

Communication powers business, Twilio powers communication



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Sumit is a highly driven Technology enthusiast in the domain of Cloud Computing and Data Warehousing. He is a lead developer in a cloud based CRM product and responsible for generation and implementation of ideas for the application. Sumit's efforts and initiatives have added value to the product by integrating various third party call management tools and also secured this application from well-known XSS and XSRF web security threats.

Communication has revolutionized our lives and it is one domain in the global arena which transforms rapidly. The technology of communication brings about a rapid overhaul in the way we conduct our routine affairs. It calls for consistent change and upgrade.

What is Twilio API?

The Twilio REST API allows you to query meta-data about your account, phone numbers, calls, text messages, and recordings. You can also do some fancy things like initiate outbound calls and send text messages.

Twilio allows software developers to systematically make and receive phone calls and send and receive text messages using its web service APIs. Twilio's services are accessed over HTTP and are billed based on usage.


As of February 2015, more than 560,000 developers use the service.

Twilio enables phones, VoIP, and messaging to be embedded into web, desktop, and mobile software. It helps reduce the use of messy telecom hardware and optimizes a globally available cloud API that developers can interact with to build intelligent and complex communication systems. This demonstrates the power of cloud computing, which operates on the basis of the most talked about Pay-As-You-Go phenomenon. So, it can be said that Twilio is here to revolutionize business communication.

Twilio helps in building intelligent phone systems. It is the next generation of communication which is much smarter, less expensive and requires zero maintenance because it is all on the cloud.

Here is how it works in real time applications:

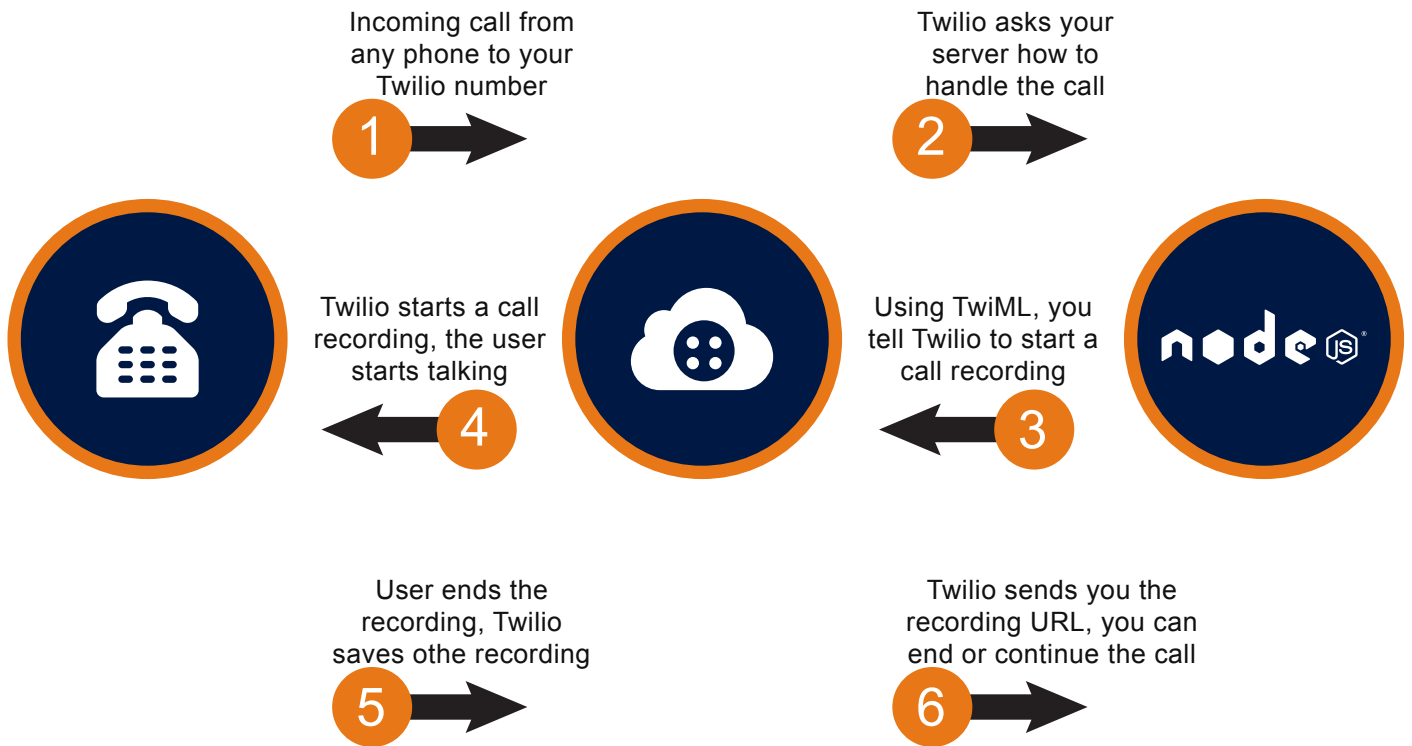
- Twilio provides clean, powerful and RESTful web API.
- We can seamlessly integrate our existing application built for either web, desktop or phone with Twilio code to make/receive calls or to send text or voice messages, using a wide range of available programming languages support from Twilio.
- From the existing application, after Twilio integration, we can trigger a call on a click of a button instead of manual dialing.
- Leverage the text-to-speech engine or play audio clips to callers so that no humans are required. When the call is over, it automatically pushes the results back into your application.
- It requires XML to route a call, which acts as a map when a call is made. We can just write text between tags called TwiMLs.
- Twilio talks to your web app via web hooks - real-time HTTP requests to your web app. When users call, Twilio will answer and synchronously make a webhook request to your app and asks for TwiML instructions about how to proceed with the call. The platform is a well-behaved HTTP client, and even supports cookies.
 - Twilio supports almost every web language that are in current run like PHP, Ruby, Python, Microsoft .Net, Java, Pearl and Node JS. Twilio supports a rich REST API as well as helper libraries for every above mentioned programming languages. There is no need to learn some foreign software or hardware stack to make a phone ring. So we just use the tools we know, and rock the phone grid.
 - Twilio's flexible API enables you to build a call center that integrates with your existing systems. Use CRM data to control call queuing and routing. Record calls and store them in the cloud. And call logs are available through the API.



