

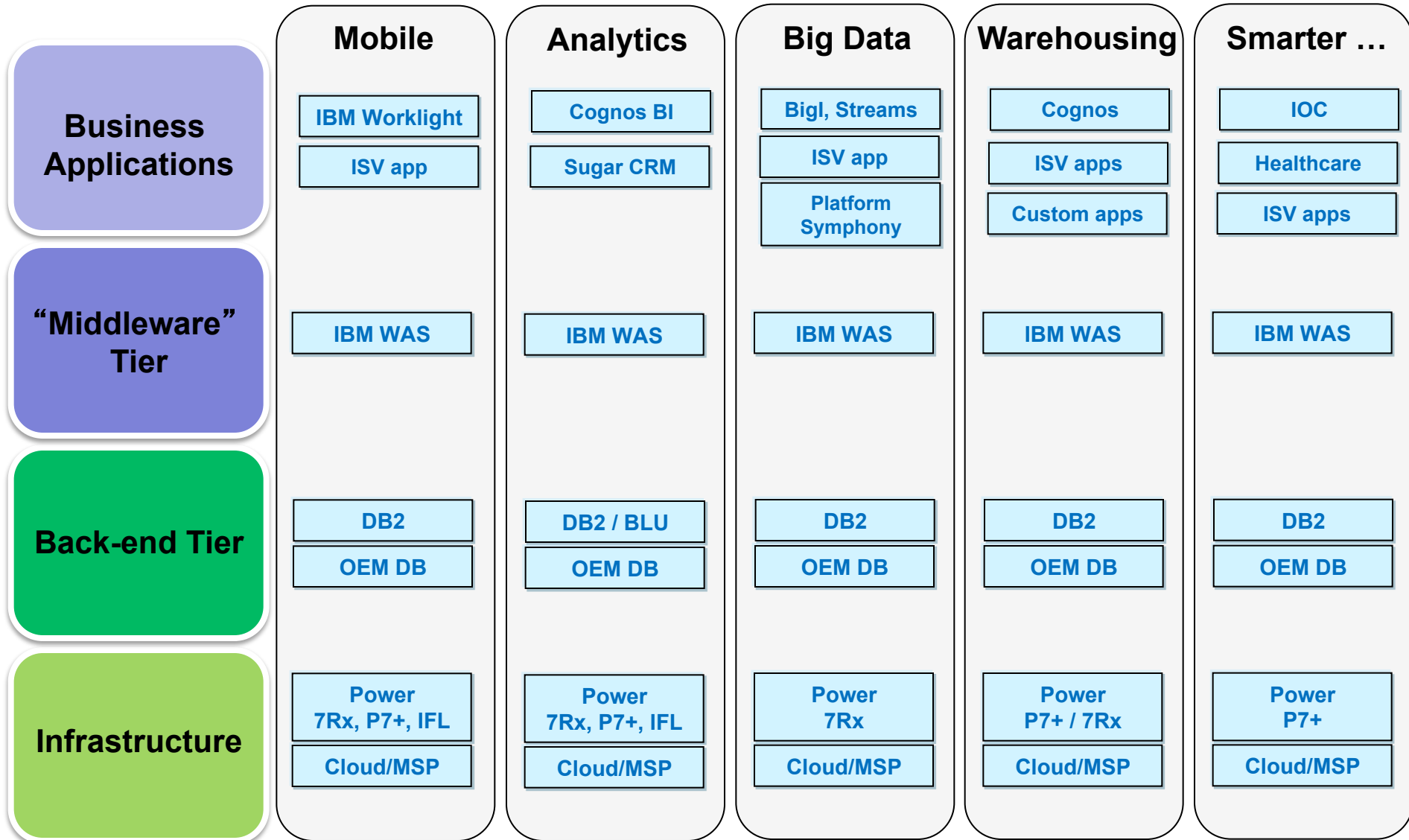
IBM Power Systems and Software

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Workloads & Solutions for Power



DB2 BLU Acceleration on Power Solution

Speed and Simplicity



Accelerated Performance

- Top 5 SAP Benchmarks Users per core on SAP 2-Tier SD benchmark
- DB2 10.5 Optimized for Power
- 8x to 25x for typical analytic workloads¹
- More predictable performance²



Faster Time to Value

- Simple load & go in-memory support
- No change to applications needed
- Integrated administration for DBAs
- Simple upgrade to deploy DB
- Multiple deployment models (Solution Edition, CuOD activation or ref configurations)



