STRAIGHT TALK,
REAL ANSWERS

Demystifying the Top 5 Myths of Running Oracle Software on IBM Power Systems
Don’t believe everything you hear.

There’s some banter about IBM Power Systems not being optimized to run Oracle software. That simply isn’t true. In fact, IBM has engineers on-site at Oracle working side-by-side with them to enable, optimize, certify, and continually deliver solutions to our tens of thousands of joint customers.

For over 30 years, IBM and Oracle have collaborated to help organizations tackle ever-evolving business and data center challenges. As part of this strong alliance, both companies work together to ensure that Oracle software is designed to leverage the differentiating features of IBM Power Systems, to ultimately provide clients with a clear route to getting the most out of their investment while attaining competitive advantage.

IBM Power Systems are designed to meet the demands of the largest enterprises around the globe, with capabilities built right into the platform that deliver performance, security, and availability features needed to support mission critical workloads like Oracle.

What most don’t realize is that Power Systems is also an open platform that supports a large and rapidly growing ecosystem of AIX and Linux applications alongside Oracle software, including enterprise data platforms like SAP HANA, key open source databases like MongoDB and EDB Postgres, and emerging cognitive frameworks like Caffe and TensorFlow that support analytics and machine learning. This sets companies up well to take advantage of advanced analytics without further investment or costly rip and replace of infrastructure. So, whether you are already on Power Systems or not, choosing it to run your Oracle software is the right choice.

Now, let’s explore in more detail the top 5 myths about running Oracle software on IBM Power Systems.
I’ve been told that IBM Power Systems can’t match the optimized combination of Oracle hardware and Oracle software. Is that true?

No. Actually, IBM Power Systems with POWER8 are designed for Big Data and workloads like Oracle Database and applications.

The IBM Oracle Alliance works to make sure that Oracle software leverages Power Systems’ architectural advantages. We verify this with Oracle certification of PowerVM and AIX features. Testing further demonstrates optimization. For example, leveraging POWER8 memory bandwidth capabilities, IBM showed 20x faster runtime of analytics reporting when deploying Oracle Database In-Memory when compared to not using the In-Memory feature.

Also, Power Systems is an open platform that is designed to support the hottest open source projects and downstream innovations developed by the OpenPOWER Foundation.

We believe that the IBM Power Systems platform offers the best performance for Oracle databases. Upgrading to IBM POWER8™ processor technology has been a huge step up. We’ve practically doubled per-core performance and can now draw on up to 4.5 TB of memory. These enhancements mean we can process and deliver data to the business faster than ever before.

—Dale McGowan
Enterprise Architect, Celero
MYTH 2

There’s an ongoing debate on whether security and availability are still differentiators, or if every platform offers the same benefits. Should I still consider security and availability when choosing a hardware platform?

Absolutely!
We find that the majority of clients still rank security and availability as critical requirements in their data centers. Not all infrastructures can provide your data center the RAS features IBM Power Systems can.

IBM designs security into its systems to provide comprehensive protection at every level of their architecture. Power Systems servers with AIX possess PowerVM hypervisor technology with strong isolation between workloads and zero documented vulnerabilities, while features like Trusted Boot, Trusted Execution, and Trusted Firewall are designed to ensure that software is protected and networks are secure. Additionally, solutions like PowerHA, for high availability and disaster recovery, are designed to increase availability of your most critical applications, through both scheduled and unexpected events. It’s no surprise that, according to Information Technology Intelligence Consulting (ITIC), “IBM Power Systems …servers… continue to achieve best in class reliability.”

Since 2008, corporate enterprise users rated IBM server hardware as the most reliable platform, besting 14 server hardware and 11 different server hardware virtualizations platforms.

—Information Technology Intelligence Consulting (ITIC) Corp.
Cloud technologies are critical to stay competitive in today’s business landscape, and Power Systems offers you optimized infrastructure to support your cloud initiative. Want to construct your own private cloud? Power Systems offers you purpose built enterprise systems for the cloud that offer OpenStack-based management, open source automation, and benchmark availability and security. These tools are designed to enable customers to build private and hybrid clouds for deploying Oracle software.

Looking to use public cloud resources? We are helping many clients implement their hybrid strategy doing just that, with IBM Cloud Managed Services as well as other cloud providers, to extend clients’ on-prem UNIX environments using off-prem resources. And when clients purchase an enterprise system for the cloud, they get reward points through our IBM Power to Cloud Rewards program. They can redeem these points for services that help them transition from traditional IT platforms to the hybrid cloud model with services hosted in IBM Cloud.

Our hybrid cloud keeps the critical systems ‘on-premises’—although in fact they are physically hosted elsewhere, because that is more economical—and integrated with non-core systems running in the public cloud.

—Mukesh Sharma
Sr. Manager of IT, Welch Foods Inc.
Upgrading to POWER8 can be time consuming, and a hassle.

IBM has demonstrated how existing clients can upgrade applications to POWER8 systems with ZERO down time using capability such as Live Partition Mobility which enables the movement of live applications like Oracle Database from a legacy Power Systems server to a new one without taking the application out of production.

To keep up with the rapidly changing demands on the data center, your organization really does need to consider modernizing your IT infrastructure, or risk exposing yourself to very high downstream costs. To support cost reductions and new projects, many organizations are considering infrastructure migration. We have teams of technical specialists, like IBM Systems Lab Services, to help clients with designing, building, and delivering Power Systems infrastructure for Linux, AIX and IBM i solutions. We offer a wide array of services and incentives for a smooth migration experience with rapid ROI, no matter what platform you run today.

The IBM Systems Lab Services and Training team were a great help in migrating our Oracle software and data from the existing platform to the new Power and FlashSystem infrastructure. The IBM team also expertly configured the new IT environment to improve system performance.

—Chen Zhaohua
Vice President, Technical Information Center Director, Wanlian Securities®
MYTH 5

“Not true.

Yes, modernizing your data center while you are trying to cut costs and retain performance can be challenging. Upgrading to the latest version of Power Systems can deliver the cost-efficiency you need, helping you spend less on IT operations and achieve more.

For instance, we have found that customers can cut operating costs by up to 50% when modernizing their infrastructure for the cloud with a Power Systems E870C or E880C server. Our TCO tool can show you what you can save.

Here are some examples of clients getting the most bang for their buck with the latest Power Systems infrastructure:

Celero is serving financial services clients better with 10X faster Oracle database performance, while cutting monthly IT leasing costs by 30%.2

DNA reduced Oracle software licensing costs by 66% implementing POWER8 while reducing their overnight reporting processes by 3 hours.8

ERCOT is getting 30% more performance out of POWER8 with only half the processor cores, compared to their prior solution, thereby reducing Oracle licensing costs.9

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Ready to see your potential savings?

Check out our TCO tool at ibm.biz/OraclePowerTCO to see how upgrading to POWER8 can help you transform your infrastructure.
Sources & Disclaimers

1. http://www-03.ibm.com/support/techdocs/atsmastr.nsf/WebIndex/PRS5344 Oracle Database Single Instance test completed on the E880 4.33 GHz POWER8 system with 16-cores, 4 TB of memory attached to an IBM FlashSystem 840 with 12 x 2TB modules. Oracle RAC test completed on 2 x E850 3.7GHz POWER8 systems with 8, 16, and 32 cores and 2 TB of memory per system, attached to an IBM FlashSystem 840 with 12 x 2TB modules.

2. http://ibm.co/1Mkuy90


