

Parallels® Software as a Service (SaaS)

Customer Success Story

Hosting a VoIP PBX Solution

Aretta Communications utilizes Parallels' SaaS platform to deliver a hosted PBX solution.

Business Challenge

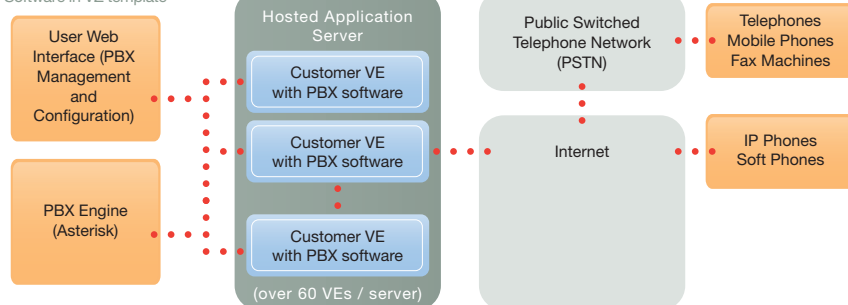
Aretta Communications provides a telecommunications solution for small and medium businesses that is faster to deploy, easier to manage, and less expensive than traditional PBX offerings. Aretta's NetPBX solution provides the three major components of IP telephony in a simple turnkey deployment: a hosted PBX, integrated SIP Trunking, and preconfigured VoIP handsets.

Aretta's success depends upon rapid deployment, uptime, and cost containment. To achieve these goals, Aretta required a fully mechanized deployment onto a platform where multiple customers could securely reside on a single server. Once provisioned, the platform had to be easy to maintain since many businesses cannot afford a full time telecom manager or the expense associated with a service organization to perform PBX maintenance.

Aretta's Platform

Aretta leverages the best-in-class open source IP-PBX technologies such as Asterisk along with industry leading graphical user interfaces. These solutions include several executables and configuration files which require a dedicated server environment. Customers connect to the hosted PBX using off-the-shelf or pre-configured VoIP handsets. Softphones operating on a personal computer or mobile phone can also be utilized.

Software in VZ template



As with other SaaS applications, Aretta's platform provides the following key end users benefits:

- **Rapid deployment** – Parallels automation tools allow customers to set up a hosted PBX and connect a VoIP handset or an IP softphone phone in a few hours. Standard PBX deployments take weeks.
- **Reduced maintenance** – adding new users, setting call forwarding, and installing new phone lines can be done in minutes using a web interface. All server software upgrades are managed by Aretta. Standard PBX deployments require an on-site technician or an expensive service call to a PBX specialist.
- **No capital expenditures** – Like other SaaS applications, Aretta's IP-PBX solution eliminates large up-front capital expenditures. Aretta charges a monthly fee based on the maximum number of simultaneous calls required by an organization.



Overview

Location: Atlanta, Georgia, USA

Type: VoIP Provider

Stock: Private

Customer Profile

Aretta provides hosted IP-PBX solutions for small and medium sized businesses. Aretta's solutions provide customers with a phone solution that is faster-to-deploy, easier-to-manage, and less expensive than on-premises equipment.

Business Situation

Aretta needed to minimize costs, reduce deployment times, and reduce manual work when deploying IP-PBX solutions based on the Asterisk Open Source PBX.

Parallels Solution

Parallels' SaaS platform provided automation and virtualization technology which provided Aretta's with a solution that met all their requirements.

- **Secure and reliable** – Unlike a PBX sitting in a company closet, the Aretta hosted PBX is located in a highly secure datacenter with nightly server backups, multi-homed network connections, and power backup.

Solution and Implementation

The choice of a virtualization solution was critical to Aretta’s success. At first, Aretta experimented with XenSource, but the solution did not provide the stability required for a mission critical application. In addition, Aretta was not comfortable providing non-technical customers with the XenSource management tools.

Next, Aretta tried VMware’s ESX solution. To contain costs, Aretta selected the solution with no SAN and a maximum of 8GB of memory. Although the solution was easy to implement, VMware’s ESX lacked key features such as the ability to over-subscribe disk space and cost effective management tools required for nightly backup and migration. However, the critical shortfall was the virtual machine density that could be achieved running multiple Linux environments. When Aretta deployed 30 machines on a dual quad-core machine, the host CPU reached 80% utilization. With 40 machines, the host load was up to 90%. At 48 virtual machines running idle, the overhead of delivering so many virtual clock interrupts pegged the host quad-core CPUs – negatively impacting call quality of the guest VoIP application.

Next, Aretta installed Parallels Virtuozzo Containers...

“Once we tried Parallels Virtuozzo Containers, the selection of a virtualization solution was obvious. Running real-time applications like VoIP inside a high-density Linux virtual environment is critical to our business. The virtual environment density and management tools provided by Virtuozzo helped us deliver a SaaS platform which is easy to manage and cost effective.”

– Marc Fribush, President, Aretta Communications

Aretta utilizes value-added resellers to assist with sales and distribution. The management tools provided by Aretta and Parallels allow for resellers to easily manage their end user systems. Parallels Automation software not only allows for real-time provisioning of systems, but also provides the correct accounting and reporting for reseller billing.

Results

Parallels Virtuozzo Containers provided the management tools and the scalability needed. At 50 virtual environments, the CPU is running at a cool 3% with Parallels Virtuozzo Containers. The Virtuozzo management tools are linked with Parallels e-commerce and ordering solutions to provide a fully automated provisioning and billing architecture.

Based on initial success, Aretta Communications is increasing marketing efforts and attacking the small and medium business marketing with its hosted IP-PBX solutions.

Learn more at www.parallels.com/saas

Performance Metrics

Application: IP-PBX software

Kernel: Linux 2.6

Hardware: 2.0 GHz Dual Quad-Core Intel Xeon Processors with 8GB RAM

VMs	VMware CPU Util.	Virtuozzo CPU Util.
30	90%	1%
40	80%	2%
48	100%	3%

Why SaaS?

“Using Parallels Virtuozzo Containers to power our Asterisk PBX solution provides a dramatic cost advantage over other PBX providers in the marketplace.”

– Michael Rand, CEO, Aretta Communications

For More Information

Contact Parallels

For more information about Parallels products and services, call Parallels sales at +1 703-995-4102. Outside the United States and Canada, please contact your local Parallels sales office.

Contact Aretta Communications

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