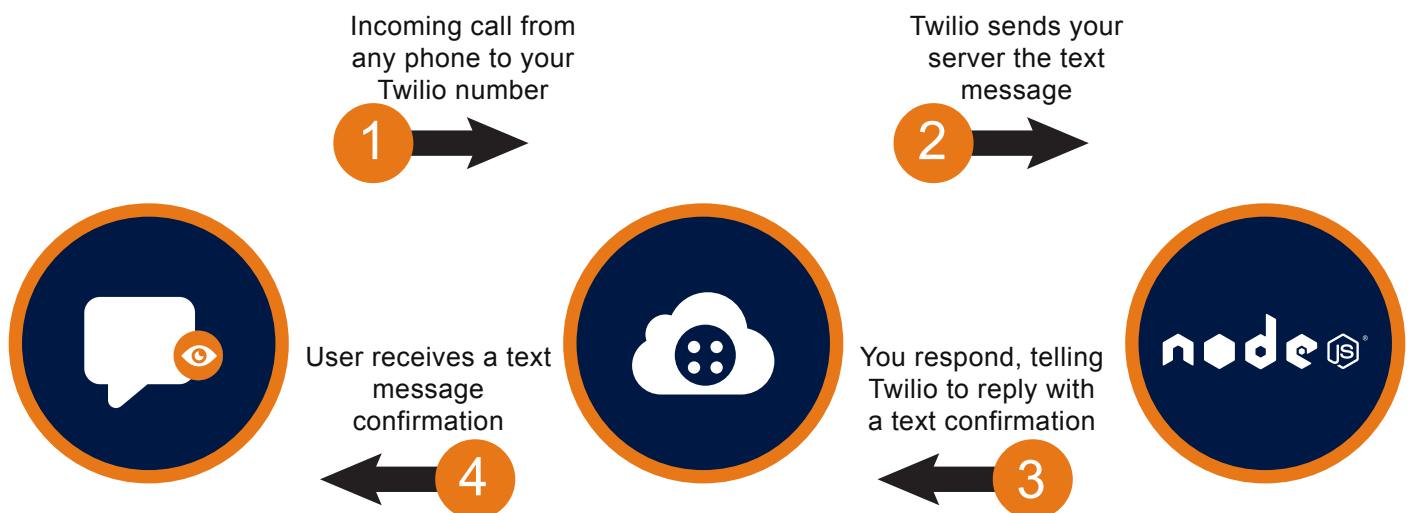
Twilio; bridging
the gap between
traditional
communications &
software worlds

