



## Cloud based VoIP solution

Enjoying 50 % increase in performance

## **L** Challenges

Our client who has multiple offices across the world was finding it difficult to implement a perfect VOIP solutions. He was struggling to scale as his server implemented with voip solutions has already reached its limits. Calls were frequently getting dropped and there was difficulty in transferring calls from geographical office to another. This has raised a huge issue of dropping potential customers and revenue for his business.

## **Solution**

SparkSupport engineers analyzed the situation thoroughly, to have both performance and scalability chose cloud based solution for his VOIP setup. The perfect cloud solution to meet both this requirement was Amazon AWS. We deployed Asterisk and FreeSwitch on Amazon cloud EC2. Since there wasn't any compatible prebuilt AMI with asterisk and zaptel driver kernel module we created our own AMI with DAHDI(zaptel) driver. Since DAHDI is a kernel module we recompiled kernel with necessary modules and changes. Once the instance was up with new custom kernel we compiled asterisk on instance and tweaked asterisk as per clients requirement. A asterisk cluster was then deployed to meet both the present and future requirements. We have also compiled freeswitch for clients who may need that on EC2.

We made security groups for instance and firewall rules to make sure that the necessary tcp-udp ports are not blocked and traffic is happening through them with out flaw. There is no any specific drawback for asterisk as well as Freeswitch on EC2. They are working perfectly as they are on physical servers.

## - Result

Our client now manages over 5 offices with around 20 agents in each with a asterisk cluster we have setup in Amazon cloud. He has now a stable system which can further manage another 5 office, needless to say his business has grown leaps and bounds and he is selling like crazy, all his products.

