SOLUTION OVERVIEW: IS LINUX ON POWER RIGHT FOR YOUR BUSINESS?

DELIVERING INDUSTRY-BASED BUSINESS SOLUTIONS FOR NEXT-GEN DATA CENTER, CLOUD, AND BIG DATA ANALYTICS TO MID-MARKET AND ENTERPRISE CLIENTS

SATURN

saturnb2b.com

ABOUT SATURN

For over 33 years, Saturn Business Systems has provided integrated information technology solutions to mid-market and enterprise accounts nationwide, with primary concentration in New York, New Jersey, and Connecticut. Saturn provides the latest enterprise compute, storage, networking, and converged infrastructure solutions to clients in finance, telecom, retail, healthcare, media and entertainment, manufacturing, and a variety of other industries.

OVERVIEW OF SATURN BUSINESS SYSTEMS
LINUX ON POWER OFFERINGS

Technology infrastructure modernization is no longer an every 10 years' ordeal. It's not even an every 5 years' task. To stay ahead of competition, business leaders must make sure that their IT infrastructure is a strategic investment and will not leave them falling behind.

IBM Power Systems combined with a Linux operating system provides organizations with the power, speed, and business resiliency required for today's most complex enterprise applications.

ABOUT LINUX ON IBM POWER

Open-source operating systems, such as Linux, are seeing increased adoption numbers on business-critical servers and other priority equipment. The Linux Foundation discovered 73% of enterprises rely on Linux-based operating systems to handle essential servers, especially those handling cloud and big data.

IBM Power Systems combined with Linux provides organizations with the power, speed, and business resiliency required for today's most complex enterprise applications. With scale-up and scale-out capabilities, a customized system on POWER8 is cloud-ready and capable of handling the biggest big data loads.

BENEFITS OF POWER SYSTEMS

x86 servers have historically been the machines of choice for companies running a Linux environment. However, as organizations mature in this new age of business computing, they are finding that the demands of modern enterprise applications are requiring new levels of performance, security, and reliability.

Maintenance costs of x86 server farms, once competitive, are no longer showing a comparative cost benefit compared to IBM Power Systems as the TCO of more advanced server solutions decreases. With IBM Power Systems, companies can:

- Achieve higher performance and flexibility.
- Scale affordably.
- Combat the challenge of big data and server sprawl.
- Meet the demands of modern databases, web applications, and enterprise software.

POWER8 IS DESIGNED AND OPTIMIZED FOR BIG DATA AND ANALYTICS:

4X threads per core vs. x86 (up to 1536 threads/system)	**4X** memory bandwidth vs. x86 (up to 16TB of memory)	**4X** more cache vs. x86 (up to 231MB cache per socket)
PROCESSORS flexible, fast execution of analysis algorithms	**MEMORY** large, fast workspace to maximize business insight	**CACHE** ensure continuous data load for fast responses
Supports growth of users, reports, and complex queries.	Delivers fast analytics results for real-time decision-making.	Handles large volumes of data for better response times.

Optimized for a broad range of big data and analytics workloads:

IBM DB2 BLU Acceleration   Cognos SPSS   hadoop   Industry Solutions (Retail, Government, Healthcare, Telecom, Banking)   5X Faster IBM WATSON

WHY CURRENT POWER AIX USERS SHOULD UPGRADE

Cost Savings:

Processers are much more powerful than they were even a few years ago. This enhanced power means costs savings. POWER8 is helping organizations save money by reducing floor space, power, and cooling costs. POWER8 users are seeing nearly twice the performance per node as the POWER 770+ and POWER 780 machines.

IBM POWER8 PERFORMANCE:

- 3.95 GHz Processor Speed
- 12 Cores (Single Socket)
- 8 Threads per Core
- 1TB Max Main Memory
- 2 Memory Controllers
- L1 On-Cip Cache – 32 KB I + 64 KB D/core
- L2 On-Cip Cache – 512KB/core
- L3 On-Cip Cache 96MB/chip
- 230GB/s Memory Bandwidth
- PCIe Gen 3 Input/output
- 96GB/s Peak Input/output
- CAPI Device Accelerator

The CAPI-enabled POWER8 processors enable very high interface speeds with devices, flash, and coprocessors. CAPI eliminates the need for a PCIe bridge, which not only reduces the number of instructions, but also dramatically speeds up the interactions between the CUP and associated hardware.

