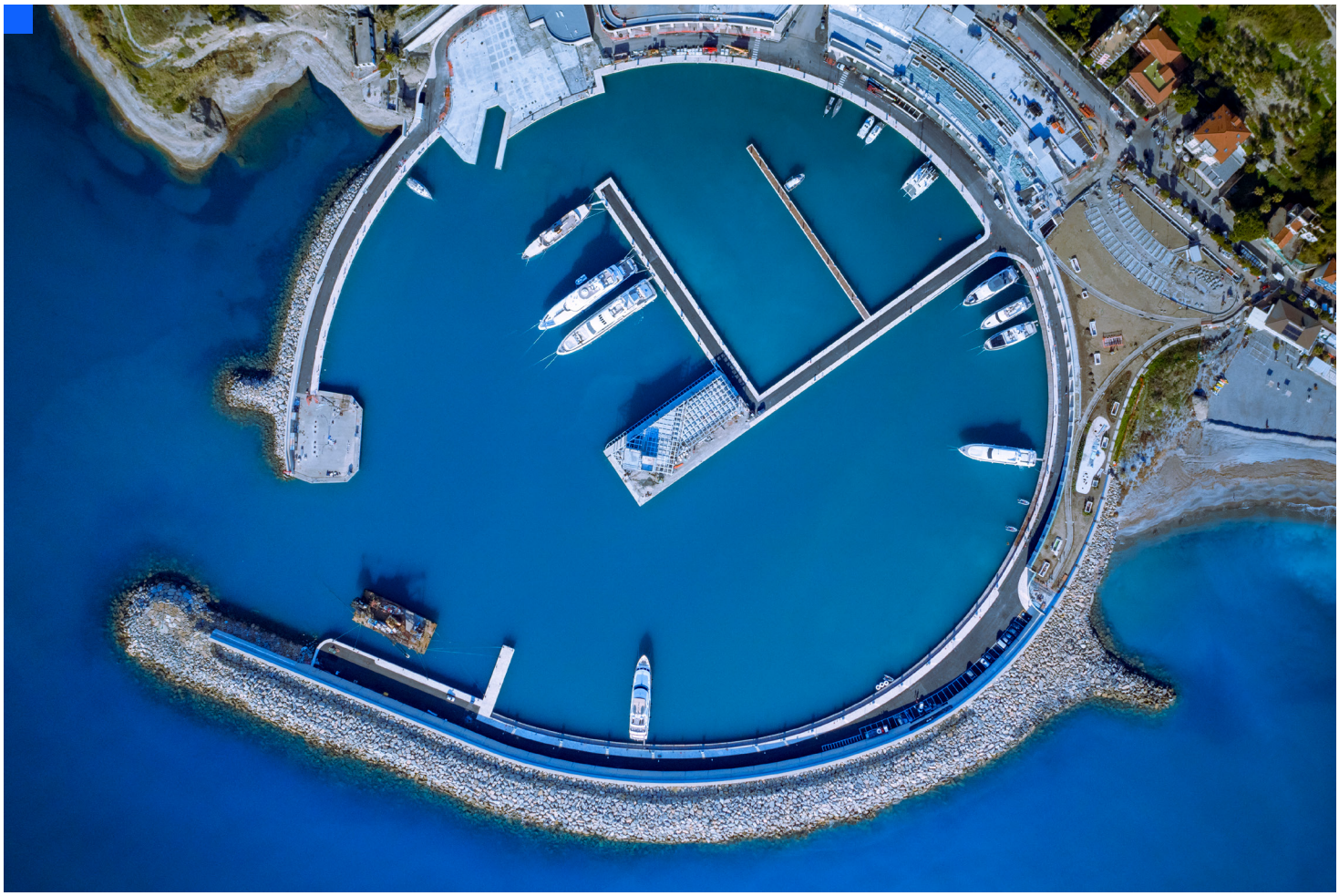
Unlock the possibilities of IBM Power with Red Hat



IBM **Power**

Table of contents

Real, meaningful transformation doesn't look like disruption or migration.

It's time to transform your IT infrastructure

In a world where change and uncertainty are constant, it can feel like where you are today and where you'll be tomorrow are worlds apart. Yet often the future is more in reach than we realize. Take digital transformation, for example. For years, enterprises' IT professionals have heard that digital transformation means deep, even disruptive, change. Processes and organizational structures must change, as well as the view of the customer relationship. Additionally, it's been widely thought that the underlying technology beneath it all must change to adapt.

