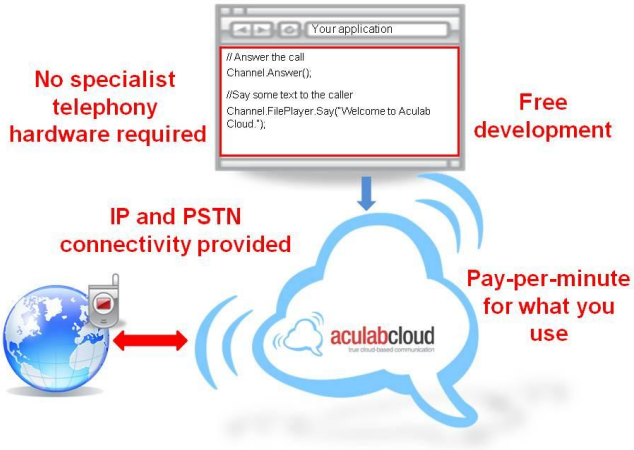
Cloud-based telephony resources

Aculab Cloud presents programmable telephony resources in a cloud-based platform. Through the use of simple high-level APIs, Aculab Cloud makes it easy to create applications that make, receive and interact with voice and fax calls, and send/receive SMS messages – and all that without any specialist telephony hardware or software.

Aculab Cloud leverages Aculab's extensive telephony experience and expertise by combining complex technologies into a powerful, flexible and easy to use platform that offers a cost effective way to build telephony applications or add telephony features to customer solutions.



Feature summary

- Inbound and outbound SIP service
- Inbound and outbound international phone calls
- Inbound and outbound SMS messaging
- Text-to-speech (TTS) – more than 20 languages/dialects
- Full call recording
- Call transfer
- Voice prompt playback and recording
- Call progress analysis (live speaker detection and leave-a-message on answering machine)
- DTMF (keypad tone) detection and barge-in
- Highly scalable multi-party conferencing
- WebRTC
- Fax support
- Extensive Call diagnostics and Call Data Records (CDRs)

Benefits

- No contracts, no set-up fees, just pay-per-minute for what you use
- Inbound and outbound service provision
- Complete control over application programs and data security - use whatever libraries, files or databases you wish
- No specialist telephony hardware or software required
- No need to understand how the telephone network works
- Full scalability of the Cloud - no need to provision for any peak usage, we take care of that for you!
- Free developer account, developer support and access to code samples and tutorials

Target applications

- Voice/SMS broadcast and alerting services
- Conference servers
- Contact and call centres
- Outbound diallers
- IVR self-service and voice portals
- Voicemail
- Quality monitoring and testing
- Unified communications
- Fax services

Technical summary

Function	Aculab Cloud function description
APIs	**UAS method** – .NET, Python, Java; **RESTful API wrappers** – .NET, Python, Java, Ruby, PHP
Audio / voice channel capacity	Full scalability in the cloud.
Inbound / outbound phone calls	Aculab Cloud provides you the ability to receive calls from the PSTN as well as place calls on the PSTN using Aculab as your provider, or specific providers of your choosing.
Inbound / outbound SIP	Aculab Cloud provides you the ability to receive calls from SIP as well as place calls to a SIP endpoint of your choice.
Call media	Call media is transported using the Real-time Transport Protocol (RTP). Within RTP, G.711 A-law and G.711 mu-law audio codecs, and RFC2833 DTMF digits are supported – all sampled at 8000Hz. G.729 is available on request[1].
SMS messaging	Inbound and outbound long code SMS; same numbers support both voice and SMS services
WebRTC	The Aculab Cloud WebRTC interface provides a way to use WebRTC to connect users to an Inbound Service e.g., conferencing. A JavaScript class, AculabCloudCaller, abstracts a browser's WebRTC APIs and handles call setup and tear down.
TTS	Aculab Cloud supports Text-to-Speech (TTS), allowing quick and easy application prototyping and, more generally, the ability for your applications to 'speak' text to users. Many languages are available, with options for male and female voices.
Call progress analysis (CPA)	Robust and accurate live speaker detection (e.g., differentiating between a human response and that from an answering machine), tone and call progress (ringing, busy/engaged, fax, SIT etc.) detection.
Record	Prompts and messages can be recorded and stored as media files via a highly reliable, distributed storage system.
Playback	Media files can be accessed and played, with or without barge-in, for example playback of messages and menu options.
Call transfer	The ability to transfer a call is provided in the form of retrievable transfer. This re-routes the audio to another destination, but maintains control over the call, allowing it to be retrieved. This allows a caller to 'opt out' of an automated system and be switched to e.g., an operator or agent.
Call connect (tromboning)	Call connect or tromboning allows additional features such as DTMF recognition during connected calls - e.g., the original called party dialling # to drop out of the call, interact with the system and then drop back in.
Media files	Aculab Cloud can access and play media files via a highly reliable, distributed storage system providing, for example, greetings, menu options and acknowledgments.
DTMF	Collection of DTMF digits, terminated by programmable timeout, character count, or terminating character. This allows voicemail menus to be navigated and options selected.
SSML	The TTS methods support the embedding of Speech Synthesis Markup Language (SSML). This is a very flexible way of adding expression to how your text is spoken. Further details on the SSML features and voices supported are available in the Aculab Cloud TTS documentation.
Fax	T.30 fax termination/relay protocol up to V.17 speeds; call progress monitoring (incoming and outgoing); Automatic detection of fax calls; dynamic switching between fax and voice within a call; Group 3 TIFF image file manipulation library; supports multiple page formats and properties; application control of individual pages; supports unlimited page length and header/footer formatting; supports fax on demand – polled mode.
Conferencing	Party type - TalkerAndListener or Listener, ringback tone, lifetime control, beep on entry, exit on DTMF digit, mute on DTMF digits, on entry media, on exit media, prefix media.

Note 1: please contact your Account Manager for more information.