# Atos aws

Unleashing Landing Zone as a Service:

# Streamlined cloud migration with CloudCatalyst

In today's fast-paced digital landscape, organizations are increasingly turning to cloud computing to scale their operations, enhance efficiency, and remain competitive.

> However, migrating to cloud comes with a set of challenges that require careful handling. Problems like data security, compatibility issues, and the lack of in-house expertise in cloud technologies can hinder the migration process.

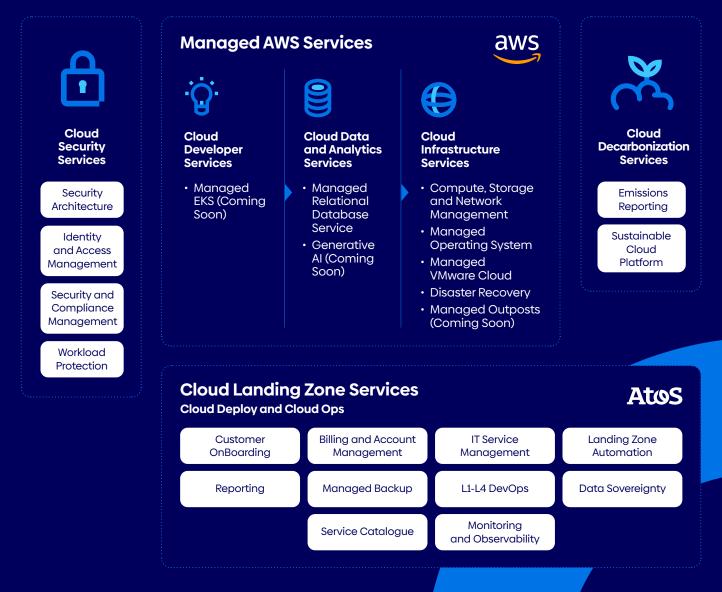
Problems such as these are what Atos is uniquely capable of solving. Together with AWS, we have helped enterprises migrate thousands of workloads to the cloud. Recognizing the need for a standardized, low-friction cloud migration process, we have joined forces with AWS to create CloudCatalyst, a collaboration designed to help companies with large-scale infrastructure investments to accelerate mission critical applications to the cloud.

Customers are increasingly looking for solutions to accelerate their time to value for migration projects and often ask "how do I make my cloud environment secure and run at scale" or "how can my DevOps/ SecOps teams consume AWS services efficiently" or "how can I effectively govern my cloud environment and be compliant without accepting more risk". In order to achieve this, we need a strong foundational layer or a landing zone which is broadly defined as performing all the required setup work to go from zero cloud footprint to migrating the first of many production workloads. Atos's innovative approach simplifies and accelerates the process of building this foundational layer and take away all the undifferentiated heavy lifting that comes with it.

Large enterprise customers often end up spending large sums in building a landing zone, only to continue pouring resources into its maintenance year after year. Unfortunately, this approach results in prolonged time to value, leaving the C-suite yearning for tangible business outcomes. In the era of a rapid technological advancements, the true measure of success lies in an organization's capability to adapt and evolve with the changing landscape. A well architected landing zone can act as a catalyst to not only accelerate digital transformation but more importantly future proof enterprises against unprecedented challenges.

Core to the CloudCatalyst offering is the new AWS Landing Zone Accelerator. By leveraging the new AWS Landing Zone Accelerator and Control Tower Technologies, Atos is able to help your organization get fully set-up on cloud with a wellarchitected, secure, cost effective and compliant AWS environment whereby minimizing the time to value for your major migration projects. Data integrity and security are at the heart of the Atos offering. Rather than starting from scratch and potentially making mistakes, Atos leverages the AWS Landing Zone Accelerator to provide an environment that aligns with industry standards and security protocols. For regulated environments and those in need of strong security focus, Atos follows the Service-Managed Standard: AWS Control Tower. Implementation of AWS Foundational Security Standards with controls embedded with AWS Control Tower.

# Key features and components of landing zone include:





## **Multi-Account Structure**

Landing Zone sets up a multi-account AWS environment using AWS Organizations. This allows for the separation of duties, isolation of resources, and centralized management across multiple AWS accounts.

## **Account Baseline**

A set of default AWS accounts, such as a master account, a logging account, a security account, and shared services account. Each serves a specific purpose and follows best practices for security and compliance.

