

zEnterprise.
A New Dimension in Computing

The New IBM zEnterprise System



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BladeCenter*	FICON*	RACF*	System z10	z/OS*
				z/VM*

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Notes:

Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

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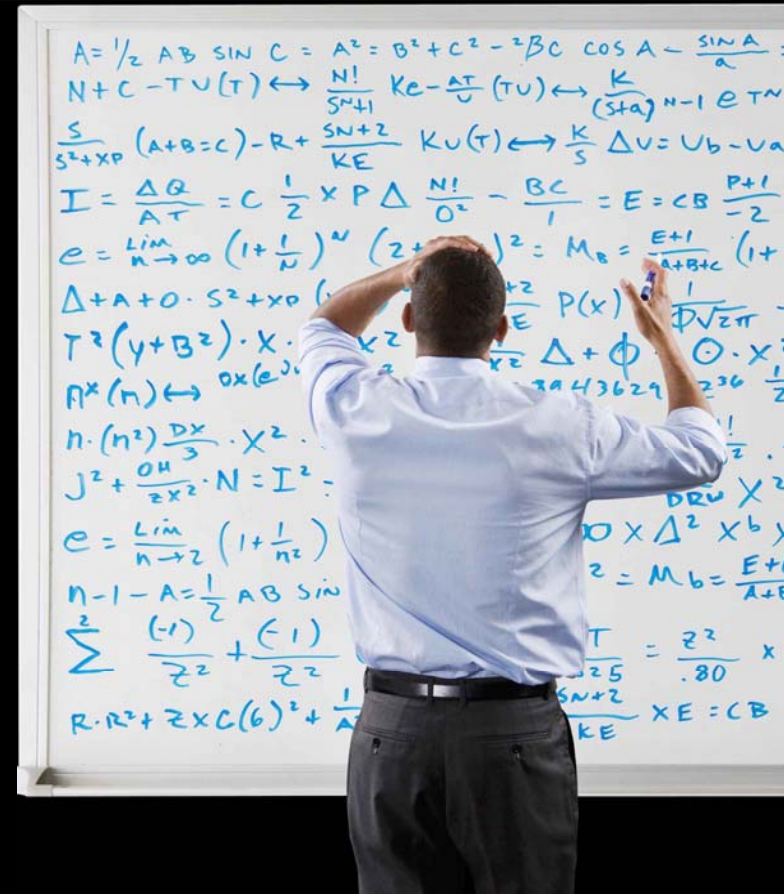
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Despite the allure of a “one size fits all” server approach ...

Today’s enterprise computing environments are multi-platform for a reason. They’re optimized to run different workloads:

- Database and transaction processing
- Analytics
- Web-based interactions
- Enterprise applications such as ERP
- The myriad of x86 applications