How does it work?

Making a Call



Sending an SMS



Services Provided

Twilio provides a range of services which include voice, SMS and Twilio Client. We can bullet point them as follows:

- **Voice:** Build intelligent phone systems. Call on phones around the world from within the application.
- **Client:** Make every device a phone. Make/receive calls from/in web browser. Even more, call from a browser to a browser, phone not required.
- **SMS:** Send and receive text messages across the world.
- **MMS:** Send and receive pictures on phones via Twilio picture messaging support.
- **Toll-free messages:** Send and receive messages with toll-free numbers
- **IVR:** With fully featured and strong text-to-speech engine, we can do telephonic surveys and can build conditional, outcome based complex IVR systems which requires no human interface, just text. It helps in building automated surveys/polls.
- **Recording:** Record every call and view logs on the cloud or download via API.
Call Conferencing: Create conference calls on the fly with only one line of code. Launch as many simultaneous conferences as you need and have as many as 40 people in any one conference. Select a moderator and chose your hold music, and many more features.
- **Usage API:** Twilio stores all usage data so we don't have to. We can use its simple REST API to slice and dice usage data by any time interval, over any date-range, and from the most detailed metrics to aggregates. We can even create triggers to notify our application when it crosses usage thresholds.
- **SIP:** Twilio provides a way to add and integrate new applications to our existing communications stack.

All these services provided from Twilio runs on pay-as-you-go. There is no maintenance cost, as everything is on cloud. It is secure, reliable, available, scalable and regularly updated.

Implementation by PSI

We at PSI, have implemented Twilio for a CRM application. Its integration has added value to the product, which is beyond imagination. Dialing is user-friendly and powerful that the user can make a call in just one click from the application running in the web browser. User can even opt for a group call from the list of predefined phone numbers. We have implemented Twilio for following services:

- Call from web browser on phone around the world
- Call conferences
- Call recordings – available as mp3 to be downloaded
- Receive calls in browser from any phone around the world
- Calling to a browser from a browser

Who uses Twilio?

Every business organization where communication is crucial for customer satisfaction uses Twilio. Twilio is being used by leading companies around the world listed below.



References:

<https://www.twilio.com>

<https://www.twilio.com/blog/2014/04/build-interactive-voicemail-for-sports-fans-with-twilio-mongodb-angular-and-node-js-part-one.html>

About PSI:

Pratham Software Inc. (PSI) is a global IT services company (with established ISO 9001:2008 practices) providing software product development, consulting and outsourcing solutions to enterprises worldwide. While providing a wide range of solutions, we focus on Outsourced Product Development (OPD), Business Process Management (BPM), Application Development and Maintenance (AMD) and Content Engineering. Our extensive experience in OPD helps us build strong relationships with Independent Software Vendors (ISVs), as we work with them throughout the product development lifecycle. Over 12 years of experience in the BPM field with various tools such as Savvion, IBM Lombardi, SharePoint and open source tools such as Activity have helped us gain leadership position in BPM. In terms of technology and platform, we work across all major technologies such as Microsoft, Java and Open source and have capabilities and experience in developing solutions for web, mobile, Cloud and social media. For Enterprise customers, in addition to Process Automation, we also offer development and support services in BI and DWH.

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