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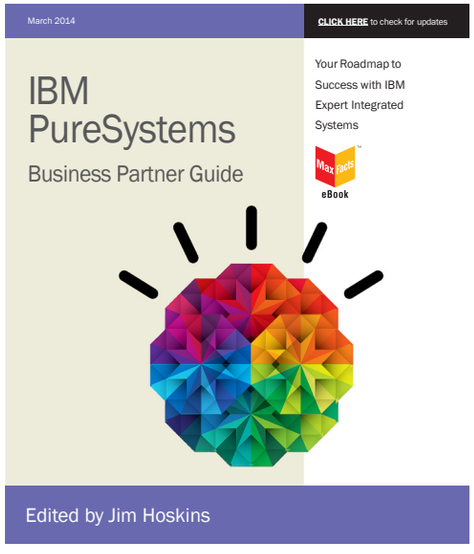
IBM Power Systems

Business Partner Guide

Your Roadmap to Success with IBM Power Systems

Edited by Jim Hoskins



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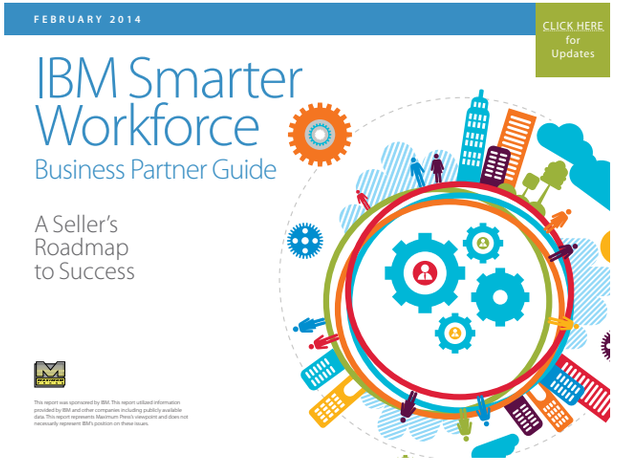

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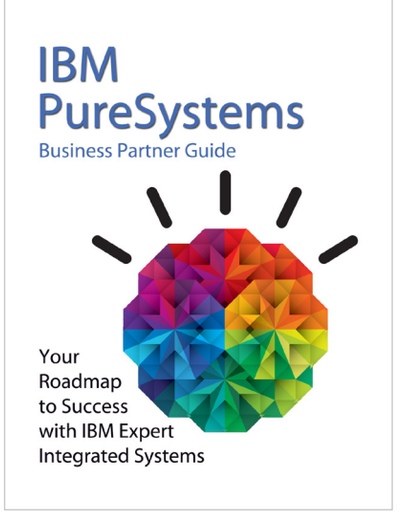

IBM PureSystems Business Partner Guide, Mobile Edition for iPhone/iPad

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This ebook was sponsored by IBM. This ebook utilized information provided by IBM and other companies including publicly available data. This report represents Maximum Press's viewpoint and does not necessarily represent IBM's position on these issues.

Acknowledgments

Many people gave assistance in preparation of this guidebook. Some provided information concerning their product area of expertise. Others acted as reviewers and provided helpful comments. To all of those who assisted… THANK YOU!!

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Contents

Your Seven-Step Quick Start

Take these seven steps to "hit the ground running" as a new IBM Business Partner.

1. Check for Updated Editions

This guide has the ability to "phone home" and check to see if there is a more current edition than the one you have. Simply click on the "More on the Web" link provided here (or the link on the cover) and this guide will automatically check to see if you have the most current edition. If you don't, you will be able to download the latest edition immediately.

More on the Web

- Check for updated editions of this guide now

2. Apply for Your IBM PartnerWorld Membership

The IBM PartnerWorld Web site is your source for information for all things related to being an IBM Business Partner (e.g., Business Partner relationships, guidelines, support, product info, etc.). You will need a user ID and a password to gain access to some areas of the site. If you have any questions, call PartnerWorld for help. (Follow the link in the "More on the Web" box to get the right phone number for your country.)

More On The Web

- Explore PartnerWorld
- PartnerWorld contact phone numbers by country
- Get your PartnerWorld user ID

3. Plug in to IBM Product and Program Communications

Staying informed is one key to success. IBM has a special page on PartnerWorld that helps you do just that. Here you will find new product announcements, letters to Business Partners, customer success stories, educational opportunities, and more.

More on the Web

- Get plugged in to IBM product and program communications

4. Learn to Quickly Find IBM Product Information

IBM maintains a search page that allows you to quickly find detailed product information from IBM announcement letters (one of these is released for every product IBM announces), the IBM Sales Manual (a comprehensive collection of detailed info on all IBM products), and much more. Give it a try so you will know how to find what you need when you need it.

More on the Web

- Find detailed IBM product information quickly

5. Learn to Find Competitive Information

IBM consistently updates information about the competitors you will encounter and their products. Explore this valuable tool so you will be ready when you need it. You will need your user ID and password.

More on the Web

- Find competitive info

6. Try Out "Know Your IBM"

IBM offers eligible Business Partners some "quick-learn training modules" under the name "Know Your IBM (KYI)," which can help you learn what you need to know about IBM offerings. You can earn points by completing these modules and then redeem the points for merchandise at participating retailers. You can earn additional points for reporting sales through KYI.

More on the Web

- "Know Your IBM" training modules

KYI is more general training that will give you a "high-level" view of IBM offerings. The roadmaps provided by IBM will guide you to more-detailed training opportunities.

7. Make Your Training and Certification Plan

Certification is required for selling IBM Power Systems. IBM offers many opportunities to learn and to demonstrate your knowledge through certification. Now is a good time to make your plans.

More on the Web

- Power Systems Business Partner certification info
- Additional Power Systems training opportunities

About This Guide

This guide brings together—all in one place—the resources you need to be successful as an IBM Power Systems Business Partner. It contains information gathered and adapted with permission from multiple IBM and non-IBM sources. Also, there are embedded links to more-detailed information and news available on the Internet, so you always have the most current information at your fingertips. We are confident you will find this a useful reference tool.

As we are always working to better help you succeed, please forward any comments on or suggested improvements to this guide to info@maxpress.com.

Products May Vary from Country to Country

Keep in mind that the specific products and services offered by IBM sometimes vary from country to country. As such, you will need to get into the details of your own country's offerings by following the "More on the Web" links provided throughout this guide with your country selected in the upper area of the screen.

How to Use This Guide

This guide has been specially designed to be read on your computer screen using the free Adobe Acrobat Reader software or a supporting Web browser. Alternately, you can print this guide on almost any printer and read the material anywhere.

Reading on a computer screen at your desk isn't as cozy as reading a printed page while lying on a towel at the beach. If you give it a fair chance, however, you will find that navigating the bookmarks along the left side of the screen provides an effective way to get to the information you need—quickly. Further, the instant access to expanded information provided by the many embedded Web links, along with the "search" function, also makes using this guide "on screen" worthwhile. We recommend that you copy this PDF file to your desktop so it will always be only "one click away." If you still want a hard copy, you can print it out on almost any printer.

Links provided throughout this guide (anywhere you see a "More on the Web" box) will lead you to additional information related to the topic at hand resident on the Web. In this way, this publication is a "three-dimensional guide" providing you with information about the topics at the level of detail you choose. To follow a link, simply click on it and a Web browser window will appear on your screen with the requested information. If the link brings you to a password-protected area (e.g., on the IBM PartnerWorld or COMP Web sites), you will be prompted to enter your IBM-issued user ID and password before you are presented with information.

When you are finished exploring, just close or minimize the Web browser window and you will arrive back at the guide. You are encouraged to explore all links that interest you to get the most out of this guide. You must have an active connection to the Internet to use the embedded links.

To navigate around within this guide, you can:

- *Step forward or backward a page at a time using the standard Acrobat Reader navigation toolbar shown along the bottom of your screen*
- *Click on the "Bookmark" links shown on the left side of your screen to go directly to that part of the guide*
- *Click on the "Table of Contents" section and click on the links to go directly to that part of the guide*
- *Search for keywords in the document using the Acrobat Reader "Find" function (found on the toolbar).*

Reader Feedback

We welcome your feedback on any aspect of this guide, so please email your comments or suggestions to info@maxpress.com.

IBM and Power Systems Basics

In this chapter, we will explore IBM's overall direction and how IBM Power Systems is playing a pivotal role.

Why Partner with IBM?

If you are seeking to truly differentiate yourself in the marketplace by extending your market reach with more profitable end-to-end solution offerings, IBM is uniquely positioned to help you make this happen. IBM provides you with a broad portfolio of servers, software, expert integrated systems, and services, coupled with a rich array of channel programs that enable you to take your business wherever you want it to go.

By providing innovative technology that delivers flexibility and high performance, easy to administer programs, and flexible financing options, IBM has an unmatched understanding and appreciation of channel importance that translates into success and prosperity for our partners.

It is an exciting time to be involved with information technology. The worlds of business and computer systems are blending in ways that will result in productivity breakthroughs greater than the sum of their parts. Teaming with IBM will allow you to provide the insight, solutions, and innovation that matter to help your customers succeed.

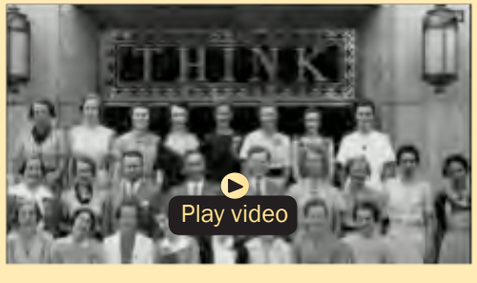
Now let's take a look at IBM's overall direction and how IBM Power Systems fit in.

Smarter Planet

Since 2008, IBMers have been working with companies, cities, and communities around the world to build a Smarter Planet. We've seen enormous advances, as leaders have begun using the vast supply of big data to transform their enterprises and institutions through analytics, mobile technology, social business, and the

More on the Web

- About IBM's patent portfolio



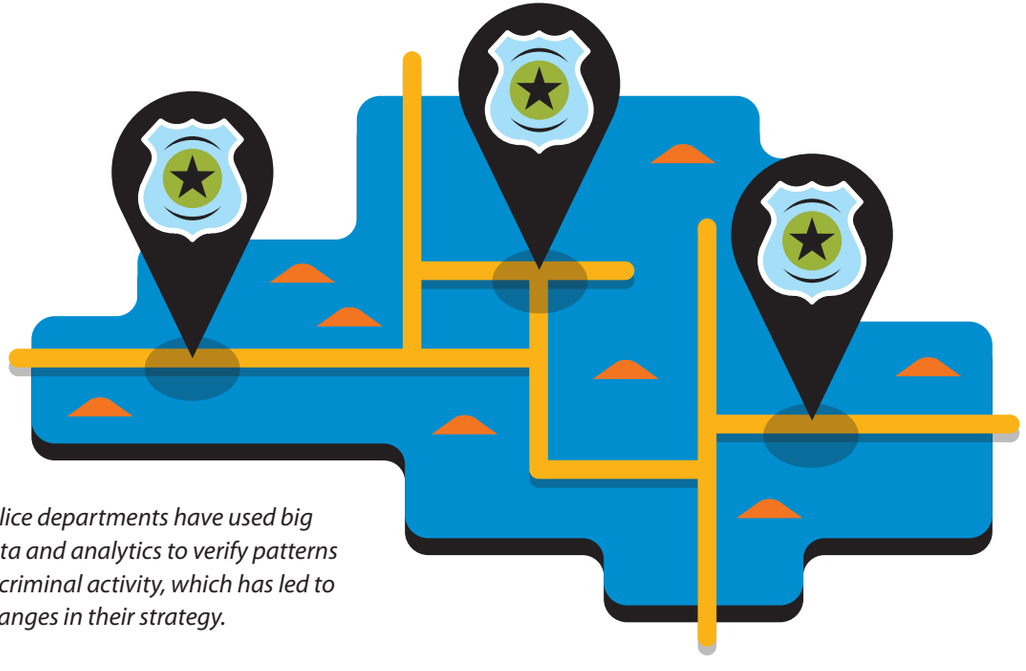
IBM History (13:14)

cloud. Big data has changed how these leaders work, how they make decisions, and how they serve their customers. And the ability to harness big data is giving their enterprises a new competitive edge in today's era of "smart."

Using Analytics, Not Instinct

Executives have traditionally regarded experience and intuition as the keys to formulating strategy and assessing risk. That type of thinking may have worked in an earlier time of information scarcity—but not in the time of big data. When every company, every city, every country, every individual is increasingly interconnected with millions of others, the cost of a bad call can be devastating. But analytics is increasingly helping business and government leaders look beyond their own biases to discern real patterns and anticipate events.

A decade ago, a police department developed an analytics platform that created multi-layer maps and spreadsheets to identify and verify patterns of criminal activity—visualizing knowledge about



Police departments have used big data and analytics to verify patterns of criminal activity, which has led to changes in their strategy.

Social networks shift value in the workplace from knowledge that people possess to knowledge that they can communicate.

where, when, and how violent crime takes place. The police department changed its patrolling strategy as a result—and reduced crime by 24 percent.

Social: The New Production Line

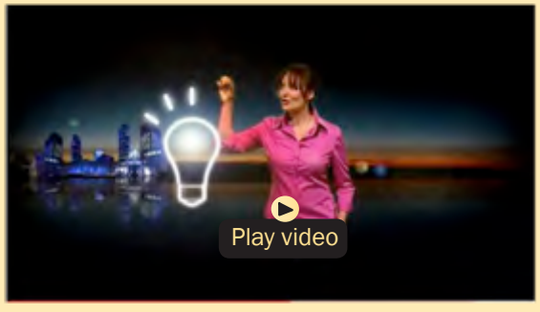
In today's knowledge economy, the exchange of ideas has become the new means of production. The advent of social and mobile technology is shifting employers' competitive edge from hiring workers who gather knowledge to hiring workers who communicate it.

A $15 billion cement maker wanted to create its first global brand of concrete, which required a coordination of stakeholders from each country. The company didn't build a new lab. It built a social business network. Employees in 50 countries formed one global active community whose collaboration helped launch the brand in a third of the anticipated time.

Effective marketing no longer aims publicity at broad demographic groups—it opens conversations with individuals.

More on the Web

- A Smarter Planet info on IBM.com



A Smarter Planet (2:14)

IBM CEO Ginni Rometty on IBM Smarter Planet (58:17)

No Individual Is a "Segment"

In the age of mass production and mass media, marketers generally understood and served broad population "segments." But the age of big data and analytics is revealing customers not as demographic slices—based on age, income, job title, hobby, and the like—but as individuals.

And this change is already underway. Call centers were once evaluated by how quickly they could get employees to spend more time with customers to learn about their needs. Advertising used to be only about selling. Now, smarter marketing starts conversations and delivers useful services—to one individual at a time.

