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The Premier Software and Product Delivery Event



Steve Mills

**Senior VP and Group Executive
IBM Software and Systems**



Smarter Planet Solutions Increase Demands on IT



1.2 zettabytes (1.2 trillion GB)

exist in the “digital universe

- **50%** YTY growth
- **25%** of data is unique; **75%** is a copy



Internet connected devices
growing 42% per year



32.6 million servers worldwide

- **85%** idle computer capacity
- **15%** of servers run 24/7 without being actively used on a daily basis



Between 2000 and 2006

- storage grew **69x**
- servers grew **6x**

Virtual machines growing
42% per year



\$12.3 billion in the US spent annually on maintenance for unused software

- **10%** of all software purchased becomes shelfware

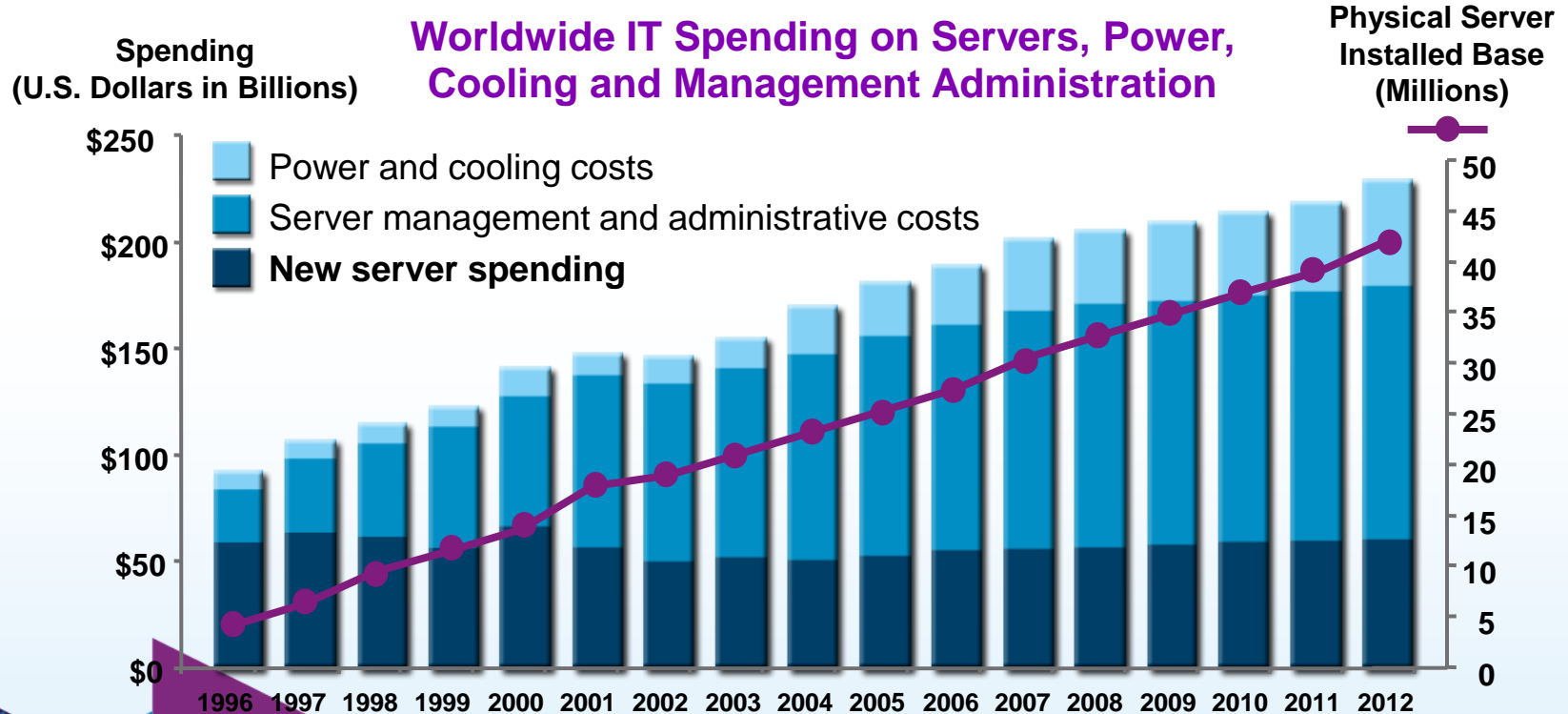
More than \$100 worth of installed but unused software per PC



But IT budgets are growing less than 0.8% per year

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IT Operating Costs are Out of Balance



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Source: IDC



Software. Everyware.

