

WEB BASED PRICING EVALUATION MODEL ON AWS INFRASTRUCTURE

The client was using complex and cascading spreadsheet based Pricing Evaluation Model (PEM) across multiple European countries.

The Vision

Client knew that their current partially automated PEM without centralized and standardized platform would not support their expansion plans. The client wanted to:

- Replace existing solution with SaaS based solution
- Implement the solution minimizing change management and end user training
- Facilitate end user reporting
- Integrate with internal applications
- Enable system development to cater for future growth

Solution Approach for WebPEM (Web based Pricing Evaluation Model) overview

The WebPEM uses the SaaS based delivery model, and is accessed by users in client's offices across the globe. The application is a Business Travel Bid Management System and provides the following capabilities:

- Gives extended functionalities in comparison to the earlier spreadsheet Based pricing tool
- Automates business processes and workflows associated with the Bid process
- Has capacity to manage client data, country-specific data, reporting and archival of the data
- Provides improved data security using a role based user access model
- Generates various Reports to review the key performance indicators (KPIs)
- Benchmarks prices and costs
- Provides scalability, accuracy and high performance

AWS Infrastructure overview

The WebPEM is hosted on AWS and the infrastructure consists of 3 layers: Web servers, Applications servers and backend (database) servers. WebPEM uses multiple EC2 servers to run the platform. Each node has its own EC2 instance running on Apache TomCat. WebPEM uses AWS MySQL RDS which allows increased performance. WebPEM uses AWS Route 53 service and Amazon SES for email communication through application.

Additional AWS services allow it to dynamically scale the number of servers of each node up and down depending on the load: CloudWatch, Auto Scaling and Elastic Load Balancing. As AWS only charges for the resources, this service helps cut cost as client does not have to buy the hardware for the highest load scenario.

Advantages of hosting on AWS Infrastructure

- High availability & high performance during the peak load
- Auto-scaling in case of increased number of concurrent users
- Direct cost savings due to auto-management (on & off based on the load) of the resources. No more paying for unused resources
- Monitoring of the performance bottlenecks by AWS
- Reduction in TCO (Total Cost of Ownership)