Finding Success on a Smarter Planet

Organizations that adopt these principles, as thousands have, are smarter enterprises. But using technology is only part of the story. The other challenge now is culture: using this emerging technology to change entrenched work practices.

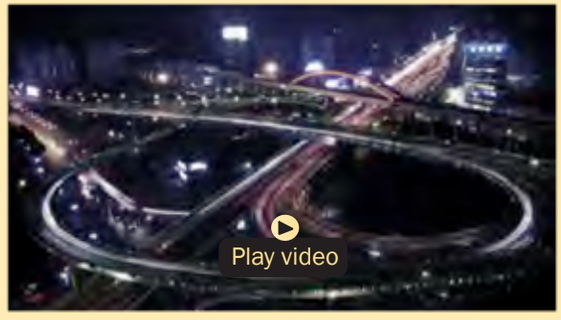
Infrastructure Matters

A hallmark of the IBM Power Systems Family has always been the ability to help businesses quickly adapt to changing business needs. Today, this need is greater than ever as businesses and entire industries are being transformed by the growth of big data, social, mobile, and cloud technologies. With new levels of business insights, organizations are able to deliver personalized experiences and services to match the rising expectation levels of their end users. Customers now expect personalized shopping experiences, evidence-based healthcare, and real-time access to information and services.

In the retail industry, the need to deliver personalized offers to individuals based on their unique preferences and needs drives higher conversion rates and repeat business.

The banking industry is embracing multi-channel bank transformation to extend personalized and unique product bundles and services across all banking channels.

More on the Web



Why Innovate on Power (2:35)

Each of these business and industry transformations is being driven by big data and analytics and requires a new generation of applications that can drive specific business outcomes. These next generation applications leverage business and predictive analytics (analyzing large amounts of both structured and unstructured data) and cognitive (natural language learning) capabilities to provide real-time, data-driven business insights in unprecedented ways. Today more than ever before, infrastructure matters.

IBM Power Systems Moving Ahead

In April 2014, IBM introduced the first generation of systems designed to transform big data & analytics, mobile, and cloud into competitive advantage in new ways never before possible.

These systems are optimized for big data and deliver the economic advantages and security necessary for cloud computing. IBM Power Systems provide an open innovation platform backed by the OpenPOWER Foundation: an open-ecosystem that is revolutionizing the way IT is created and consumed.

Designed for Big Data

IBM Power Systems, based on the innovative POWER8 design, are the first server generation optimized for big data and analytics. They provide an ideal platform for capturing and analyzing the large amounts of data generated by both traditional ERP and OLTP systems as well as emerging next-generation applications.

Power Systems have the compute-intensive performance for real-time business analytics and cognitive applications like IBM Watson, which runs on Linux on Power and can process hundreds of millions of pages of unstructured and structured data within seconds.

The innovative POWER8 processor design, at the heart of Power Systems, is the first processor optimized for big data & analytics. When compared to x86 processors, POWER8 has four times the threads per core allowing for more concurrent queries. POWER8 also has three times more on chip cache, and up to six times more memory bandwidth supporting up to 1 TB of memory.

This, coupled with more than five times the I/O bandwidth of POWER7 Systems and the IBM SoftLayer for Watson platform for cognitive computing, means that Power Systems are ready to put data to work and deliver Insights up to 82 times faster than x86 systems.

More on the Web

- Power Systems big data and analytics on IBM.com

Maximizing the value of enterprise data: IBM Power Systems (2:14)

Open Innovation Platform

IBM Power Systems (with industry standard Linux, AIX, and IBM i operating systems) embody the ultimate open innovation platform of choice for today's data intensive workloads. They provide an open server ecosystem revolutionizing the way IT is developed and delivered.

Power Systems has long been an active player in the Open source community and this commitment is stronger than ever. IBM is investing $1 billion in Linux on Power, Power Systems Linux Centers, Power Development Cloud, Watson Lab, and other resources. IBM was awarded best Linux server by Linux Journal.

The OpenPOWER Foundation also nurtures the open ecosystem around the POWER architecture by sharing expertise, investment, and server-class intellectual property to help serve the evolving needs of customers.

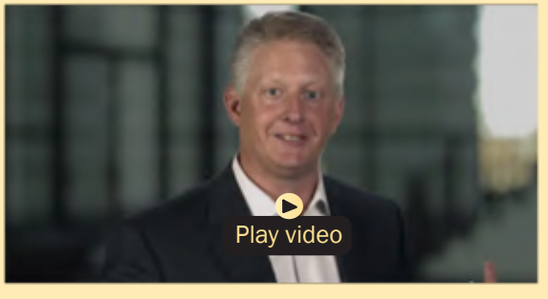
Power Systems offer unmatched versatility for integrating applications from across this open ecosystem to acheive the ideal combination of applications to meet business needs without unnecessary complexity. The ecosystem includes thousands of independent software vendors and tens of thousands of applications available to address an extremely wide range of customer needs. These solutions range from traditional applications such as transaction processing and structured databases to next generation applications for big data and analytics, all within a highly available, scalable, and secure environment.

IBM Power Systems is at the heart of the open innovation community, leveraging Linux portability and open source technologies such as OpenStack, PowerKVM, and CAPI backed by the OpenPOWER Foundation.

More on the Web

- Open platform of choice on IBM.com

The Value of OpenPOWER from IBM Systems Magazine (2:51)



The new IBM Power Systems built with open innovation to put data to work (1:28)

Defined by Software for the Cloud

Regardless of whether you are deploying a public, private, or dynamic hybrid cloud (a mix of both public and private), the infrastructure you choose matters.

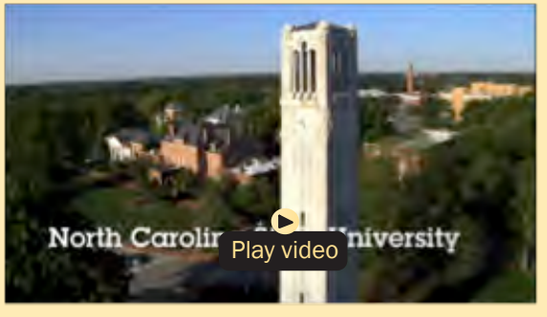
IBM Power Systems drive superior cloud economics and security. Power Systems' superior cloud economic advantages stem from performance improvements (e.g., twice the performance vs. x86 for Java Linux workloads) and higher sustained utilization (65 percent guaranteed). Security is enhanced by the new, built-in encrypt/decrypt engine. The rapidly growing OpenPOWER community brings Power Systems to new buyers and new markets.

A cloud computing service doesn't float on air, it needs a solid infrastructure. It needs to be an infrastructure that delivers scalability and security from the hardware components to the hypervisors and operating system. And it should deliver flexibility, agility, and responsiveness. This is exactly what software-defined IT can do through infrastructure automation across compute, storage, and networking resources. In a software defined environment, IT becomes more simplified through standards, more responsive to shifting requirements, and more adaptive through policy-based automation.

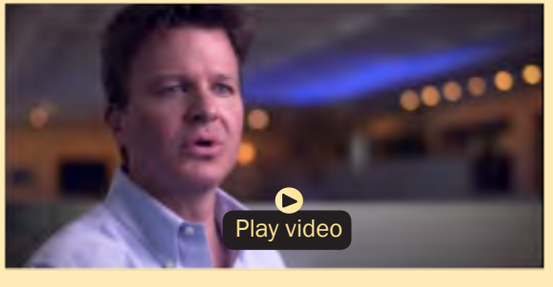
You can realize the agility and cost advantages that software-defined IT can provide through offerings like PowerKVM, SmartCloud Entry for Power Systems, SoftLayer, and Watson technology on Power. Power Systems provide the performance-for-price economic advantages and security so you can confidently move more workloads to the cloud. The result is better economics for cloud infrastructures. Infrastructure matters.

More on the Web

- Cloud on Power Systems info on IBM.com
- IBM Power Systems Linux Center info on PartnerWorld
- $1B investment in Linux on Power (press release)
- IBM offers POWER technology for open development (press release)
- IT-Informatik GmbH case study
- WellPoint, Inc. case study



North Carolina State University case study (3:46)



IBM PowerLinux—backed by the Linux community (4:38)

The Value of Power Systems to Business Partners

The IBM Power Systems family offers IBM Business Partners a large and growing opportunity to increase revenue by helping customers meet a wide range of traditional and emerging business needs.

Whether it's industry standard Linux, AIX, or IBM i, Power Systems provide your clients with the freedom and flexibility of choice to respond to their unique business needs quickly and efficiently. Power Systems' unique open platform for choice allows your clients to expand their options for faster technology development and IT integration with existing resources and ecosystem technologies. Today's rich multi-media, big data, and multi-device environment requires flexible options and industry compatibility so your clients can integrate what they have today with what's coming tomorrow.

Power provides an open and flexible platform for choice allowing organizations to choose from industry standard Linux, AIX, or IBM i to run their mission critical workloads and next generation applications.

Businesses have consistently chosen Power over its competitors… making Power #1 in UNIX revenue share for nearly a decade. Why? Because clients find their applications and databases run best on Power. And, as proven by IBM Watson and Sequoia (one of the top supercomputers in the world today), Power is the ultimate system for today's compute and data-intensive workloads that drive businesses' need to improve business performance, revenue, and customer loyalty. IBM Power Business Partners can take advantage of this market opportunity and conquer the competition with Power Systems, Software and Solutions that address today's emerging business needs.

And IBM continues to invest in Power innovations today. These innovations and continued investments in R&D ensure that there will be continuing demand for Power Systems in the marketplace, which translates into continued revenue opportunity for IBM Business Partners.

IBM is committed to helping Business Partners do more, sell more, and cultivate more skills that extend your reach across more markets and into high-growth areas such as cloud, analytics, and expert integrated systems.

"IBM is an important part of Canonical's Server and Cloud partner ecosystem. We believe IBM's launch of POWER8, with Ubuntu 14.04 LTS, Ubuntu OpenStack and Juju will deliver the scale, reliability, and performance customers are looking for. Ubuntu 14.04 LTS on IBM's new POWER8 architecture will give clients access to a broad ecosystem with hundreds of next generation cloud based applications."

—Mark Shuttleworth, Founder, Canonical, Ltd.

"Our customers are focused on leveraging their infrastructure to help them respond to business needs. They require a low touch and reliable infrastructure automation solution. Our solution provides a programmatic approach to infrastructure automation that is scalable, agile, stable, and secure. These features, in combination with IBM Power Systems built with innovative POWER8 technology, running Linux, will provide an outstanding platform on which to continue to meet and exceed those key customer requirements."

—Adrian Hall, CEO, CFEngine

More on the Web

- Business Partner programs and benefits
- Join IBM PartnerWorld

IBM Systems ISV YouTube channel

Today, IBM offers more support and resources than ever to help our Business Partners succeed. When you go to market with IBM, you can tap into the strengths that have made us a leader for more than 100 years.

If you are not an IBM Business Partner, sign up today. If you are already an IBM Business Partner, we thank you and look forward to working with you to grow your business.

Power Systems Resources

This chapter provides you with general information and valuable resources that will help you be successful marketing, selling, and supporting IBM Power Systems solutions.

IBM PartnerWorld Program

The IBM PartnerWorld Program provides IBM Business Partners with the support they need to understand general market trends, plan market and business strategies, and generate demand for IBM hardware, software, or services.

Business Partners who invest the most in IBM receive higher-value benefits and resources from the PartnerWorld program. This investment is recognized through three PartnerWorld membership levels: Member, Advanced, and Premier. Qualification for these membership levels is based on the Business Partner's attainment according to a point system. Points are earned by acquiring skills, developing and selling solutions, driving IBM revenue, and achieving customer satisfaction.

The IBM PartnerWorld program publishes a blog for IBM Business Partners called "Partner Voices."

Once you are an IBM Business Partner, The IBM PartnerWorld Web Site is your central source for information and tools to help you succeed.

IBM Power Systems on PartnerWorld Web Site

The IBM PartnerWorld Web site has a great deal of information of use to all IBM Business Partners worldwide. On the site you will find the latest presentations and marketing materials (such as brochures, data sheets, and case studies) as well as competitive information, consultant reports, IBM white papers, education and events, tools, technical support, and much more.

There is an IBM Power Systems portal on PartnerWorld, which serves as a central repository of much Power Systems information of interest to Business Partners (see the "More on the Web" box).

In this guide, we have summarized and provided direct links to a great deal of PartnerWorld information of interest to Power Systems Business Partners. As such, this publication is your personal "guide" to the PartnerWorld Web site. Just the same, we encourage you to spend some time browsing the PartnerWorld site so you can get a feel for the full scope of resources available to you.

More on the Web

- Partner Voices YouTube channel
- Partner Voices on Twitter

More on the Web

- Power Systems portal on PartnerWorld
- IBM PartnerWorld Web site home page
- IBM PartnerWorld news and newsletters
- PartnerWorld membership levels
- Join PartnerWorld

You will need your IBM-assigned user ID and password to access some areas of PartnerWorld. If you don't have your user ID and password, you can contact IBM PartnerWorld for help.

Power Systems Asset Index

There is a great deal of information available on the PartnerWorld Web site. The Power Systems Asset Index can help you find what you need. This downloadable spreadsheet contains direct links to key PartnerWorld assets. It is organized by asset type (sales kits, presentations, white papers, etc.).

Here are just a few examples of the many asset types available:

- *Executive briefings*
- *Solution briefs*
- *Data sheets*
- *Analyst papers: (e.g., Value Proposition for IBM Power Systems Servers and IBM i: Minimizing Costs and Risks for Large Business)*
- *Management Solutions for Power*
- *Special offerings and incentives*
- *Freshly updated Power Systems Quick Proposals*
- *Client Webcasts (e.g., IBM Power Systems Announcement Overview)*
- *Client presentations (e.g., Power Systems Cloud Solutions)*
- *ROI Tools*
- *Proof of Concept*
- *Competitive assets (e.g., Power Systems Competitive x86/VMware sales kit)*

More on the Web

- Power Systems Asset Index

Power Systems Education

As with almost any endeavor, time spent educating yourself and your team on appropriate topics such as selling techniques and Power Systems solutions will help you succeed. In fact, IBM Business Partners are required to achieve certification prior to selling IBM Power Systems. In this section we discuss options for you to obtain the education and certifications you need.

Know Your IBM (KYI)

Know Your IBM is a permission-based interactive marketing and selling resource designed for you, our Business Partner sellers. It provides net, customized, online education modules focusing on strategic product and solution areas while rewarding our business partners for taking the time to learn and then to sell selected products.

The education helps increase your understanding and awareness of the key features and business benefits of IBM products, solutions, and offerings. Incentives offered in conjunction with Know Your IBM are designed to encourage you to complete the education modules and provide you rewards for performance. Incentives are awarded at the individual rep level, not to the firm.