Resulting Sprawl Drives Unsustainable Costs



Strategies to Reduce Costs and Improve Value



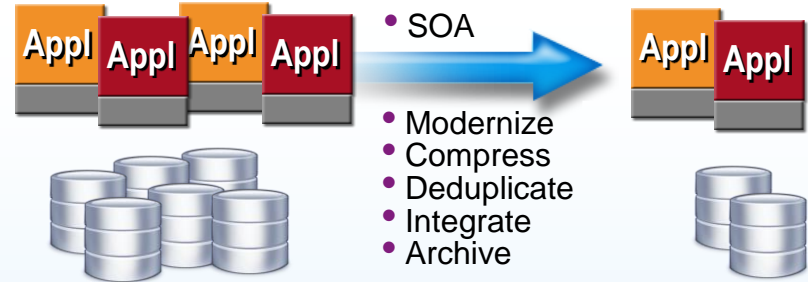
Optimize the Overall IT Environment



Consolidate Hardware Infrastructure



Eliminate Redundant Software and Data
Optimize Software Delivery



Improve Service Delivery

Integrated Service Management



Visibility



Control



Automation



Cloud Computing

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 Software. Everyware.

Meeting These Challenges



Leading clients
are already
addressing this
IT conundrum
through

SMARTER COMPUTING

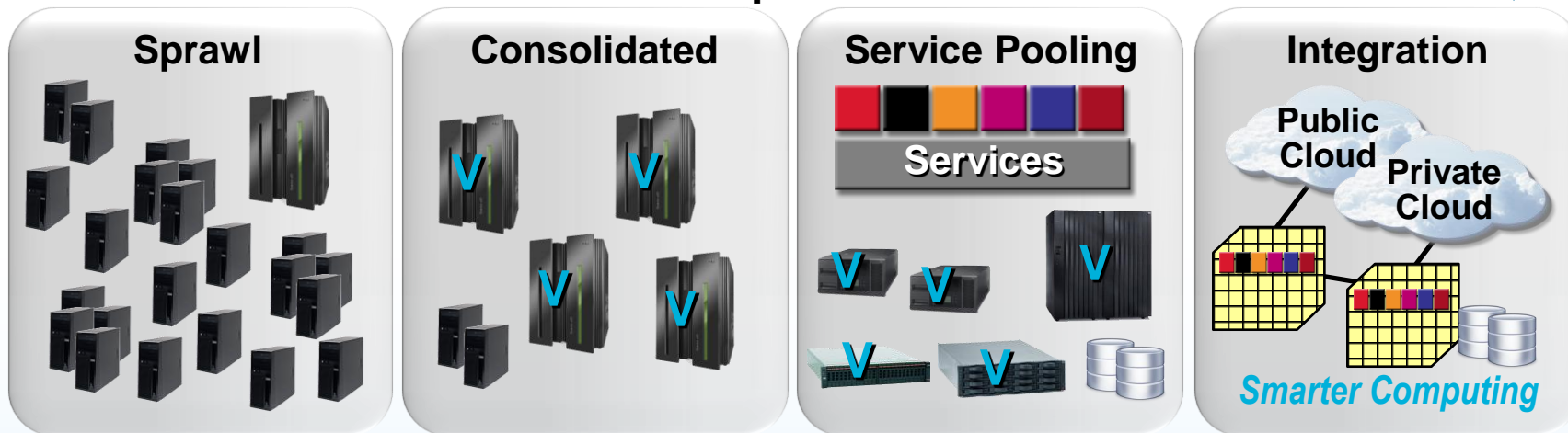
Strategies to transform IT to deliver
breakthrough economics and value

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IBM Internal IT Infrastructure Evolution



IT Simplification



Key Technologies

- Comprehensive virtualization
- Software and systems delivery
- Ensembles and scalable servers
- End-to-end service management
- Converged networks
- Cloud computing services

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Optimize Server Utilization



Reduce Server Sprawl

- Reduce # of Data Centers
- Consolidate Servers
- Server Virtualization
- Asset Management



Automate Processes

- Automation
- Provisioning
- Workload Scheduling

Manage Workloads

- Workload Optimized Systems – **Best Fit**

Optimize Service Delivery

- Integrated Service Management (ISM)
- Self-provisioned Cloud Services



Storage Efficiency and Best Practices



STOP Storing so Much

- Data Compression
- Data Deduplication



MOVE Data to the Right Place

- Automated Tiering
- Automated Data Migration
- Policy-based Management



STORE More with What's On The Floor

- Storage Virtualization
- Thin Provisioning
- Consolidated Storage Management

Eliminate Redundant Software and Data



Data



- Reduce Database Size - Data Compression
- Reduce Multiple Copies - Data De-duplication
- Information Integration - Master Data Management
- Data Governance - Archiving