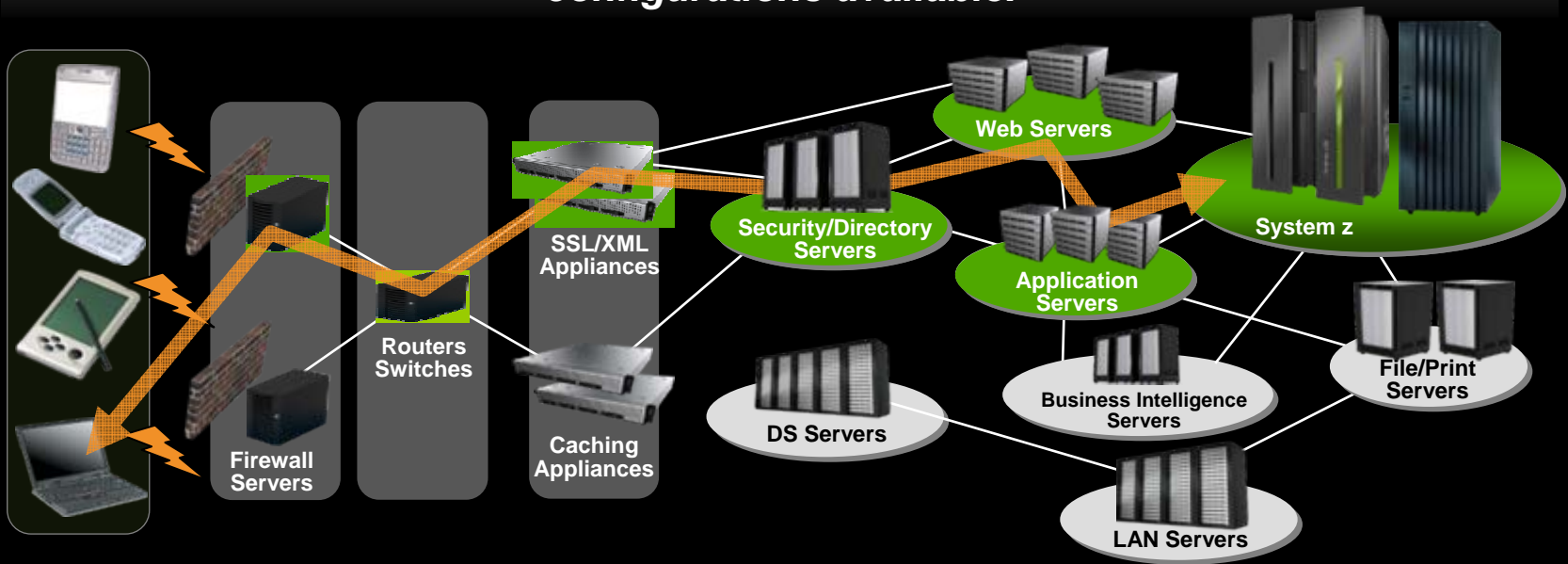
Complex solutions are optimally deployed on multi-tier heterogeneous infrastructures ...

... and cost less on System z

Information technology today

Limitations

Information technology today is limited by the technology and architecture configurations available.



- Business processes and the applications that support them are becoming more service oriented, modular in their construction, and integrated.
- The components of these services are implemented on a variety of architectures and hosted on heterogeneous IT infrastructures.
- Approaches to managing these infrastructures along the lines of platform architecture boundaries cannot optimize: alignment of IT with business objectives; responsiveness to change; resource utilization; business resiliency; or overall cost of ownership.
- **Customers need better approach: The ability to manage the IT infrastructure and Business Application as an integrated whole.**