# Single Sign-On (SSO)

Landing Zone integrates with AWS Single Sign-On (SSO), enabling users to access accounts using their corporate credentials.

# **Centralized Logging**

All account logs are centralized in the logging account, making it easier to monitor and audit activities across all accounts.

# Reporting

Using powerful native services and 3rd party tooling Atos provides a comprehensive set of security, health and financial status reports for all managed components in the AWS cloud.

## **Security and Compliance**

Landing Zone sets up a security baseline across all accounts, including Config rules, CloudTrail, and GuardDuty for threat detection. Combined with AWS Security Hub, Landing Zone can be configured to support a variety of compliance controls and data sovereignty regulation.

#### Automation

By automating the build of a regulatory compliant landing zone, the AWS Landing Zone Accelerator speeds up the customer's time to value, reduces their cost to implement, facilitates use of security best practices, and focuses their resources on high-value opportunities for mass migration, next-generation serverless application development, and reinvention in cloud.

# **Network Design**

A network baseline with a pre-configured network architecture, across all AWS regions and availability zones, including Virtual Private Cloud (VPC) settings, subnets, gateways, and security groups.

#### Infrastructure as Code (IaC)

Landing Zone uses CloudFormation StackSets to deploy infrastructure resources and configurations across multiple accounts and regions. Depending on the level of customization required, this repeatable software-defined accelerator reduces the time to implement production-ready AWS Control Tower from months to days. Landing Zone also has ITSM integration, Patch management, Billing & Reporting, and DEVOPS embedded in its standard offering.

#### **Resiliency & High Availability**

Landing Zone uses the global infrastructure of AWS to provide a highly available and resilient environment for customer workloads. Landing Zones can be deployed into multiple availability zone in a single region or across multiple regions to maintain uptime for business critical applications.

# Monitoring and Observability

Monitoring and observability is provided by a number of native AWS tools deployed as part of the landing zone configuration. It can be supplemented by 3rd party tooling if required. These tools are integrated with Atos' ITSM systems and provide visibility and insight into the clients workload health and performance. This suite of tools allows Atos to, troubleshoot, and resolve issues with workload availability and performance to improve the end user experience.

#### **Identity and Access Management**

Identity and Access Management (IAM) is used to control what actions can be performed by a user or service on what resource. Combination of IAM roles, IAM policies, permission sets, along with Service Control Policies will decide whether an entity has permission to undertake a certain action. No permissions will be provided by default.

Atos can integrate with AWS Single Sign-On and enable Multi-Factor Authentication to improve the overall security of the environment.

# **ITSM Integration**

Landing Zone provides integration with Atos's upstream IT service management platform enabling, full incident, change and event management services.

Our ITSM service and processes ensure all the alerts and alarms are captured and sent to ServiceNow for remediation by the correct resolution teams.

# **Billing and Account Management**

Atos will manage provisioning of AWS cloud accounts on behalf of Customer or to take on the management of Customer's own AWS cloud account. Financial control and billing setup provides tools for Customer to manage and control cloud costs and supports the billing process specific to the billing relationship the customer holds.

# **Managed Backup Services**

Landing Zone uses AWS Backup to provide a fullymanaged data protection service that makes it easy to centralize and automate across AWS services, in the cloud, and on premises. Using this service, Atos can configure backup policies and monitor activity for customers in one place. It allows the automation and consolidation of backup tasks and removes the need to create custom scripts and manual processes.

Data protection policies and schedules can be set up to provide backup encryption, and backup access control policies to support full alignment with customer compliance requirements.

#### **Managed Networks**

In addition to providing full network design services Atos will manage the cloud network, helping to create and onboard new networks, subnets, other network devices and execute configuration changes. Centralized network management services use a dedicated network account for audit and traceability. Using a tagging system Atos can differentiate between Customer and Atos managed networks and a service control policy is defined to protect against accidental modification of unmanaged networks.