Applications



- Identify and Eliminate Redundant Systems and Applications
- Reuse of Common Services – SOA
- Optimize Software and Systems Delivery



Largest Cost Savings But Slower to Achieve

Optimize Software and Systems Delivery



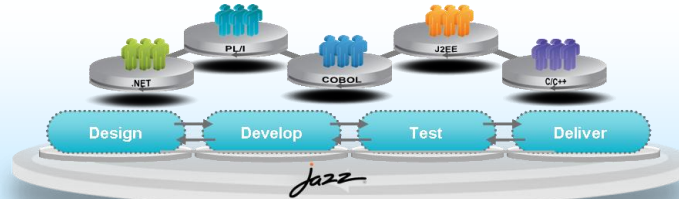
Reduce Complexity

Portfolio Rationalization



Increase Productivity

Team Collaboration



Maximize Efficiency

Infrastructure Optimization

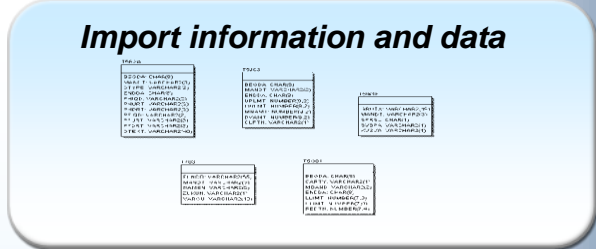
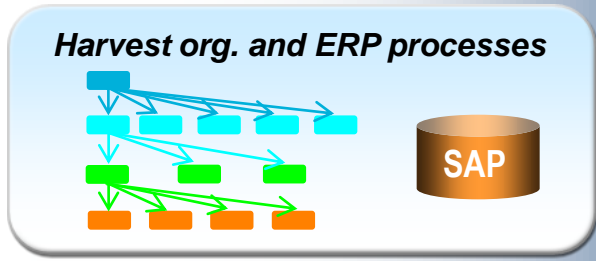


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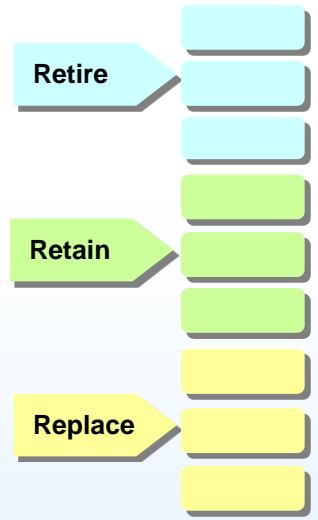
Software. Everywhere.

