
Getting started on Aculab Cloud

What you need to know about developing with Aculab Cloud



Introduction

Aculab Cloud is a global cloud API platform that enables you to simply add voice calling, fax or SMS messaging to any web application using simple, high-level APIs. There's no need for you to have any specialist telephony equipment, Aculab Cloud takes care of the telephony for you.

Your telephony-enabled applications are hosted on your servers, and interact with the Aculab Cloud telephony resources. Using the APIs you can quickly develop applications such as message broadcasting, conference calling, click-to-call and IVR systems.

Aculab provides two API methods for interacting with Aculab Cloud:

1. User application server (UAS)
2. REST API.

Both APIs provide access to the same range of telephony features, and you are free to choose between either API, depending on which one meets your needs.

In addition, both API types are supported with a wide range of API wrappers in a number of common languages, such as Python, PHP and Java. Using these common language wrappers allows your application to use other 3rd party libraries when additional features, such as database access, are required.

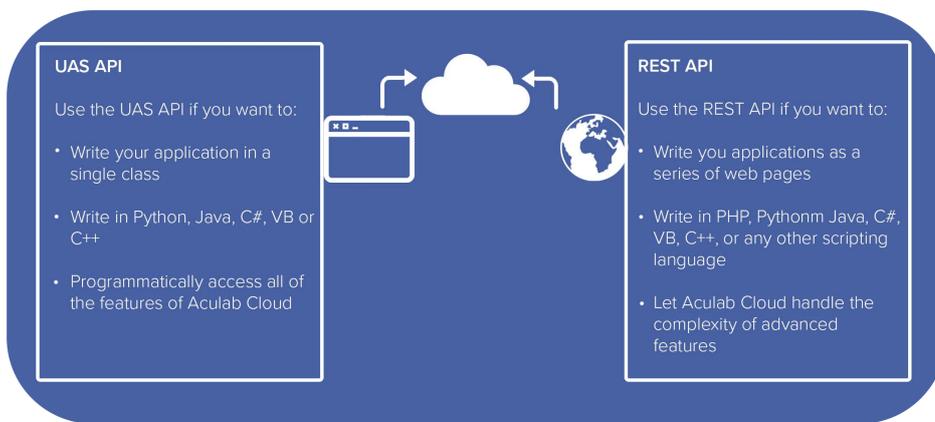
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First Steps

1 — Decide which type of API to use

Aculab provides two methods of interacting with Aculab Cloud.



This can be changed later if you wish. The following page on the Aculab Cloud website might help with your choice: https://cloud.aculab.com/documents/api_comparison

2 — Sign up for a free developer account

Sign up here for a free developer account on Aculab Cloud: <https://cloud.aculab.com/login/enrol>. Once you've created a developer account, a detailed quickstart guide for UAS or REST will be available.

3 — Set up test numbers

Aculab provides developers with a range of free to use test numbers for application testing. Other alternatives would be a SIP endpoint or to use WebRTC. Adding credit to your account will enable you to purchase your own inbound DID number to use with your application.

4 — Set up hosting

Decide where to host your applications and UAS code (if you choose that option). This could be one of your own servers or a web server from a cloud hosting company.

5 — Get coding!

You're now ready to begin work on Aculab Cloud.

To give you an idea of what Aculab Cloud can do, this paper briefly describes how you can create a simple application to answer a call and play a message to the caller. When you sign up with Aculab Cloud, you will have access to a quickstart guide that explains these steps in much more detail. The approach is slightly different depending upon whether you use the UAS or REST approach, so both options are described.

“...this paper will briefly describe how you can create a simple application to answer a call and play a message to the caller.”

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Inbound call using UAS API

When using the User Application Server (UAS) API, your application consists of a program written in Python, .Net (C#, VB) or Java. The application describes the flow of the call, from when it first arrives at Aculab Cloud, through to when the caller hangs up, or the application hangs up the call.



Figure 1: Inbound UAS API overview

When using the User Application Server (UAS) API, your application consists of a program written in Python, .Net (C#, VB) or Java. The application describes the flow of the call, from when it first arrives at Aculab Cloud, through to when the caller hangs up, or the application hangs up the call.

```
1: state = channel.answer() # this can raise a Hangup exception
2: if state == channel.State.ANSWERED:
3:     cause = channel.FilePlayer.say("Hello. Thank you for calling.")
```

Figure 2: UAS application example

You install the applications you have written within a service provided by Aculab (the UAS), which runs on one of your servers. This service responds to requests from Aculab Cloud to execute your application. Control messages from your application tell Aculab Cloud what actions to perform, such as playing a message to a caller, or requesting user input.