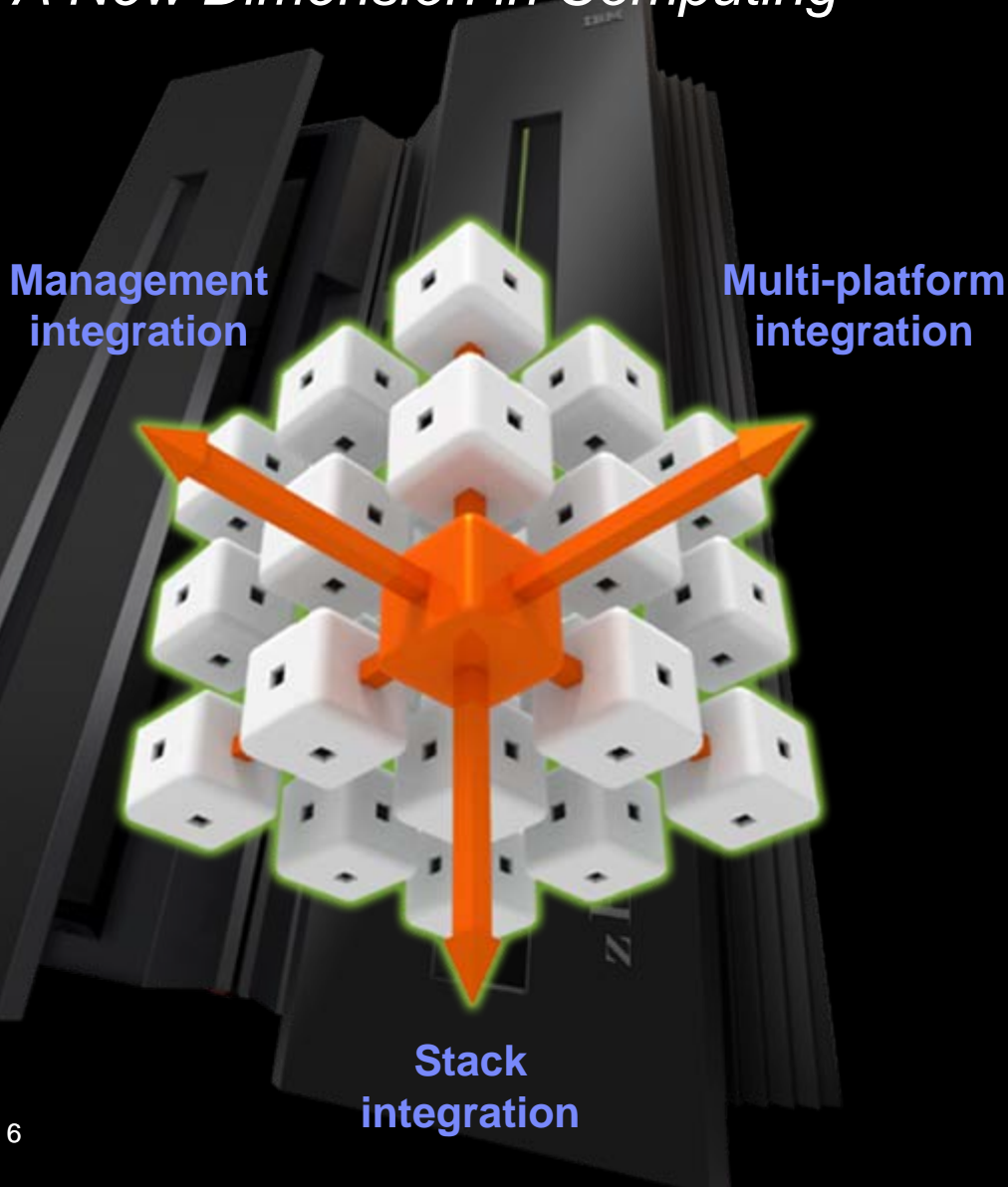
We need Smarter Systems and software for enterprise computing and robust cloud environments that ...

- ... unify and optimize multiple systems to work as a single, integrated service delivery platform
- ... can scale without adding complexity to meet the growing demands on the infrastructure
- ... simplify data center management
- ... can turn IT into a catalyst for business innovation and growth



Announcing the IBM zEnterprise System

A New Dimension in Computing



- A “System of Systems”, integrating IBM’s leading technologies to dramatically improve productivity of today’s multi-architecture data centers and tomorrow’s private clouds.
- The world’s fastest and most scalable enterprise system with unrivalled reliability, security, and manageability.
- The industry’s most efficient platform for large scale data center simplification and consolidation.

IBM zEnterprise System – Best-in-class systems and software technologies

A system of systems that unifies IT for predictable service delivery



IBM zEnterprise 196 (z196)

- Optimized to host large-scale database, transaction, and mission-critical applications
- The most efficient platform for large-scale Linux consolidation
- Capable of massive scale-up
- New easy-to-use z/OS V1.12

zEnterprise Unified Resource Manager

- Unifies management of resources, extending IBM System z qualities of service end-to-end across workloads
- Part of the IBM Systems Director family, provides platform, hardware and workload management

zEnterprise BladeCenter Extension (zBX)

- Selected IBM POWER7 blades and IBM System x Blades* for tens of thousands of AIX and Linux applications
- High-performance optimizers and appliances to accelerate time to insight and reduce cost
- Dedicated high-performance private network

IBM zEnterprise 196: The heart of the new machine

The industry's fastest and most scalable enterprise system

Dramatic improvement over IBM System z10™:

For Linux

Up to

60%

Improvement in performance

for

35%

Less cost

For z/OS

Up to

40%

Improvement in performance

with

60%

More capacity

- With no increase in energy consumption
- And even better performance with new software