# EC2 Instance OS and Patch Management

Using AWS Systems Manager agent and AWS CloudWatch agents installed on guest Operating System to provide these services. Covered under the scope of OS and patch management are the following items:

- Monitoring and Alerting using AWS CloudWatch to perform monitoring and alerting of managed cloud resources
- Patch Management using AWS Systems Manager to provide patching and compliance. Patch Management will be an automated process
- OS Compliance will use AWS Inspector and AWS Systems Manager to ensure compliance with Atos and customer compliance standards
- **Backup:** Using a tagging system Atos will manage the backup schedule for a particular instance and ensure compliance with any data retention policies in place
- **Disaster Recovery:** Managed EC2 instances can be added to elastic DRS service to replicate to other AWS region to recover the instances in case of regional outages

#### Managed VMware Cloud

Landing Zone supports full integration with VMware Cloud on AWS, enabling customer to quickly migrate VMware workloads to a VMware-managed Software-Defined Data Center (SDDC) running in the AWS Cloud and extend your on-premises data centers without re-platforming or refactoring applications. Native AWS services can be used with Virtual Machines in the SDDC to increase the workload's agility and scalability.





# **Managed Relational Database Services**

Amazon Relational Database Service (Amazon RDS) provides a managed service that enables Atos to set up, operate, and scale databases in the cloud. Atos provides support for MySQL, PostgreSQL, MariaDB, Oracle BYOL, or SQL Server.

Atos will provide DB Administration, Monitoring, backup and restore and service management functions for databases under management.

RDS instances can be provisioned without first provisioning specific infrastructure or installing and maintaining database software packages.

Managed RDS is complemented by our DB modernization/ transformation service wherein we transform your supported on-prem databases to RDS on AWS.

## **Disaster Recovery**

Atos's landing zones support region to region data replication and recovery. Our landing zone service uses this to enable Elastic Disaster Recovery from AWS which provides a tag based disaster recovery capability for Atos managed EC2 resources.

The Disaster Recovery service increase resilience of managed EC2 instances by replicating data from primary region to secondary region.

# Customizations

While Landing Zone provides a default setup, Atos can also help you customize it to fit your specific requirements, without the need for code changes.

# Features in the future

Development of our Landing Zone is a continuous process and we plan to enrich the landing zone with integration of further services from AWS. These include:



Managed Container services using Elastic Kubernetes, Elastic Containers and Fargate.



**Sovereign Landing Zones** providing data residency and operational sovereignty

Managed Outposts for hybrid workloads

**Generative AI Services** providing ready made AI Applications as well as the toolbox customers can use to develop their own





# Conclusion

Building a landing zone is not just an exercise in achieving architectural excellence; it should be viewed as a strategic investment that can shape an enterprise's trajectory. By leveraging the power of our well-designed landing zone, our customers can expedite time to value, and accelerate business success. It not only results in cost savings and operational efficiency but also in the ability to embrace innovation, resilience, and long-term growth.

# Why Atos and AWS?

Atos's relationship with AWS is based on years of successful cloud migrations for major customers across consumer goods, ecommerce, technology, banking, government, and more. Atos has been an AWS GSI Advanced Consulting Partner since 2013, holds the Migration Delivery Competency, and our AWS certified experts have over 1,000 certifications.

CloudCatalyst, our new collaboration with AWS, is a powerful solution set to transform the global infrastructure outsourcing industry. Together, we are migrating our customers' critical systems and workloads from managed on-premise to managed on the world's leading cloud.

Through our deep understanding of enterprise environments, Atos offers you a proven methodology that incorporates best practices and solution accelerators. Our relationship enables clients to tap into a wide array of services – including Landing Zone. This collaboration ensures a faster time to value, enhanced flexibility, security, innovation, and reduction of technical debt – all under a single managed service.

The holistic approach of CloudCatalyst not only focuses on the technical aspects but also ensures business continuity, driving radical change and a unique solution for customers looking to migrate to cloud.

# The collaborative approach: Working together for success

The journey to cloud is not one-size-fits-all – it requires a deep understanding of our customers' goals, challenges, and culture. We take a collaborative approach, working closely to design and implement a Landing Zone that aligns with the unique requirements of our customers. By leveraging our combined expertise, organizations can harness the full potential of cloud computing, innovate faster, respond to market changes more effectively, and deliver exceptional digital experiences.

Take the next step towards a seamless cloud transformation by getting started with CloudCatalyst. Our team of experts is ready to guide you through every stage of the process, ensuring a smooth and successful transition.

<u>Contact us today to discover how</u> <u>CloudCatalyst can empower your business</u>.