

Mainframe application modernization with IBM and AWS

Maximize your mainframe investments and improve agility

IT leaders are tasked with integrating and extending mainframe capabilities to drive agility and business innovation. In fact, four out of five organizations believe they must rapidly modernize mainframe-based applications to keep up with the competition.¹ The challenge, however, is in finding the best approach to application modernization—one that offers the best ROI.

IBM Consulting™ helps you design a hybrid cloud strategy with a single integrated operating model. It includes common agile practices and interoperability of applications between IBM® zSystems and Amazon Web Services (AWS). IBM places applications and data on the right platform and helps keep it secured, encrypted and resilient. It's an agile, seamlessly integrated hybrid cloud platform with IBM zSystems at the core.

IBM Consulting works to accelerate mainframe application modernization, develop cloud-native applications and drive IT automation with IBM zSystems and AWS. The joint approach allows businesses to innovate faster, maximize investment value and reduce the need for specialized skills. For IBM zSystems clients, the IBM Z® and Cloud Modernization Stack on the AWS Marketplace provides a flexible and integrated software solution to support application modernization on the IBM z/OS® operating system, cloud native development and API creation. The result: faster modernization at a lower cost.

IBM and AWS have identified five patterns in support of a hybrid cloud approach.

- **Cloud-native development for z/OS applications** can increase speed and agility by shifting DevTest workload to cloud, have greater productivity with the IBM Z and Cloud Modernization Center and use AWS CodePipeline for enterprise DevOps.
- **Real-time sharing between z/OS applications and AWS** enables a faster, efficient and flexible way to share core business data and information in near real-time between mainframe and digital frontend applications running on AWS.

- **Mainframe augmentation with new channels** extends the z/OS reach to the AWS Cloud by making z/OS business functions and data available with APIs hosted and managed in AWS for new use cases on AWS.
- **Hybrid cloud storage with AWS Cloud storage** enables organizations to use the strengths of on-premises disk and tape storage while adding the intrinsic strengths of cloud solutions like AWS storage for backup, archive and unstructured data.
- **Enterprise automation across z/OS and AWS** is enabled by using the Red Hat® Ansible® Certified Content for IBM Z mainframes, which includes collections that accelerate automation of the z/OS operating system, z/OS middleware products and other IBM zSystems resources.

Why IBM and AWS

As an AWS Premier Tier Services Partner, IBM Consulting helps clients adopt, optimize, modernize, and secure business and IT operations on AWS Cloud. IBM Consulting has 19,000+ AWS-certified cloud practitioners, 16 validated service delivery programs, and mastery in 15 AWS competencies to develop cloud-native apps in the AWS Cloud environment. IBM continues to strengthen AWS capabilities through acquisitions like Nordcloud, Taos and Octo, innovations at IBM Research, and co-development of solutions with AWS—making IBM the ideal partner of choice.

IBM and AWS support a hybrid cloud strategy that can:



Improve agility by enabling reuse of core backend processes and significantly reduce talent gaps.



Deliver rapid innovation with an agile DevOps approach.



Provide easier access to applications and data without significant changes.



Optimize the costs of running or extending applications.

[Learn more](#) about IBM Consulting services for AWS Cloud.

1. Application modernization on the mainframe, IBM Institute for Business Value, March 2022.

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