Business Proven



Lower Risk

- Proven technology leadership - including 10+ years of SAP optimization
- 1/6th the downtime compared to other platforms³
- Integrated security to simplify regulatory compliance
- Large number of client references



Transparent Scalability

- Efficient and application transparent database scalability
- Most efficient use of resources
- Automated workload management with shared-everything resource pools
- No penalty if all data doesn't fit in memory



LA POSTE



Lower Cost



Lower Acquisition Costs

- 7x-14x lower year 1 TCA⁴
- Flexible hardware options
- Flexible software licensing options
- Leverage existing investment
- CoD, SubCap, TB based Licensing



Lower Operating Costs

- Storage savings from 1.6x to 2.6x, through increased compression⁵
- Option to use lower cost near line storage
- Mature technology not requiring frequent patching



[IBM DB2 10.5 with BLU Acceleration Optimized for Power Systems](#) Video on Youtube

IBM PowerLinux Big Data Solution for Hadoop & BigInsights

- Configurations to match the needs of your Hadoop solution



Value Configuration

- Processor: 2 x Power7 3.55 GHz 8 core
- Memory Base: 64GB – 8 x 8GB
- Disk (OS): 1 x 600GB 2.5"
- Disk (data): 17TB, 29 x 600GB SAS 2.5"
- HDD controller: 3Gb JBOD Controller
- Hardware storage protection: None (JBOD)
- User space*: 4.5TB w/600GB drives
- Network: 1GbE switch w/4 10GbE uplinks (IBM G8052)

Enterprise Configuration

- Processor: 2 x Power7 3.55 GHz 8 core
- Memory Base: 64GB – 8 x 8GB
- Disk (OS): 1 x 300GB (mirrored) 2.5"
- Disk (data): 16TB, 28 x 600GB SAS 2.5"
- HDD controller: 3Gb Controller
- Hardware storage protection: RAID5 11+P, RAID6 10+P+Q (business critical)
- User space*: 4.5TB w/600GB drives
- Network: Redundant switches

Performance Configuration

- Processor: 2 x Power7 3.55 GHz 8 core
- Memory Base: 72GB – 6 x 8GB + 6 x 4GB, 96GB – 12 x 8GB, 256 GB – 16 x 16GB
- Disk (OS): 1 x 600GB 2.5"
- Disk (data): 17TB, 29 x 600GB SAS 2.5"
- HDD controller: 3Gb JBOD Controllers
- Hardware storage protection: None (JBOD)
- User space*: 4.5TB w/600GB drives
- Network: 10GbE switch w/4 40GbE uplinks (IBM G8264/ G8316)

•Note: These examples are based on a standard sizing and will vary significantly for specific customer requirements. Consult your business partner and/or IBM Techline for sizing assistance.

* Assumes 3 copies of data, uncompressed, 25% capacity reserved for map/reduce intermediate files

AIX Solution Edition For Cognos and SPSS

Power Delivers Workload Optimized Solutions for Analytics



- AIX Standard or Enterprise Edition
- PowerVM Std or Ent Edition
- Power 710, 720, 730, 740
- WebSphere



