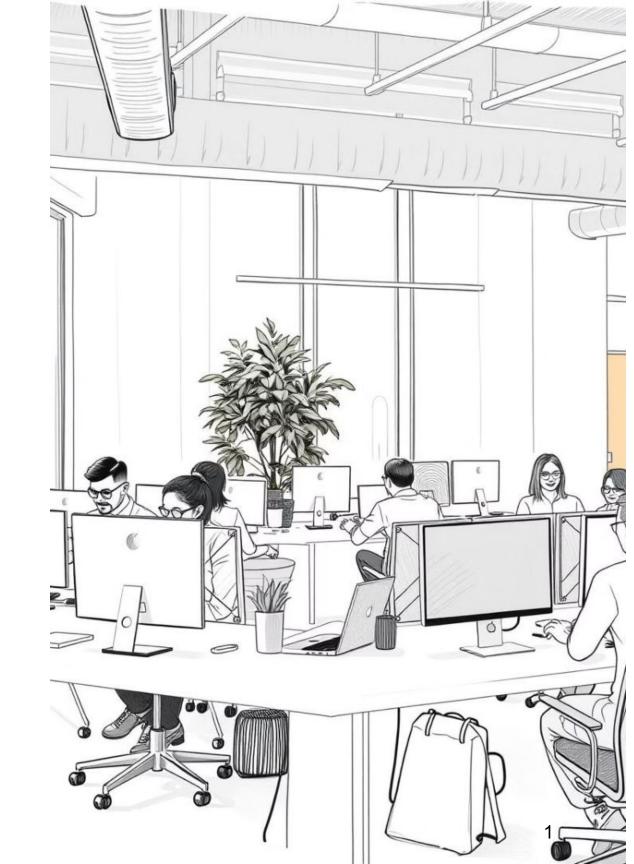




# QuriousCode Case Study:Core5

This presentation showcases how Core5, an AWS Partner, helped QuriousCode build a secure and scalable development environment that mirrored their production architecture on AWS. The solution delivered by Core5 enabled QuriousCode to meet client demands, improve reliability, and reduce costs.





### **About QuriousCode**

QuriousCode is a software development company specializing in building innovative, scalable applications for clients across various industries. They leverage AWS for their production environments, ensuring high availability, security, and performance for their software solutions.

- Diverse Client Base

  QuriousCode serves a wide range of clients, including businesses, organizations, and government entities.
- 3 Scalable Architecture
  Their applications are designed to handle increasing
  workloads and growth without compromising performance.

2 Innovative Solutions

They create cutting-edge applications that address complex challenges and enhance business operations.

4 AWS Expertise

QuriousCode leverages the power of AWS to deliver reliable and secure software solutions.



# **Customer Challenge: Bridging the Gap**

QuriousCode needed a development environment that mirrored their production architecture, ensuring consistency, reliability, and security. Their goal was to eliminate the inconsistencies between development and production environments, improving the overall development process.

### **Inconsistent Environments**

Mismatches between development and production environments could lead to unexpected behavior, bugs, and delays in deployment.

### **Security Concerns**

Development environments often had weaker security measures compared to production, increasing the risk of vulnerabilities and data breaches.

#### **Performance Issues**

Limited scalability of development environments could lead to performance bottlenecks during testing phases, hindering the development process.



# Why AWS: A Foundation for Success

QuriousCode selected AWS for its proven reliability and scalability, particularly in the Mumbai region, where their production environment was located. AWS's global reach and extensive suite of services provided the perfect foundation for building a robust development environment.

#### **Global Reach**

AWS's global infrastructure ensured low latency and high availability for QuriousCode's development environment in Mumbai.

### **Extensive Services**

AWS services like EC2, RDS, S3, and Route 53 provided the necessary building blocks for a scalable and secure development environment.

### **Security Features**

AWS security features, such as IAM policies and WAF, helped QuriousCode create a secure development environment.

### **Cost Optimization**

AWS's pay-as-you-go pricing model and cost optimization tools enabled QuriousCode to manage their cloud spend effectively.



### **Core5: The Perfect Partner**

Core5 was chosen for their deep expertise in AWS architecture and experience in setting up similar environments for other businesses. They had a proven track record of delivering robust and secure AWS solutions, tailored to client-specific needs.

**AWS Expertise** 

Core5 had a strong understanding of AWS services and best practices, ensuring the delivery of a highly optimized solution.

**3** Proven Track Record

Core5 had a successful history of delivering complex AWS projects, ensuring confidence in their capabilities.

**Client-Specific Approach** 

Core5 tailored the solution to meet QuriousCode's specific requirements and integrate seamlessly with their existing workflow.

**AWS Partner Network** 

Core5's participation in the AWS Partner Network

(APN) demonstrated their commitment to AWS best practices and customer satisfaction.



### The Solution: A Secure and Scalable Environment

Core5 designed a comprehensive AWS solution for QuriousCode, addressing key challenges with a secure and isolated environment, high availability, robust security measures, efficient content management, and seamless integration into QuriousCode's existing workflow.

Virtual Private Cloud (VPC)

A secure and isolated VPC in the Mumbai region provided dedicated resources for QuriousCode's development environment, mirroring their production environment for a smooth developer transition.

**2** Redundancy and Scalability

AWS Auto Scaling ensured high availability and performance during testing, supporting QuriousCode's growth and expansion.

