Multinational conglomerate simplifies management of AWS environment and enhances predictability with automation

Reduces TAT to launch new AWS instances by 40% and increases scalability of infrastructure

About the Client

A Fortune 20 American multinational conglomerate, the client offers services and products across various segments including power and water, oil and gas, energy management, aviation, healthcare, transportation, and finance. The client operates in more than 100 countries and employs more than 300,000 people.

Goals

MAXIMIZING BENEFITS BY MANAGING THE AWS ENVIRONMENT EFFECTIVELY

The client managed a large Amazon Web Services (AWS) environment and wanted to enable the application of its standard security protocol for AWS instances. Monitoring and managing the workloads deployed on AWS such as the availability of instances, application specific services, disk space, memory, swap, and local time became a challenge. The client also wanted to enable its development users with no formal AWS skills, to independently launch instances in a controlled manner by leveraging Scalr, a cloud management platform for provisioning AWS instances.

Microland

DELIVERING EXPERT SERVICES DRIVEN BY AUTOMATION

The client chose Microland to manage its AWS environment because of our decade-long engagement

Scale of AWS environment

- 35 AWS accounts
- 5 Chef clusters
- Over 40 bastion hosts
- 47 GRE boxes
- 52 Bind servers which are the management hosts
- Over 500 development/production instances

and expertise in providing infrastructure management services. We employ a hybrid global delivery model backed by robust internal processes and tools. Our deep understanding of security and compliance best practices combined with our expertise in relevant automation tools positioned us as the ideal choice.

Transformation

ENABLING AUTOMATION FOR STREAMLINED MANAGEMENT

Drawing upon experience from previous AWS implementations and automation, the Microland team transformed the AWS environment. Figure 1 highlights the details of our solution.
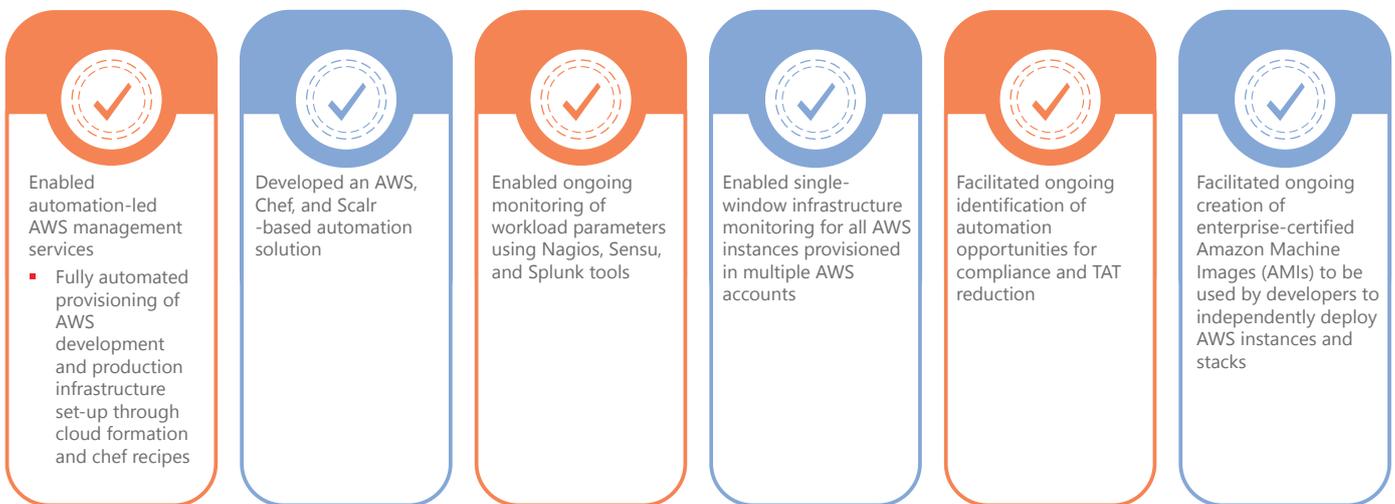
Enabled automation-led AWS management services
- Fully automated provisioning of AWS development and production infrastructure set-up through cloud formation and chef recipes

Developed an AWS, Chef, and Scalr -based automation solution

Enabled ongoing monitoring of workload parameters using Nagios, Sensu, and Splunk tools

Enabled single-window infrastructure monitoring for all AWS instances provisioned in multiple AWS accounts

Facilitated ongoing identification of automation opportunities for compliance and TAT reduction

Facilitated ongoing creation of enterprise-certified Amazon Machine Images (AMIs) to be used by developers to independently deploy AWS instances and stacks

Figure 1: Microland's solution

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HELPING REALIZE THE TRUE POTENTIAL OF AWS THROUGH AUTOMATION

Using our solution, the client was able to exploit the full potential of its AWS environment. The major benefits included:

AGILITY

- 40% reduction in TAT for development users to launch new instances and stacks in AWS
- Simplified AWS Management, leading to an increase in the number of managed AWS accounts from 35 to 80. The number of management hosts doubled, all through automation
- Simplified management by unifying six services lines providing AWS support into one service line

PREDICTABILITY

- Ensured round-the-clock support by acting as the first point of contact for all cloud-related issues faced by the client's business units
- Improved security and compliance through automation by eliminating the chances of breaches likely in manual work of the voice infrastructure

About Microland

Microland is a leading Hybrid IT Infrastructure Service Provider and a trusted partner to enterprises in their IT-as-a-Service journey. Incorporated in 1989 and headquartered in Bangalore, India, Microland has more than 3,200 professionals across its offices in Europe, Middle East, North America and India. Microland enables global enterprises to become more agile and innovative through a comprehensive portfolio of services that addresses hybrid IT transformation, workspace transformation, service transformation and end-to-end IT infrastructure management.

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