

Focus20 AWS Migration Blueprint

Zero-Downtime Migration Architecture & Strategy

Introduction

Digital transformation requires a resilient foundation. Migrating mission-critical enterprise workloads—especially complex legacy systems from on-premise data centers or competing clouds like Microsoft Azure—demands extreme precision, risk mitigation, and architectural foresight. This blueprint details Focus20's elite methodology for executing seamless AWS migrations.

Phase 1: Deep Discovery & Assessment

Without comprehensive discovery, migrations inevitably stall. Our assessment phase establishes a complete topological footprint:

Dependency Mapping: Utilizing AWS Application Discovery Service and custom agentic crawlers to identify hidden network dependencies, hardcoded IP bottlenecks, and shadow IT.

TCO & FinOps Analysis: Generating exact total cost of ownership (TCO) comparisons, factoring in AWS Reserved Instances, Compute Savings Plans, and spot-instance orchestration.

Phase 2: The '6 R's' Strategy Alignment

We systematically categorize every workload:

Rehost (Lift & Shift): Rapid migration of VMs using AWS Application Migration Service (MGN).

Replatform (Lift, Tinker & Shift): Upgrading foundational components, such as shifting self-managed SQL Server to Amazon RDS or Amazon Aurora.

Refactor (Cloud-Native): Breaking monolithic architectures into event-driven microservices running on AWS Fargate, AWS Lambda, and Amazon EKS.

Phase 3: Execution Engine & CI/CD

Focus20 operates as an engineering 'seal team', deploying infrastructure as code (IaC) to guarantee immutability:

Terraform & CloudFormation: 100% of the target architecture is codified, allowing for rapid deployment across dev, staging, and production environments.

Zero-Downtime Data Sync: Utilizing AWS Database Migration Service (DMS) with continuous data replication to ensure exact data parity prior to instantaneous DNS cutover (Amazon Route 53).

Phase 4: Optimization & Agentic Handover

Migration is only the beginning. Post-cutover, we inject autonomous Agentic AI hooks:

Autonomous FinOps: AI agents that continuously monitor usage patterns to right-size EC2 instances and instantly terminate orphaned resources.

Proactive Security: Integrating AWS Security Hub findings into intelligent alerting pipelines that draft remediation pull requests autonomously.