

# **GUIDANCE AND SECURITY OF BANKING SERVICES**

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## INTRODUCTION

We are an advanced AWS consulting partner offering consulting, digital, cloud, and operations expertise. ACC employs dedicated engineers across various business areas like cloud and so on. In this project we have migrated an existing ECS application to Kubernetes with the best solution possible with great research and with the best infrastructure.

## OUR CLIENT

Our client is a leading provider of housing finance in India with many customized solutions and has fulfilled over nine million dreams since its inception. Their target is to increase the country's residential housing stock by providing Housing Finance in a systematic and professional manner and encouraging home ownership.

With an aim to Integrate the home finance sector with the overall domestic financial markets to increase the flow of resources to the housing sector. Banking, insurance (life and general), asset management, real estate venture capital, and education loans are a few of diversified financial services by the client.



## KEY BENEFITS OF USING AWS IN BUSINESSES

Businesses can save a lot of money on hardware, physical facilities, and utilities when they don't have to pay for equipment and data center improvements. Furthermore, as the requirement to administer on-site servers decreases, so does the necessity for people. When compared to maintaining on-premises systems, small to mid-sized businesses find public cloud solutions like AWS to be 40% more cost-effective.

The majority of cloud service providers provide variable resource provisioning, which allows enterprises to scale up or down based on their current requirements. One of the benefits of AWS, for example, is that you can control resources at a granular level and implement numerous cost-cutting measures to minimize your bill even more.

Disaster recovery (DR) has long been a worry for companies with large in-house IT departments. The normal procedure was to keep a backup in a separate physical place. This was also pricey. You may reduce the hassle of orchestrating DR scenarios and achieve higher service levels with cloud computing.

Identity, access, encryption, firewall, and app security are all responsibilities of every firm that uses the cloud. However, the cloud services provider is responsible for ensuring that the cloud remains secure. Your organization can slash its in-house security costs by shifting data to the cloud.

Cloud computing allows your company to become 'connected,' which means that the service you provide may be easily scaled and distributed to international users over the Internet. Furthermore, the most forward-thinking businesses see the cloud as a way to innovate and transform their traditional business models into cloud-first services.

Speed and agility are two more important Amazon Web Services advantages. You can request and receive more server space in minutes as a client. Simply select your requirements and watch as your app goes global in minutes and Increase storage speed with Glacier, Simple Storage Service, AWS EBS, and other choices. Redshift, RDS, and ElastiCache are examples of high-performance databases.

## WHY SHOULD ONE USE LANDING ZONES

A landing zone is a cloud framework that allows organizations to carry out large-scale cloud migrations in a simplified and effective manner.

A landing zone is a set of configurable cloud infrastructure, policies, best practices, guidelines, and centrally managed services. It's the first step in a factory model application's cloud migration journey. Simply said, a landing zone is made up of building blocks that cover the basics of cloud deployments. Management, data security, network design and logging, as well as multi-account architecture and identity access management, are examples of these building blocks. They're set up in accordance with the company's overall strategy and industry laws, ensuring that any workload deployed to the cloud follows best business practices.

Landing zones help cloud adoption in three basic ways:

Landing zones help teams unlock cloud benefits by centralizing and automating administrative tasks and heavy lifting. This enables greater cloud adoption benefits, such as agility, scalability, and faster deployment. When application teams aren't responsible for platform administration, they can focus their time and skills on activities that provide more value to customers.

By establishing a centralized security baseline for all implementations, they improve the overall security of the cloud environment. The landing zone configuration should follow the cloud provider's well-architected security standards, as well as any industry-specific or organizational needs. This provides application teams with the confidence and freedom to innovate while being secure.

Finally, by consolidating cost management, they can be used to establish a cost-effective strategy. These can be linked to landing zones created with the use of third-party services like AWS Control Tower.

## LET US SEE WHAT IS A CONTROL TOWER

Cloud administration and governance can be complicated and time consuming if you have several AWS accounts and teams, slowing down the very innovation you're hoping to accelerate. AWS Control Tower is the simplest way to create and manage a landing zone, which is a secure, multi-account AWS environment. It constructs your landing zone using AWS Organizations, providing continuous account management and governance as well as best practices for cloud implementation based on AWS's expertise working with hundreds of clients.

If you're setting up a new AWS environment, starting your AWS journey, or launching a new cloud venture, AWS Control Tower's built-in governance and best practices will help you get up and running quickly.

With just a few clicks, you can automate the configuration of your multi-account AWS environment. To govern your environment, the setup uses models that capture AWS best practices for setting AWS security and management services. Identity management, federated account access, centralized logging, cross-account security audits, account provisioning routines, and account baselines with network configurations are all covered by blueprints.

AWS Control Tower includes guardrails, which are obligatory and strongly recommended high-level rules that assist enforce your policies with service control policies (SCPs) or identify policy violations with AWS Config rules. As you establish new accounts or make modifications to existing accounts, these rules stay in place, and AWS Control Tower offers a summary report of how each account adheres to your enabled policies. For example, you can use data residency guardrails to ensure that customer data, which is the personal information you upload to AWS services through your AWS account, is not stored or processed outside of a certain AWS Region or Regions.

AWS Control Tower comes with an integrated dashboard that provides you a high-level overview of the policies that have been applied to your AWS environment. You can see data more about accounts that have been provisioned, the guardrails that have been activated across your accounts, and the compliance status of your guardrails at the account level.

## KEY BENEFITS OF CONTROL TOWER

Let us see a few key benefits of using a control tower

- It allows you to easily set up and configure a new AWS environment.
- AWS accounts can be quickly provisioned by multiple teams.
- All of the accounts will be aligned with the company's centrally determined policies.
- Continuous policy management can be automated.
- View summary policies for your AWS environment.
- Security, operational, and corporate compliance requirements can be used to govern AWS workloads. Setup the AWS environment automatically.
- Pre-packaged policies can be applied globally or to individual groups or accounts.





## OVERVIEW

Earlier the applications were managed by different vendors, the aim was to bring the AWS accounts which are hosting these applications as child accounts in the new proposed LZ. The Next Generation Landing Zone will be leveraging the features and functionalities of AWS Organizations to centrally organize and manage the AWS accounts that are created under it with the ability to host both external facing applications and internal facing applications.

## WORKFLOW OF THE PROJECT BY ACC

The project was started with the main aim to have a secure and proper governance of the initially used system. The earlier Infra in AWS cloud was managed according to different applications and business owners thus governance was difficult. It needed a proper upgrade to an efficient landing zone where governance of AWS infra would be easier and efficient. The client wanted all of its cloud governance under one umbrella; they basically had six accounts basically for security, shared services, log archives, master account and so on to move from on premise to cloud service and a proper landing zone was implemented to govern the multiple accounts of the client.



The client wanted a centralized management of logs in a single account (Log archive account) similarly shared services like direct connect, transit gateway etc to be in the shared services account. The master account to govern the SSO integration which also includes centralized billing of all the accounts in AWS Organizations. We had assisted the AWS Proserve team in building the architecture for the landing zone. Our team assisted in the configurations and the project was completed as promised.

## KEYWORDS

UAT(User Acceptance Testing)

AWS

Cloud Services

Microservices

DevOps

Landing Zones

Control Tower

Cloud Architecture



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