More on the Web

- Know Your IBM training modules

Required Certifications for Power Systems

IBM requires that all IBM Power Systems Business Partners maintain a minimum number of sales and technical certifications in order to be authorized to sell Power products. All new Business Partners (or existing Business Partners adding new products from IBM or a distributor) are required to meet these certification requirements throughout their contract period and no later than six months from their contract and/or product start date.

More on the Web

- Power Systems certification requirements

IBM Systems College

IBM Systems College is your one-stop education resource for all STG brands including System z, Power, Storage, System x, BladeCenter, and Retail Store Solutions. Find the most current education as well as roadmaps, certification information, tools, resources, and much more by platform or job role. With hundreds of on demand learning opportunities, there is sure to be something that will help you be successful today and over the long term. The IBM Systems College also provides information on IBM skills mastery, mastery tests, and certifications.

More on the Web

- IBM Systems College
- Power Systems Sales
- Power Systems Technical

Sales Tools

Through the PartnerWorld Web site, IBM offers Business Partners a wide range of sales tools to help you succeed with IBM Power Systems. Here we will look at a few key examples.

Power Systems Master Sales Kit

The IBM Power Systems Master Sales Kit is a central repository for a wide variety of assets that can help you sell Power Systems. The Master Sales Kit includes benchmarks, brochures, competitive info, lead-passing guidelines, proposal inserts, sales plays, sales tools, white papers, and more.

More on the Web

- Power Systems Master Sales Kit

Sales Conversations

IBM has assembled a set of sales conversations to help sellers advance more rapidly through the stages of prepare, engage, and pursue as they identify and progress opportunities. They are designed to guide meaningful solution-oriented discussions with your customers. The sales conversations assets are aligned with the sales cycle—Prepare, Engage, and Pursue. Each conversation includes: (a) Buyer and role-based targeted assets, (b) Best practices to help start conversations and progress/win deals, (c) Targeted client references, (d) Relevant videos, demos, and client presentations.

Sales conversations cover many topics including: Power Enterprise Workload Expansion, Competitive Protect and Attack for Power, Winning New Linux Workloads

More on the Web

- Power System sales conversations

on scale out Power Systems, Cloud on Power for Enterprise Private Cloud (EPC) Solutions, etc. Follow the "More on the Web" link for detail.

Power Systems Quick Proposals

Creating a high-quality proposal can be difficult and time consuming. To help streamline this process for you, the IBM Americas Techline team has designed "Quick Proposal" templates you can use to prepare comprehensive proposals for your sales opportunities. Simply download the QP Content Document and customize it for your specific opportunity.

More on the Web

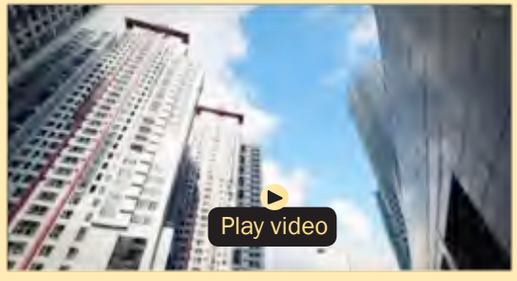
- Power Systems Quick Proposals

Success Stories, References, Case Studies

It is often helpful to make prospective customers aware of other businesses that have successfully implemented solutions based on Power Systems. For this reason, IBM maintains a database of existing customer success stories, complete with company profiles, identified needs, solutions, and resulting benefits. IBM Business Partners can use these success stories with customers to advance the sell cycle. To see what is available, simply follow the links provided in the "More on the Web" box.

More on the Web

- Power Systems client references on PartnerWorld
- Power Systems success stories on IBM.com



YouTube Channel: IBM Client Voices

Competitive Marketing Information

The strengths of IBM Power Systems solutions will help you beat the competition. This section provides you with basic information and tools you can use to hone your competitive edge.

Let's start by looking at what analysts and customers are extolling about the Power platform when compared to commodity x86 systems.

POWER8 Processor

The IBM POWER8 microprocessor represents a significant advance in processing power for the IBM Power Systems family. POWER8 is designed to be a massively multithreaded chip, capable of handling up to 96 hardware threads simultaneously. The chip makes use of very large amounts of on- and off-chip eDRAM caches, and on-chip memory controllers enable very high bandwidth to memory and system I/O.

POWER8 gives IBM Power Systems a powerful competitive advantage over servers built on x86 or other processors. Follow the "More on the Web" link for a detailed presentation reviewing the many POWER8 competitive advantages.

What Research Analysts are Saying

"Organizations virtualizing industry-standard Linux images (e.g., Red Hat, SLES) on Power Systems have seen utilization rates climb from an average of 34% to over 70%, resulting in more cost-efficient and reliable operations."
—IBM PowerLinux Servers: Leveraging Virtualization for Operational Efficiency, IDC, (All rights reserved), January 2013

"For example, for the three SAP users for which IT costs are calculated, 'costs of down-time' range from 53 to 63 percent less, and average 59 percent less for use of Power Systems than for Windows servers."
—Value Proposition for IBM Power Systems: Platform Choices for the Enterprise SAP Infrastructure, ITG, (All rights reserved), January 2012

What Power System Clients are Saying

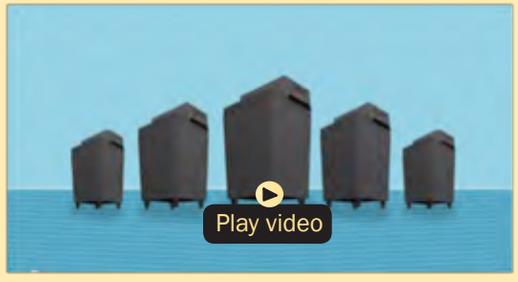
"The highly virtualized and automated IBM infrastructure will give us the flexibility to enable this and deliver services faster with minimal administrative overhead."
—Dave Haseman, Director of the CTI, University of Wisconsin

"The greater efficiency when administering and backing up the centralized systems, the optimal price/performance ratio and the improvement of the productivity parameters are also appreciable advantages."
—Martin Poláèek, IT Manager at Agrofert Holding

"With IBM Power Systems, we've seen a clear 20 percent improvement in our transaction processing performance, and we've been able to extend our service period by an hour a day—that's a big deal for our sales force. We've also improved batch performance by 40 percent minimum, and by up to 300 percent for the largest jobs. We no longer need to shut down transactions to handle our two large annual jobs, so the sales force can continue to serve client needs during that time."
—François Tapin, Director of IT and Central Services, Thélem Assurances

More on the Web

- POWER8 Competitive Claims (PowerPoint)



Is the x86 architecture the best choice? DIscover IBM Power Systems. (3:53)

Power Systems Virtualization Advantages

Security and compliance challenges and data center inefficiencies from x86 based technologies can leave your business with increased risk and less than ideal return on your IT investment. IBM Power Systems' virtualized infrastructure and industry workload solutions can help you drive greater efficiency and improved business benefits from IT infrastructures. Power Systems servers help your business deliver services faster, with higher quality and superior economics, making rapid progress on your journey to smarter computing.

Unlike commodity servers that utilize off-the-shelf virtualization software add-on piece parts from third parties, Power Systems servers are designed with embedded virtualization called PowerVM. Designed together from the silicon up, Power servers and PowerVM have the DNA to deliver efficient virtualization that is as dynamic as your business. PowerVM enables you to deploy, add, remove, and redeploy resources to match your business needs without business interruption.

The Power Systems virtualization advantages over virtualized x86 include:

- *Up to 58 percent faster time-to-market for new IT initiatives*
- *Increased availability—up to 5.5 times better than x86*
- *Superior security—No reported VM security breaches*
- *Up to 71.4 percent lower TCO*
- *Easier to manage—less staff to operate*
- *Improved efficiency—up to 105 percent more efficient VM resource usage*

More on the Web

- Power workload simulator tool
- Webcast: Virtualization and Cloud on Power (registration)

Migrating Linux Applications from x86 to Power Systems

With IBM Power Systems servers and blades based on the IBM POWER processor architecture, IBM has significantly elevated system performance, throughput, and resiliency. These servers are capable of running your choice of operating systems (Linux, IBM AIX, and IBM i) in whatever combination you choose. Most importantly, the new architecture also integrates IBM PowerVM virtualization to provide extreme scalability, flexibility, and robustness. As a result, enterprise workloads deployed in PowerVM virtual machines (VMs) not only run faster on POWER-based platforms, but they can also scale further and be optimized more efficiently.

PowerVM is a complete virtualization solution that is integrated and packaged with Power Systems. This is a very robust implementation of virtualization developed by IBM, based on best practices learned over the course of four decades of experience with the IBM mainframe. With each new Power Systems generation, IBM continues to grow its virtualization offerings beyond just the hypervisor, using features such as Live Partition Mobility and Active Memory Sharing. Reducing costs, improving service, and managing risk are three focus areas of interest to virtualization customers. Deploying virtualization can maximize scalability to reduce IT costs.

More on the Web

- White paper "Migrating Linux applications from x86 to IBM Power Systems"

Migrate to Power Systems with Help from IBM

IBM Power Systems support the applications your business depends on. Whether you need AIX (UNIX), Linux, or IBM i operating systems, you can gain significant advantages for your business with a Power Systems migration. However, you

More on the Web

- Migrating to IBM Power Systems
- Compare Power on IBM.com

may be concerned about the challenge of migrating your applications from your current x86 infrastructure. The IBM Migration Factory can help you plan your migration to reduce risk and get the best return on your investment. Experienced IBM experts will help you develop a high-level technical and financial roadmap that identifies optimization opportunities within your server environment and the best targets for migration.

IBM COMP Web Site

COMP is IBM's worldwide portal for competitive information on hardware, software, and services. COMP is updated daily with documents from a number of external suppliers (works made for hire and off-the-shelf reports). Reports from IBM competitive specialists are also made available via COMP as well as links to competitive tools from third parties.

More on the Web

- IBM "Comp" Web site
- IBM Power System Competitive Sales Tool

Through COMP you can also download the "IBM Power Systems Competitive Sales Tool" which is updated regularly and is the most extensive source of competitive information. Be sure you also sign up to automatically receive email notification when a new version of the tool is posted.

Power Systems Solutions Selling

IBM Power Systems, built as an open platform for choice with UNIX, Linux, and IBM i, provide solutions for organizations of all sizes that help turn massive volumes of raw data into actionable business insights on a scalable, secure, and resilient system.

More on the Web

- Power Systems solutions

IBM Power Systems introduce next generation applications and cognitive computing solutions to help organizations of all sizes drive better outcomes through data driven insights from big data and analytics. With these applications organizations are able to deliver personalized shopping experiences, evidence-based healthcare, and real time access to information and services.

Solution areas include business analytics, cloud computing, cognitive computing, healthcare, retail, and more.

Adding Value and Increasing the Sale

Once an IBM Power Systems solution begins to take shape for your customer, consider what other products and services can be added to the deal to bring more value to the customer and increase your sales revenue. Let's look at a few ideas to help fuel your thinking.

Attaching Power Software to Your Proposals

Including IBM Software to your solution sales gives you a way to enhance your productivity, accelerate sales, and increase deal size today while creating offerings that are more attractive to your clients than ever before. The IBM Software portfolio automatically exploits available threads on POWER8 to improve performance and value. IBM Business Partners and their clients can leverage processing power without rewriting their applications, achieving better cost/performance than with competitive offerings.

More on the Web

- IBM Power Software

Attaching Storage to Your Proposals

Whenever you are proposing the sale of a Power Systems server, it only makes sense to include the needed storage devices in the original proposal. Selling storage with servers is known as "clothing" the servers with storage devices. Properly clothing a server allows you to offer a complete solution while also increasing your profits.

More on the Web

- Storage products for Power Systems

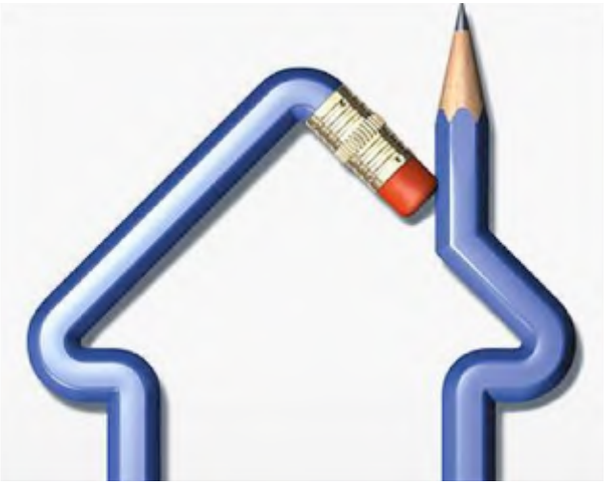
IBM's line of storage devices falls under the System Storage brand and includes disk storage, tape storage, and storage management software. IBM System Storage offers storage solutions that are architected and tested to provide critical data on demand for IBM Power Systems applications.

Attaching Services to Your Proposals

Attaching IBM Global Technology Services to your IBM solution sales gives you a way to enhance your productivity, accelerate sales, and increase deal size today while creating ongoing revenue opportunities for the future—creating offerings that are more attractive to your clients than ever before.

More on the Web

- Service offerings for Power Systems



CIOs, IT directors, and business leaders in client organizations of all sizes across all industries see tremendous value in IBM Global Technology Services. Our offerings can provide powerful supplements to their internal resources, opportunities to save money, and programs to enhance the effectiveness of their technology investments. And IBM gives you a way to complement your resources and capabilities. The result is that IBM Global Technology Services can help increase your client satisfaction because you can offer a more complete solution.

IBM Global Services provides structured and standardized approaches backed by industry-leading experts who can help

plan, design, install, configure, tune, test, and support solutions; speed time to value; reduce risk; and minimize disruption to IT and business operations.

Attaching Training to Your Proposals

When selling servers to your clients, don't forget to ask them about their skills, especially if they are buying new technology. You want your clients to have the latest skills so they can implement solutions faster and see a shorter ROI. Clients with skills are more loyal to the brand and will be in a better position to take advantage of upgrades and new technology in the future.

When you create a proposal, add an IBM Education Pack to the deal. The EdPack allows a client to train anyone (or everyone) in their company and they have up to one year after activation to take the IBM Technical Training. EdPacks can be used for our online classes, face-to-face classes, technical conferences, and private classes (either F2F or online). The advantage to adding it to the deal is that the client doesn't have to go back for another PO for the skills transfer. It's included in the deal up front. Tier 1 partners buy directly from IBM. Tier 2 partners buy from their distributor. More information about EdPacks can be found online.

