NaturalMediaGW™ - Media Gateway

NaturalMediaGW™ is a state of art Voice and Video over IP gateway converting TDM-based G.711 voice and 3G-324M video signals to IP-based streaming packets between PSTN and SIP network

- **PSTN Protocol Support**
  - ISDN PRI, SS7 ISUP (via **NaturalSS7™** signaling gateway)
- **3G-324M Standards**
  - Compliant with 3GPP 3G-324M standards TS.26.911, TS.26.111, TS.26.110. TS.26.235 Release 5, TS.26.244
  - H.324 Annex C (3G-324M), H.245 version 6, H.223 Annex B (Level 2)
- **Media Processing**
  - Support both voice and 3G video calls
  - DSP-based H.223 Multiplexing
  - Pass-through AMR / G.723.1 audio and H.263 /MPEG4 video streaming
  - Audio Transcoding: seamless AMR to/from G.711
  - Support AMR, G.711 (A-law, µ-law), G.723.1, G.729A, H.263, MEPG-4
  - Lip-synch play/record
  - Audio and Video silence detection
  - File format supports 3GP Basic Profile
  - Audio jitter buffering
  - Video burst absorption and re-ordering
- **User Indications**
  - H.245 UII DTMF detection / generation
- **IP Interface**
  - Audio and video transport over RTP/UDP
  - RFC 3550 and RFC 3551 (RTP and RTCP)
  - RFC 3016 (for MPEG-4)
  - RFC 3267 (for AMR)
  - RFC 2190, RFC 2429 (for H.263)
  - RFC 2833 (DTMF)
  - IP session setup : SIP
- **OAM Features**
  - **Graphic OAM User Interface**
    - Block / unblock selected channels or trunks
    - Real-time trunk and channel status monitor
    - Status indications include inbound, outbound, video call, voice call, E1 status (synch / out-of-synch), blocked, idle and so on
  - **Keep-Alive Mechanism**
    - Support heartbeat with SS7 Signaling GW
    - Support heartbeat with Media Servers
  - **Alarm Notifications**
    - SMS/Email Alarms including E1 out-of-synch / synch-recover, Media Server heartbeat check timeout, SS7 SG heartbeat check timeout, Media GW start-up / shut-down, media processing board failures and so on
- **Call Detailed Record**
  - Comprehensive caller, callee, call duration and release causes
  - Timestamps for call arrival, answered, release
  - Inbound / outbound indication