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**Security Measures** 

AWS WAF and IAM policies provided enhanced security, preventing unauthorized access and protecting sensitive data, aligning with production environment standards.

**Content Management and Delivery** 

Amazon S3 buckets enabled efficient content delivery and management for both staging and production environments.

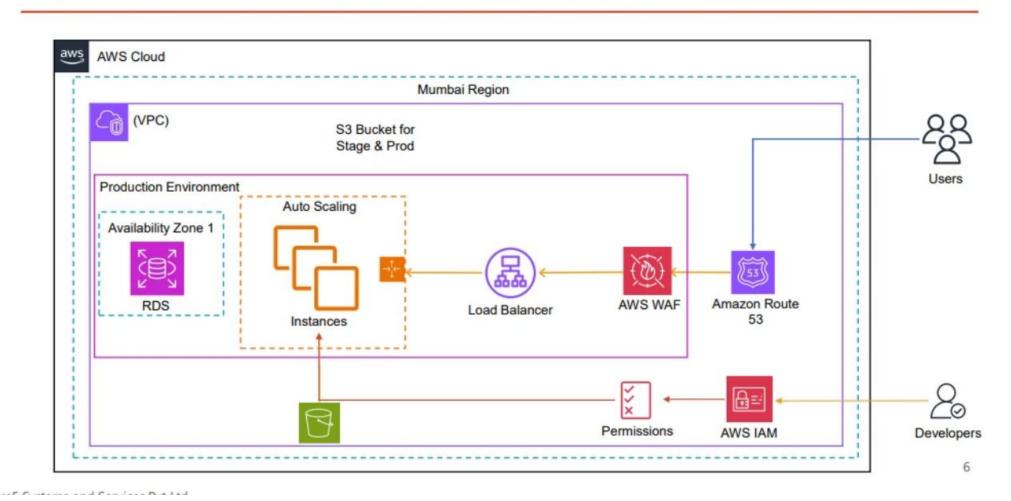
**Development Workflow Integration** 

The development environment was integrated with QuriousCode's existing workflow, streamlining developer access and enabling faster deployment cycles.



# **Architecture Diagram**

### Highly Available & Scalable Multi-AZ DB Solution



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# **Benefits: A Positive Impact**

Core5's solution provided significant benefits for QuriousCode, including improved reliability, enhanced scalability, increased security, and cost optimization.

### **Improved Reliability**

AWS ensured 99.99% uptime, minimizing downtime.

#### **Enhanced**

**Scalability** prevented performance bottlenecks.

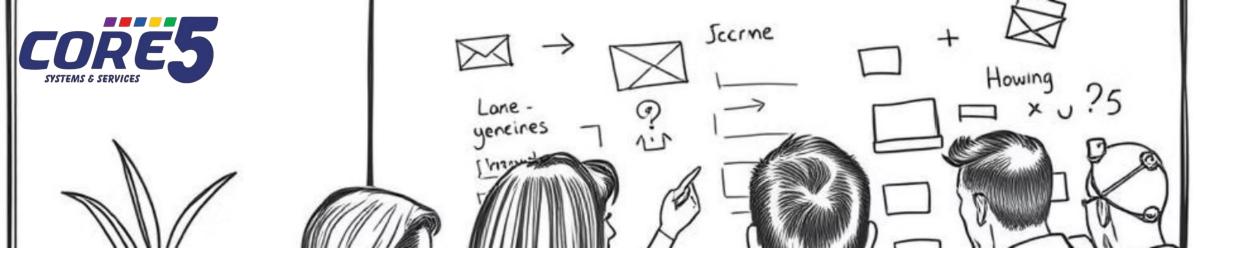
### **Increased Security**

AWS WAF and IAM policies reduced security breach risk by 40%.

### **Cost Optimization**

QuriousCode reduced cloud infrastructure costs by 25%.







## **Next Steps: Continued Innovation**

QuriousCode plans to continue working with Core5 to enhance its cloud infrastructure. Future plans include exploring containerization technologies like AWS Fargate to further optimize application performance and reduce costs.

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### **Containerization with AWS Fargate**

QuriousCode is exploring the adoption of containerization technologies like AWS Fargate, which offer improved resource utilization and reduced operational overhead.

### **Continuous Improvement**

QuriousCode and Core5 will continue to collaborate to identify areas for further optimization and enhance the development environment.

### **Scaling for Growth**

As QuriousCode continues to grow, their cloud infrastructure will be further optimized to support their expanding development and deployment needs.





### **About Core5**



Core5 is a leading System Integrator and Technology Provider, offering high-end IT technical and consulting solutions to businesses, organizations, and government entities. As a certified AWS Partner, they focus on delivering simple, secure, and cost-effective IT solutions to enhance operational efficiency and ensure rapid returns on investment.



### **Cloud Solutions**

Core5 provides
comprehensive cloud
solutions, leveraging AWS
services to deliver scalable
and reliable infrastructure.



### **Security Expertise**

They prioritize security, implementing robust measures to protect sensitive data and ensure compliance with industry standards.



### **Cost Optimization**

Core5 helps clients optimize cloud spending, leveraging AWS cost optimization tools and best practices to maximize efficiency.



### **Exceptional Support**

Core5 provides ongoing support and guidance to ensure successful implementation and ongoing operation of their solutions.