More on the Web

- IBM Training info on IBM.com
- Training Paths for AIX
- Training Paths for IBM i

IBM Global Financing

Help your customers get the most out of your Power Systems investment with IBM Global Financing. With competitive rates and flexible terms your customers can take full advantage of big data and analytics, mobile and cloud on the new Power technology to affordably grow their business and drive innovation for competitive advantage.

IBM Global Financing offers promotions from time to time that can help you close the sale. For example, you can offer credit qualified customers 24 months financing at 0% interest rate for select POWER8 and POWER7+ servers including systems software and systems software maintenance. With Power Systems Exchange, you can offer your clients increased performance and functionality with minimal downtime when they migrate to select POWER Systems servers.

More on the Web

- Presentation: IBM Global Financing solutions for POWER8 BPs
- IBM Global Financing for Power Systems info on IBM.com

Side-by-side migrations through Power Systems Exchange (1:51)

Moving Your Business Forward

As an IBM Business Partner, you have the opportunity to leverage IBM PartnerWorld program benefits to help build your capabilities and effectiveness in the

marketplace. In this section, we look at just a few ways you can add value to your business to the benefit of your customers and your bottom line.

Power Systems Specialty

The IBM Power Systems Specialty recognizes and rewards IBM Business Partners who have made a significant investment in skills and certifications, have acquired and completed client references, and have achieved market differentiation by successfully selling and deploying solutions based on IBM Power Systems.

The Power Systems Specialty is for authorized Power Systems Business Partners who want to improve their success in selling IBM Power Systems solutions. Meeting the eligibility criteria gives you access to a comprehensive set of benefits that can be leveraged to help drive significant growth in your IBM Power Systems revenues.

Two achievement categories are offered in select geographies: Specialty and Specialty Elite. For those Business Partners who demonstrate more proficient skills, showcase more client references, and meet higher revenue targets, the Power Systems Specialty Elite offering is available in North America. These Business Partners will be offered greater levels of support and benefits.

More on the Web

- Power Systems Specialty

You must apply for the specialty to participate. Your company must meet the specified criteria through eligible certifications and verified client references, and achieve the minimum annual IBM Power Systems revenue requirements.

The Power Systems Specialty enrollment is open and is currently available to Business Partners in Europe and North America.

IBM Digital Content Marketing (Web Content Syndication)

IBM's Digital Content Marketing benefit is an integrated suite of marketing tools—web content syndication, email marketing and social automation—designed to help you generate leads, while saving you time and money. Use one, two, or all three capabilities to create digital marketing campaigns to increase your visibility in the marketplace.

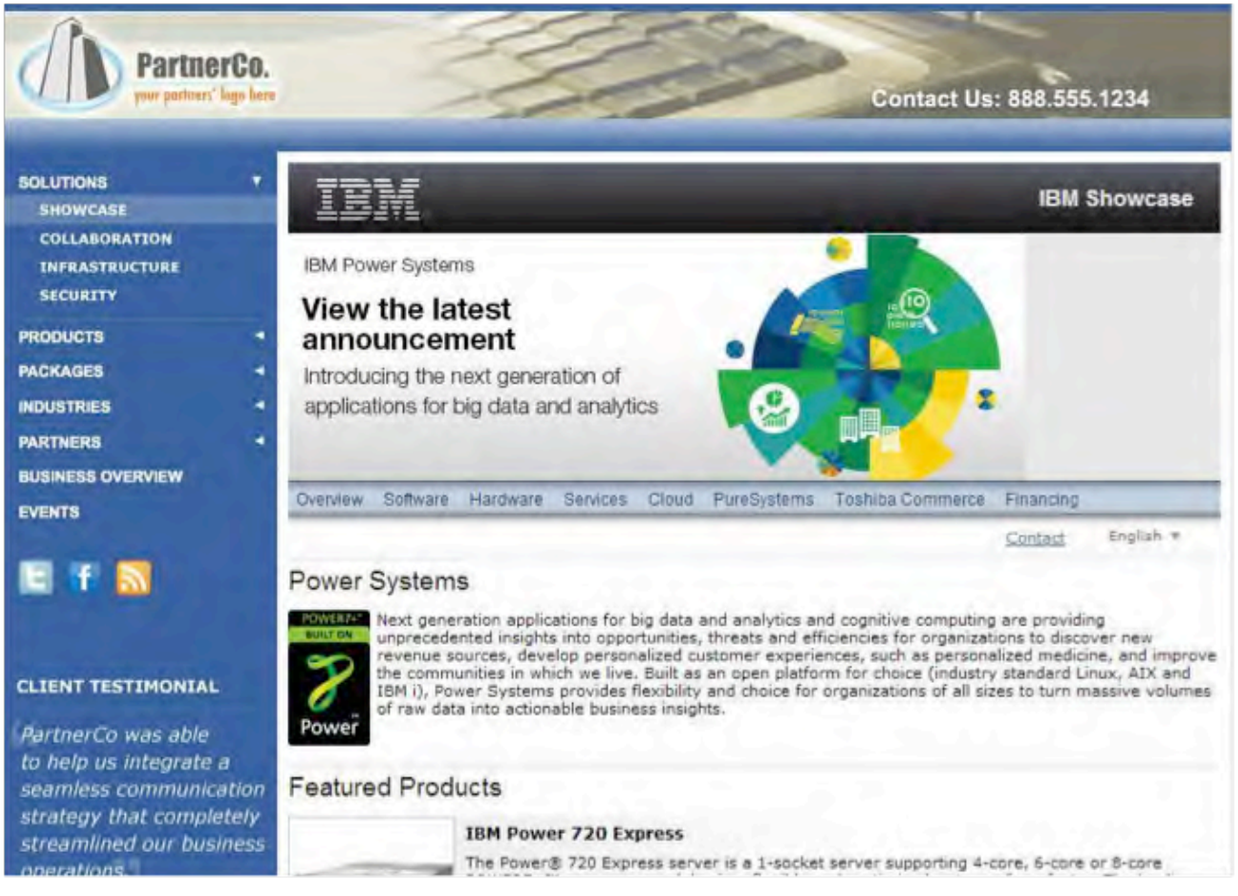
Ninety three percent of business-to-business purchases start with an online search. You can use Web site syndication to unlock more leads:

- *Help clients find you in the digital world*
- *Attract new buyers and new clients*
- *Put the power of digital marketing to work.*

More on the Web

- Digital Content Marketing info on PartnerWorld
- Digital Content Marketing registration

Power Systems content includes syndicated analyst papers, POWER8 System details, and info on the latest Power Systems Software and operating systems.



Digial Event Resource Kit

The Digital Event Resource Kit provides event execution enablement and tools for IMT-executed events. It helps you host your own events raising the profile of your business and engage both existing customers and prospects. Event-in-a-Box provides presentation materials and introductory videos. Demand generation offers such as analyst reports, brochures, and infographics are also provided.

More on the Web

- Ditial Event Resource Kit
- Event-in-a-Box

Social Media Resources for IBM Business Partners

Social media is quickly growing in importance for businesses of all sizes. Whether you are already involved in social media or just getting interested, the "More on the Web" box provides some links that will be of interest to you. Join the Power Systems conversation!

More on the Web

- Follow on Twitter (#powersystems, #aix, #ibmi, #powerlinux)
- Follow on LinkedIn
- Power Systems YouTube channel
- Access our Flickr photostream
- IBM Power Systems forums, wikis, communities
- Power Systems RSS feed
- IBM PartnerWorld communities
- LinkedIn social network (has an IBM Business Partner Group)
- Use Twitter to Grow Your Business (IBM Software Business Partner Blog)

Gauging Server Performance through Benchmarks

Trying to judge the performance of servers by comparing the individual component specifications (processor, disk, memory, etc.) can be misleading. A better way to compare the performance of servers is to run specially designed software that simulates various types of workloads and measures the time it takes to complete

More on the Web

- Power Systems performance benchmarks

tasks. This is known as benchmark testing. You can find detailed information on benchmark testing and the latest benchmark testing results for Power Systems by following the link in the "More on the Web" box.

Getting Help

Everyone benefits when Business Partners can quickly find answers to questions that inevitably arise during the sales cycle. To this end, the IBM PartnerWorld program and your distributor stand ready to help you. Following are a few of the most useful resources the IBM PartnerWorld program provides to Business Partners—with the goal of identifying, proposing, and ultimately installing solutions that will provide value for your clients.

Technical Support for Business Partners

Technical sales support from IBM provides Business Partners with extensive pre-sales support through the PartnerWorld program online via the Web and by voice. Voice support can be accessed via PartnerWorld Contact Services, the single point of entry to all key support organizations. PartnerWorld Contact Services provides access to Techline for hardware and software technical sales support, as well as Competeline for win strategies and competitive information. Power Systems Business Partners entitled through the PartnerWorld program have access to:

- *Remote solution design assistance/review*
- *Technical marketing assistance*
- *Product and promotion information*
- *Configuration assistance*
- *Competitive product information*
- *Sales strategy information*
- *Solution assurance assistance.*

Follow the links in the "More on the Web" box to access Technical Sales Support online (region selectable).

More on the Web

- Contact Techline
- Technical Sales Library
- PartnerWorld technical resources and support

Solution Assurance

Business Partners are responsible for having their own equivalent Solution Assurance Quality Practice and for conducting their own technical reviews. Solution Assurance support and education should be provided by the Distributors. In some cases, IBM may conduct these reviews or provide assistance. Please contact your local IBM Sales team for geo-specific offerings.

All Solution Assurance collateral such as checklists, user guides, and installation guides are available through the Solution Assurance Library.

More on the Web

- Solution Assurance

Power Systems Quick Reference

In this chapter, we explore the IBM Power Systems you will be selling and offer some resources that will help you succeed.

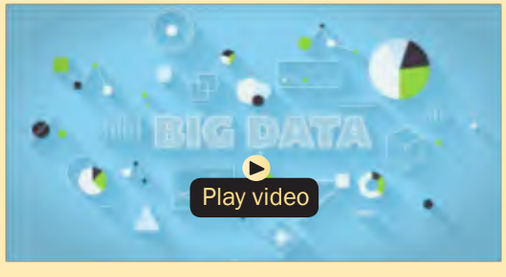
Power Systems Solution Selling

IBM Power Systems, built as an open innovation platform for organizations of all sizes, provide solutions to transform big data and analytics, cloud and mobile into competitive advantage—in ways never before possible.

IBM offers a growing collection of solutions based on IBM Power Systems in areas shown in the table.

More on the Web

- Power Systems info on IBM.com
- Customer brochure: Power Systems brochure for large enterprises (pdf)
- Customer brochure: Power Systems brochure for midmarket (pdf)



The Value of OpenPOWER from IBM Systems Magazine (2:51)

Power Solution area	Description
• Big data and analytics solutions	Unlock the value of data and deliver faster insights with IBM systems and solutions optimized for big data and analytics applications.
• Cloud computing solutions	Designed to help deliver on the promise of cloud and take advantage of superior cloud economics for scale-out infrastructures.
• Linux on Power solutions	Linux Solutions tuned to extend the performance of POWER to key emerging workloads running on industry-standard Linux.
Industry solutions • Healthcare industry solutions • Retail industry solutions	Power Systems enable organizations to gain greater actionable insights for competitive advantage through industry solutions with leading analytics capabilities.
Solution providers • ISV Solutions • Business Partner application showcase	IBM, with our technology partners, provides innovative solutions while offering flexibility and choice to deliver value to organizations of all sizes.
• Cognitive computing solutions	With Watson's leading cognitive computing capabilities, IBM Power Systems enable industries to transform their business with the next generation of cognitive applications.
• All IBM Power Systems Solutions on IBM.com	

Scale-out Servers

Power Systems S class servers are affordable, easy-to-deploy, and energy efficient application servers, consolidation servers, or standalone servers for Linux, UNIX, and IBM i workloads. Available with up to 24 cores, these one- and two-socket servers offer better cloud economics and security for businesses that need smaller or scale-out deployment options for data-centric applications.

S822

IBM Power System S822 server is ideal for consolidation of multiple applications and infrastructure workloads in a virtualized environment, bringing together business transaction processing with infrastructure for social and mobile solutions in UNIX and Linux operating

More on the Web

- S822 assets on PartnerWorld
- S822 info on IBM.com
- S822 Competitive Insights
- S822 blog search
- S822 Twitter search

S822 Specifications

System configurations	Model 8284-22A
Microprocessors	One or two 6 core 3.89 GHz POWER8 processor cards or One or two 10 core 3.42 GHz POWER8 processor cards
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	16 MB per DIMM
Memory Min/Max	16 GB, 32 GB and 64 GB 1600 MHz DDR3 module 16 to 512 GB (1S) 32 to 1 TB (2S)
Processor-to-memory bandwidth	192 GBps per socket
Standard backplane	12 SFF Hard Disk Drive/Solid State Disk
With dual IOA higher function backplane	8 SFF HDD/SSD plus 6 1.8-inch bays for SSD
Media bays	One slimline DVD
Integrated SAS controller	Standard RAID 0,5,6,10. optional: 7200 MB cache & easy tier function
Adapter slots	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use Nine PCIe Gen3 slots with concurrent maintenance: four x16 plus five PCIe Gen3 x8 1 CAPI adapter per processor card
I/O bandwidth	96 GBps per socket
Power supply	200 V to 240 V
RAS features	Processor instruction retry, alternate processor recovery, selective dynamic firmware updates, chipkill memory ECC L2 cache, L3 cache, service processor with fault monitoring, hot-swappable disk bays, hot-plug concurrent maintenance PCIe slots, hot-plug and redundant power supplies and cooling fans, dynamic processor deallocation, extended error handling on PCI slots
Operating systems	AIX and Linux for POWER
System dimensions	427.5 W x 86.5 H x747.5 D mm
Warranty	3 year limited warranty, on site for selected components; CRU (customer replaceable unit) for all other units (varies by country), next business day 9x5 (excluding holidays), warranty service upgrades and maintenance are available

environments. A two-socket 2U system, which can be ordered with the flexibility of either one or two processor sockets populated, provides growth capacity for customers who need it.

It provides the benefits of greater performance per core as well as per socket with POWER8 processors, new I/O capabilities, higher internal storage and PCIe capacities and performance, the capability to support CAPI accelerator devices, and greater RAS including hot-plug PCIe capability.

Here are some quick S822 facts:

- *Ideal for consolidation of multiple applications and infrastructure workloads in a virtualized environment, bringing together business transaction processing with infrastructure for social and mobile solutions*
- *Consolidation of UNIX and x86 Linux workloads*
- *Gain faster insights with the IBM POWER8 processor and smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies*
- *Reduce energy consumption utilizing advanced energy control.*

S814

The Power System S814 is designed to be a highly secure architecture providing a stable database and middleware platform for efficient deployment of business processing applications. A 1-socket system with a 6-core POWER8 processor is available in either a rack or tower configuration.

