



Hewlett Packard
Enterprise



Move from mainframe to HPE GreenLake

Get proven expertise from HPE Services



The advent of hybrid cloud environments has resulted in many organizations moving applications, including large, mission-critical workloads away from mainframes. IT departments are under pressure to adapt to the business needs of the digital era while cutting operational costs and increasing the agility to roll out new services and systems quickly and cost-effectively. And this can only be achieved by simplifying the environment, improving TCO, and reducing dependency on legacy technologies—all of which can be addressed by migrating to hybrid cloud environments.

Five reasons to make the move off mainframe

1. **Operating costs:** The hardware, operating system, database, and third-party application costs associated with mainframes are high, and they continue to increase.
2. **Footprint and power costs:** Standards-based hybrid cloud platforms now match the performance of mainframes while using less power.
3. **Availability of skills:** Staffing needs are much easier to meet when you run workloads on hybrid cloud platforms while the mainframe operations workforce gets smaller and older.
4. **Inflexibility:** Mainframes have traditionally been run in a hosted IT environment—a structure that makes it very expensive to scale. In contrast, HPE standards-based hybrid servers or HPE GreenLake software as a service (SaaS) / platform aaS (PaaS) enable you to scale cost-effectively and leverage better application development capabilities.
5. **Choice of applications:** Thousands of more up-to-date applications are available on Intel®-based servers than on mainframes, offering greater choice to meet IT and business needs

Is mainframe migration daunting?

Yes. It's complex, detailed, and takes time. Fortunately, Hewlett Packard Enterprise has vast experience having been helping with this for 25 years.

Rely on the HPE expertise and experience at every step

As legacy mainframe environments support mainly business-critical applications, you can rely on HPE migration experts to help ensure business continuity throughout the migration process. We've designed the mainframe alternative (MFA) methodology, combining proven processes and tools.

The methodology offers four key services as shown in Figure 1.

