Building a Seamless Hybrid Cloud for Critical Workloads

Explore IBM Power with Red Hat and IBM Cloud Paks

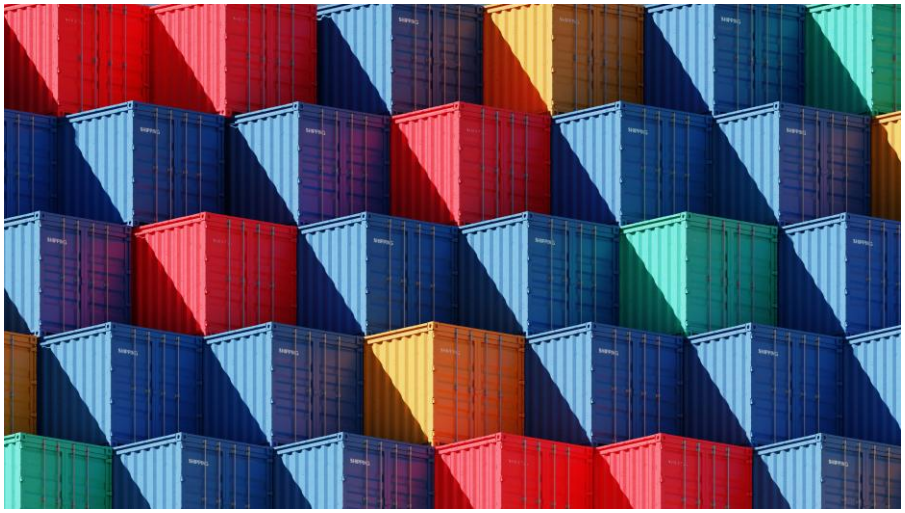
Highlights
Rapidly launch new composable services

Drive insights with data

Streamline operations and business processes

The pandemic and rapidly changing business, economic, and geopolitical environments have accelerated ten years of digital transformation into one. In this fast-moving climate, your organization must secure sensitive data and workloads, support new applications, and deliver consistency and simplicity across the enterprise. Red Hat® OpenShift® and IBM Cloud® Paks on IBM® Power® can help you achieve these goals. With this combination of IT infrastructure and modern cloud-native solutions, you can develop, run, and manage applications and workloads consistently across hybrid cloud. As business and workload demands change, you can move critical services and optimize them in the environment of your choice.

With IBM Power and Red Hat, you don't need to change your existing hardware to take advantage of next-generation capabilities. Power runs containers more efficiently and delivers better price performance compared to x86 processor-based servers. IBM Power11 processor-based servers offer up to 55% better core performance compared to Power9 processor-based servers[1], and up to 45% more capacity with higher core counts in entry and mid-range systems compared to Power10 processor-based servers[2]. Compared to x86 processor-based servers, Power11 processor-based servers offer up to 2X better performance per watt[3].

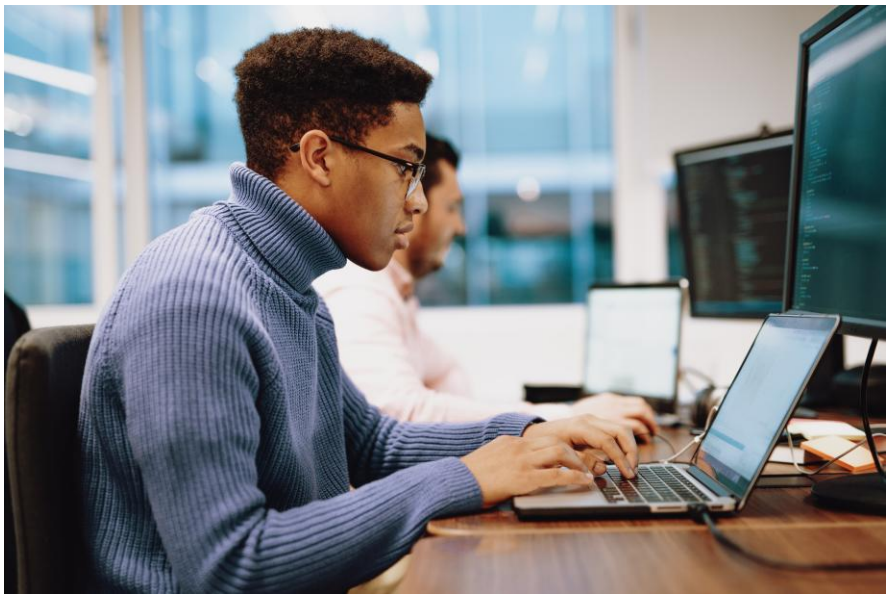


IBM Power Modernization Entry Points

Rapidly launch new composable services
With Red Hat OpenShift on IBM Power, you can incrementally modernize applications by surrounding them with containers. Gain many benefits of app modernization with much less complexity and cost. As your application modernization journey advances further, you can refactor applications into containerized microservices. This paves a path to more portable applications across your hybrid cloud and more frequent software updates through DevOps practices.

Drive insights with data
High volumes of mission-critical data are often left untapped for AI projects and opportunities to drive new business insights. This data is often found in databases running on Power processor-based servers. With MMA on-chip AI acceleration on the Power processor, both large and small language models can inference on the same server next to where data is living and being generated. This reduces security risks, lowers latency and complexity, and improves governance and throughput for big data. On-chip AI acceleration with Power eliminates the cost, complexity, and noise of GPUs to run inferencing.

Streamline operations and business processes
IT teams embracing hybrid cloud and new cloud-native technologies are challenged by specialist skills shortages for managing and administrating infrastructure and applications. IBM addresses these resource and skills challenges with a suite of AI-driven tools that help IT organizations overcome these obstacles. Red Hat Ansible Automation Platform components now run natively on IBM Power. Monitor your entire infrastructure environment from a single dashboard and user interface with Instana Observability for Power. Leverage Turbonomic with Power to avoid over-provisioning and increase the number of workloads through utilization per server with AI-driven optimization. Proactively prevent issues before they occur with IBM Cloud Pak for AIOps for Power.



Conclusion

Resiliency has never been more important. Your business relies on IT infrastructure, both hardware and software. Together, IBM Power and Red Hat OpenShift help you maximize system availability and respond quickly to rapidly changing customer needs. With IBM Cloud Paks, you can deploy IBM software on-prem with IBM Power and across public and private clouds. And with Red Hat OpenShift you can scale quickly from pilot to production environments, bringing innovation and modernization to hybrid cloud operations.

1. Based upon IBM internal measurements of a commercial core banking solution running on IBM Power E950 compared to an E1150.
2. Based upon current IBM Power rPerf and CPW estimates for E1150, S1124 and S1122 versus E1050, S1024 and S1022 respectively.
3. Based upon Quantitative Performance Index (QPI) data as of May 15, 2025 from IDC available at https://www.idc.com/about/qpi and utilization. IBM Power E1150 (4x30c Power11 at 3.0-4.1GHz) QPI of 241,000E versus HPE Compute Scale-up Server 3200 (4x60-core Intel cores at 1.9GHz) QPI of 208,898 and utilizations of 75% for E1150 based on IBM Power Performance Utilization Guarantee and 40% for x86. Energy consumption is based on maximum input power: IBM Power E1050 with maximum power of 5,200 W https://www.redbooks.ibm.com/redpapers/pdfs/redp5684.pdf . HPE Compute Scale Up Server 3200 with maximum power of 4,740 W https://www.hpe.com/psnow/doc/a50004268enw.html?jumpid=in_pdp-psnow-qs

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