The 8-core higher performance system is only available in a rack configuration and supports new I/O capabilities including CAPI accelerators, higher internal disk and SSD capacities, and hot plug PCIe Gen3 slots.

More on the Web

- S814 assets on PartnerWorld
- S814 info on IBM.com
- S814 Competitive Insights
- S814 blog search
- S814 Twitter search

Here are some quick S814 facts:

- *Highly secure architecture providing a stable database and middleware platform for efficient deployment of business processing applications*
- *Ideal for mid-size business customers consolidating UNIX, IBM i, and Linux workloads*
- *Gain faster insights with the IBM POWER8 processor and smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies*
- *Reduce energy consumption utilizing advanced energy control.*

S814 Specifications

System configurations	Model 8286-41A
Microprocessors	One 6 core 3.02 GHz POWER8 processor card (rack and tower) or One 8 core 3.72 GHz POWER8 processor card (rack only)
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	16 MB per DIMM
Memory Min/Max	16 GB, 32 GB and 64 GB 1600 MHz DDR3 module, 16/512 GB Active Memory Sharing
Processor-to-memory bandwidth	192 GBps per socket
Standard backplane	12 SFF Hard Disk Drive/Solid State Disk
With dual IOA higher function backplane	18 SFF bays for HDD/SSD
Media bays	One slimline DVD
Standard Ethernet	Standard RAID 0,5,6,10. optional: 7200 MB cache & easy tier function
Integrated SAS controller	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use Seven PCIe Gen3 slots with concurrent maintenance: two x16 plus five PCIe Gen3 x 8 1 CAPI adapter per processor card
Adapter slots	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use Nine PCIe Gen3 slots with concurrent maintenance: four x16 plus five PCIe Gen3 x8 1 CAPI adapter per processor card
I/O bandwidth	96 GBps per socket
Power supply	Tower: 100 V to 240 V; Rack: 200 V to 240 V
RAS features	Processor instruction retry, alternate processor recovery, selective dynamic firmware updates, chipkill memory, ECC L2 cache/L3 cache, service processor with fault monitoring, hot-swappable disk bays, hot-plug concurrent maintenance PCIe slots, hot-plug and redundant power supplies and cooling fans, dynamic processor deallocation, extended error handling on PCI slots
Operating systems	AIX, IBM i and Linux on POWER
System dimensions	Rack: 427.5 W x 173 H x 750.5 D mm Tower: 328.5 W x 522 H x 751.7 D mm
Warranty	3 year limited warranty, on site for selected components; CRU (customer replaceable unit) for all other units (varies by country), next business day 9x5 (excluding holidays), warranty service upgrades and maintenance are available

S824

IBM's newest Power S824 server for existing customers is designed to put data to work. With a strong commitment to optimizing AIX and IBM i workloads, these new systems deliver better performance than our prior generation of systems and additionally offer unmatched price/performance value for integrated Linux applications.

IBM Power Systems based one- and two-socket servers provide the ideal foundation for private and public cloud infrastructure. The new Power S824 server based on POWER8 processors delivers superior throughput of Intel based offerings for comparable workloads and provides superior economics for scale-out deployments. For customers looking to deploy advanced

More on the Web

- S824 assets on PartnerWorld
- S824 info on IBM.com
- S824 Competitive Insights
- S824 blog search
- S824 Twitter search

S824 Specifications

System configurations	Model 8286-42A
Microprocessors	One or Two 6-core 3.89 GHz POWER8 processor cards or One or Two 8-core 4.15 GHz POWER8 processor cards or Two 12-core 3.52 GHz POWER8 processor cards
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	16 MB per DIMM
Memory Min/Max	16 GB, 32 GB and 64 GB 1600 MHz DDR3 module, 32 to 512 GB (1S) 32 to 1 TB (2S) Active Memory Sharing
Processor-to-memory bandwidth	192 GBps per socket
Standard backplane	12 SFF Hard Disk Drive/Solid State Disk
With dual IOA higher function backplane	18 SFF bays for HDD/SSD
Media bays	One slimline DVD
Integrated SAS controller	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use Nine PCIe Gen3 slots with concurrent maintenance: four x16 plus five PCIe Gen3 x8 1 CAPI adapter per processor card
Adapter slots	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use 11 PCIe Gen3 slots with concurrent maintenance: four x16 plus seven PCIe Gen3 x 8 One CAPI adapter per processor card
I/O bandwidth	96 GBps per socket
Power supply	100 V to 240 V
RAS features	Processor instruction retry, Alternate processor recovery, selective dynamic firmware updates, chip kill memory, ECC L2 cache/L3 cache, service processor with fault monitoring, hot-swappable disk bays, hot-plug concurrent maintenance PCIe slots, hot-plug and redundant power supplies and cooling fans, dynamic processor deallocation, extended error handling on PCI slots
Operating systems	AIX, IBM i, and Linux on POWER
System dimensions	427.5 W x 173 H x 750.5 D mm
Warranty	3 year limited warranty, on site for selected components; CRU (customer replaceable unit) for all other units (varies by country), next business day 9x5 (excluding holidays), warranty service upgrades and maintenance are available

analytics, Power can now deliver superior response time for sorting and querying unstructured big data sets and deliver a superior number of business reports per hour for typical business analytics over competing solutions built on x86.

Here are some quick S824 facts:

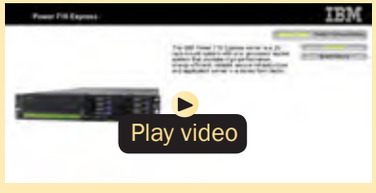
- *Consolidation of UNIX, IBM i and Linux workloads and ideal for virtualized application servers*
- *Analytics application and small to mid-size database can run on the same server*
- *Gain faster insights with the IBM POWER8 processor and smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies*
- *Reduce energy consumption utilizing advanced energy control.*

Power 710 Express

Built on the leadership performance of the POWER7+ processor, the Power 710 Express is a one-socket server that supports up to eight POWER7+ cores in a dense, rack-optimized form factor. As a high-performance infrastructure or application server, the Power 710 Express

More on the Web

- Power 710 Express details on PartnerWorld
- Power 710 Express details on IBM.com
- Power 710 Express Competitive Insights
- Power 710 Express blog search
- Power 710 Express Twitter search



Power 710 Express virtual tour

contains innovative workload-optimizing technologies that improve performance based on client computing needs.

In addition, it includes Intelligent Energy features that help increase performance and optimize energy efficiency, resulting in one of the most cost-efficient solutions for UNIX, IBM i, and Linux deployments. And, with solutions from thousands of ISVs, you can make the choices that set your business apart from the competition.

710 Specifications

POWER7 processor modules (one per system)	4-core 3.6 GHz or 6-core 4.2 GHz or 8-core 4.2 GHz
Sockets	1
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB per core
Memory	8 GB to 256 GB of RDIMM DDR3 Active Memory Expansion
Solid-state drives (SSD)	Up to 6 SFF drives
Disk drives	Up to 6 SFF SAS drives
Disk capacity	Up to 5.4 TB
Media bays	Slimline for DVD-RAM,Half height for tape drive or removable disk
PCI adapter slots	5 PCI Express Generation2 8x low profile
Standard Ethernet	4 Ethernet 10/100/1000 Mbps ports
Integrated SAS controller	1 controller for SAS DASD/SSD w/ RAID 10 and DVD-RAM Optional protected 175 MB cache with RAID 5, 6
High-performance PCI adapters	8 Gigabit Fibre Channel; 2-port 16 Gbps Fibre Channel 2-port 10 GbE RoCE; Dual port 10 Gigabit Ethernet Dual port 10 Gigabit Fibre Channel over Ethernet Dual port QDR Infiniband; 6 Gbps SAS RAID controller
Other integrated ports	3 USB, 2 HMC, 2 system ports
GX slots	1 GX++ (not available with 4-core processor)
Operating systems	AIX, IBM i, Linux for POWER

Here are some quick Power 710 Express facts:

- *A high-performance, energy efficient, reliable, and secure infrastructure and application server in a compact 2U package. With IBM POWER7+ workload-optimizing technologies, the Power 710 Express server is designed to handle today's compute-intensive combination of business transactions along with social and mobile activity.*
- *An easy-to-buy, install, and manage server that can seamlessly fit into your existing infrastructure, resulting in faster deployment time and time to value for applications running on AIX, IBM i, and Linux operating systems.*

Power 720 Express

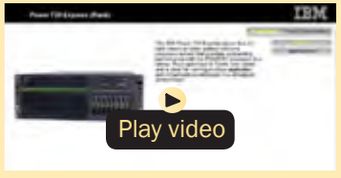
As a distributed application server, the IBM Power 720 Express is designed with POWER7+ technology, providing capabilities to deliver leading-edge application availability and enable more work to be processed with less operational disruption for branch office and in-store applications. As a consolidation server, PowerVM Editions provide the flexibility

720 Specifications

POWER7 processor modules (one per processor card)	4-core 3.6 GHz or 6-core 3.6 GHz or 8-core 3.6 GHz
Sockets	1
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB per core
Memory	8 GB to 512 GB of RDIMM DDR3 Active Memory Expansion
Solid-state drives (SSD)	Up to 8 SFF drives
Disk drives	Up to 8 SFF SAS drives
Disk capacity	Up to 7.2 TB
Media bays	Slimline for DVD-RAM, Half height for tape drive or removable disk
PCI adapter slots	5 PCI Express 8x Generation 2 plus optional 4 PCI Express Generation 2 low profile
Standard Ethernet	4 Ethernet 10/100/1000 Mbps ports
Integrated SAS controller	1 controller for SAS DASD/SSD with RAID 10, and DVD-RAM Optional protected 175 MB cache with RAID 5,6
High-performance PCI adapters (optional)	4-port 8 Gb Fibre Channel; 2-port 16 Gb Fibre Channel 2-port 10 GbE RoCE; 10 Gigabit Ethernet 10 Gigabit Fibre Channel over Ethernet; Dual Port Quad Data Rate IB 6 Gbps SAS RAID Controller
I/O expansion (available with 6-core or 8-core processors)	Up to 2 PCIe 12X I/O drawers – 20 PCIe slots Up to 4 PCI-X DDR 12X I/O drawers – 24 PCIx slots Up to 380 SFF disk slots
Other integrated ports	3 USB, 2 HMC, 2 system ports, 2 SPCN
GX slots	1 GX++
Other PCI adapters supported	SAS, SCSI, WAN/Async, USB, Crypto, iSCS
Operating systems	AIX, IBM i, Linux for POWER

More on the Web

- Power 720 Express details on PartnerWorld
- Power 720 Express details on IBM.com
- Power 720 Express Competitive Insights
- Power 720 Express blog search
- Power 720 Express Twitter search



Power 720 Express virtual tour

to use leading-edge AIX, IBM i, and Linux applications and offer comprehensive virtualization technologies designed to aggregate and manage resources while helping to simplify and optimize your IT infrastructure and deliver one of the most cost-efficient solutions for UNIX, IBM i, and Linux deployments.

The Power 720 Express with IBM i provides a technology foundation with proven reliability and security for the small or mid-size company seeking a complete, integrated business system. The Power 720 allows you to avoid increased spending and staffing requirements while becoming more responsive to your customers, improving productivity, and keeping data secure. IBM i integrates features to simplify your IT environment and delivers a complete, cost-effective business system that can grow with a business. And the Power 720 delivers the performance and capacity to run new and existing core business applications on a single server, to greatly integrate and simplify your IT environment.

Here are some quick Power 720 Express facts:

- *Reliable, secure distributed application server or consolidation server that is designed to handle today's compute-intensive combination of business transactions along with social and mobile activity for UNIX, IBM i, and Linux operating environments*
- *IBM i delivers a highly scalable and virus-resistant architecture with a stable database and middleware foundation for efficiently deploying business processing applications.*

Power 730 Express

The IBM Power 730 Express server delivers the outstanding performance of the POWER7+ processor in a dense, rack-optimized form factor and is ideal for running multiple application and infrastructure workloads in a virtualized environment. Take advantage of the Power 730 Express server's scalability and capacity by leveraging the industrial strength PowerVM technology to fully utilize the server's capability. PowerVM offers this capability to dynamically adjust system resources to partitions based on workload demands, enabling a dynamic infrastructure that can dramatically reduce server sprawl via consolidation of applications and servers.

The Power 730 Express server is a two-socket high-performance, reliable, and energy-efficient server supporting up to 16 POWER7+ cores and a choice of AIX, IBM i, or Linux operating systems. Combine the outstanding performance with PowerVM and the workload-optimizing capabilities of POWER7+ and you are now ready to run multiple application and infrastructure workloads in a virtualized

environment while driving higher utilization and reducing costs.

Here are some quick Power 730 Express facts:

- *High-performance, dense, and energy-efficient server ideal for running multiple application and infrastructure workloads in a virtualized environment—including today's compute-intensive combination of business transactions along with social and mobile activity for UNIX, IBM i, and Linux operating environments*
- *Consolidation of UNIX and x86 Linux workloads.*

More on the Web

- Power 730 Express details on PartnerWorld
- Power 730 Express details on IBM.com
- Power 730 Express Competitive Insights
- Power 730 Express blog search
- Power 730 Express Twitter search

Power 730 Express virtual tour

730 Specifications

POWER7 processor modules (two per system)	8-core 4.3 GHz or 12-core 4.2 GHz or 16-core 3.6 GHz or 16-core 4.2 GHz
Sockets	2
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB per core
Memory	8 GB to 512 GB of RDIMM DDR3 Active Memory Expansion
Solid-state drives (SSD)	Up to 6 SFF drives
Disk drives	Up to 6 SFF SAS drives
Disk capacity	Up to 5.4 TB
Media bays	Slimline for DVD-RAM, Half height for tape drive or removable disk
PCI adapter slots	5 PCI Express 8x Generation2 low profile
Standard Ethernet	4 Ethernet 10/100/1000 Mbps ports
Integrated SAS controller	1 controller for SAS DASD/SSD with RAID 10, and DVD-RAM Optional protected 175 MB cache with RAID 5, 6
High performance PCI adapter	4-port 8 Gbps Fibre Channel; 2-port 16 Gbps Fibre Channel 2-port 10 GbE RoCE; Dual port 10 Gigabit Ethernet Dual port 10 Gigabit Fibre Channel over Ethernet Dual port QDR Infiniband; 6 Gbps SAS RAID controller
Expansion features (optional)	Storage expansion up to 378 total SFF bays; Up to 20 PCIe slots
Other integrated ports	3 USB, 2 HMC, 2 system ports, 2 SPCN
GX slots	1 GX++
Operating systems	AIX, IBM i, Linux for POWER

Power 740 Express

As a small to mid-size database server, the Power 740 Express server is fueled by the outstanding performance of the POWER7+ processor, making it possible for applications to run faster with fewer processors, which can result in lower per core software licensing costs. The Power 740 Express also supports innovative workload-optimizing and energy management technologies to help clients get the most out of their systems, running applications quickly and energy efficiently to reduce costs.

