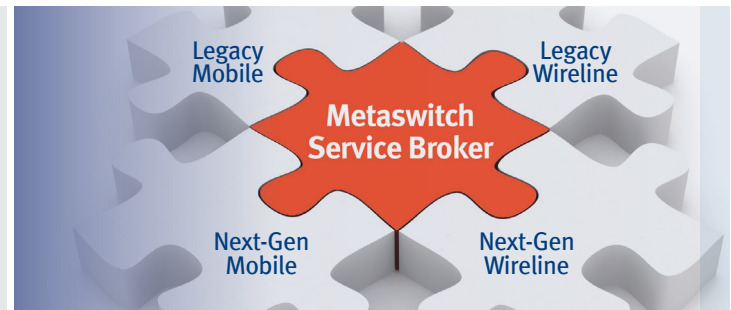


# SERVICE BROKER TECHNICAL SPECIFICATIONS



## FEATURES

### MEDIA FUNCTIONS

#### VOICE CODECS

- G.711, G.723.1, AMR
- G.726, G.727
- G.729A/B, GSM-FR

#### ECHO CANCELLATION

- G.168 compliant: 32, 64 & 128 ms tails

#### ANALOG AND FAX MODEM

- Real-time fax over IP
- T.38 compliant group 3 fax relay or fall back to G.711

#### DTMF

- TDM or IP side Call Progress Tones
- DTMF / MF Detection and generation
- DTMF over RTP per RFC 2833

#### MEDIA SERVER FUNCTIONS

- 10 MB On Board Announcement Storage:  
20 minutes of G.711 or 200 minutes of G.723.1
- Streaming record / playback with web server via HTTP
- Conferencing: Six-party conferences
- Media Gateway Control: H.248 Megagrow

#### VOIP STANDARDS COMPLIANCE

- RTP and RTCP per RFC 1889 and 1890 per RFC:3261: Session Initiation Protocol (SIP)

### SIGNALLING PROTOCOL SUPPORT

#### PSTN

- ISDN PRI: Q.931
- CAS: MFC/R2 numerous country variants
- MF-R1 wink start, delay dial, immediate start, programmable
- ISUP variants

#### IN

- G.168 compliant: 32, 64 & 128 ms tails • Any to any services protocol support
- TCAP: MWI, INAP, IP, WIN, CAMEL, IS826, 8XX, LNP, CNAM, MAP

#### IP

- IP SIP
- H.323
- T.38 compliant group 3 fax relay or fall back to G.711

### CALL CONTROL FEATURES

#### CALL MODEL

- ITU Recommendation Q.1204 IN CS-2 Basic
- Call State Machine

#### ENHANCED CALL ROUTING

- Connect any endpoint to any endpoint (IP or PSTN)
- Dynamic or user defined route selection
- Enhanced call route advance

#### CONGESTION CONTROL

- Provisionable thresholds for congestion control based on CPU utilization

#### CAPACITY

- Up to 5K VoIP to VoIP or 10K VoIP to PSTN simultaneous calls
- 1M BHCA in single or distributed multi-chassis systems (assumes a typical application)

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## INTERFACES

### APPLICATION CONTROL OPTIONS

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#### SIP

- Call Control
  - Redirect
  - Notify
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#### CCXML / VXML, PARLAY X, WEB SERVICES

- Per version 1.0, January 2005
  - Terminal status & location, SMS
  - Full Call Processing API support
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#### API

- Multiple levels of call control
  - Any level of intervention from monitoring to detailed control of all call states and transactions
  - Discrete management and call control functions
  - Supports redundant links to applications with failover transparent to the application
  - SDK (Software Development Kit)
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### MANAGEMENT INTERFACES

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#### INTERFACES

- SNMP V2: Standard MIB-2, RTP MIB
  - CLI
  - HTML GUI
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#### API

- Application Control and Management
  - API with SDK and sample applications
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#### REPORTS

- Call records
- Performance monitoring data
- IP and PSTN statistics
- SNMP Agent: alarm traps and statistics

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## HARDWARE

### CURRENTLY CERTIFIED OPTIONS

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#### SERVERS (LINUX MONTAVISTA 3.1)

- Dell PowerEdge 2950 Dual 3.0GHz, Dual-Core Xeon—Redundant AC Power 4GB RAM, (1) 146GB SAS HD—24X CDRW/DVD
  - Dell PowerEdge 2950 Dual 2.66GHz, Quad-Core Xeon—Redundant AC/DC Power 4GB RAM, (1) 146GB SAS HD—24X CDRW/DVD
  - HP DL380 G5 Dual 3.0GHz Dual-Core Xeon—Redundant AC/DC Power 4GB RAM, (1) 146GB SAS HD—RAID 0/1, DVDRW
  - HP DL380 G5 Single 3.0GHz Dual-Core Xeon—Redundant AC Power 2GB RAM, (1) 73GB SAS HD, DVDRW
  - 2RU PCI Server NEBS—AC/DC -48VDC Dual 3.2 Xeon, 2G RAM, 73G HD, DVD-ROM
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#### I/O CARDS

- AudioCodes PCI I/O Cards: 1,2,4, or 8 Spans
  - AudioCodes cPCI I/O Cards: 2,4,8, or 16 Spans
  - Interphase PMC SS7 Card: 4 Port T1/E1/J1
  - Interphase PCI SS7 Card: 4 Port T1/E1/J1
  - Sangoma PCIExpress Card: 2, 4, 8 Port T1/E1
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#### CHASSIS

- 1RU PDSi, 2/2 Slots, 32 Spans, 1 AC/DC Power Supply
- 4RU PDSi, 8/6 Slots, 96 Spans, 3 AC/DC Power Supply
- 12RU PTI, 21/16 Slots, 256 Spans, 8 AC/DC Power Supply