Portfolio Rationalization



Gather information, analyze, make decisions

Determine disposition



Capabilities

Enterprise and Business Architecture

Application Portfolio Management

Enterprise Modernization

IBM Offerings

Rational System Architect

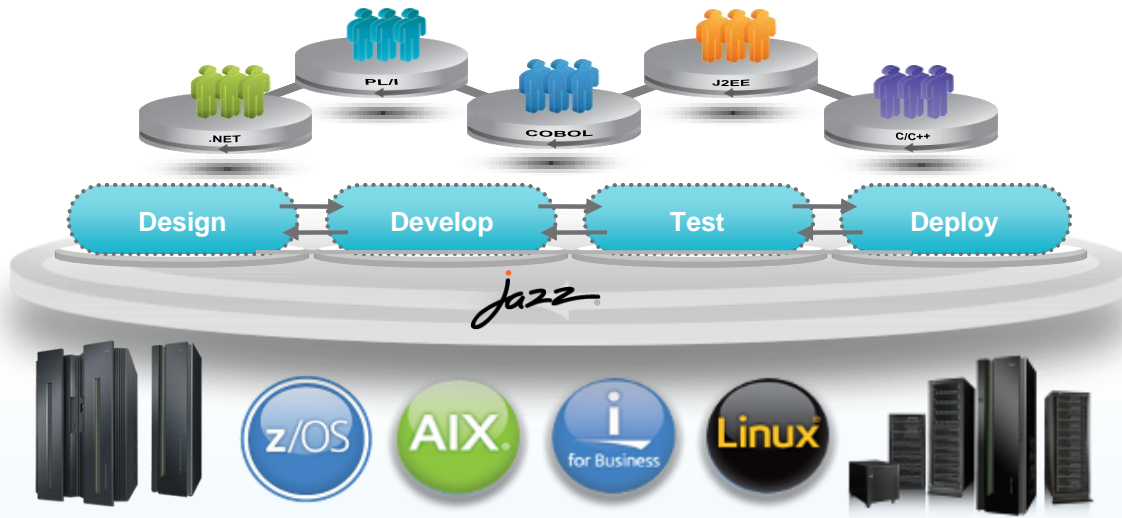
Rational Focal Point

Rational Asset Analyzer

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Collaborative Lifecycle Management



- Integrated platform for managing delivery of multiplatform project
- Integrated collaboration, process automation and reporting
- Advanced dependency analysis and build capabilities

Capabilities

Collaborative
Application Lifecycle
Management

Design & Development

IBM Offerings

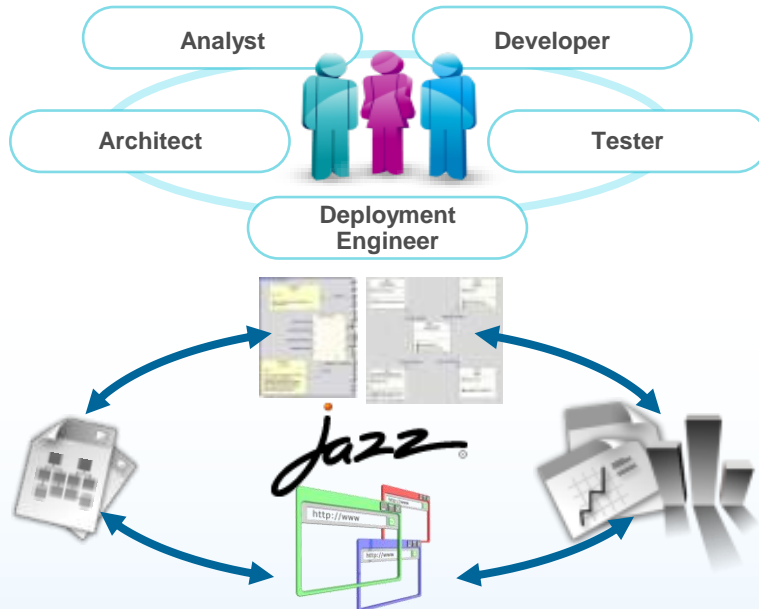
Rational Team Concert

Rational Requirements
Composer

Rational Quality
Manager

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Collaborative Design Management



- Engage stakeholders and accelerate design review process
- Reduce complexity and gain insight with impact analysis
- Collaborate on design artifacts through Jazz integration
- Visit jazz.net to learn more about Design Management

