**iMeet Documentation Phase-2**

**Objectives:** Documentation Phase-2 includes the elaboration of Addons in iMeet Voice-Video part.

**Addons used for Voice-Video portions in iMeet**

|  |  |  |  |
| --- | --- | --- | --- |
| Addons | Basic Functionality | Why we use it in iMeet | Status |
| SRTP | * RTP defines a standardized packet format for audio and video over IP network. SRTP that incorporate enhanced security feature. * Responsible for high throughput in communication environment that includes wireless and hard wired device. | * Voice and video , SRTP is must. * Secure the audio and video packet from middle man access in network(man in middle attack). |  |
| OpenSSL [1.0.1.c] | * OpenSSL is an open-source implementation of the SSL and TLS protocols. * Implements cryptographic functions and provides various utility functions. | * SRTP use OpenSSL for number of cryptographic algorithms (AES etc.) |  |
| Boost | * Boost C++ libraries based on C++ standard. |  |  |
| JNI swig | * Java Native Interface (JNI) is a programming framework that enables Java code running in a JVM by native applications and libraries written in other languages such as C,C++ and assembly. | * To combine FreeSWITCH( in C) and Red5( in Java) * Use in iMeet -mini (clientend) * Used in meeting manageability. |  |
| speex and speexdsp | * Speex is a codec patent-free voice compression format. * Speexdsp is used to mix up multiple voice. | * multiple user's voice mix up during conference time. |  |
| YASM [1.2.0] | * Assembler need to compile different codec ( video codec) |  |  |
| VPX | * Video library |  |  |
| YUV  [video scaling] | * Video scaling. | * Video resizing . |  |
| OPUS | * audio codec . | * High bit rate codec. ( HD voice). |  |
| opencore-amr | * Voice codec. * Used for mix up narrow band and wide band. * narrowband bandwidh |  |  |
| Libogg | * video recording library | * video recording . |  |
| Libvorbis | * video recording library | * video recording . |  |
| Libtheora | * video recording library | * audio codec |  |
| GSM | * audio codec. |  |  |
| g729 gen Codec | * audio data compression algorithm |  |  |
| iLBC | * Voice codec where bandwidth fluctuate frequently. | * voice codec for low bit rate bandwidth. |  |
| x264 | * Video codec library * encoding video streams into the H.264/MPEG-4 AVC format. | * video streaming . |  |
| FFmpeg | * FFmpeg is a complete, cross-platform solution to record, convert and stream audio and video | * video streaming. |  |
| Libfreetype | * used for font rendering. | * used in font rendering. |  |
| Libfaac | * used with FFmpeg for audio encoding. | * used with FFmpeg |  |
| openal-soft | * used for better (3d) audio. | * better audio. |  |
| OpenOffice/LibreOffice( > 4.0) | * used for document file conversion. | * file conversion, edit (.doc, .xls etc.) format. |  |
| AEC | * Acoustic echo cancellation * The term echo cancellation is used in telephony to describe the process of removing echo from a voice communication in order to improve voice quality on a telephone call. |  |  |