![Digium - The Asterisk Company]

TriangTec uses Asterisk to Build Powerful Call Centers

Brazilian Call Center Provider Discovers Asterisk & Finds Cost Savings of 80 Percent on IP PBX Implementations

> MTM engineers had a high degree of confidence that Asterisk could be customized to meet the need of their business.

It was seven years ago that TriangTec Technology in São Paulo, Brazil discovered Asterisk, and it changed the dynamic of their company. Back then, TriangTec was a small technology company employing two software developers and a single support person. They created customized IP PBX business communications systems by integrating data and voice with other diverse solutions to help high level call centers bring down costs and speed up connectivity.

At the time, TriangTec was successful enough using open source technology to develop communications solutions. Then a client asked them to develop an application integrating PHP (a widely-used open source scripting language used in web development and embedded into HTML), with an open source toolkit called Asterisk. TriangTec accepted the project, but its systems analyst, Bruno Pignatari, had to do some homework.

Asterisk, Pignatari discovered, is an open source toolkit for building communications applications. The open source project is sponsored and maintained by Digium, an American telecommunications company who also uses Asterisk as the foundation of their Switchvox business business phone system solutions for small to medium-sized businesses (SMBs) around the world. Asterisk powers IP PBX systems, VoIP gateways, conference servers, and other communications solutions. Used by SMBs, enterprises, call centers, carriers, and governments worldwide, Pignatari immediately realized they could use it to build powerful, low-cost turnkey custom call center systems.

Not only that, but his research showed that Asterisk had important advantages over anything they had used before. Since it is free open source software, both price and return on investment (ROI) were unbeatable, averaging a reduction in costs of about 80 percent when building a solution for their clients.He also discovered Asterisk had a sterling reputation among telecom developers around the world as the best telephony platform available for customizing VoIP telecommunications solutions because there were no limitations on what you could do with it. In his opinion, Asterisk had by far, the better "Best Practices" of any other available platform, and it had flexibility, versatility, adaptability, and ROI. Pignatari knew he needed to try Asterisk in a project.

"Asterisk is Infinite in its Customization Capabilities …"

Discovering Asterisk made it possible for TriangTec to develop telephony platforms that give their clients more control over the administration of their call centers and the power to focus on customer service. Customers can add phone lines, build extensions at will, implement SIP trunks to practically eliminate long distance charges, and even create their own dial plans.

TriangTec also developed intelligent automatic dialers using Asterisk, replacing their traditional outbound call center method with one that is far more efficient. The old method involved each individual call center agent manually dialing out on each call, but having to wait for a connection. In totality, this downtime is an inefficient way for call centers to operate. Asterisk lets TriangTec implement an automatic dialing solution that increases efficiency by reducing downtime and wasted calls; reduces costs overall; and improves connection speeds. All of these improvements give a company the power to increase sales, provide better customer service, and better manage lead generation.

Today, TriangTec uses Asterisk to drive all of their telephony offerings including IP PBX, call centers, and consultation portability. It is often difficult to identify which call center operator belongs to each number dialed, and the pricing for calls is different depending on the operator and the number they dial or answer. TriangTec's IP PBX uses Asterisk to create a dial system that determines those factors before the call leaves the PBX search system, along with a portability listing assigned to each operator. This creates a specific output route based on the operator with the lowest cost for that call. Some representatives are seeing savings of as much as 40 percent for their company. It is an easy solution and it saves money!

Pignatari says Asterisk helped them develop a panel for managing connections and integrating modem data cards, sometimes called dongles or data sticks that are compliant with HSPA (High Speed Packet Access) standards. It allows clients to send out bulk SMS messages all at one time using a desktop or laptop computer.

Asterisk also accommodates Gateway GSMs (Global Systems for Mobile), which reduce user costs when calling from fixed lines to GSM networks. Calling from a fixed network to a mobile network is more expensive than calling between mobile networks, so a GSM Gateway makes up the difference. Customers can also use it to send and receive SMS and FAX messages, and permits the forwarding of calls to mobile phones and mobile extensions.

Triangtec has been working with Asterisk for 7 years and Pignatari still doesn't believe they have found Asterisk's limits. They can build in controls for telecom agents and create call queues that direct inbound calls to specific departments; and they can manage analogic networks so VoIP can talk to and connect with analog systems using IP Gateway FXS and E1 cards. FXS are ports used by analog phone lines – also known as POTS (Plain Old Telephone Service) or analog phones. This upholds call quality even if a call center representative is communicating with someone on a POTS.

As flexible and versatile as Asterisk is, Pignatari says its main advantages are iits ROI and its power of customization in building a smooth, homogenous system that is easily integrated with a diverse number of add-on features and customer modifications.

"I believe Asterisk is infinite in its customization capabilities," says Pignatari. "So far, we have not found anything we cannot do in regards to a telephone or telephone system, using Asterisk."

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