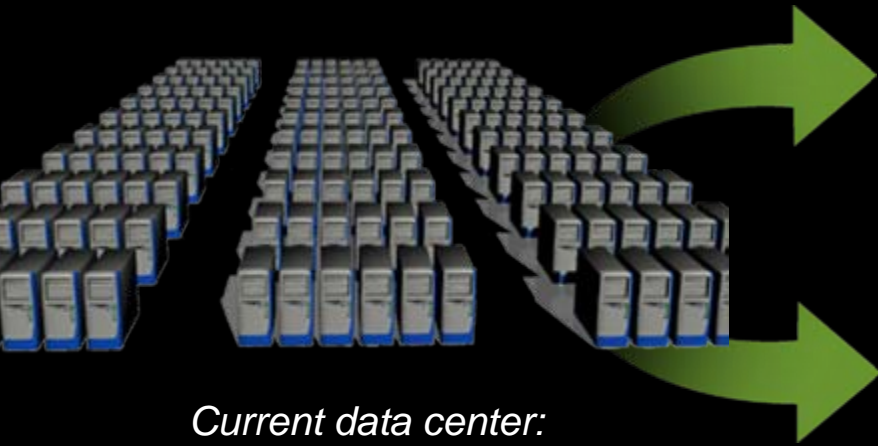
- 5.2 GHz superscalar processor
- Up to 96 Cores, 1 to 80 configurable for client use

- Up to 3 TB RAIM memory
- Over 100 new instructions
- 1.5 MB L2 Cache per core, 24 MB L3 Cache per processor chip

- Cryptographic enhancements 
- Optional water cooling

The IBM zEnterprise System

Lowering the cost of distributed workloads through optimal platform selection



Current data center:

distributed workloads on a variety of Intel servers, connected to a System z

Option 1:
Deploy distributed work on new Intel servers with 3rd Party virtualization



--OR--

Option 2:
Optimize distributed work on zEnterprise with Linux on z, Power7 blades and Intel blades with Unified Resource Manager



Simplify, automate, and improve service quality by consolidating on zEnterprise and ...

Lower cost of acquisition by up to 38%* compared to new Intel blades (option 1)

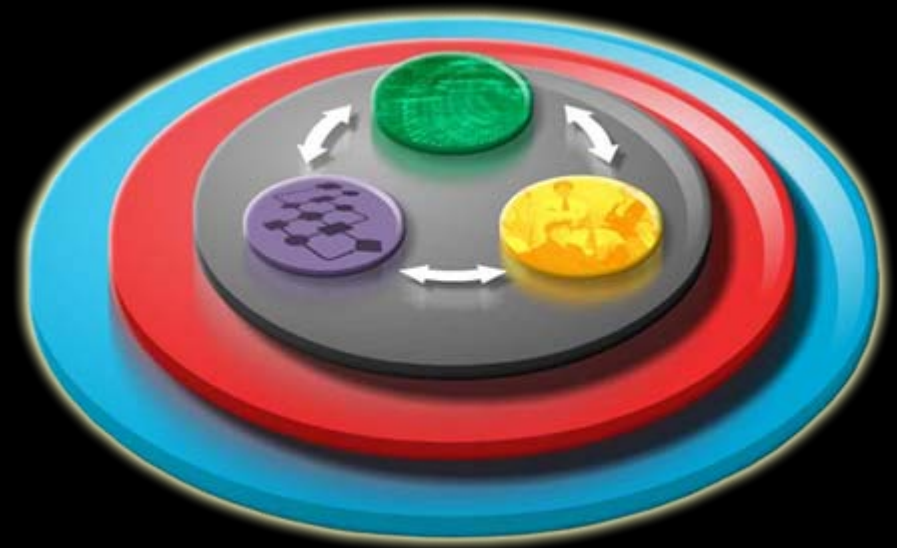
Reduce cost of ownership by up to 57%* compared to current distributed data center

Reduce network complexity (adapters, cables and switches) by up to 98%* compared to current distributed data center

Integrated value with software optimized for Smarter Systems

Innovative software solutions

- Strong information management platform solutions built for business workloads
- Visibility, control, security, and automation across your business with integrated service management
- Flexible application infrastructure, connectivity and dynamic business processes
- Easy-to-use, multi-platform development tools
- Cost-effective collaborative tools