As a consolidation server, businesses can further reduce costs and energy consumption by combining the Power 740 Express performance, capacity, and configuration flexibility with industrial-strength PowerVM virtualization for AIX, IBM i, and Linux. The Power 740 Express is designed with large memory and I/O capacity to satisfy even the most demanding processing environments and can deliver business advantages and higher client satisfaction.

740 Specifications

POWER7 processor modules (one or two per system)	6-core or 12-core 4.2 GHz or 8-core or 16-core 3.6 GHz or 8-core or 16-core 4.2 GHz
Sockets	1 or 2
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB per core
Memory	8 GB to 512 GB of RDIMM DDR3 - 1 processor 8 GB to 1024 GB of RDIMM DDR3 - 2 processors Active Memory Expansion available
Solid-state drives (SSD)	Up to 8 SFF drives
Disk drives	Up to 8 SFF SAS drives
Disk capacity	Up to 7.2 TB
Media bays	Slimline for DVD-RAM, Half height for tape drive or removable disk
PCI adapter slots	5 PCI Express 8x Generation2 plus optional four PCI Express Generation2 low profile
Standard Ethernet	4 Ethernet 10/100/1000 Mbps ports
Integrated SAS controller	1 controller for SAS DASD/SSD with RAID 10, and DVD-RAM Optional protected 175 MB cache with RAID 5, 6
High-performance PC adapters (optional)	4-port 8 Gigabit Fibre Channel; 2-port 16 Gigabit Fibre Channel 2-port 10 GbE RoCE; 10 Gigabit Ethernet 10 Gigabit Fibre Channel over Ethernet; Dual Port Quad Data Rate IB 6 Gbps SAS RAID controller; 10 Gigabit Fibre Channel over Ethernet Dual Port Quad Data Rate IB
Other integrated ports	3 USB, 2 HMC, 2 system ports, 2 SPCN
GX slots (12x)	1 GX++
Operating systems	AIX, IBM i, Linux for POWER

More on the Web

- Power 740 Express details on PartnerWorld
- Power 740 Express details on IBM.com
- Power 740 Express Competitive Insights
- Power 740 Express blog search
- Power 740 Express Twitter search

Power 740 Express virtual tour

Here are some quick Power 740 Express facts:

- *For small to mid-size database servers*
- *Ideal for running today's compute-intensive combination of business transactions along with social and mobile activity for UNIX, IBM i, and Linux operating environments*
- *For consolidation of UNIX, IBM i, and x86 Linux workloads and virtualized application servers.*

Power 750 Express

The IBM Power 750 Express server has been completely redesigned to leverage the leadership performance of the POWER7+ processor. The resulting combination of secure, reliable computing, and energy efficient virtualization make it an ideal system for application consolidation or transaction processing.

As a consolidation server, the Power 750 Express offers tremendous configuration flexibility to meet demanding capacity and growth requirements. Utilize the full capability of the system by leveraging industrial-strength PowerVM virtualization for AIX, IBM i, and Linux.

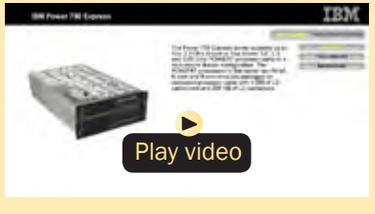
PowerVM offers the capability to dynamically adjust system resources based on workload demands so that each partition gets the resources it needs. Active Memory Expansion with hardware assist is a new POWER7+ technology that enables the effective maximum memory capacity to be much larger than the true physical memory. Innovative compression/decompression of memory content can enable memory expansion up to 125 percent. This can enable a partition to do significantly more work or enable a server to run more partitions with the same physical amount of memory.

Here are some quick Power 750 Express facts:

- *Ideal for both application and database workloads*
- *Designed for secure application availability*
- *Compact, economically efficient design*
- *Virtualized from within for better integration.*

More on the Web

- Power 750 Express details on PartnerWorld
- Power 750 Express details on IBM.com
- Power 750 Express Competitive Insights
- Power 750 Express blog search
- Power 750 Express Twitter search



Power 750 Express virtual tour

750 Specifications

POWER7 processor modules (one per processor card)	4-core 3.7 GHz or 6-core 3.7 GHz or 8-core 3.2 GHz or 8-core 3.6 GHz
Sockets	1 or 4
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	4 MB per core
Memory	8 GB to 512 GB of RDIMM DDR3 Active Memory Expansion
Solid-state drives (SSD)	Up to 8 SFF drives
Disk drives	Up to 8 SFF SAS drives
Disk capacity	Up to 2.4 TB
Media bays	Slimline for DVD-RAM, Half height for tape drive or removable disk
PCI adapter slots	2 PCI-X 2.0; Three PCI Express 8x
Integrated Virtual Ethernet	4 Ethernet 10/100/1000 Mbps ports (or) 2 10 Gigabit Ethernet ports
Integrated SAS controller	1 controller for SAS DASD/SSD and DVD-RAM, optional protected 175 MB cache
Other integrated ports	3 USB, 2 HMC, 2 system ports, 2 SPCN
GX slots (12x)	2
Operating systems	AIX, IBM i, Linux for POWER

Scale-out/Linux

Linux is supported on every Power Systems server IBM makes. These systems are designed exclusively for Linux deployments. With industry standard Linux from Canonical, Red Hat, and SUSE along with PowerVM and PowerKVM hypervisors, you can optimize your workloads for emerging business challenges.

More on the Web

- Power scale-out/Linux servers on IBM.com
- Linux on Power portal on PartnerWorld
- Linux on Power portal on IBM.com
- Linux on Power community on developerWorks

S812L and S822L

IBM Power Systems servers running Linux provide the ideal foundation for private and public cloud infrastructure. The Power S812L and S822L servers based on POWER8 processors deliver superior throughput over x86 based offerings for comparable workloads and provide superior economics for scale-out deployments.

For customers looking to deploy advanced analytics, Power delivers superior response time for sorting and querying unstructured big data sets, and a superior number of business reports per hour for typical business analytics over competing solutions built on x86. Designed to empower the ecosystem of open source development, these systems support an expanded Linux OS ecosystem (RHEL, SLES, and Ubuntu Server) and support open source virtualization technology with PowerKVM.

More on the Web

- S812L assets on PartnerWorld
- S822L assets on PartnerWorld
- S812L and S822L info on IBM.com
- S812L Competitive Insights
- S822L Competitive Insights
- S812L blog search
- S822L blog search
- S812L Twitter search
- S822L Twitter search

S812L and S822L Specifications

System configurations	Model 8247-21L and 8247-22L
Microprocessors	S812L: One 10-core 3.42 GHz or 12-core 3.02 GHz POWER8 processor card S822L: Two 10-core 3.42 GHz or 12-core 3.02 GHz POWER8 processor cards
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	16 MB per DIMM
Memory Min/Max	16 GB,32 GB and 64 GB 1600 MHz DDR3 module 16 GB/512 GB (S812L) 32 GB/1 TB (S822L)
Processor-to-memory bandwidth	192 GBps per socket
HDD/SSD Bays in system unit	Standard: 12 SFF or 8 SFF Plus optional 6 1.8-inch SSD bays
Media bays	One slimline DVD
Integrated SAS controller	Standard RAID 0,5,6,10. optional: 7200 MB cache & easy tier function
Adapter slots	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use S812L: Six PCIe Gen3 slots with concurrent maintenance: Two x16 plus four PCIe Gen3 x 8 S822L: Nine PCIe Gen3 slots with concurrent maintenance: Four x16 plus five PCIe Gen3 x 8 One CAPI adapter per processor card
I/O bandwidth	96 GBps per socket
Power supply	S812L: 100 V to 240 V; S822L: 200 V to 240 V
RAS features	Live partition mobility, machine check error handling, alternate processor recovery, concurrent firmware update, hot-swappable disk bays, hot-plug concurrent maintenance PCIe slots, hot-plug and redundant power supplies and cooling fans, dynamic processor deallocation
Operating systems	Linux on POWER
System dimensions	427.5 W x 86.5 H x 747.5 D mm (2U in. 19-inch rack)
Warranty	3 year limited warranty, on site for selected components; CRU (customer replaceable unit) for all other units (varies by country), next business day 9x5 (excluding holidays), warranty service upgrades and maintenance are available

Here are some quick S812L and S822L facts:

- *Optimized for Big Data & Analytics, the Power Systems Linux servers provide the ideal foundation for scale-out data and cloud environments in a compact 2U package*
- *Gain faster insights with the IBM POWER8 processor and smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies*
- *Choice of Linux distributions: Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES) or Ubuntu Server*
- *Choice between industry recognized enterprise virtualization with PowerVM or open virtualization with PowerKVM*
- *Reduce energy consumption utilizing advanced energy control.*

7R1/7R2

The IBM PowerLinux 7R1 server is designed specifically as an economical foundation for emerging and traditional scale-out workloads. IBM PowerLinux workload optimized solutions, each tuned to a specific task, are affordable for businesses of all sizes.

Specifications	7R1	7R2
Configuration options	Models 8246-L1D, 8246-L1T	Models 8246-L2D & 8246-L2T
POWER7+ processor modules - one per system	4-core 3.6 GHz or 6-core 4.2 GHz or 8-core 4.2 GHz	8-core 4.3 GHz or 12-core 4.2 GHz or 16-core 3.6 GHz or 16-core 4.2 GHz
Sockets	1	2
Level 2 (L2) cache	256 KB per core	256 KB per core
Level 3 (L3) cache	10 MB per core	10 MB per core
Memory	32 GB to 256 GB of RDIMM DDR3 Active Memory Sharing	32 GB to 512 GB of RDIMM DDR3 Active Memory Sharing
Solid State Drives (SSD)	Up to 6 SFF drives	Up to 6 SFF drives
Disk drives	Up to 6 SFF SAS drives	Up to 6 SFF SAS drives
Disk capacity	Up to 5.4 TB	Up to 5.4 TB
Media bays	Slimline for DVD-RAM Half height for tape drive or removable disk	Slimline for DVD-RAM Half height for tape drive or removable disk
PCI Adapter slots	5 PCI Express 8x Gen2 low profile	5 PCI Express 8x Gen2 low profile
Standard Ethernet	4 Ethernet 10/100/1000 Mbps ports	4 Ethernet 10/100/1000 Mbps ports
Integrated SAS controller	1 controller for SAS DASD/SSD with RAID 10 and DVD-RAM Optional protected 175 MB cache with RAID 5, 6	1 controller for SAS DASD/SSD with RAID 10 and DVD-RAM Optional protected 175 MB cache with RAID 5, 6
Other integrated ports	3 USB, two HMC, two system ports	3 USB, 2 HMC, 2 system ports, 2 SPCN
GX slots	2 GX++ (not available with 4-core processor)	2 GX++

More on the Web

- Power 7R1 assets on PartnerWorld
- Power 7R2 assets on PartnerWorld
- Power 7R1 details on IBM.com
- Power 7R2 details on IBM.com
- Power 7R1 Competitive Insights
- Power 7R2 Competitive Insights
- Power 7R1 blog search
- Power 7R2 blog search
- Power 7R1 Twitter search
- Power 7R2 Twitter search

The IBM PowerLinux 7R2 server is designed specifically as an economical foundation for emerging and traditional scale-out workloads. IBM PowerLinux workload optimized solutions, each tuned to a specific task, are affordable for businesses of all sizes.

With solutions ranging from Virtualized Open Source Infrastructure services to IBM Watson-inspired big data analytics, companies that previously relied on x86-based servers can now enjoy the advantages the Power Architecture has brought to large enterprises, including more throughput per server, superior reliability and security, and end-to-end system optimization.

7R4

The IBM PowerLinux 7R4 server has been designed to leverage the leadership performance of the POWER7+ processor. The resulting combination of secure, reliable computing and energy efficient virtualization make it an ideal server for data-intense workload applications.

The PowerLinux 7R4 is a two- or four-socket server that supports 16 or 32 cores with outstanding energy efficiency and diagnostic features in a 5U (EIA Units) package. The PowerLinux 7R4 with POWER7+ Intelligent Energy management features is designed to help clients become more energy efficient. And the PowerLinux 7R4 also implements Light Path diagnostics, which provide an obvious and intuitive means to positively identify failing components.

Here are some quick 7R4 facts:

- *The Power behind IBM Watson*
- *A high-performance, open technology server for data-intense workload solution in a 5U package. With IBM POWER7+ workload-optimizing technologies*
- *Cloud ready data-intense workloads consolidation server for applications, industry solutions, departmental OLTP and emerging workloads like big data, analytics*
- *Virtualized from within for better integration with compact, economically efficient design.*

More on the Web

- Power 7R4 assets on PartnerWorld
- Power 7R4 details on IBM.com
- Power 7R4 Competitive Insights
- Power 7R4 blog search
- Power 7R4 Twitter search

7R4 Specifications

POWER7+ processor modules—one per system	8 x 3.5 GHz POWER7+ processor cores or 8 x 4.0 GHz POWER7+ processor cores
Sockets	2 or 4 (16 or 32 cores)
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB L3 per core (eDRAM)
Memory	Up to 1 TB of 1066 MHz DDR3 Active Memory Sharing
Integrated SAS bays for Solid State Drives (SSD) or Hard Disk Drives	Six SFF SAS drive bays
Integrated media bays	One slimline for SATA DVD-RAM
Integrated PCI adapter slots	Six PCIe (8x) Gen2 slots
Standard Ethernet ports	Dual 10 Gb plus a choice of two additional 10 Gb or two additional 1 Gb
Integrated SAS controller	Two SAS DASD/SSD controllers
Other integrated ports	Three USB, two HMC, two SPCN, one serial port
GX slots (12X)	Two

Enterprise

IBM understands that applications and business processes have differing demands and that one size does not fit all. To ensure that technology aligns to business rather than the other way around, IBM offers a full range of Power Systems servers, each of which delivers leadership data capabilities, security, performance, and scalability in its class. A totally integrated approach to the design, development, and testing of each and every Power server ensures the resiliency required for today's enterprise IT infrastructure.

More on the Web

- Power Enterprise servers on IBM.com

Power 760

The IBM Power 760 server is completely new and designed to leverage the leadership performance of the POWER7+ processor. The resulting combination of secure, reliable computing and energy efficient virtualization make it an ideal system for virtualized application consolidation.

As a consolidation server, the Power 760 offers tremendous configuration flexibility to meet demanding capacity and growth requirements. Utilize the full capability of the system by leveraging industrial-strength PowerVM virtualization for AIX, IBM i, and Linux. PowerVM offers the capability to dynamically adjust system resources based on workload demands so that each partition gets the resources it needs. Active Memory Expansion with hardware assist is a new POWER7+ technology that enables the effective maximum memory capacity to be much larger than the true physical memory. Innovative compression/decompression of memory content can enable memory expansion up to 125 percent. This can enable a partition to do significantly more work or enable a server to run more partitions with the same physical amount of memory. Capacity on Demand options include Processor CUoD and Trial Processor CoD.