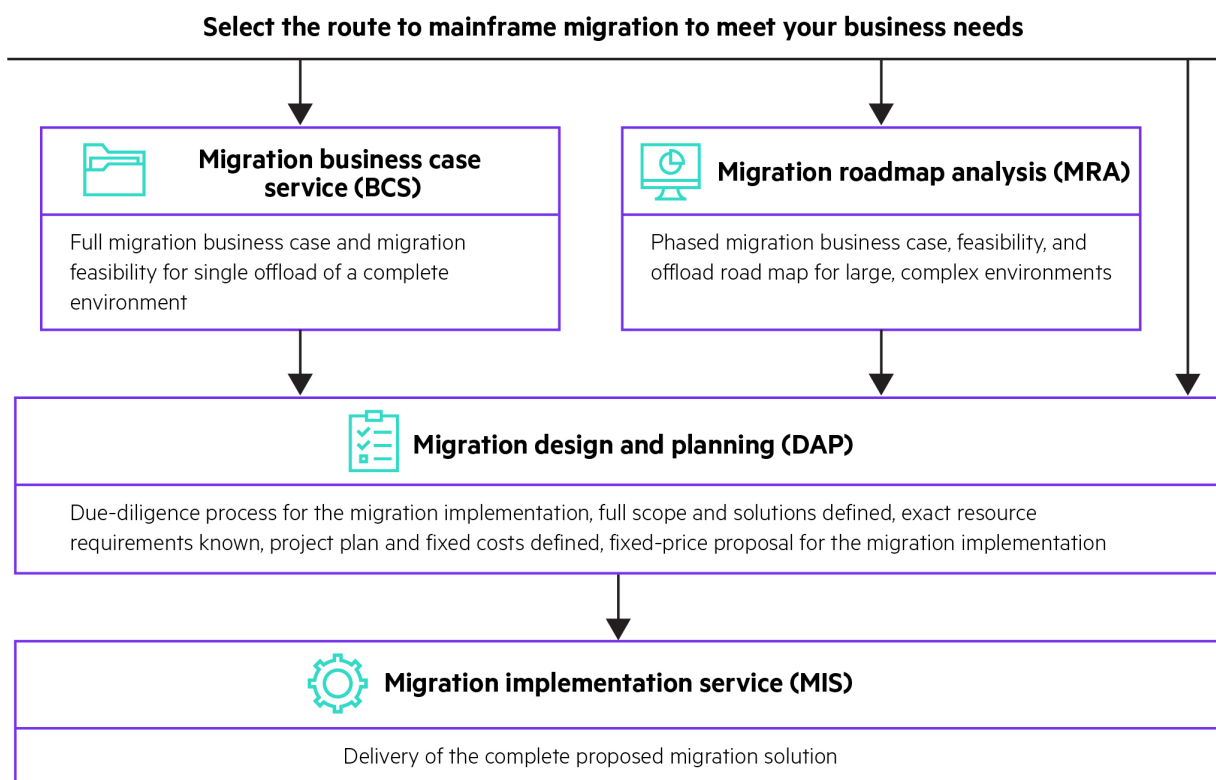


Figure 1. Routes for mainframe migration



Mainframe migration business case service (BCS)

The first step is to understand the business case and migration feasibility. Typically, four to five weeks in length, it helps build the business case for full mainframe migration, including a four-year TCO/ROI economic analysis, along with technical and timeline feasibility. Other deliverables include a high-level target design concept, source-to-target migration mapping, high-level project plan, and a schedule showing major phases, activities, and milestones, as well as information on risks and impacts.



Mainframe migration roadmap analysis (MRA)

Planning migration from a large mainframe environment needs to be addressed in phases, identifying potential roadblocks, dependencies, support and technical constraints, and an overall business case. This service makes arriving at the right decisions faster, supported by an actionable plan. This is typically 8 to 12 weeks in length. It builds a more elaborate business case when phased migration of a vast mainframe estate is involved. The analysis covers how the environment can be partitioned and the order in which the migrations should occur.



Mainframe migration design and planning (DAP)

The final step before embarking on migration implementation. This service is designed to cover the aspects of the due-diligence process to help mitigate migration risks and provide the best possible start for a successful migration. Typically, it follows either of the previous services, though it can be a standalone engagement for those who already have clarity on the need for migration, as well as a high-level scope establishing that a single-project migration is feasible. After performing the in-depth analysis and due diligence required to integrate the scope and feasibility, a fixed-price migration implementation proposal is finalized.



Mainframe migration implementation service (MIS)

The specialist and dedicated Mainframe Migration Center of Expertise from HPE delivers the implementation. On an average, it could take about 12 months, but could also be 18 months. For very large mainframe environments, it could be a number of projects over several years. It covers the aspects of replacing the mainframe environment—including online and batch architecture, application and data migration, security, printing, management, and hybrid cloud infrastructure. It is designed to enable a low-risk migration with little impact on day-to-day business operations.

These services enable complete, partial, or phased mainframe migration to various hybrid cloud platforms. It has become clear the debate over public cloud or mainframe as an either/or decision is no longer valid when the choice to take a cloud everywhere approach can be made.

What does hybrid cloud look like with HPE GreenLake?

HPE GreenLake cloud services provides you with a powerful foundation to drive digital transformation through an elastic aaS platform that can run on-premises, at the edge, or in a colocation facility. HPE GreenLake combines the simplicity and agility of the cloud with the governance, compliance, and visibility that comes with hybrid cloud. Managed from HPE GreenLake Central, it brings the cloud experience to your apps and data, wherever they reside. It helps you rapidly deploy a broad portfolio of cloud services such as machine learning operations (MLOps), containers, storage, compute, virtual machines (VMs), data protection, and more. It is delivered to your facility in about 14 days—with no up-front cost. What's more, HPE GreenLake can help you gain cost and compliance insights and simplify management across your hybrid cloud platform.