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Capabilities

Collaborative
Application Lifecycle
Management

Design & Development

IBM Offerings

Rational Software
Architect
Design Manager

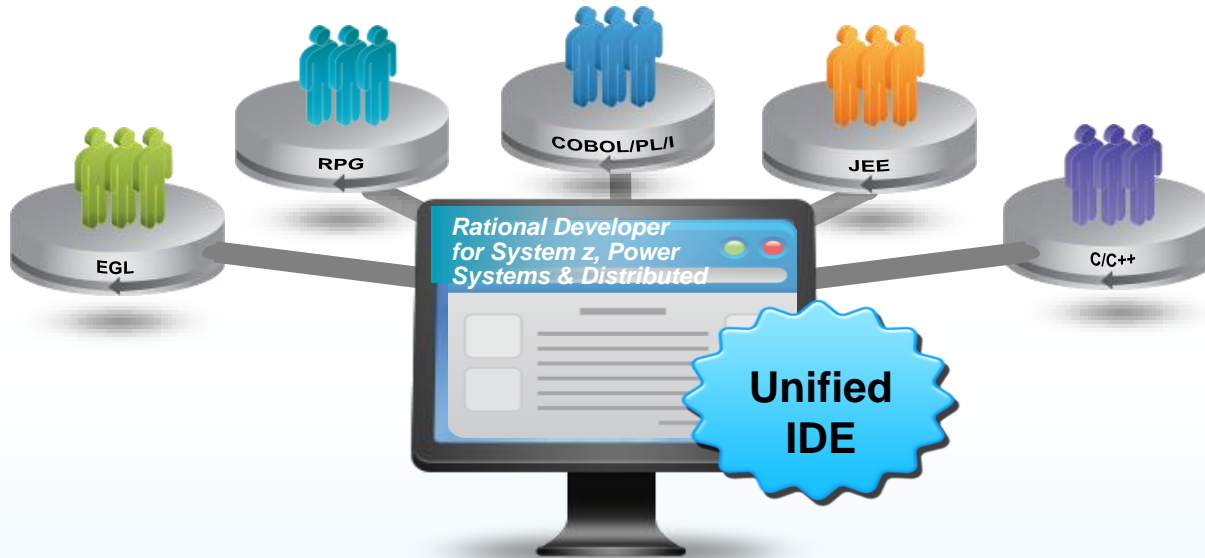
Rational Rhapsody
Design Manager



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Multiplatform Development



- Leverage existing and new talent
- Up to 37% improvement in developer productivity
- Develop and test z/OS apps on a dedicated x86 Linux machine
- Build development teams which can move between platforms and applications quickly and effectively

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Capabilities

Design & Development

IBM Offerings

Rational Developer for zEnterprise

Rational Developer for System z

Rational Business Developer

Rational Developer for Power Systems

Rational Application Developer



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Deployment Planning & Automation



- Integrate and automate development-operations lifecycle
- Collaborative Incident Management
- Accelerate release cycles and speed defect resolution

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Capabilities

Deployment Planning and Automation

Collaborative Lifecycle Management

IBM Offerings

Rational Software Architect

Tivoli Service Automation

Tivoli Provisioning

Rational Automation Framework

Rational Asset Manager



Smarter Computing

Sharing hardware and software services to increase operational efficiencies and optimize workload performance

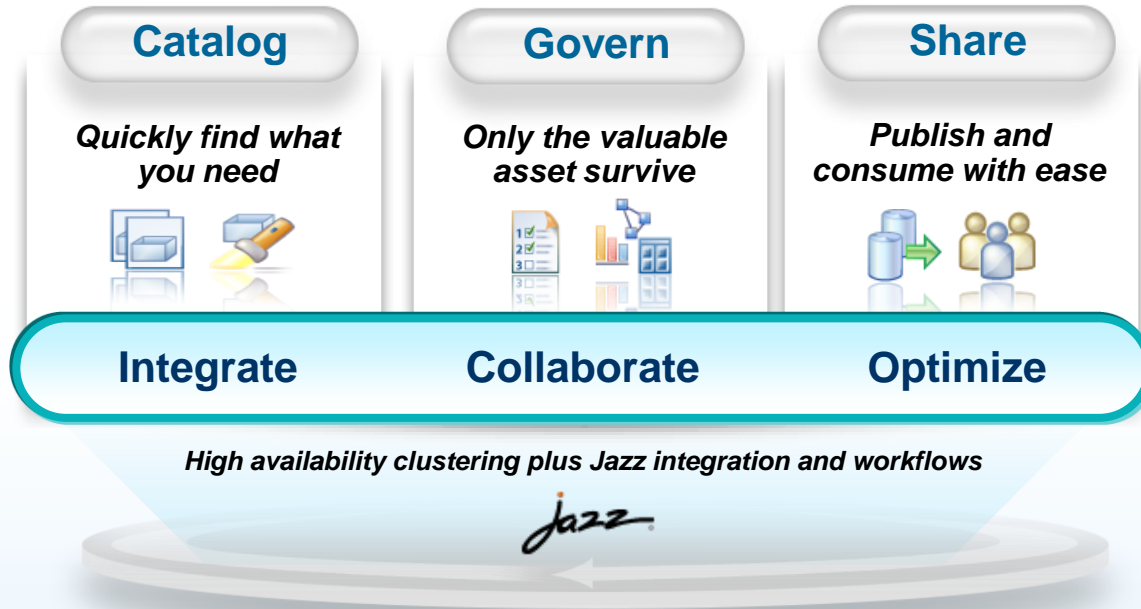
while reducing Total Cost of Ownership

**Doing More
for Less**

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Asset Reuse and Management



- Catalogue, organize, use, reuse, manage and report on assets
- Deliver high-quality software solutions faster to market
- Reduce implementation and maintenance costs

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Capabilities

Application Portfolio Management

Design & Development

IBM Offerings

Rational Asset Manager



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Smarter Computing



6 streams, 18 tracks, and nearly 400 technical sessions to help you ignite your software and systems innovation:

- Application Lifecycle Management
- Application Security & Compliance
- Enterprise Modernization
- Software & Systems Innovation
- Strategic Planning

**It's all about
cost and
value**

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