Here are some quick Power 760 facts:

- *Ideal for both application and database workloads*

Power 760 Specifications

POWER7+ processor options	12 x 3.1 GHz POWER7+ processor cores or 12 x 3.4 GHz POWER7+ processor cores
Sockets	1 or 4
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB per core
Memory	Up to 2 TB of 1066 MHz DDR3 plus Active Memory Expansion with hardware assist
Integrated SAS bays for Solid State Drives (SSD) or Hard Disk Drives	6 SFF SAS drive bays
Integrated media bays	1 slimline for SATA DVD-RAM
Integrated PCI adapter slots	6 PCIe (8x) Gen2 slots
Standard Ethernet ports	Dual 10 Gb plus a choice of 2 additional 10 Gb or 2 additional 1 Gb
Integrated SAS controller	2 SAS DASD/SSD controllers
Other integrated ports	3 USB, 2 HMC, 2 SPCN, 1 serial port
GX slots (12x)	2
Capacity on Demand features Processor CUoD (optional)	Processor CUoD (optional) Trial Processor CoD
Operating systems	AIX, IBM i, Linux for POWER

More on the Web

- Power 760 assets on PartnerWorld
- Power 760 details on IBM.com
- Power 760 Competitive Insights
- Power 760 blog search
- Power 760 Twitter search

Power 760 Express virtual tour

- *Instant, on-demand growth capabilities*
- *Designed for secure application availability*
- *Compact, economically efficient design*
- *Virtualized from within for better integration.*

Power 770

Designed for virtualized consolidation of business-critical workloads, the IBM Power 770 delivers on performance, availability, efficiency, and virtualization in a way that is unique in the industry. PowerVM virtualization enables continuous,

Power 770 Specifications

Configuration options	Per Building Block	System Maximum
Processors	16 x 3.8 GHz POWER7+ processor cores or 12 x 4.2 GHz POWER7+ processor cores	64 x 3.8 GHz POWER7 processor cores or 48 x 4.2 GHz POWER7 processor cores
Sockets	4	16
Level 2 (L2) cache	256 KB per core	256 KB per core
Level 3 (L3) cache	10 MB per core (eDRAM)	10 MB per core (eDRAM)
Enterprise Memory	Up to 1 TB of 1066 MHz DDR3 Active Memory Expansion	Up to 4 TB of 1066 MHz DDR3 Active Memory Expansion
Integrated SAS bays for SSDs or HDDs	Up to 6 SFF SAS drive bays	Up to 24 SFF SAS drive bays
Integrated media bays	1 slimline for SATA DVD-RAM	4 slimline for SATA DVD-RAM
Integrated PCI adapter slots	6 PCIe Gen2 slots	24 PCIe Gen2 slots
Integrated multifunction card	Up to 1 per enclosure: Dual 10 Gb + Dual 1 Gb	Up to 4 per system: Dual 10 Gb + Dual 1 Gb
Integrated SAS controller	2 SAS DASD/SSD controllers 1 SATA media controller	8 SAS DASD/SSD controllers 4 SATA media controllers
Other integrated ports	3 USB; 2 HMC; 2 SPCN	9 USB; 4 HMC; 4 SPCN
GX slots (12x)	2	8
Operating systems	AIX, IBM i, Linux for POWER	AIX, IBM i, Linux for POWER

dynamic resource adjustments across all partitions and operating environments to optimize performance and enable higher utilization levels while optimizing energy usage. Supported environments include AIX, IBM i, Linux for Power applications, all on the same system.

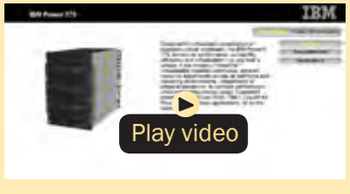
Ever increasing numbers of IBM Power clients are reporting enormous savings from faster provisioning using cloud enabled technologies. Of course this comes in addition to the more traditional savings of reduced software costs, energy, floor space, and administrative overhead. Additional benefits include increased application performance, operational availability, and security that can only come from IBM. All of this is delivered on the latest technology from a vendor you can trust. No wonder more and more companies are switching to IBM Power Systems.

Here are some quick Power 770 Express facts:

- *Cloud enabled for fast implementation of new workloads*
- *Designed for secure, application availability*
- *Modular, economically efficient design*
- *Virtualized from within for better integration*
- *Supports your growth, without disrupting your business.*

More on the Web

- Power 770 assets on PartnerWorld
- Power 770 details on IBM.com
- Power 770 Competitive Insights
- Power 770 blog search
- Power 770 Twitter search



Power 770 Express virtual tour

Power 780

Designed for virtualized consolidation of business-critical workloads, the IBM Power 780 delivers on performance, availability, efficiency, and virtualization in a way that is unique in the industry. PowerVM virtualization enables continuous, dynamic resource adjustments across all partitions and operating environments, independent of physical placement, to optimize performance while minimizing energy usage. Supported environments include AIX, IBM i, Linux for Power applications, all on the same system.

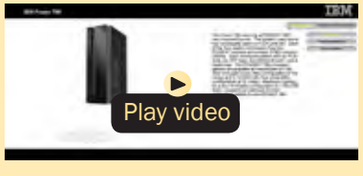
IBM Power clients continuously report savings from reduced hardware, software, energy, floor space, and administrative overhead. Additional benefits include faster provisioning, increased application performance, and an operational availability that can only come from IBM. All of this is delivered on the latest technology from a vendor you can trust. No wonder more and more companies are switching to IBM Power Systems.

Here are some quick Power 780 Express facts:

- *Delivers the utmost in infrastructure efficiency at enterprise scale, with flexible delivery models and dynamic resource management that can increase utilization while reducing operational costs*
- *Delivers trusted information across the enterprise, ensuring continuous transaction availability and enabling real-time business analytics*

More on the Web

- Power 780 assets on PartnerWorld
- Power 780 details on IBM.com
- Power 780 Competitive Insights
- Power 780 blog search
- Power 780 Twitter search



Power 780 Express virtual tour

Power 780 Specifications

Configuration options	Per Building Block	System Maximum
Processors	Four 3.72 GHz POWER7+ processor modules with eight cores each or four 4.42 GHz POWER7+ processor modules with 4 cores each	Sixteen 3.72 GHz POWER7+ processor modules with eight cores each or sixteen 4.42 GHz POWER7+ processor modules with 4 cores each
Sockets	4	16
Level 2 (L2) cache	256 KB per core	256 KB per core
Level 3 (L3) cache	10 MB per core (eDRAM)	10 MB per core (eDRAM)
Enterprise Memory	Up to 1 TB of 1066 MHz DDR3 Active Memory Expansion	Up to 4 TB of 1066 MHz DDR3 Active Memory Expansion
Integrated SAS bays for: - Solid State Drives (SSD) - Hard Disk Drives (HDD)	Up to 6 SFF SAS drive bays	Up to 24 SFF SAS drive bays
Disk drives	Up to 6 SFF SAS drives	Up to 24 SFF SAS drives
Integrated media bays	1 slimline for SATA DVD-RAM	4 slimline for SATA DVD-RAMs
IntegratedPCI adapter slots	6 PCIe Gen2 slots	24 PCIe Gen2 slots
Integrated multifunction card	1 per enclosure: Dual 10 Gb + Dual 1 Gb	Up to 4 per system: Dual 10 Gb + Dual 1 Gb
Integrated SAS controller	2 SAS DASD/SSD controllers 1 SATA media controller	8 SAS DASD/SSD controllers 4 SATA media controllers
Other integrated ports	3 USB; 2 HMC; 2 SPCN	9 USB; 4 HMC; 4 SPCN
GX slots (12x)	2	8
Operating systems	AIX, IBM i, Linux for POWER	AIX, IBM i, Linux for POWER

- *Provides the highest levels of security, ensuring the integrity of critical information while mitigating risk and meeting regulatory compliance mandates*
- *Ideal platform for private cloud deployments.*

Power 795

The Power 795 supports large-scale transaction processing and database applications within a highly virtualized system infrastructure, enabling new levels of workload consolidation, resource utilization, resiliency, and efficiency. As the

More on the Web

- Power 795 assets on PartnerWorld
- Power 795 details on IBM.com
- Power 795 Competitive Insights
- Power 795 blog search
- Power 795 Twitter search

Power 795 Express virtual tour

Power 795 Specifications

Processor cores (maximum)	192 POWER7 3.72 GHz processors;256 POWER7 4.00 GHz processors; 128 POWER7 4.25 GHz processors (TurboCore)
Processor books	Up to 8
Sockets	Up to 32
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	4 MB L3 cache per core (eDRAM) or8 MB L3 cache per core (eDRAM)
RAM (memory)	32 DIMMs per processor book;up to 16 TB of 1066 MHz DDR3
PCIe I/O drawers	24"; 1–32
Internal disk bays	26 SAS Small Form Factor bays in each 24" PCIe I/O drawer;up to 832 maximum per system in 24" drawers;up to 2,220 bays in 19" drawers
Adapter slots	20 PCIe in each 24" I/O drawer; 640 maximum per system
I/O ports	4 GX++ adapter ports per processor book, 32 per system
Hardware management console ports	2 pairs via redundant Ethernet hubs
POWER Hypervisor	LPAR, Dynamic LPAR, Virtual LAN
PowerVM Standard Edition (optional)	Micro-partitioning with up to 20 micro-partitions per processor (1,000 maximum); Multiple Shared Processor Pools; Virtual I/O Server; Shared Dedicated Capacity; PowerVM Lx86
PowerVM Enterprise Edition (optional)	PowerVM Standard Edition plus Live Partition Mobility and Active Memory Sharing
Operating systems	AIX, IBM i, and Linux for Power

most powerful member of the IBM Power Systems family, this server provides exceptional performance, massive scalability, and bandwidth to efficiently and concurrently support a full range of complex, mission-critical applications.

Equipped with up to 256 POWER7 processors, the Power 795 server can scale rapidly and seamlessly to address the changing needs of today's business climate. Equipped with industry-leading PowerVM virtualization, EnergyScale technology, and affordable Capacity on Demand (CoD) options (including a specific number of Elastic CoD processors and memory days, dependent on the configurations that come standard with all new Power 795s), the Power 795 helps enterprises increase their productivity and effectively consolidate multiple UNIX, IBM i, and Linux workloads onto a single system.Extensive mainframe-inspired reliability, availability, and serviceability (RAS) features in the Power 795 help ensure that mission-critical applications run reliably around the clock. IBM clients with installed Power 595 systems may leverage their current investment in Power technology by upgrading their POWER6 system to a Power 795 to increase capacity and improve performance.

Here are some quick Power 795 Express facts:

- *For large-scale server consolidation to increase flexibility and lower operational and energy cost*
- *For enterprises requiring the highest levels of resiliency for their mission-critical applications*
- *For data centers supporting the largest UNIX and IBM i transaction processing and database applications*

POWER Compute Nodes for PureFlex

IBM PureFlex System is a complete, flexible cloud infrastructure system with integrated expertise. The system integrates and optimizes all compute, storage and networking resources to deliver infrastructure-as-a-service (IaaS) out of the box. These fully integrated, optimized solutions can be configured for your specific business need and may be complemented by a package of support services.

More on the Web

- IBM PureFlex System POWER Compute Node info on IBM.com
- IBM PureSystems Business Partner Guide eBook and iPhone/iPad application

In this section, we will look at some compute nodes for IBM PUreFlex Systems that are based on the POWER processor.

p260-p460 Compute Nodes

IBM Flex System p260 and p460 Compute Nodes are POWER7 and POWER7+-based servers optimized for virtualization, performance, and extraordinary efficiency. The nodes support IBM AIX, IBM i, or Linux operating environments and are designed to run a wide variety of workloads in your IBM PureFlex System or IBM Flex System solution.

The IBM Flex System p260 compute node is a two-socket server that supports up to 16 cores with outstanding energy efficiency and flexibility in a standard-width form factor. With two PCIe expansion slots, support for Dual VIOS and a choice of internal drives, it is the ideal choice

for running multiple application and infrastructure workloads in a virtualized environment—including today's compute-intensive combination of business transactions along with social and mobile activity for UNIX, IBM, and Linux operating environments. The IBM Flex System p260 compute node offers large memory capacity, outstanding performance of the POWER7+ processor, industrial-strength virtualization, and workload-optimizing capabilities.

The IBM Flex System p460 compute node is a four-socket server that supports up to 32 cores and is an outstanding offering for mid-market clients desiring a high-performance, reliable, secure system that is cloud-enabled and has room for handling their business growth. With excellent virtualization capabilities and the flexibility to run proven solutions from thousands of ISVs that support the AIX, IBM i, and Linux operating systems, the Flex System p460 enables companies to get the most out of their systems by increasing utilization and performance while reducing costs.