If you're a client that uses IBM® Power® technology, however, you don't need to change your existing hardware to take advantage of next-generation capabilities, such as open hybrid cloud environments, containers, Kubernetes and automation. You can modernize your applications, automate your DevOps processes and embrace an open hybrid cloud strategy by running Red Hat® software with the IBM hardware you already have.

Real, meaningful transformation doesn't look like disruption or migration. Instead, it looks more like a logical evolution that builds upon a foundation of what already works. Leading enterprises around the world have built their success upon the reliability, security and performance of IBM Power servers; building a bridge to the open hybrid cloud future doesn't mean leaving existing IT investments behind.

Red Hat's software can support a broad ecosystem of hardware solutions and public cloud infrastructure, making one of the world's leading enterprise Linux® platforms accessible before a multitude of unique scenarios. Kubernetes, containers and hybrid cloud environments are the future of computing, and IBM Power servers are a part of that future. The Red Hat® OpenShift® is an enterprise Kubernetes platform built for an open hybrid cloud strategy. Red Hat OpenShift on IBM Power brings the consistency developers need to build and deploy cloud-native applications across the hybrid cloud and accelerate the path to application modernization.

The future is open

Across industries, IT leaders face many of the same challenges:

- Modernize applications to take advantage of cloud efficiencies and cost savings
- To adopt a hybrid cloud approach that prevents them from being locked into a single vendor or deployment model
- Initiate more automation to improve agility and help them focus on customer-centric initiatives
- Obtain the maximum value from the investments they've already made

Red Hat has a solution for a wide variety of IT challenges. It starts with Red Hat Enterprise Linux, the operating system that redefined the open enterprise. Today, Red Hat Enterprise Linux solutions are trusted by many of Fortune 500 companies and is the operating system of choice for enterprises that value innovation, security, reliability and openness. That openness means that the Red Hat Enterprise Linux platform also runs natively on IBM Power servers.

↑ 29%

faster application development[1]

↑ $21.62M

increase in annual revenue[1]

↑ 636%

ROI over a five-year period[1]

The value of Red Hat is even more apparent as you move to containers, Kubernetes and hybrid cloud environments. The Red Hat OpenShift platform is an industry-leading multicloud container platform, adding valuable security and developer tools to its open implementation of Kubernetes. With the Red Hat OpenShift platform, applications can be deployed in containers across multiple IT environments and deliver a consistent experience, whether running on IBM Cloud®, Amazon Web Services (AWS), Microsoft Azure, Google Cloud or on a bare-metal Power server in a private cloud environment.

There are financial and operational benefits of moving from a single cloud approach to a hybrid cloud approach with the Red Hat OpenShift platform. Independent research found that Red Hat OpenShift technology can speed up development lifecycles by 29%, increase annual revenue by USD 21.62 million and deliver a 636% return on investment over a five-year period.[1]

The Red Hat Ansible® Automation Platform completes the move to modernization with a powerful automation tool to help enterprises scale their application development and drive innovation. The Red Hat Ansible Automation Platform enables enterprises to automate applications and workloads with a myriad of hardware platforms, including IBM Power servers. There's even prebuilt, community-driven content available so enterprises can begin automating tasks on their existing IBM hardware right away.

Rethink what's possible with Red Hat

The very reasons that you invested in IBM Power technology in the first place—security, reliability, performance, scalability—are the same reasons why you should protect that investment in the future. You can keep everything that you love about your existing IBM infrastructure and use those strengths as you modernize your applications and embrace the open, hybrid cloud future. It's not just about protecting the investments you've already made but investing your time and energy into future innovation. Moving applications to a new platform that requires additional skills and processes likely won't improve customer service—investing that money and energy into building better customer applications can.

Deploying Red Hat solutions on IBM Power can be a safe, more intelligent way to modernize applications. For example, IBM AIX® and IBM i applications running on Power servers can easily be ported to run on the Red Hat OpenShift platform. Power servers continue to be a smart investment going forward. In side-by-side performance tests conducted by IBM, the Power S1022 server supported 4.1 times more containers per core. While at the same time, it provides 26% more performance for containerized workloads running on Red Hat OpenShift and MongoDB when compared with a two-socket Intel Xeon® server.[2]

Innovation in the banking industry

Perhaps no industry understands the importance of maximizing its investment as much as the banking industry. Banks have traditionally been among the strongest supporters of IBM Power due to the server's known capabilities that prioritize security and reliability. Yet banks are also under tremendous pressure to modernize their applications and customize experiences to meet the changing financial needs of newer generations.

