A L T E N CALSOFTLABS
AN ALTEN GROUP COMPANY

Developing Highly Scalable Solution for SON

THE CLIENT

The client is a start-up in the field of Wi-Fi (Wireless Networks) solving the problems of self-optimizing networks for various product vendors.

BUSINESS NEED

The customer wanted ALTEN Calsoft Labs to develop a centralized server hosted on cloud (public/private cloud platforms) which can do the following:

- Scale infinitely for serving millions of access points at the same time
- Provide a scalable storage to host the statistics generated by all the Wi-Fi Aps

TECHNOLOGY USED

- Platform: Hadoop
- File System: Hadoop Distributed File System
- Paradigm: MapReduce
- Machine Learning Tools: Mahout
- Language: R

SOLUTION DELIVERED

ALTEN Calsoft Labs re-architected the SON server (PULL model was changed to PUSH model) thus making it stateless so that the services can be easily scalable with the integration of MOM service running between the client access points. The SON server offered high availability, scalable infrastructure and acted as a load balancer to balance the load across multiple servers.

BUSINESS BENEFITS

- Making the server stateless, it is possible that any server can process the requests originated by any AP and can scale infinitely along with high availability offered by the MOM service sitting between server and the Aps.
- The usage of RabbitMQ, Celery and MongoDB provided a scalable and robust solution.

www.altencalsoftlabs.com

business@altencalsoftlabs.com