Rocket® software

Modernizing for Performance and Operational Resilience

Keeping critical systems running under pressure

Executive intro

Your mainframe runs the workloads your business can't afford to lose. So when modernization enters the conversation, the question isn't whether to evolve, it's how to evolve without putting availability, response times, or recovery readiness at risk.

CIOs tell us the same thing: they want modernization that strengthens performance rather than straining it. They watch for latency creeping into transactions, for the mainframe "starting to groan" under peak load, and for any gap that could widen RTO and RPO targets when an incident hits. This brief lays out how senior IT leaders are thinking about performance and operational resilience, and how Rocket® Software helps you modernize without disruption.

Who it's for

This brief is written for CIOs and senior IT leaders at highly regulated mainframe organizations, those accountable for SLAs, uptime, incident recovery, and the outcomes of modernization.

The top challenges CIOs face

The "isolated mainframe" myth.
The idea that the mainframe is a sealed fortress is now a dangerous assumption. As you offload data, connect to cloud, and integrate APIs, the green screen is no longer the only attack surface.

Recovery readiness.
Meeting RTO and RPO commitments gets harder as environments grow more complex and hybrid. Incident recovery has to be fast, precise, and provable.

Monitoring blind spots.
End-to-end visibility across mainframe and distributed systems often requires heavy manual effort, slowing detection and resolution when minutes matter.

Skills coverage.
As experienced staff retire, coverage gaps appear right where critical operations live, raising the risk of slower response during incidents.

Change risk.
Leaders are understandably cautious. A missed requirement or unplanned outage on a core system carries real business and reputational cost.

The top priorities CIOs are setting

- Protect availability and response times throughout the modernization journey, not just after it.
- Keep MIPS consumption and operational overhead in check while extending systems to the cloud.
- Tighten RTO and RPO through faster, more targeted recovery.
- Replace manual monitoring with proactive, automated insight across hybrid environments.
- Build scalability that absorbs growth and demand spikes without degradation.
- Connect every modernization decision back to business continuity.

How Rocket Software helps: the solution

Rocket Software partners with you to modernize in place, meeting you wherever you are on your journey. The goal is simple: strengthen resilience and performance, never compromise them.

01 **Minimize operational impact of modernization.** Rocket solutions are designed to limit the load modernization places on core systems — helping you extend to hybrid and cloud architectures without degrading performance or increasing MIPS consumption. Efficient data access, workload handling, and infrastructure optimization ensure modernization efforts don't become a performance liability.

02 **Improve performance visibility and operational efficiency.** Rocket® TMON and Rocket® C\Prof provide deep, real-time and historical insight into system and application performance, enabling teams to quickly isolate bottlenecks, tune workloads, and prevent issues before they escalate. Intuitive dashboards and automation make it easier for both experienced and next-generation staff to manage complex environments with confidence.

03 **Automate and optimize workload execution.** Rocket® Enterprise Orchestrator coordinates workloads across mainframe and distributed environments, ensuring jobs run at the right time, in the right sequence, with full dependency awareness. Rocket® AI Predictive Pulse adds predictive intelligence — identifying anomalies and potential failures before they impact SLAs — reducing unplanned disruptions and manual intervention.

04 **Strengthen resilience and recovery readiness.** Rocket® Rapid Data Recovery accelerates restoration from cyber incidents, operational failures, or data corruption — enabling recovery of critical datasets in hours, not days. This helps organizations confidently meet aggressive RTO and RPO targets while minimizing business disruption.

05 **Modernize storage management and scale with confidence.** Rocket® z/OS Storage solutions simplify storage administration, capacity planning, and data lifecycle management across disk, virtual tape, and archive environments. With automation and intelligent insights, teams can proactively manage growth, avoid performance degradation, and reduce the risk of costly overprovisioning or last-minute capacity purchases.

06 **Protect performance as data and workloads grow.** Rocket storage and data management solutions optimize dataset placement, access patterns, and backup strategies — ensuring high availability and consistent performance even as data volumes expand. This reduces contention, improves throughput, and keeps mission-critical systems responsive under increasing demand.

07 **Apply AI-driven intelligence across operations.** Rocket EVA™ is an AI-powered, agentic platform that delivers precise, end-to-end operational diagnostics across core systems. Its simplified, hybrid -ready architecture deploys quickly and scales across mainframe, distributed, and cloud environments.

This intelligence complements solutions like Rocket® TMON, C\Prof, and Enterprise Orchestrator — enhancing visibility with predictive insight and enabling teams to make faster, more informed decisions. The result is improved system resilience, reduced mean time to resolution, and a more efficient use of skilled resources, allowing teams to focus on innovation rather than troubleshooting.

Why this approach works

Rip-and-replace projects carry steep risk, and many organizations have lived through the failed rewrites to prove it. Modernizing in place protects the business logic and reliability you already trust while adding modern monitoring, automation, and recovery capabilities. You gain agility without betting your most critical workloads on a disruptive overhaul.

Decision-maker takeaway:
This approach lowers risk, controls cost, and improves recovery speed, directly supporting the SLAs and business continuity you're measured against.

Requirements and considerations

- Inventory your critical workloads and current performance baselines before you change anything.
- Define clear RTO and RPO targets so recovery capabilities map to real business needs.
- Plan for hybrid interoperability and consistent monitoring across mainframe and cloud.
- Account for skills coverage, favoring tools that next-gen staff can use without deep mainframe expertise.

Next step

See how Rocket Software can help you modernize without compromising the systems your business depends on. Schedule a working session with our team to map your performance and resilience priorities to a practical, low-risk plan.

Talk to an expert

Resilience and performance checklist

Use this as a quick readiness check for performance-safe modernization:

- We've baselined current performance and identified peak-load thresholds.
- Modernization plans are validated to avoid added latency on core transactions.
- MIPS consumption and operational overhead are monitored and managed.
- RTO and RPO targets are defined, documented, and tested.
- Recovery can target specific datasets quickly, including ransomware scenarios.
- Monitoring is proactive, automated, and unified across hybrid environments.
- Storage and capacity planning is forward-looking, not reactive.
- Automation reduces manual effort and closes skills-coverage gaps.
- Every modernization decision links back to business continuity.

Rocket® software

Modernization. **Without Disruption.**™

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