Rocket® software

Protected and Connected

Modern mainframe access and security

Contents

← Back to contents

The mainframe lives in a connected, digital, hybrid IT world

It must meet a new generation of demands such as mobile and cloud connectivity, while continuing to underpin big business by extending enterprise-level security to an ever-changing world of business applications.

In short, protected and connected.

Protect

Ensure the mainframe complies with the very latest secure access standards, making application security the mandatory requirement, while simultaneously accommodating more points of entry than ever.

Connect

Revisit mainframe applications so they integrate, collaborate and cooperate, accommodate new users, capabilities, devices and platforms. These requirements — greater workloads, demands, and use cases — represent a big change of pace for the mainframe. Secure, modern mainframe access is becoming the standard. Organizations with the solutions that enable modern host access, extend enterprise security to the mainframe, deliver terminal-based mainframe applications, increase business efficiencies and improve services with Robotic Process Automation (RPA) have a competitive advantage.

This is recognized by analysts, including Forrester[1] who agree “nearly 75% reported that improving the experience of their organization’s customers was a top business objective over the next 12 months," and "69% of respondents stated that IT modernization is very or extremely important when it comes to helping their organization achieve its business objectives over the next 12 months.” Put simply, the mainframe must modernize and adapt to meet these modernization imperatives.

Protected and connected

The demands on your organization’s technology continue to grow. This is especially true for the mainframe where, according to IBM®[2], “71% of executives say mainframe-based applications are central to their business strategy.” Additionally, IBM states that “mainframes handle almost 70% of the world’s production IT workloads.” With all this information, and so many mainframe-reliant applications, organizations must ensure secure access.

The challenge

If the mainframe is an essential part of your success, your challenges include:

1. Terminal-centric client applications.
2. Enterprise level security.
3. Secure host access.
4. Testing of terminal-based applications.
5. Robotic Process Automation (RPA).

[1] https://www.rocketsoftware.com/sites/default/files/resource_files/rocket-it-modernization.pdf
[2] https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/application-modernization-mainframe

← Back to contents

01

Terminal-centric client applications

Organizations need technology to meet the ongoing increase in business and regulatory compliance standards, an ever competitive marketplace, and increasingly sophisticated user demands. This is especially true for terminal-centric client applications, as users expect a modern look and feel when accessing the mainframe. Creating a user-friendly experience for mainframe access requires understanding the deployed software and user configurations. This insight informs modernization initiatives. The next requirement is secure, modern, enterprise-wide host access through desktop, or zero-footprint terminal emulation. Finally, modernized, terminal-based applications that integrate mainframe business logic and applications through service enablement, or user interface modernization, complete the picture.

> 4 in 5 executives say their organizations need to rapidly transform to keep up with the competition, including modernizing applications on the mainframe."
>
> **IBM**

02

Enterprise-level security

IBM estimates[3] "today, 45 of the top 50 banks, 4 of the top 5 airlines, 7 of the top 10 global retailers, and 67 of the Fortune 100 companies leverage the mainframe as their core platform. Mainframes handle almost 70% of the world's production IT workloads." However, even though "68% of respondents noted that mainframe security is an area that their organizations take seriously," only "27% of respondents know it's important but don't have enough funding or resources to contribute as much as they feel they should."[4] This is not a nice-to-have, as much as a business necessity. The average cost of a security breach per incident is $4.45M[5], not to mention reputational damage and lost business.

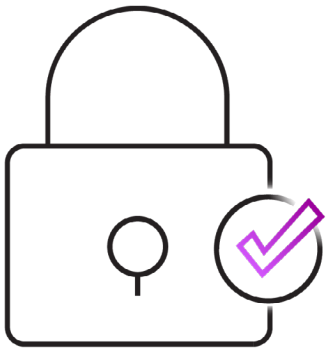
[3] https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/application-modernization-mainframe
[4] https://drift-lp-96785964.drift.click/1542cf0f-3d55-4121-a440-71616238f7de
[5] https://www.ibm.com/downloads/documents/us-en/10a99803ab2fd7ac

03

Secure host access

Forrester has found that "56% of organizations are modernizing applications on the mainframe and integrating them with replatformed or existing applications hosted on public clouds."[6]

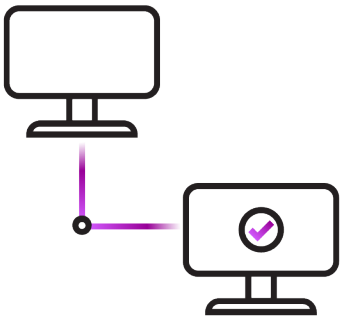
To help with this shift to the cloud, organizations must implement flexible, zero-footprint access to business-critical host applications, in the cloud or on-premises. This lowers endpoint total cost of ownership, enables host access from anywhere, and helps ensure a modern user experience.



04

Testing of terminal-based applications

Test automation is key for organizations looking to increase the delivery velocity of terminal-based mainframe applications, while ensuring they meet user requirements without compromising quality. By automating the testing behind continuous integration/continuous delivery (CI/CD) practices, mainframe development teams can meet user and line-of- business demands, quickly and efficiently. Organizations using functional, regression, and performance testing deliver mainframe applications that meet regulatory requirements on time, with fewer bugs, and increased scale and flexibility.



