

Mainframes – Services and Solutions 2025

A guide for clients evaluating their mainframe
commitment and modernization strategy



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Mainframe systems have been supporting public sector IT operations for decades. However, with the widespread demand for digital modernization of systems and operations, most agencies question how legacy mainframe environments can be leveraged to meet availability, interoperability and cost requirements in today's digital world.

This ISG Provider Lens™ study assesses service providers and software vendors that enable the modernization of mainframe systems, software environments and business applications to meet current and next-generation digital requirements of U.S. public sector organizations, including state, local, municipal and educational (SLED) agencies.

Resilient mainframe environments can leverage high-performance hardware and software tools for continuous modernization, enabling mainframe applications to integrate with new technologies and computing platforms. The service providers and vendors in this study assist clients in adapting their mainframe applications to meet modern digital business needs by offering modernization and

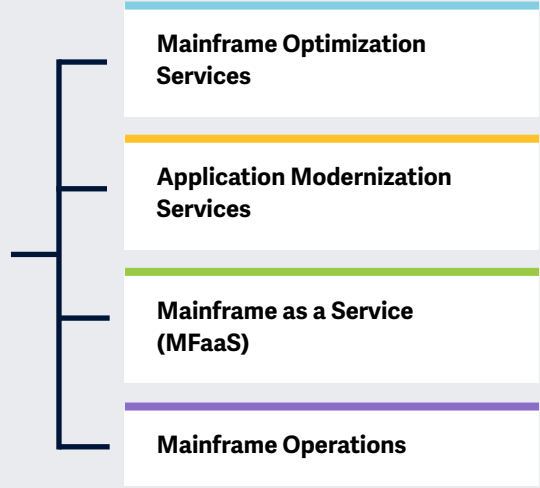
outsourcing services, either on-premise or via a mainframe-as-a-service (MFaaS) model. The providers in this study cover mainframe platforms such as IBM (Z and AS/400), HP, Cray, Fujitsu and Unisys.

The ISG Public Sector Provider Lens™ studies examine, explain and offer guidance on business software platforms, solutions, tools, services and providers that help improve public sector organizations' operations and transform them toward digital realities.



Key focus areas for Mainframes – Services and Solutions 2025 study

Simplified Illustration Source: ISG 2024



Definition

The ISG Provider Lens™ Mainframes — Services and Solutions 2025 study offers the following to business and IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers.
- A differentiated positioning of providers by segments on their competitive strengths and portfolio attractiveness.
- Focus on the U.S. Public Sector.

Our study serves as an important decision-making basis for positioning, key relationships, and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their current vendor relationships and potential engagements.



Mainframe Optimization Services

Definition

Like most legacy systems, mainframes were implemented decades before the emergence of modern application development practices. While mainframes are based on legacy programming languages and architectures, modern approaches to development and maintenance can improve the efficiency of application development and operation.

Service providers in this quadrant offer legacy application modernization services that are less disruptive to the mainframe operation, enabling organizations to better leverage contemporary technologies and practices. The providers offer services such as implementing code repositories, including GitHub or equivalent platforms, integrating DevOps practices, and automating testing processes and conducting security assessments. Modernization retains the original programming language, such as COBOL, adding architecture optimization and documentation to enable agility.

After modernization is complete, clients can adopt agile methodologies for developing and maintaining applications running on mainframe systems. This includes utilizing code repositories, quality assurance and DevOps practices.

The providers can assess a client's application portfolio to create a modernization plan, offering guidance on which applications should remain on the mainframe platform and which should be migrated. They also help public sector organizations decide on the type of applications that can be transformed and migrated to other platforms, thus enabling cost and performance optimization.