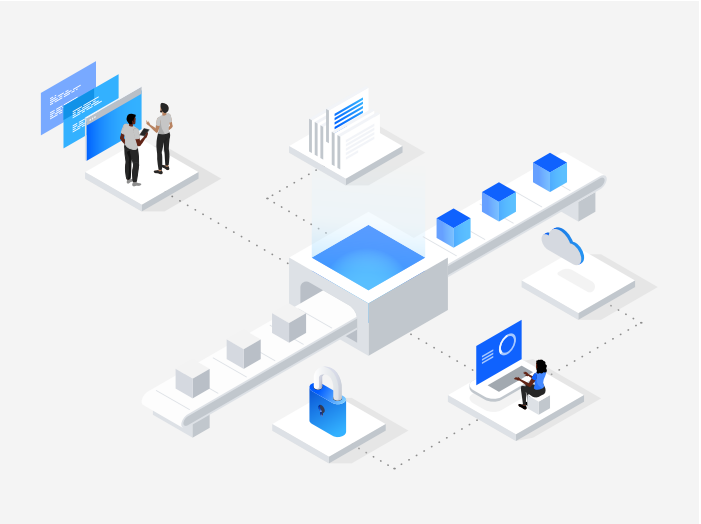
Let's look at three banking use cases where Red Hat running on Power servers redefine the possibilities:

Open banking
One Australian bank was able to transform its core payment processing applications to meet the country's new open-banking regulations. Their solution? Red Hat OpenShift running on a private cloud environment built on Power servers. The ability to run their applications anywhere and connect them seamlessly to a cloud database meant funds could be transferred across multiple financial institutions.

Digital banking
For proof that digital banking is the future, look no further than one African bank that saw explosive customer growth after it tapped into the power of mobile access. The bank runs its mobile apps as container-based microservices that can run anywhere and connect back to mission-critical banking apps on their IBM Power-based private cloud.

Pricing and risk analytics
Newer generations expect fast service and personalized experiences. One consumer financial services firm is delivering on both container-based microservices running on the Red Hat OpenShift platform and Power servers.

These use cases are only some of the ways that Red Hat solutions can deliver digital transformation without hardware disruption. An open hybrid cloud gives businesses flexibility, control and choice—and leaves them open to innovation. It makes the most of existing resources, while allowing systems, applications and data to work together seamlessly across a public or private cloud.



Empower your enterprise with open-source technology

The world has learned a lot about the importance of resilience. Open hybrid cloud computing is a symbol of that resilience. It represents an openness to possibilities and a refusal to be defined by any one definition of the future. But resilience doesn't always mean change—it can also mean making the most of what you have. Deploying Red Hat solutions on IBM Power servers can provide a strong foundation for open hybrid cloud.

The future is about empowering individuals and creating memorable customer experiences. It's also about the opportunities that open hybrid cloud brings, from automation to AI, and how that openness and innovation improve productivity and personalization. IBM and Red Hat invite you to see how well your infrastructure investments serve as the reality of hybrid cloud computing evolves.

Learn more →

1. The Business Value of Red Hat OpenShift, IDC white paper sponsored by Red Hat, 23 April 2021.
2. Based on IBM internal testing running MongoDB's Geospatial (https://www.mongodb.com/docs/v5.0/tutorial/geospatial-tutorial/) Queries with 2,000 users, each running 2 million transactions using JMeter V5 adding containers until servers could not maintain 99% of transactions completing in under 1 second. Results valid as of 22 June 2022 and conducted under laboratory conditions; individual results can vary based on workload size, use of storage subsystems and other conditions. Comparison based on the total transactions per second and supported containers on IBM Power S1022 (2x16 cores/1 TB) with 26 worker node cores versus Intel Xeon Gold 6348-based system (2x28 cores/1 TB) with 51 worker node cores, both with Red Hat Enterprise Linux 8.5 on the OpenShift Container Platform helper node, Red Hat OpenShift 4.10 and MongoDB 5.07 and Node.js v16.13.1 (REST APIs).

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