[6] https://www.rocketsoftware.com/sites/default/files/resource_files/rocket-it-modernization.pdf

← Back to contents

05

Robotic Process Automation (RPA)

RPA drives improvements in business efficiencies and customer service by automating interactions with desktop, web, and legacy applications. Software robots interact with applications and systems just as people do, but are faster, more accurate, and highly secure. They also save time, reduce costs, and free employees to work on other projects.

Analysts, including Gartner[7], write about the growing popularity of RPA: "the RPA software market grew at a steady pace in 2023 at 22.1%, on par with its 2022 growth rate. At $3.2 billion revenue in 2023, the market is showing signs of consolidation with RPA vendors leveraging generative AI for innovation and growth." And a recent study[8] found "98% of IT business leaders say automating processes is essential to ongoing business success."

Organizations using RPA on the mainframe can automate repetitive tasks currently performed by human users, potentially reducing errors and improving productivity. With a large percentage of key business data housed on the mainframe, enterprises are looking for ways to leverage this data in their RPA initiatives.

The challenge is in implementation. It is important the mainframe team leads work to implement RPA rather than, for example, the security or customer operations functions, who are less likely to understand the specific needs of the platform. While interacting with a desktop or web-based application is typically straightforward, host system data typically requires special skills, such as a connector. Not every enterprise can do this.

> "98% of IT business leaders say automating processes is essential to ongoing business success."
>
> **IDC**

[7] https://www.gartner.com/en/documents/5614191#:~:text=The%20RPA%20software%20market%20grew,AI%20for%20innovation%20and%20growth.
[8] https://towardsdatascience.com/all-the-robotic-process-automation-rpa-stats-you-need-to-know-bcec22eaaad9

← Back to contents

Rocket Mainframe Access and Security answers the challenge

1. Modernizing terminal-centric client applications

Rocket® Host Access Analyzer* offers a first step toward challenge resolution by providing insight on software deployment and usage across organization-wide host access systems and users. The information provided, helps organizations make decisions to ensure a secure, modern user experience, license compliance and control. Rocket® Reflection Desktop*, Rocket® Extra!® X-treme*, and Rocket® Rumba+ Desktop* all provide secure desktop host access with a modern interface. Rocket® Host Access for the Cloud* ensures secure, true zero-footprint mainframe access from anywhere. Finally, Rocket Verastream®* uses RESTful services, Java and .NET interfaces to enable the integration behind modernized mainframe application access.

2. Extending enterprise-level security

Rocket® Host Access Management and Security Server (MSS)* uses centrally managed desktop terminal emulation and built-in security that ring-fences business-critical systems and data through masking and encryption. For example, Automated Sign-On for Mainframe add-on gives mainframe users automatic access. Multi-Factor Authentication (MFA) with MSS further extends mainframe protection, and the Rocket® Advanced Authentication Connector for z/OS®* ensures authorized access only to business-critical host systems. By integrating directly with the Rocket Advanced Authentication Server, this solution adds MFA, or Two-Factor authentication, to meet regulatory, industry, and client standards.

3. Delivering secure host access

Rocket® Host Access for the Cloud* answers the host access challenge by enabling secure, zero-footprint access at any time, from the cloud or on-premises. It reduces IT costs and desktop maintenance at the endpoint and improves mainframe protection through strong access control.

4. Providing automated testing of terminal-based applications

Rocket® Verastream® Host Integrator* delivers automated testing that works with current testing solutions and infrastructure, using discrete services to automate terminal-based mainframe application testing. These services use encapsulated application business logic that is exposed by many standard interfaces.

5. Incorporating Robotic Process Automation

Rocket Verastream Host Integrator can harness the power of RPA by incorporating host data into RPA projects via a service enablement approach. This brings performance and scalability to RPA via web services or through more traditional application programming interfaces, such as HLLAPI, Java, and .NET. These traditional interfaces work with our desktop terminal emulation solutions, including Rocket Extra! X-treme, Rocket Reflection Desktop, and Rocket Rumba+ Desktop.

Next steps

Contact your Rocket Software agent to ask about our Value Profile Service. It is how we understand what you want to achieve, and explain how our modernization solutions and collaborative approach can help deliver it.

← Back to contents

Rocket Application Modernization

Our application modernization portfolio delivers four things, to realize one ambition – enabling smart digital transformation.

Bridging old and new by IT investments, by reusing not replacing.

Increasing app and data value by delivering changes faster with low risk.

Protecting, and using core system IP in new ways to serve the business.

Leveraging cloud or containers to drive new business.

What makes us different?

Real world application modernization with Rocket Software re-uses what works to create successful, risk-averse digital transformation that enables applications deployment across every platform. An unmatched track record of reducing customer risk by adding innovative new technologies to proven systems more than 1000 times.

About Rocket Software

Rocket Software is the global technology leader in modernization and partner of choice that empowers the world's leading businesses on their modernization journeys, spanning core systems to the cloud. Trusted by over 12,500 customers and 750 partners, and with more than 3,000 global employees, Rocket Software enables customers to maximize their data, applications, and infrastructure to deliver critical services that power our modern world. Rocket Software is a privately held U.S. corporation headquartered in the Boston area with centers of excellence strategically located around the world. Rocket Software is a portfolio company of Bain Capital Private Equity. Follow Rocket Software on LinkedIn and X.

Visit RocketSoftware.com ›

*formerly Micro Focus® products

Rocket software

MAR-10926_Brochure_ProtectConnectModMainframeAccessSecurity_V4