Current Power AIX users should consider the advantages of Linux on POWER8 for the ever-increasing demands of big data workloads, computing power, memory bandwidth, and I/0.

THE RISE OF NOSQL

Why are NoSQL databases, such as Redis, increasingly becoming the norm at mid-sized and large enterprises?

To meet the performance needs of modern businesses, hardware alone cannot meet your basic requirements. It must have a database backbone that can work with multiple types of data sets. Mobile, social, and cloud workloads require scalability, flexibility, and immense processing power.

Redis Labs joined with POWER8 to offer a high performance, versatile ecosystem built around Redis NoSQL. It is open source, key-value, and in-memory with high throughput and low latency (1.5M ops/sec with a single cloud instance). It's being used today for some of the most complex computing needs in business, including real-time analytics, leaderboards, web session stores, high speed messaging, and high volume transactions.
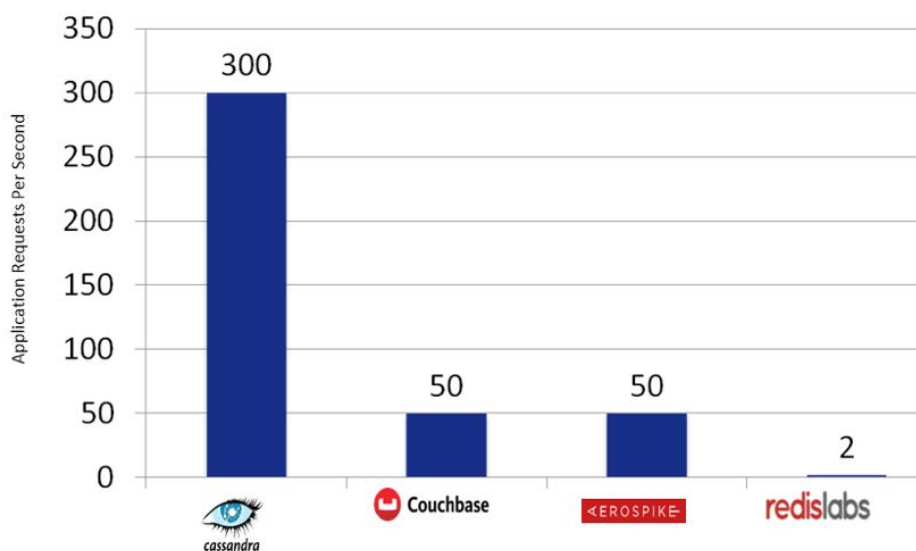
Redis Labs' unique enterprise layer delivers:

- Blazing speed applications
- Seamless scalability
- True high availability
- Stable top performance
- Cost savings
- Enhanced customer experience

Top organizations in financial services, digital advertising, eCommerce, manufacturing, social, gaming, and more are using Redis for their most compute-intensive applications.

Why? Because Redis is the world's fastest database.

Lowest number of servers needed to deliver 1 Million operations/second

(212) 557-8134 | 228 E 45th St., New York, NY 10017 | info@saturnb2b.com

LET'S TALK ABOUT THE FUTURE OF YOUR BUSINESS TECHNOLOGY

Find out more about how CAPI on IBM POWER8 and Redis Labs provides organizations with stable performance, seamless scalability, true high availability, and cost savings.

Contact Saturn Business Systems today to set up a time to compare your current performance to the potential performance with Linux on IBM POWER8 and Redis Labs.

REQUEST A DISCOVERY SESSION

OR CLICK TO JUST ASK US A QUESTION

ABOUT REDIS LABS

Redis Labs is the open source home and commercial provider of Redis, a database benchmarked as the world's fastest. The company's software and service solutions power cutting-edge applications with enterprise-class Redis. They are trusted by over 5,000 paid and 30,000 free customers in 40 countries for high performance, infinite scalability, true high availability, and best-in-class expertise.

redislabs
home of redis

ABOUT IBM POWER

IBM Power Systems offers servers built with open technologies and designed for mission-critical applications. The waitless world demands servers designed for big data that are optimized, secure, and adapt to changing business demands. These servers deliver superior cloud economics complete with secure and open choices. They incorporate innovation from a growing, open ecosystem, broadening application choice, and enhancing optimization.

Premier Business Partner **IBM**

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