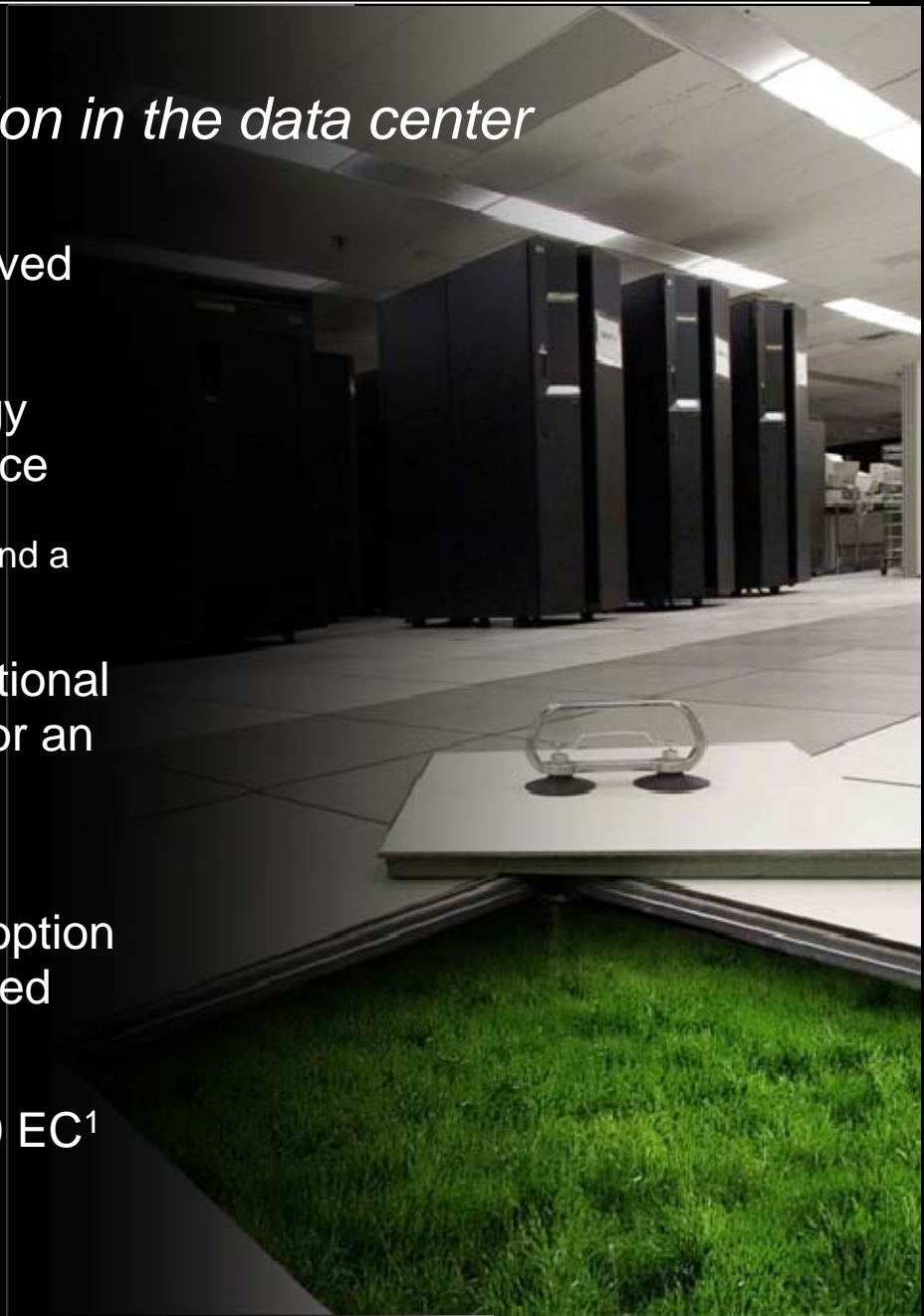
22 new software announcements working together to bring optimal application availability to your business critical services.