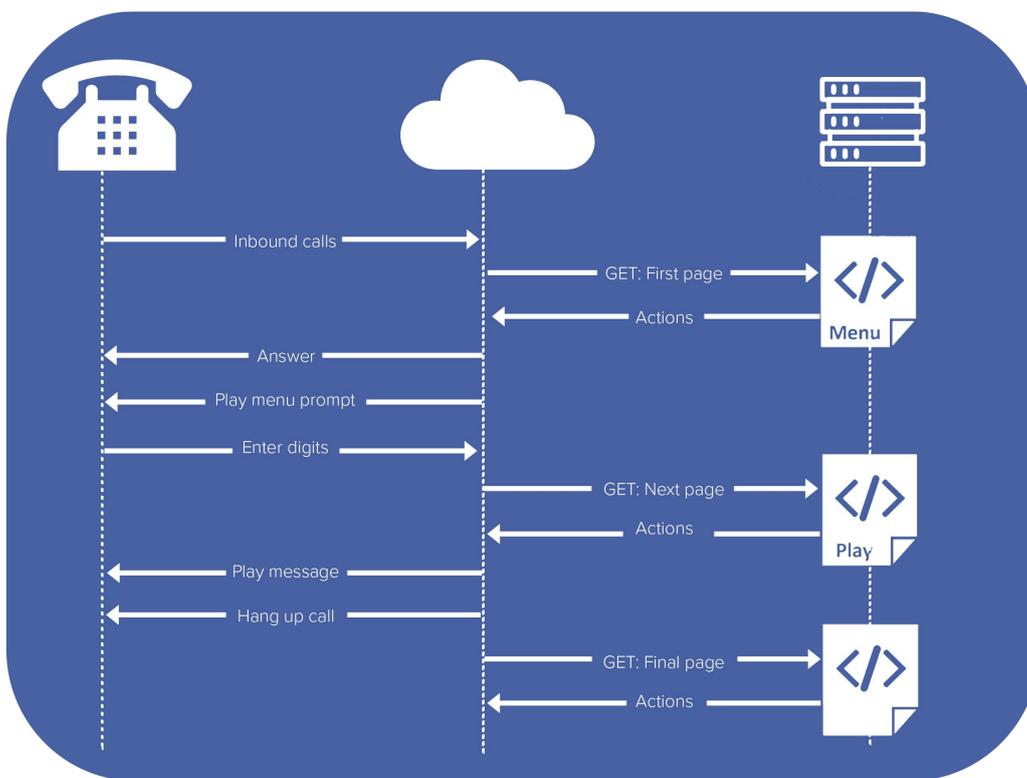
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Inbound calling using REST API

When using the Aculab Cloud REST API, your application is hosted on your own web server. Your application responds to JSON requests from Aculab Cloud, telling Aculab Cloud what actions it should perform.

An action could be a request to play a message to a caller, or to ask them to enter some digits via their phone handset.



```

"play":
{
  "play_list":
  [
    {
      "text_to_say": "Hello, good evening and welcome."
    }
  ]
}
    
```

Figure 4: Raw JSON example

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However, we provide wrappers for a number of programming languages, including Python, PHP, Java and .Net (C#). These wrappers can be downloaded from your Aculab Cloud account, and enable you to easily integrate with suitable web frameworks. Here's an example:

```
$response->addAction(Aculab\telephonyRestAPI\Play::sayText('Hello, good evening and welcome.'));
```

Figure 5: Rest API example

As with the UAS API, in order for your REST application to run you must associate it with a telephone number on your Aculab Cloud account. When that number is called, Aculab Cloud will send a JSON request to the web address where your application is hosted. Your application will then respond to Aculab Cloud identifying the telephony actions you wish it to perform.

Try Aculab Cloud for free today

Now that your appetite is whetted; the next stage is to have a go yourself.

It's free to try it out.

Don't worry if you are still not quite sure of all the detail, the best way to learn is often to have a go yourself. Support to assist you is available from our highly experienced team of engineers – we know a thing or two about communications, we've been in this field for over 30 years!

We look forward to seeing what you create with Aculab Cloud.

You can sign up for your free Aculab Cloud account at <https://cloud.aculab.com/login/enrol>.

Aculab Cloud

Three decades of innovation — in the cloud

Leverage the heritage of Aculab when you move to the cloud

Moving your application development environment to a cloud infrastructure is a big step. Despite the clear benefits of cloud migration, it's natural for developers of hardware-based solutions to be concerned about the risks of moving their technology IP — and the years of investment and knowledge that has gone into creating it — to a new cloud development platform. Most of the big names in cloud communications are relatively new entrants to the communications market; some are working with open source technologies and, as the market consolidates, it is likely that many will not be in business in just a few years' time.

So how do you know that a cloud platform can deliver the same level of reliability and performance that you've come to expect from a hardware deployment, and that it will be around for decades?

Three decades of innovation — the next chapter

Aculab Cloud deploys Aculab's industry benchmark technology and has been built organically out of more than 35 years' worth of experience in the communications enablement market. Put simply, it's the result of more than three decades of experience and innovation.

Aculab Cloud developers can be assured that the technology that powers Aculab Cloud has been used to enable tens of thousands of mission-critical applications across the world. Aculab Cloud features robust, field-proven protocols that have been developed and honed in conjunction with thousands of developers and deployed across hundreds of networks.

It's the only cloud communications platform that delivers the expertise, experience and reliability that you get from working with a proven communications enabler.

Leverage our heritage when you move to the cloud.

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About Aculab

Aculab provides deployment proven telephony products to the global communications market

Whether you need telephony resources on a board, on a host server processor or from a cloud-based platform, Aculab ensures that you have the choice. We are an innovative, market leading company that places product quality and support right at the top of our agenda. With over 35 years of experience in helping to drive our customers' success, our technology is used to deliver multimodal voice, data and fax solutions for use within IP, PSTN and mobile networks – with performance levels that are second to none.

For more information

To learn more about Aculab Cloud and Aculab's extensive telephony solutions visit:

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