



VoIP Drupal Fact Sheet

Overview

Are you working with communities that do not have easy access to the Internet? Would you like to provide your clients with automated phone access to their orders and personal information? How about organizing a phone and SMS campaign in your neighborhood?

VoIP Drupal is a versatile open source communication toolkit that adds the power of voice and Internet-telephony to Drupal web sites. It can be used to build hybrid applications that combine regular touchtone phones, the Web, SMS, and other channels in a variety of ways, facilitating community outreach and providing an online presence even to those who are technically challenged, or who do not have regular access to computers.

VoIP Drupal comes with an extensive collection of ready-made modules that provide voicemail, click-to-call, phone recording, audio blogging, dialplan scripting and other high-level functionality, dramatically simplifying application development. Sample code and a sandbox to help developers play with the different aspects of the platform may be found at <http://voipdrupal.org/>

Key VoIP Drupal features

- A plug-and-play interface (API) that interoperates with popular Internet-telephony providers, dramatically reducing the learning and development costs associated with the construction of unified communication systems. VoIP Drupal currently works with the KooKoo, Plivo Cloud, Tropo and Twilio services. It also supports the open source Plivo Framework, which enables you to run phone service in developing countries and in areas that are not covered by other telephony companies.
- A simple dialplan scripting language for the creation of interactive phone calls featuring voice menus, conference calls, speech generation, SMS handling and more.
- Support in the dialplan scripting language for hybrid interactions combining voice and text communication channels. For example, a user may send a text message to the system and receive a voice call in return. This feature is particularly useful in regions where phone calls are expensive or where a large number of users subscribe to pay-per-use phone programs.
- Portability across different VoIP services that provide different features, programming languages, coverage, and pricing structures. VoIP Drupal enables developers to program once for all those different services without having to learn their specific languages.

Applications

Potential applications of the VoIP Drupal platform include:

- “Get Out to Vote” campaigns
- 2-1-1 and 3-1-1 community hotlines
- Call centers
- eCommerce phone and SMS access
- Phone- and SMS-based surveys
- Group communication
- Story recording / playback
- Audio speed dating services
- Language training
- Audio tours
- Adventure games
- Interactive community radio programs
- Emergency announcements

Key benefits

- Facilitates the construction of unified communications systems integrating SMS, email, Web, and voice
- Makes Drupal accessible from any phone — no data plan required!
- Enables the expansion of community outreach initiatives (aka. as “community plumbing”) beyond the web
- Is open source and free — you are in control

Benefits for administrators

- Easy installation and configuration
- Fully customizable — enable only the features you need
- Run as part of the Drupal system itself with support for features, fields, notifications and more
- Enhance user interaction with ready-to-use audio blogs, click-to-call fields, phone recorders, audio announcements, etc.

Benefits for developers

- Well defined API for VoIP services
- 20+ sample scripts that can be customized
- A suite of 20+ modules such as click2call, phonerecorder, voicemail, and others that implement commonly needed features — no need to reinvent the wheel
- Simple, yet powerful, PHP-like scripting language with a short learning curve
- Visual programming language for novice developers and fast prototyping

Case studies

The first beta version of VoIP Drupal was launched in March 2011. We are currently promoting the platform and building more systems on top of it. Here are a few interesting projects we have built:

- My Dot Tour, a system that helps people organize participatory neighborhood tours using web, SMS and even touchtone phones (<http://timenesia.org/>).
- New Day New Standard, an initiative that promotes the rights of nannies, housekeepers, and elderly caregivers (<http://www.rev-it.org/projects/newday.htm>)
- OnTrack, a World Bank system designed to foster civic participation via phone, web and SMS. The first pilot has been tested with community organizations in Bolivia, Nepal and Zambia.
- VoJo, a mobile blogging platform that makes it easy for grassroots groups to post content via voice calls, SMS, or MMS (<http://vojo.co/>).
- What's Up, a local information system that enables access to web content via offline channels such as low-cost digital signs, customized flyers and posters, and an auto-generated community hotline. By dialing or SMS texting to a central number, folks might find out info about ongoing events, get reminders, and be redirected to local organizations (<http://civic.mit.edu/whats-up>).

In addition, we have been collaborating with grassroots organizations to implement innovative outreach approaches for their programs. One example is:

- VoxBox, a service that provides voice-based bulletin boards for grassroots organizations such as PTAs, churches, local sports teams, and informal groups. By dialing or texting a VoxBox number, community members might find out about important weather alerts, meeting reminders, poems, stories, and announcements of all kinds. Users might also subscribe to different VoxBoxes and, with that, receive email and SMS notifications whenever something new is added to the system,

Future directions

Short-term goals

- Integration with Drupal Commons, Drupal Conference Organizing Distribution (COD), CiviCRM, OpenScholar, Open Atrium, Commerce, and other widely adopted Drupal-based systems
- Promote community adoption and ownership of the platform
- Expand beyond MIT
- Turn VoIP Drupal into a social venture

References

Source code: <http://drupal.org/project/voipdrupal/>

General documentation: <http://drupal.org/node/1078710>

API information: <http://drupal.org/node/1155572>

Sandbox: <http://voipdrupal.org/>

Discussion group: <http://groups.drupal.org/voip-drupal>

5-minute video about the What's Up initiative in Wisconsin: <http://www.youtube.com/watch?v=ToBvwEjNET8> (recorded on June 26, 2012 at MIT)

45-minute video introducing the platform, its applications and benefits: <http://groups.drupal.org/node/215969> (recorded at the March 7, 2012 webinar) with slide deck at <http://slidesha.re/yNr3Jy>

5-minute video recorded at the VoIP Drupal launch at Drupal Con Chicago in March 2011: <http://www.voipdrupal.org/node/152>

Additional information

VoIP Drupal is an initiative of the MIT Center for Civic Media (<http://civic.mit.edu/>). For additional information about the project, please contact Leo Burd (voipdrupal@media.mit.edu)