

NaturalMediaServer™ - Media Server

NaturalMediaServer™ is an IVVR, Interactive Voice and Video Response, system which handles call flow, play multimedia prompts (voice and video), detect user's input (DTMF or speech), record multimedia inputs, interact with backend business logics.

▶ Service Creation Environment

- ◆ GUI-based drag-and-drop interactive multimedia service creation environment
- ◆ Online update service flow without terminating services
- ◆ Full-featured emulation environment for pre-alpha service logic test

▶ Multimedia Processing

- ◆ Simultaneously supports voice and video calls
- ◆ State-of-art **NaturalBMPEncoder™** technology supports dynamical menu generation
 - Real-time dynamic text overlay features
 - Support H.263 and MPEG4
 - Separately play/record audio and video
- ◆ Host-based audio conferencing MCU
 - Audio conferencing up to 30 parties
 - Support G.711 and AMR
 - Support silence detection
- ◆ Supports 3GP multimedia record and playback
- ◆ Supports hybrid combination of circuit-switched calls (voice and video) and packet-switched calls (e.g. SIP voice and video calls).
- ◆ Supports bit rate adaptation and burst video absorption to synchronize video and audio record and playback
- ◆ Built-in basic Text-To-Speech features such as date, time, numerical digits, money announcement

▶ Backend Access Capability

- ◆ Support HTTP, UDP, TCP connectivity
- ◆ Support FTP, Telnet, SMTP connectivity
- ◆ Support ODBC Database connectivity

▶ Optional ASR Support (needs **NaturalASR™**)

- ◆ Adopting RTP (Real-time Transport Protocol) for voice streaming between the Media Server and our ASR server called **NaturalASR™**
- ◆ In addition to ASR-based (server-side) endpointing capability, we also support front-end (client-side) endpointing function by adopting NaturalTel's state-of-art endpointing technology named **NaturalEndpointer™**.
- ◆ Support simultaneous handling of recognition transactions for multiple ASR engines

▶ Optional TTS Support (needs **NaturalTTS™**)

- ◆ Adopting RTP for voice streaming between Media Server and our TTS Server called **NaturalTTS™**
- ◆ Support handling of multiple commercial TTS engines

▶ OAM Features

- ◆ Support auto-restart with keep-a-live watchdog
- ◆ Support comprehensive Call Detail records
- ◆ Support GUI-based real-time channel status display

▶ Call Detailed Record

- ◆ Comprehensive caller, callee, call duration and release causes
- ◆ Timestamps for call arrival, answered, release
- ◆ Inbound / outbound indication