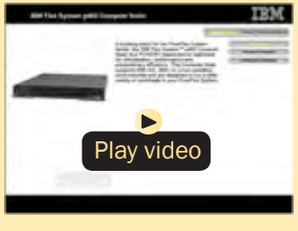
Specifications

Specifications	Flex System p260	Flex System p460
Form factor	Flex System standard node	Flex System double-wide node
Processor cores	2, 4, 8 or 16 cores, POWER7+, 64-bit processors with VSX, Memory Expansion acceleration and Encryption acceleration Configuration Options: 2-core 4.0 GHz 4-core 4.0 GHz 8-core 3.6 GHz 8-core 4.1 GHz 256 KB per processor core	16 or 32 cores, POWER7 64-bit processors with AltiVec SIMD and Hardware Decimal Floating-Point acceleration 16 or 32 cores, POWER7+, 64-bit processors with VSX, Memory Expansion acceleration and Encryption acceleration Options: 4-core 3.3 GHz or 4.0 GHz 8-core 3.2 GHz or 3.6 GHz 8-core 3.5 GHz or 4.1 GHz
Level 2 (L2) cache	256 KB per processor core	256 KB per processor core
Level 3 (L3) cache	10 MB per processor core on P7+ offerings	4 MB per processor core on 3.3, 3.2 and 3.5 GHz P7 offerings; 10 MB per processor core on 3.6, 4.0 and 4.1 GHz P7+ offerings
Memory (min/max)	8 GB up to 512 GB, 16 DIMM slots, ECC IBM Chipkill DDR3 SDRAM running at 1066 MHz plus Active Memory Expansion with hardware assist	16 GB up to 1 TB node, 32 DIMM slots, ECC IBM Chipkill DDR3 SDRAM running at 1066 MHz plus Active Memory Expansion with hardware assist
Internal disk storage	Up to two 2.5-inch Hard Disks or two 1.8-inch Solid State Drives	Up to two 2.5-inch Hard Disks or two 1.8-inch Solid State Drives
Expansion	Two PCIe Expansion Slots	Four PCIe Expansion Slots
Operating systems	AIX 6.1, AIX 7.1 IBM i 6.1 and 7.1 RHEL 5.7, 6.2; SLES11 SP2	AIX 6.1, AIX 7.1 IBM i 6.1 and 7.1 RHEL 5.7, 6.2; SLES11 SP2
Energy management	EnergyScale energy management	EnergyScale energy management

More on the Web

- p260 assets on PartnerWorld
- p460 assets on PartnerWorld
- p260 and p460 info on IBM.com
- p260 Competitive Insights
- p460 Competitive Insights
- p260 blog search
- p460 blog search
- p260 Twitter search
- p460 Twitter search

p260 virtual tour



p460 virtual tour

Here are some quick p260 and p460 facts:

- *IBM POWER7+ technology brings faster frequencies and larger L3 cache sizes, which helps improve performance by over 20 percent on most workloads and hardware assisted memory compression helps reduce memory requirements without penalizing performance*
- *Offers tremendous configuration flexibility to meet demanding capacity and growth requirements; Utilizes the full capability of the system by leveraging industrial-strength PowerVM virtualization for AIX, IBM i, and Linux*
- *IBM provides the integration and configuration expertise up front so you can get your system deployed faster and get faster time-to-value.*

p270 Compute Node

IBM Flex System p270 compute node is completely new and designed to leverage the leadership performance of the POWER7+ processor. The resulting combination of secure, reliable computing and energy-efficient virtualization make it an ideal solution for virtualized application consolidation and workload environments that need tremendous configuration flexibility to meet demanding capacity and growth requirements. The node supports IBM AIX, IBM i, or Linux operating environments and is designed to run a wide variety of workloads in your IBM Flex System and PureFlex System solution.

Here are some quick p270 facts:

- *IBM POWER7+ technology brings faster frequencies, larger L3 cache sizes, and more processor cores, which helps improve performance by over 20 percent on most workloads and with hardware assisted memory compression helps reduce memory requirements without penalizing performance*

More on the Web

- p270 assets on PartnerWorld
- p270 details on IBM.com
- p270 Competitive Insights
- p270 blog search
- p270 Twitter search

p270 virtual tour

- *Easily handles virtualized consolidation of multiple applications and business workloads, is designed for secure application availability, and delivers reduced requirement for space, cooling, and software costs*
- *IBM provides the integration and configuration expertise up front so you can get your system deployed faster and get faster time-to-value.*

p270 Specifications

Form factor	Flex System standard node
Processor cores	24 cores, POWER7+, 64- bit processors with VSX, Memory Expansion acceleration and Encryption acceleration Configuration Options: 12 x 3.1 GHz POWER7+ processor cores or 12 x 3.4 GHz POWER7+ processor cores
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	10 MB per processor core
Memory (min/max)	8 GB up to 512 GB, 16 DIMM slots, ECC IBM Chipkill DDR3 SDRAM running at 1066 MHz plus Active Memory Expansion with hardware assist
Internal disk storage	Up to two 2.5-inch Hard Disks or two 1.8-inch Solid State Drives
Networking/Expansion	Two PCIe Expansion Slots One ETE adapter card slot (provides dedicated Dual VIOS on internal drives with optional adapter)
Systems management	Integrated systems management processor, light path diagnostics, Predictive Failure Analysis, Cluster Systems Management (CSM), Serial Over LAN, IPMI compliant
RAS features	Chassis redundant/ hot- plug power and cooling Front Panel and FRU/ CRU LEDs Concurrent code update and Processor deallocation Compute node hot plug and Dual VIOS support Dual AC Power Supply Auto reboot on power loss Internal and chassis- external temperature monitors System management alerts IBM Chipkill ECC detection and correction
POWER Hypervisor	LPAR, Dynamic LPAR, Virtual LAN
Operating systems	AIX 6.1, AIX 7.1 IBM i 6.1, IBM i 7.1 RHEL 6.4, SLES11 SP2
Energy management	EnergyScale energy management

Power Systems Software

In this section, we will take a look at some of the system-level software for Power Systems that enables businesses to fully exploit Power Systems servers.

More on the Web

- Power Systems Software info on IBM.com

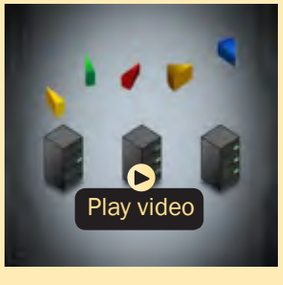
PowerVM

IBM PowerVM provides the industrial-strength virtualization solution for IBM Power Systems servers and blades that run AIX, IBM i, and Linux workloads. Based on more than a decade of evolution and innovation, PowerVM represents the state-of-the-art in enterprise virtualization and is broadly deployed in production environments worldwide by most Power Systems owners.

The IBM Power Systems family of scale-out and scale-up servers includes proven workload consolidation platforms that help clients control costs while improving overall performance, availability and energy efficiency. With these servers and IBM PowerVM virtualization solutions, an organization can consolidate large numbers of applications and servers, fully virtualize its system resources, and provide a more flexible, dynamic IT infrastructure. In other words, IBM Power Systems with PowerVM deliver the benefits of virtualization without limits.

More on the Web

- PowerVM assets on PartnerWorld
- PowerVM info on IBM.com
- Compare PowerVM to Sun and HP
- PowerVM Group on FaceBook
- PowerVM blog search
- PowerVM Twitter search



PowerVM overview (1:50)

PowerVM also offers a secure and resilient virtualization environment, built on the advanced RAS (reliability, availability, and serviceability) features, extreme scalability, and leadership performance of the IBM Power Systems platform, based on the outstanding Power processors.

Here are some quick PowerVM facts:

- *Deliver services with superior economics by consolidating virtualized workloads*
- *Deliver services built for the cloud faster by automating deployment of virtual machines and storage*
- *Optimize utilization of server and storage resources to control costs and boost ROI*
- *Scale out or scale up your virtualized deployments without paying underlying performance penalties*
- *Eliminate scheduled downtime by deploying live mobility between servers*
- *Deliver higher quality services by improving virtual resource management.*

PowerKVM

IBM PowerKVM provides an open virtualization choice for IBM scale-out Linux systems based on the POWER8 technology. This solution includes the Linux open source technology of KVM virtualization, and is designed to complement the performance, scalability, and security qualities of Linux. This provides an open extendable solution for running VMs on Linux scale-out servers that enables cloud deployments, scale-out processing, and big data solutions, reducing complexity and cost.

Here are some quick PowerKVM facts:

- *Open source server virtualization for IBM scale-out Linux servers*
- *Optimize Linux workload consolidation at a lower cost of ownership*
- *Exploit the advantage of performance, scalability, and security built into Linux and the Kernel-Based Virtual Machine (KVM) hypervisor*
- *Avoids high cost proprietary x86 virtualization*

More on the Web

- PowerKVM assets on PartnerWorld
- PowerKVM info on IBM.com
- PowerKVM blog search
- PowerKVM Twitter search

- *Managed just like any other KVM host—OpenStack, libvirt, and open Linux tools help you avoid vendor lock-i n*
- *KVM enables single cross platform virtualization which simplifies management.*

PowerHA

PowerHA SystemMirror Standard Edition and PowerHA SystemMirror Enterprise Edition with Cluster Aware AIX (CAA), kernel-based health management, Graphical Management, HyperSwap, and other integrated features are designed to provide a robust HA/DR environment focused on ease of implementation and ease of use.

PowerHA SystemMirror V7 represents the next generation of solutions for high availability and disaster recovery. This offering integrates core clustering technology into the kernel and the OS, enabling our customers to be more productive and deliver higher quality IT services while enjoying a more robust and easier-to-manage clustering environment.

The IBM PowerHA SystemMirror for AIX Standard Edition features Cluster Aware AIX, which provides the strategic foundation for Power Systems Software. It enables PowerHA to do kernel level messaging, event management, and monitoring in coordination with AIX. PowerHA features a Director-based management interface, a set of Smart Assists and a number of other enhancements that will make the solution more robust and self-managing.

More on the Web

- PowerHA assets on PartnerWorld
- PowerHA info on IBM.com
- PowerHA blog search
- PowerHA Twitter search
- PowerHA on the IBM Technology Made Simple wiki

PowerHA SystemMirror monitors numerous soft and hard errors within the cluster from various event sources, including problems that are severe enough to immobilize the system (such as a process failure or exhaustion of system resources). With PowerHA V7, monitoring and event management have been moved into the kernel of the operating system (OS), which provides a robust foundation not prone to job scheduling issues or other events related to OS operations. Cluster awareness enables operating-system-based functions to operate harmoniously with PowerHA. PowerHA SystemMirror is integrated with cluster-aware AIX and exploits the operating system features by extending them across the cluster, enabling efficient centralized management.

Here are some fast PowerHA facts:

- *Graphical Management—IBM Director Plug-in for both data center and disaster recovery deployments*
- *Multichannel cluster communications for data center configurations with support for multicast or unicast network configurations*
- *HyperSwap for active-active two site configurations with the IBM DS8800 and DS8870 storage servers*
- *Operator managed manual failover policy for multi-site linked clusters*
- *Federated Security for cluster wide security management*
- *Enhanced High Availability management support for SAP.*

PowerSC

With its simple administration interface and preconfigured compliance profiles, PowerSC is designed to simplify the administrative effort associated with complying with some of the most common external standards for security and compliance. PowerSC security and compliance automation provides profiles for the Payment Card Industry Data Security Standard (PCI DSS), the Health Insurance Portability and Accountability Act Privacy and Security Rules (HIPAA) and U.S. Department of Defense Security Technical Implementation Guide for UNIX (DoD STIG) standards, as well as supporting the implementation of best practices specified by the Control Objectives for Information and related Technology (COBIT) standard. Public companies that are subject to the U.S. Sarbanes-Oxley Act of 2002 often adopt the COBIT best practices. PowerSC also provides a security automation profile to automate configuration of optimal security for database servers.

Since all external security standards include aspects outside the realm of system configuration settings, the use of the security and compliance automation will not, by itself, ensure standards compliance. Nonetheless, PowerSC security and compliance automation does significantly simplify systems configuration settings management, allowing security administrators the time to focus on the other aspects of standards compliance.

More on the Web

- PowerSC assets on PartnerWorld
- PowerSC info on IBM.com
- PowerSC blog search
- PowerSC Twitter search
- PowerSC on the IBM Technology Made Simple wiki

Here are some quick PowerSC facts:

- *Simplify security management and compliance measurement*
- *Reduce administration costs of meeting compliance regulations*
- *Ensure virtualized environments meet same security levels as physical servers*
- *Improve the audit capabilities for virtualized systems*
- *Reduce time and skills required for preparation of security audits*
- *Improve detection of security exposures in virtualized environments.*

PowerVP

As benefits of server virtualization continues to be realized it becomes even more important to be able to monitor virtualized workloads. VM placement of virtualized workloads becomes an important part of the equation for optimal performance. PowerVP provides a rich real-time continuous graphical display which allows monitoring of Power Systems virtualized by the PowerVM hypervisor. This monitor provides detailed resource data directly from the PowerVM hypervisor which has the most accurate information on resource utilization for the Power server.

The PowerVP monitor has the ability to set various thresholds to control the display. These include color coded indications of health of the system, green for normal, yellow for caution, red for warning, and white for unused. The thresholds are customizable to meet the needs of a particular installation. The color thresholds are applied to each of the components monitored, which includes compute, memory, storage, and network resources.

When the PowerVP user interface is active, the performance data displayed on the screen is also saved to a historical file so it can be replayed later for further analysis. There is also a mode which allows performance data to be captured without the user interface so that data can be viewed historically in case an operator or performance analyst isn't present during a performance problem.

Here are some quick PowerVP facts:

- *Optimize your virtualized IBM Power Systems*
- *Understand current workloads performance from virtual machine to physical hardware*
- *Simple real-time graphical performance information highlighting overcommitted resources*
- *Ability to replay saved performance data to analyze historical performance data*
- *Accelerate the resolution of performance issues.*

More on the Web

- PowerVP assets on PartnerWorld
- PowerVP info on IBM.com
- PowerVP blog search
- PowerVP Twitter search

PureData System

With the challenge of growing volume, velocity, and variety of data used today in all aspects of the business—using a multi-purpose system for all data workloads is often not the most cost effective or low risk approach, and definitely not the fastest to deploy. The new PureData System is optimized exclusively for delivering data services to today's demanding applications. Like each of the IBM PureSystems, it offers built-in expertise, integration by design, and a simplified experience throughout its life cycle.

Codified data management best practices are provided for each workload. PureData System delivers automated pattern-based deployment and management of highly reliable and scalable database services.

Hardware, storage and software capabilities are designed and optimized for specific high performance data workloads such as patented data filtering using programmable hardware (FPGAs) for ultrafast execution of analytic queries without the need for indices.

The PureData System provides single part procurement with no assembly required (ready to load data in hours), open integration with third party software, integrated management console for the entire system, single line of support, integrated system upgrades and maintenance.

The new PureData System comes in different models that have been designed, integrated, and optimized to deliver data services to today's demanding applications with simplicity, speed, and lower cost.

More on the Web

- IBM PureSystems Business Partner Guide
- PureData Systems assets on PartnerWorld
- PureData Systems info on IBM.com
- PureData Systems blog search
- PureData Systems Twitter search

Smart Analytics System 7700

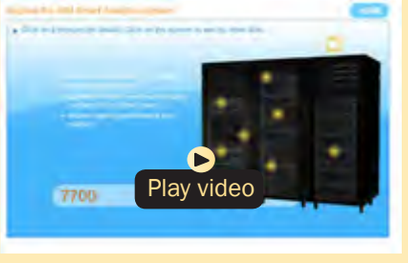
IBM Smart Analytics System 7700 is integrated, full-featured analytics software built on IBM POWER7 technology. The enterprise platform is optimized for operational analytics workloads, using IBM data warehousing and business intelligence software to transform information into insight you can act on.

Here are some quick Smart Analytics System 7700 facts:

- *Integrated software, server, and storage hardware—centralizes your information*
- *Advanced data warehousing and business intelligence—for high availability, scalability, and performance for operational analytics*
- *Business-ready software—engineered for rapid deployment, peak performance, and ease of management.*

More on the Web

- Smart Analytics System 7700 info on IBM.com
- Smart Analytics System 7700 assets on PartnerWorld
- Smart Analytics System 7700 info on COMP
- Smart Analytics System 7700 blog search
- Smart Analytics System 7700 Twitter search



Smart Analytics demo