

BT-HMP

Multimedia Processing for Next Generation

Overview

BT-HMP is a host media processing (HMP) solution developed by Bridgetec. It offers higher performance at lower costs compared to its competitors.

BT-HMP is a software library for developing voice, video, and fax services. The optimized architecture enhances performance through efficient resource management, and the intuitive API allows the user to create audio and video contents quickly and easily.

Benefit

✔ High performance

- Has better performance than the competitors on same hardware specifications

✔ Easy to use and Intuitive API

- Able to select the optimal hardware settings for applications regardless of hardware form factor
- Supports Linux and Solaris
- Supports Intel, AMD, and SPARC processors
- Standard protocol support and intuitive API allows fast time to market

✔ Low total cost of ownership

- Reduction of cost through providing voice, video, and fax services on a single system.
- low development cost than solutions based on DSP board by eliminating unnecessary hardware inventory

References



Multimedia Processing for Next Generation Upgrade Your Solution with Bridgetec HMP

Features

- RTP/SRTP : Supports RTP for audio and video delivery over IP / Supports SRTP for encrypted audio and video delivery
- Audio Codec : supports g.711 alaw/ulaw, g.726, vox, linear PCM, g.723.1, g.729 codecs
- Video Codec : supports h.263, h.264, mpeg4 codecs / supports qcif, cif image size / supports 5~30 frame rate
- QoS : dynamic jitter buffer, PLC, FIR, RTCP feedback, video bitrate adaptation
- Play : Supports native/transcode play, and memory/file play, and voice/DTMF barge-in
- video rendering : text/graphic overlay, horizontal/vertical scroll, paging, word wrapping, DTMF echo
- Record : Supports native/transcode record and memory/file record. Pre-speech buffer function available.
- Switch : Supports native/transcode switch. (Converts in-band and rfc2833 DTMF)
- DTMF : In-band/rfc2833 detection/generation
- Audio Conference : n-1 mixing, play/record for conferences, DTMF clamping, active talker detection, AGC
- Video conference : planned
- Fax : Supports T.38 fax. ECM/non-ECM, v.17 14400 bps

System specifications

- Minimum system requirements
 - OS : Linux kernel 2.6(equivalent to Redhat ES4) or above, or Solaris 9 or above
 - CPU : Intel Pentium4 or equivalent AMD CPU, supporting SSE commands
 - Memory : 256Mb
 - Hard drive : 500Mb space required
- License
 - RTP : number of RTP endpoints
 - Conference : number conference participants
 - g.711 : number of g.711 codecs
 - g.723.1 : number of g.723.1 codecs
 - g.729 : number of g.729 codecs
 - H.263 : number of h.263 codecs
 - H.264 : number of h.264 codecs
 - Mpeg4 : number of mpeg4 codecs
- Performance
 - Test hardware : Quadcore Xeon L5408 2.13G * 2
 - Test OS : Redhat AS4

Codec	Number of channels	CPU usage
g.711	960	21%
g.723.1/g.729	720	57%
h.263	Qcif 15fps, 480	70%
h.264	Qcif 15fps, 240	67%
mpeg4	Qcif 15fps, 480	72%