

PHONEPLAY



CASE STUDY

ASTERISK IP-PBX, DECEMBER 2008

OVERVIEW

PhonePlay designs, develops, and deploys big screen games that crowds of people can play simultaneously using their mobile phones as controllers. To play, a person just calls the phone number on the screen. Their key presses are then sent in real-time to the screen to control an element of the game. While the technology is innovative, what really makes PhonePlay interesting is the game design. PhonePlay has found that their simple games can really grab attention and people have a lot of fun interacting with them.

PhonePlay began as the graduate thesis project of Josh Knowles at NYU's Interactive Telecommunications Program at the Tisch School of the Arts. The thesis project was initially not about telephones or mobile apps; it was about creating public-space collaborative gaming systems. As Josh worked on it, it became clear that mobile phones should be used as controllers. It has since expanded to include a whole variety of games that have been displayed around the world.

Asterisk Heads to the Big Screens

CHALLENGE

The greatest challenge that PhonePlay faced was how to determine the best way to get a room full of people to play a big screen game together. Additionally, the answer to this challenge needed to be a solution that was inexpensive and easy to apply and manage. PhonePlay also needed a solution that would enable phone capability with all users.

SOLUTION

Originally the phone client used to control the PhonePlay games was a Java app that a user would have to download. The second iteration was built with a proprietary phone client; a kind of AJAX-like tool for creating mobile interfaces for applications. The problem with the previous versions was that virtually no one would or could use either of them, so PhonePlay chose Asterisk. Josh was familiar with Asterisk, and knew that it was not only free, but it was simple enough to learn. He was able to familiarize himself with the program to write the basic software he needed in only a few weeks.

Josh explored ways of using a mobile phone as a game control by utilizing key presses during a call. The public screen hosting the game displays a phone number for players to call. From there, they do not listen to their phones anymore; they hold them down and watch the screen for feedback. Game controls are displayed on the video screen. A few games also have limited audio feedback.

IMPLEMENTATION

Asterisk serves as the bridge between the player's phone and the game software. Players can call into a phone number that terminates into Asterisk. Asterisk communicates key presses to the PhonePlay server, which is written in Java. The PhonePlay server then communicates with the game software, which controls all of the game mechanics and visualizations.

This Asterisk solution allows PhonePlay to replace the need to download custom applications to play the games. Users also do not have to use awkward tools like SMS to communicate with the PhonePlay screen. Asterisk enables PhonePlay compatibility with 100% of mobile phones.

RESULTS

PhonePlay is unique and cool because of the specific interface -- the way one places a phone call to play a game. PhonePlay has become a game design and creative interaction design business. While PhonePlay is just now reaching the market, it sees that it has an advantage over potential competitors by being the first to market. With its innovative use of Asterisk, PhonePlay is able to keep prices relatively low compared to the impact that it will have for customers.

LEARN MORE

For more information, visit PhonePlay's website at <http://gophoneplay.com/>.

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Digium Headquarters
445 Jan Davis Drive NW
Huntsville, AL 35806 - USA
Phone: +1 256-428-6000
Fax: +1 256-864-0464
www.digium.com

