

Mainframe is a Part of Your Cloud Strategy.

Now What?

Three Ways to Include Mainframe Workloads in Your Hybrid Cloud

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If Mainframe were an athlete, it would have multiple MVP titles. So would Cloud. Now, this sounds like the beginning of a championship team. But, just as great players alone don't bring home the pennant (or trophy, depending on your sport), neither do great technologies. You've got to bring those "players" on your IT roster together and integrate them into a cohesive unit that allows each one to shine. That's what makes a championship team.

Now, in sports, players get an off-season and time to rest. In the world of business—and the technology that runs it—there is no off-season. Your IT stack needs to be ready 24x7x365. That means every one of the platforms on your IT roster needs to know its position and be able to perform at its best and work seamlessly with the rest of the squad.

Many companies want the flexibility that Cloud offers, yet business-critical workloads that depend on the Mainframe aren't going anywhere. In fact, there's great value in what the Mainframe delivers for business and operations. Activating the Mainframe as part of your Cloud strategy means opening up access to a rich data source—a wellspring of modern insights and applications that transforms your ability to build business innovations and IT resiliency. So the question is not so much should you include the Mainframe in your Cloud strategy, but how?

Go Hybrid, Go Mainframe

When creating a successful hybrid environment with the Cloud and Mainframe, it's important to understand that you are modernizing the infrastructure, not individual applications. A Cloud strategy alone only modernizes infrastructure for Cloud-like workloads. The Hybrid approach takes capabilities on the Mainframe that have proven value to your business and delivers them to all applications on the Cloud.

In general, a Hybrid Cloud architecture enables teams to:

- Consolidate and share IT resources
- Orchestrate processes with the help of automation
- Connect multiple systems through a network
- Scale and quickly provision new resources
- Incorporate a single, unified management layer
- Move workloads between environments

The Mainframe is the fastest and most secure platform on the planet and constantly expands based on evolving technologies and business needs. Combining the strengths of Mainframe with Hybrid architectures allows organizations to continue to leverage proven value and critical capabilities. The challenge is to select the best approach for your business and current IT stack.

Start by evaluating your current tech landscape against your business needs. This knowledge will enable you to identify value and differentiate which applications run best on the Cloud and which are better suited for the Mainframe. It's a winning lineup that helps you capitalize on the strengths of both.

Here are three proven ways to successfully integrate and benefit from Mainframe workloads in your Hybrid Cloud.



#1

Enable Cloud Access to Mainframe Data

The Mainframe hosts a trove of critical business records and data—offering impactful insights on everything from operations to customer experience. This data is a source of incredible value that Cloud apps can, and should, leverage to gain advantage in the market.

Traditionally, it could be challenging to access Mainframe data from outside the host. Modern applications such as online shopping and banking are primarily API-based and Mainframe is not. These incompatible formats can result in application projects that require Mainframe data taking a long time.

Today, businesses are using APIs to access Mainframe data with very positive results. APIs enable secure and managed access to the Mainframe and help abstract incompatible formats so that Cloud-native applications, such as a mobile banking app, can easily leverage valuable Mainframe data. Opening up the Mainframe with APIs means that businesses can combine the power of the Cloud and Mainframe to develop modern solutions with more agility and faster time to market. In addition, standard data integration technologies such as RESTful APIs, virtualization, or GraphQL make it easy for businesses to support flexible development.

#2

Enable Cloud Access to Mainframe Services

Using RESTful APIs, businesses can make accessing Mainframe services and capabilities look the same as they would on any Cloud service. This familiarity is quite handy. For example, Mainframe services usually come with business logic, policies, or processes around using or updating the associated data. These are part of standard business services required to comply with regulations or compliance criteria. Incorporating these services into applications from outside the host can be a challenge. However, now you can leverage the existing policies and logic with a RESTful interface.

A RESTful interface, synonymous with RESTful APIs, is how businesses operate digitally and manage interoperability between services and developers. In essence, RESTful APIs make accessing Mainframe services and capabilities operate just like they would for any Cloud service. Enabling Cloud access to Mainframe services in this way means you can more easily modernize and accelerate the delivery of Mainframe apps. For example, creating new customer-facing interaction logic to function in applications in real-time.

#3

Host Cloud Workloads on the Mainframe

The promise of Hybrid is mainly in portability and optimization—provisioning workloads where they make the most sense and moving workloads between platforms as needed. Modernizing your Mainframe infrastructure to run newer, Cloud-native workloads means gaining the ability to make those new languages and runtimes available on the Mainframe for developers to exploit.

Many newer workloads are non-traditional, as in not COBOL or PLI running in CICS or IMS. They include new databases and runtimes found on Linux (or Linux on z), new languages like JavaScript, Ruby, or Python, and new technologies like containers and Kubernetes. Hosting new runtime technologies on the Mainframe, like containers in zCX or Linux on z, makes it easier for developers to stay current with workload runtimes in a shorter time.

Hybrid Cloud with the Mainframe FTW

Season after season, organizations make a substantial investment in services, business logic, governance, and compliance on the Mainframe. Leveraging that investment doesn't mean reengineering the existing assets. It means modernizing access to those resources using the language of the Cloud.

Given the Mainframe's "triple threat" of unique strengths—scalability, security, and reliability—businesses need to consider integrating it into the Cloud a necessity.

There are multiple ways to integrate the Mainframe based on your business' priorities. Assessing your business and operational needs will guide you toward the best one(s). Whichever way you choose, embracing and exploiting Mainframe strengths in your Cloud strategy will expand the value of your IT investment and set your business up to win with a game plan to innovate, grow, and offer extraordinary customer experiences.





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