Eligibility Criteria

1. Demonstrate **wide customer presence** and involvement in the U.S. public sector as defined by ISG
2. Offer **case studies around mainframe modernization** of either IBM Z, IBM AS/400, IBM iSeries, HP, Cray, Fujitsu or Unisys applications
3. Include examples of **DevOps** tools integration, including code repository
4. **Modernize legacy programming languages**, such as COBOL, to build and deploy in line with modern continuous integration and deployment best practices
5. Plan for **phased modernization** with robust testing and quality assurance
6. Decouple applications, develop APIs and **integrate with applications** outside the mainframe environment
7. Offer guidance for future-state **application governance** and **application assessment services**
8. Deliver services directly through **employees** with adequate expertise in COBOL and other mainframe programming languages



Definition

The number of software developers skilled in maintaining mainframe applications written in decades-old programming languages is dwindling. To ensure these applications remain operational and to preserve the business logic refined over many years of serving constituents, agencies are seeking to transform legacy mainframe codes into modern programming languages that are not restricted to the mainframe environment. Transforming applications reduces maintenance costs and eliminates mainframe licensing costs. The applications are also more agile and better adaptable to changing technology.

This quadrant assesses application development and maintenance services providers with new application modernization methodologies to assess and rewrite legacy programming language applications written with COBOL, RPG, Fortran, PL/1, Natural and other languages that typically run on mainframes.

The main target programming languages may include Java, .Net, C#, Python and others, enabling the same logic and business rules to run on any platform, including the public cloud.

Government organizations seeking to move their applications off the mainframe can choose service providers that offer modernization methods such as refactoring, rehosting, encapsulating, replatforming, rewriting and reengineering. A complete transformation should include UI translation services that can eliminate green screens while introducing a modern graphic UI for a better UX.

Eligibility Criteria

1. Demonstrate **wide customer presence** and involvement in the U.S. public sector as defined by ISG
2. **Ability to reverse engineer** legacy applications to provide application logic documentation
3. **Showcase expertise in automating code conversion** with tools to reduce the time required to transform the applications
4. Offer **emulation systems** to run legacy applications on other platforms without rewriting code
5. Offer **services** such as application assessment, phased transformation with robust testing and quality assurance, application decoupling, system architecture, API development and future-state application governance
6. Offer **phased transformation** with robust project management, testing and quality assurance
7. Ability to help clients incorporate **agile development** and maintenance with CI/CD automation through transformation



Mainframe as a Service (MFaaS)

Definition

Mainframe-as-a-service offering provides a valuable alternative to agencies that run and maintain a mainframe in their own data center. Challenges with licensing costs and finding qualified professionals to support these systems put significant pressure on agencies to keep these systems running. In many cases, state and local agencies cannot manage mission-critical applications that run on mainframes. They find it challenging to handle the disruption and risks associated with rewriting applications and modernizing the systems. Moving their mainframe environment to a third party's infrastructure and tasking them to maintain it eliminates some challenges of operating a mainframe on their own.

This quadrant assesses infrastructure service providers that offer shared IBM Z mainframes under a pay-per-use contract model. The services include facilities, hardware, connectivity, mainframe network management, licensing, operating system, subsystems and tools.

The providers must also offer all maintenance services required to keep mainframe workloads running and to comply with the expected performance established upfront. An MFaaS is hosted at a provider's or partner's data center, offering a cloud-like experience.

A more cloud-like mainframe has many capabilities and benefits. It enables customers to scale up or down their service as requirements change. Latency is also low as the mainframe is closer to the public cloud than in an agency's data center.

Eligibility Criteria

1. Demonstrate **wide customer presence** and involvement in the U.S. public sector as defined by ISG
2. Use **robust and secure data centers** to deliver high performance and availability as expected from mainframes
3. Offer **services** such as job scheduling, performance optimization, CICS®, batch, backup, restore, system upgrades, security patches and other typical mainframe operations
4. Demonstrate the **disaster recovery** effectiveness of its MFaaS infrastructure
5. Offer low-latency **connections to clients' locations** through its hosting facilities and the public cloud, such as AWS Direct Connect, Azure Route and GCP Direct Connect
6. Demonstrate the **financial capacity** to invest in and grow mainframe operations
7. Have a **hiring and training** program to ensure future skill availability in the future
8. **Ensure performance** and security as per SLAs and corresponding contractual penalties



Mainframe Operations

Definition

Maintaining a skilled workforce to operate mainframes within a government agency is challenging. While finding COBOL developers is difficult, agencies' tight budgets often make retaining them cost-prohibitive. When outsourcing the whole environment to a third party as an as-a-service model is not viable, agencies may bring experts in to work on their machines.