PLUS 100s of existing software products run on zEnterprise today.

z196

Helping to control energy consumption in the data center

- Better control of energy usage and improved efficiency in your data center
- New water cooled option allows for energy savings without compromising performance
 - Maximum capacity server has improved power efficiency of 60% compared to the System z10 and a 70% improvement with water cooled option
- Savings achieved on input power with optional High Voltage DC by removing the need for an additional DC to AC inversion step in the data center
- Improve flexibility with overhead cabling option while helping to increase air flow in a raised floor environment
- z196 is same footprint as the System z10 EC¹



From zEnterprise upgrades to data center transformation

IBM Global Financing can help you achieve greater IT economic value

IT Equipment Acquisition



Low Rate Financing

Competitive low, fixed rates for IBM and non-IBM hardware, software and services

Complex Migration Projects



IBM Project Financing

Customized, all-inclusive financial package for migration services, infrastructure solutions and business transformation projects

IT Infrastructure Transformation



IBM IT Financing Facility

Structured line of credit to manage complex projects

What clients are saying about the zEnterprise

Retail



Application: SAP Financials Module

Customer Challenge: Application coordination is resource intensive and vulnerable to several points of impact

Value:

- End-to-end flexibility / manageability providing application 'insulation'
- Improved business continuance, common point in time recovery regardless of platform
- Consistent security and compliance

Public Sector



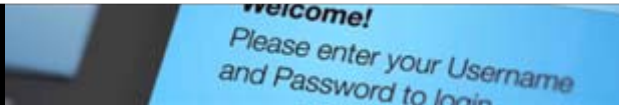
Application: Internet-based Tax Receipt processing application for small businesses in Germany

Customer Challenge: Not able to respond quickly for need of new function. Staff required to maintain multi-tier application high in cost.

Value:

- Improved application network speed (10x)
- Horizontal workload management
- Pre-integrated solution allows small business to implement and realize value faster

Financial Services



Application: On-line Consumer Banking

Customer Challenge: Banking in multiple countries across Europe and maintaining different infrastructures based on acquisitions; need to standardize to reduce complexity

Value:

- Greater focus on delivering new business functions through reduced manual coordination of tasks
- Lower cost via a single management and policy framework
- Increased flexibility through simplification and standardization

Healthcare



Application: Information hubs

Customer Challenge: Needs to consolidate data and systems that have become too complex through acquisitions

Value:

- Consolidation and simplification increases competitiveness
- Enables application selection for performance and cost
- High speed, private / internal network, reducing requirements for firewalls

zEnterprise receives strong endorsement from industry analysts

Ian Bramley
Managing Director,
Software Strategies

“ ... IBM’s immensely powerful new “System of Systems” runs the three most vibrant, important MPU stack-workload sets in our industry today ... a truly inspiring leap forward. ”

Gary Barnett
Partner and CTO,
The Bathwick Group

“ This release of the IBM mainframe dramatically extends the platform’s value proposition for existing customers, and offers non-mainframe customers a real choice when it comes to delivering large scale applications reliably and cost effectively. ”

Gordon Orr
Director, Enterprise
Client Services,
International
Technology Group

“ Where mainframes constitute the back-end data tier of complex business-critical server architectures, zEnterprise systems may offer new, cost-effective opportunities to extend “mainframe-class” capabilities across all platforms and tiers. ”

Alan Radding
Research Director,
[Independent Assessment](#)

“ The zEnterprise has the potential to change the way the organization thinks about mainframe computing; suddenly it’s not just a mainframe anymore. ”

Richard L. Ptak
Managing Partner,
Ptak, Noel &
Associates LLC

“ IBM’s zEnterprise System provides the single largest opportunity of this decade to shift IT efforts towards creative problem solving and away from maintenance. ”

The IBM zEnterprise System

*Now extending System z cost savings
and value to a new dimension*

- Designed to meet the need of today's heterogeneous data centers
- Enables a mixed set of workloads to be deployed on best fit technologies
- Delivers lower acquisition and operating costs than a one size fits all approach
- Reduces risk by extending the reach of System z qualities of service
- Improves service through tighter integration for multi-tier workloads

Thanks for joining us today.



Let us know how we can help.