Sophisticated metering enables accurate and transparent pay-per-use* billing that scales up and down with usage and a consistent cloud experience across your environments. Operations are highly automated and cloud native, which means you do not need expensive training and skills for each platform. And with 24x7 monitoring and management, HPE GreenLake takes on the heavy lifting associated with managing your infrastructure.

* May be subject to minimums or reserve capacity may apply

HPE GreenLake Central—one platform to run, manage, and enhance your hybrid estate

The HPE GreenLake Central self-service platform serves as the cohesive force, bringing all components together by streamlining operations and providing a centralized source of insights across your hybrid infrastructure. Simply point and click to get a single integrated view into the cost, governance, performance, and security status of your hybrid estate, as well as comprehensive compliance capabilities and broader cost insights and analytics. Understand and control costs, manage and prove compliance, and help optimize the right mix of public, private, and on-premises workloads.

With HPE GreenLake Central, you get:

1 Unified portal for your entire IT estate

Simplify IT operations across your data centers and cloud

- Move faster with a self-service cloud experience
- Get the right information with role-based access
- Gain quick insights with an overview of all KPI
- Is managed for you, with a unified, automated experience, which hides the diverse tools and platforms

2 Intuitive consumption analytics

Gain visibility into usage and costs across your hybrid estate with powerful analytics

- View top costs by service type, location, and more: Interactive charts and graphs help you track where you're spending your IT budget
- Get aggregated usage across on-premises and public cloud and see all your usage and spend in one easy-to-use app
- Spot areas to optimize with rules-based insights

3 Plan for future capacity needs

Get the capacity you need for your HPE GreenLake cloud services

- Monitor usage against installed and reserved capacity, showing exactly how much capacity has been used compared to what's installed and reserved
- Predict capacity, which helps eliminate guesswork by forecasting future capacity based on historical usage and trends
- Plan capacity at any level, from aggregated storage across your hybrid environment down to capacity on a specific array or server

4 Deploy and manage cloud services

Provision, monitor, and manage workloads across your HPE GreenLake private cloud deployments

- Create and manage VMs, containers, and MLOps projects—power up your DevOps team with self-service provisioning, management, and reporting
- View real-time statistics for overall CPU, storage, and memory utilization to help you monitor your instances, providing overall efficiencies of resources
- Provision quickly with preloaded workloads, customize on the spot, or provide simple pull-down menus to customize workloads to suit your specific needs

5 Mitigate risk with continuous compliance control

Monitor over 1500 controls for governance, risk, and compliance

- Quickly mitigate identified risks—once out-of-compliance situations are identified, experts work with you to remediate and tailor frameworks
- Reduce the time and cost associated with comprehensive audit reports as you streamline them
- Stay on top of governance and compliance with up-to-date KPIs
- Be current with ongoing evaluation to key operational and regulatory controls

Mainframe migration with HPE

Mainframe migration combined with HPE GreenLake offers a complete end-to-end application migration and service from the legacy mainframe to a hybrid cloud environment. Proven migration methodology and process, implementing and utilizing IP automation tools and technologies from HPE allow organizations to significantly reduce TCO with low risk.

Organizations like yours benefit from reduced cost. You can also help eliminate the need to rely on mainframe infrastructure skills and specialists. What's more, you benefit from accelerated application workloads migration from legacy to a right mix of HPE GreenLake cloud services. It also includes improved business and IT agility while maintaining high availability and service-level agreements (SLAs).

Connect with HPE technology experts

You rely on technology to run your business efficiently. To stay competitive and capitalize on new revenue opportunities, you must learn how to access technology in new ways. You can now team up with HPE experts to take full advantage of technology to drive your business. Explore how HPE can give you cloud everywhere for your applications locked in mainframe.



Learn more at

[HPE.com/services/platformconsulting](https://hpe.com/services/platformconsulting)

[HPE.com/GreenLake](https://hpe.com/GreenLake)