This quadrant assesses traditional outsourcing providers with extensive experience in offering mainframe services. Typical participants employ experienced practitioners to cover legacy mainframe technologies and the most recent mainframe releases. Constantly updating the skill level of these consultants and maintaining a knowledge base are key requirements.

Mainframe operation service providers offer skilled teams to keep clients' mainframes running. These services can be delivered at any client- or provider-owned hosting facility. Such services have long existed and include job scheduling, performance optimization,

CICS®, batch processing, backup and restore, system upgrades, security patches and other typical mainframe operations. Multiple options exist for hardware and software ownership, upgrades and modernization responsibilities. Mainframe operations cover staff augmentation and support the operation of client-owned on-premises mainframes.

Eligibility Criteria

1. Offer **wide customer presence** and involvement in the U.S. public sector as defined by ISG
2. **Demonstrate a strong** mainframe operation capacity through case studies
3. Have a **hiring and training program** to ensure skills availability in the future
4. Offer **professional services** to manage and monitor CPU, memory, databases, operating systems and tools
5. Offer professional services to **install and replace** hardware, software and tools
6. Offer professional services such as **patching services** for operating systems, middleware and applications, system upgrades, data center security, network configuration and system integration
7. Provide management **dashboards**, including utilization reports, performance indicators and chargeback
8. Offer services, such as incident management, problem management and release management, that **comply with ITSM** best practices



Quadrants by Region

As a part of this ISG Provider Lens™ quadrant study, we are covering the following four quadrants on Mainframes — Services and Solutions 2025:

Quadrant	U.S. Public Sector
Mainframe Optimization Services	✓
Application Modernization Services	✓
Mainframe as a Service (MFaaS)	✓
Mainframe Operations	✓



The research phase falls in the period between September and October 2024, during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in February 2025.

Milestones

Beginning

End

Survey Launch	September 25, 2024	
Survey Phase	September 25, 2024	October 25, 2024
Sneak Preview	February 2025	
Press Release & Publication	March 2025	

The collection of client testimonials via the Star of Excellence Program requires early client referrals (no official reference needed) as CX scores have a direct influence on the provider’s position in the IPL quadrant and the awards.

Please refer to the [link](#) to view/download the ISG Provider Lens™ 2024 research agenda.

Access to Online Portal

You can view/download the questionnaire from [here](#) using the credentials you have already created or refer to instructions provided in the invitation email to generate a new password. We look forward to your participation!

Buyers Guide

ISG Software Research, formerly “Ventana Research,” offers market insights by evaluating technology providers and products through its Buyers Guides. The findings are drawn from the research-based analysis of product and customer experience categories, ranking and rating software providers and products to help facilitate informed decision-making and selection processes for technology.

In the course of the Mainframes – Services and Solutions IPL launch, we want to take advantage of the opportunity to draw your attention to related research and insights that ISG Research will publish in 2025. For more information, refer to the [Buyers Guide research schedule](#).

Research Production Disclaimer:

ISG collects data for the purposes of writing research and creating provider/vendor profiles. The profiles and supporting data are used by ISG advisors to make recommendations and inform their clients of the experience and qualifications of any applicable provider/vendor for outsourcing the work identified by clients. This data is collected as part of the ISG FutureSource™ process and the Candidate Provider Qualification (CPQ) process. ISG may choose to only utilize this collected data pertaining to certain countries or regions for the education and purposes of its advisors and not produce ISG Provider Lens™ reports. These decisions will be made based on the level and completeness of the information received directly from providers/vendors and the availability of experienced analysts for those countries or regions. Submitted information may also be used for individual research projects or for briefing notes that will be written by the lead analysts.



ISG Star of Excellence™ – Call for nominations

The Star of Excellence™ is an independent recognition of excellent service delivery based on the concept of “Voice of the Customer.”

The Star of Excellence™ is a program, designed by ISG, to collect client feedback about service providers’ success in demonstrating the highest standards of client service excellence and customer centricity.

The global survey is all about services that are associated with IPL studies. In consequence, all ISG Analysts will be continuously provided with information on the customer experience of all relevant service providers. This information comes on top of existing first-hand advisor feedback that IPL leverages in context of its practitioner-led consulting approach.

Providers are invited to [nominate](#) their clients to participate. Once the nomination has been submitted, ISG sends out a mail confirmation to both sides. It is self-evident that ISG anonymizes all customer data and does not share it with third parties.

