

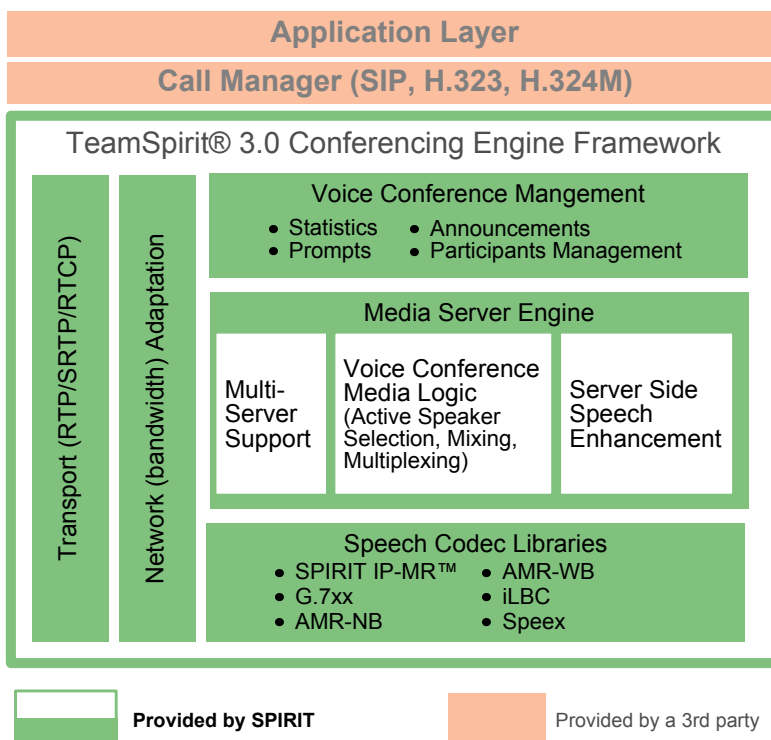
TeamSpirit® 3.0 Conferencing Engine

SPIRIT delivers a proven media conferencing technology to help application developers create reliable voice/video conferencing systems. The technology has excellent performance and scalability and may be used to arrange conferencing sessions counting tens to thousands of participants.

TeamSpirit® Conferencing Engine provides up to 20 times (!) higher server capacity than existing solutions, achieving up to 8000 simultaneous HD VoIP sessions per one quad-core Intel-based conference server. At the same time, the engine provides the best voice quality that competitive solutions simply can not match.

Overview

Voice quality. The quality formula of SPIRIT's conferencing engine is simple. There is no delay, transcoding, and noise aggregation on the server side. TeamSpirit includes patent-free SPIRIT IP-MR™ codec, which payload is currently being standardized by the Internet Engineering Task Force (IETF). The codec is specifically optimized for voice transmission over IP networks, robust to packet loss and ideally suits for TeamSpirit's smart multiplexing.



Benefits

- Very efficient traffic usage
- High scalability for massive deployment
- Low server CPU requirements
- High voice quality

Key Features

- Distributed media processing
- Sophisticated active speaker selection
- Patent-free IP-optimized SPIRIT IP-MR codec
- Individual user channel control
- Support for dial-up and WiFi connections
- Wideband speech

Applications

- Conferencing systems
- Collaboration tools
- Softphones with conferencing service

Availability

Server

- Linux
- Windows

Client

- Windows
- Windows Mobile
- Linux
- Linux Mobile
- Mac OS X
- Apple iPhone OS
- Symbian

Software-based media processing gives solution developers freedom to choose a server platform and speed up the addition of new features.

Scalability. SPIRIT Multipoint Conferencing Engine achieves 5000 concurrent connections on a quad-core Intel-based server. With TeamSpirit multi-server support, a distributed conferencing solution may be implemented to achieve even greater scalability.

It includes a sophisticated active speaker selection mechanism built on a careful analysis of prosodic speech characteristics. It does not have the traditional limitations of "The Loudest" and "First Come First Served" and further delivers on conferencing speech quality, making the user experience as natural as face-to-face communication.

The TeamSpirit has independent user bandwidth/channel control features that exercise differentiated voice quality management. Even dial-up and WiFi users are supported.

Specifications

Audio Codecs	<ul style="list-style-type: none"> ▪ SPIRIT IP-MR™ ▪ GSM AMR NB, GSM AMR WB* ▪ iLBC ▪ G.711, G.722, G.722.1, G.723.1, G.726, G.728, G.729 AB 		
Media Transport	<ul style="list-style-type: none"> ▪ RTP/RTCP, HTTP 		
Signaling	<ul style="list-style-type: none"> ▪ SIP (RFC 3261)** ▪ Jingle*** ▪ SIP Media Services (RFC 4240) ▪ Any proprietary signaling protocol 		
Telephony Algorithms	<ul style="list-style-type: none"> ▪ DTMF over RTP in-band (<i>ITU-T Q.23</i>), <i>out-of-band (RFC 2833)</i> 		
Network Optimization	<ul style="list-style-type: none"> ▪ Adaptive Jitter Buffer ▪ Automatic Rate Selection ▪ Frame Packing ▪ Packet Loss Concealment (ITU G.711 annex I compatible) ▪ RTCP Statistics & Logging 		
Client Side Functionality	<ul style="list-style-type: none"> ▪ Full-duplex ▪ Acoustic Echo Canceller ▪ Anti-howling Control ▪ Auto Echo Cancellation Mode Detection ▪ AGC, CNG, VAD ▪ Noise Canceller ▪ Non-linear Processor ▪ PC Clock Drift Control ▪ Sample Rate Converter (Resampler) ▪ Sound Card Control 		
Server Side Functionality	<ul style="list-style-type: none"> ▪ Multiplexing and mixing modes support ▪ Prosodic Active Speaker Selection – PASS ▪ Active Speaker Selection – FCFS ▪ Participant rights (speak/ listen) ▪ Mute any participant ▪ Recording and Playback ▪ Codec transcoding and rate matching 		
Supported OS	Server <ul style="list-style-type: none"> ▪ Linux Red Hat 9 ▪ Windows 2K/XP 	Client <ul style="list-style-type: none"> ▪ Windows 98/2K/XP, Vista, Windows 7 ▪ Linux ▪ Mac OS X 	Mobile Client <ul style="list-style-type: none"> ▪ Apple iPhone OS ▪ Windows Mobile 5.0, (including SmartPhone Edition), 6.x ▪ Windows PocketPC 2003 ▪ Symbian ▪ Linux*

* Call for details

** Functionality is available through partners

*** Module is licensed from SPIRIT separately

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