Delivering Faster Insights

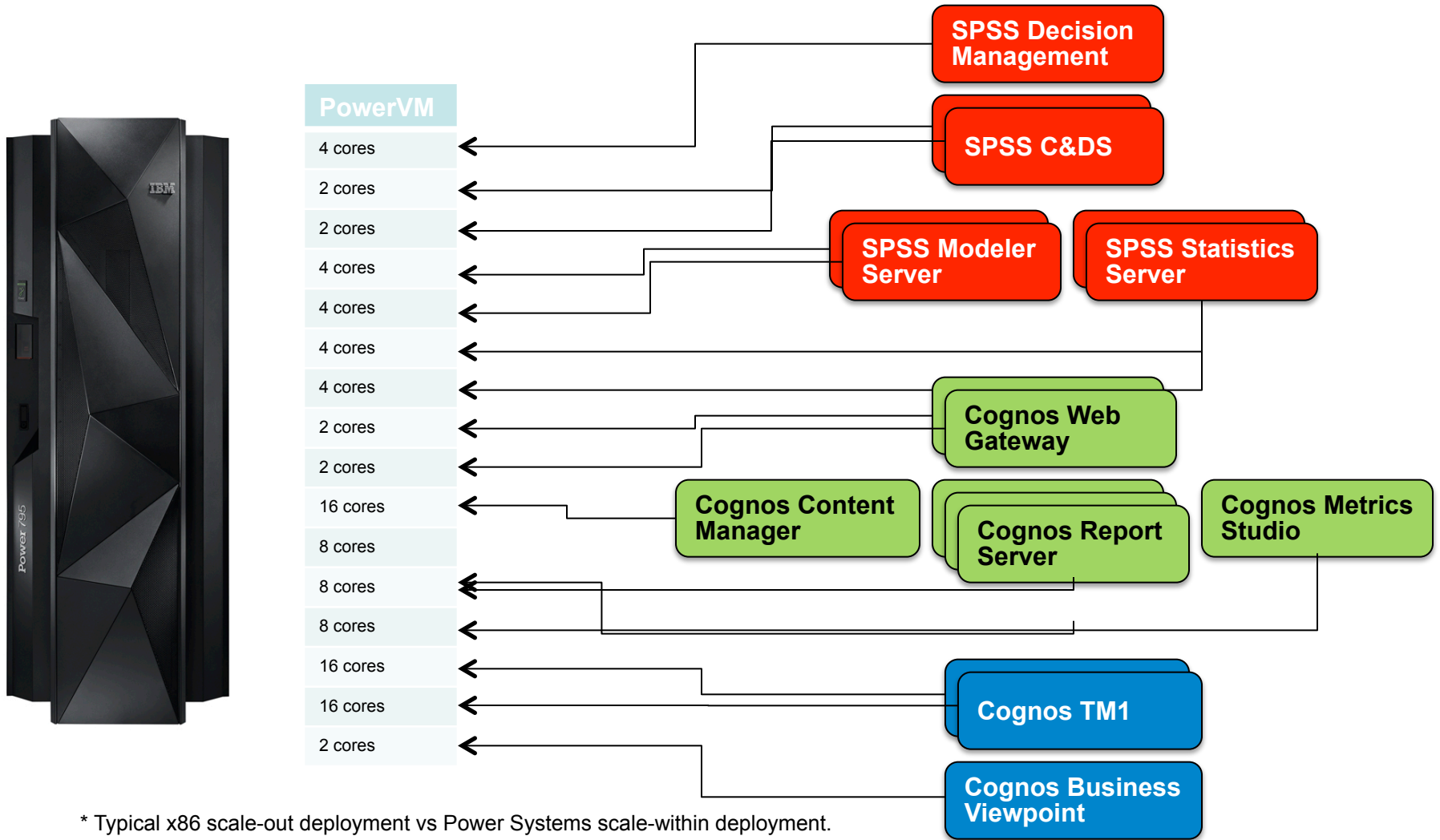
40% better performance with Cognos BI V10.1.1 on POWER7/AIX 7.1, over Windows 2008 on x86

Predicting Outcomes Faster

22% better performance with SPSS Collaboration and Deployment Services V4.2 on POWER7/AIX 7.1, over Windows 2008 on x86

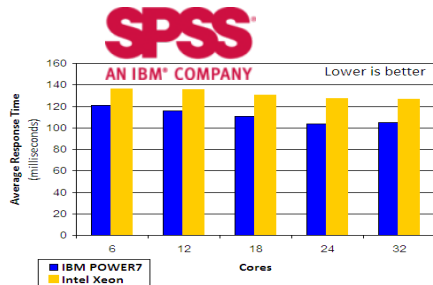
For more information: <http://www.ibm.com/systems/power/hardware/solutioneditions/aix/index.html>

PowerVM on POWER7 provides the Scalability that companies can not get with VMware on x86



* Typical x86 scale-out deployment vs Power Systems scale-within deployment.

Anticipate business outcomes through predictive analytics



22% better performance with SPSS on POWER7, over Windows 2008 on Intel Xeon

Power Systems is **uniquely designed** to support real-time complex queries and predictive analytics with intelligent threads and computational capability

- Massive parallelism with up to **1024-threads per system**, 6.4 times more than Intel Xeon based servers
- Greater performance with up to **4.25 GHz POWER7 processors**
- Faster access to data with **Memory Affinity, TurboCore** and **32MB on chip cache**, 1.33 times more than Intel Xeon based systems
- Greater memory capacities with up to **8TB Memory** per LPAR, 8 times more per VM than Intel Xeon based solutions

IBM SPSS and Power Systems servers are **workload optimized** to provide superior performance over Intel Xeon based solutions



Deployed an IBM analytics solution to help understand and predict customer buying behavior in real-time to optimize the product mix, made up of 100,000 parts, in each of the 3,400 stores nationwide.