It is our vision that the Star of Excellence™ will be recognized as the leading industry recognition for client service excellence and serve as the benchmark for measuring client sentiments.

To ensure your selected clients complete the feedback for your nominated engagement please use the Client nomination section on the Star of Excellence™ [website](#).

We have set up an email where you can direct any questions or provide comments. This email will be checked daily, please allow up to 24 hours for a reply.

Here is the email address:

ISG.star@isg-one.com



ISG Star of Excellence



The ISG Provider Lens Mainframes – Services and Solutions 2025 research study analyzes the relevant software vendors/service providers in the global market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this study will include data from the ISG Provider Lens™ program, ongoing ISG Research programs, interviews with ISG advisors, briefings with service providers and analysis of publicly available market information from multiple sources. ISG recognizes the time lapse and possible market developments between research and publishing, in terms of mergers and acquisitions, and acknowledges that those changes will not reflect in the reports for this study.

All revenue references are in U.S. dollars (\$US) unless noted.



Contacts For This Study

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ISG Provider Lens Advisors Involvement Program

ISG Provider Lens offers market assessments incorporating practitioner insights, reflecting regional focus and independent research. ISG ensures advisor involvement in each study to cover the appropriate market details aligned to the respective service lines/technology trends, service provider presence and enterprise context.

In each region, ISG has expert thought leaders and respected advisors who know the provider portfolios and offerings as well as enterprise requirements and market trends. On average, three advisors participate as part of each study's quality and consistency review team (QCRT). The QCRT ensures each study reflects ISG advisors' experience in the field, which complements the primary and secondary research the analysts conduct. ISG advisors participate in each study as part of the QCRT group and contribute at different levels depending on their availability and expertise.

The Consultant Advisors:

- Help define and validate quadrants and questionnaires,
- Advise on service provider inclusion, participate in briefing calls,
- Give their perspectives on service provider ratings and review report drafts.

ISG Advisors to this study



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Steven
Garant

**Principal
Consultant**



Invited Companies

If your company is listed on this page or you feel your company should be listed, please contact ISG to ensure we have the correct contact person(s) to actively participate in this research.

* Rated in previous iteration

Accenture*

Astadia (Amdocs)*

Atos*

Avanade (Asysco) *

BlueHill Data Services

BMC*

Capgemini*

CDW

CGI*

CGI Group

CherryRoad Technologies

Coforge

Cognizant*

Converge Technology Solutions

CPT Global*

Deloitte*

Delphix

DXC Technology*

Ensono*

Eviden (Atos Group)*

FNTS*

Fujitsu*

HCLTech*

Hitachi Vantara

HPE*

IBM*

Infinite Corporation

Informatica

Infosys*

INNOVA*

Jumar

Kyndryl*

Lansa

LTIMindtree*

Mainline Information Systems

Maintec*

MigrationWare

mLogica*

Morphis Tech

Mphasis*

Nous Infosystems

NTT DATA*

Profi AG

PSR*

Qlik

Recovery Point Systems*

RSM Partners (BMC)

SCC



Invited Companies

If your company is listed on this page or you feel your company should be listed, please contact ISG to ensure we have the correct contact person(s) to actively participate in this research.

* Rated in previous iteration

Software AG

UST

Sopra Steria

V8.Tech

SysperTec

Value-4IT

TCC Software Solutions

Verang*

TCS*

vfunction

Tech Mahindra*

Vicom Infinity

TierPoint

VioN MFaaS

Tietoenvy

Wipro*

TSRI*

Yash Technologies

Unisys*



iSG Provider Lens™

The iSG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of iSG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while iSG advisors use the reports to validate their own market knowledge and make recommendations to iSG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about iSG Provider Lens™ research, please visit this [webpage](#).

iSG Research™

iSG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. iSG Research™ delivers guidance that helps businesses accelerate growth and create more value.

iSG offers research specifically about providers to state and local governments (including counties, cities) as well as higher education institutions. Visit: [Public Sector](#).

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iSG

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Founded in 2006, and based in Stamford, Conn., iSG employs 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

For more information, visit isg-one.com.



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REPORT: MAINFRAMES — SERVICES AND SOLUTIONS