



# Information on Demand – Leveraging Your Information Assets to Maximize your Business results

*The future runs on System z*



***Dan Wardman***  
***VP, Information Management***  
***Mainframe Software***

# Agenda

- **IOD strategy update**
- **IMS**
- **DB2**
- **Data Warehouse**
- **Information Server**
- **Master Data Management**
- **Data Base Tools**
- **Enterprise Content Management**
- **Summary**

# The Information Challenge

## Business Challenges

Globalization  
 M&As  
 Supply chain  
 Risk & compliance  
 Customer loyalty  
 Operational costs  
 Business velocity

...

## Information Challenges

Accuracy  
 Timeliness  
 Relevance  
 Accessibility  
 Security

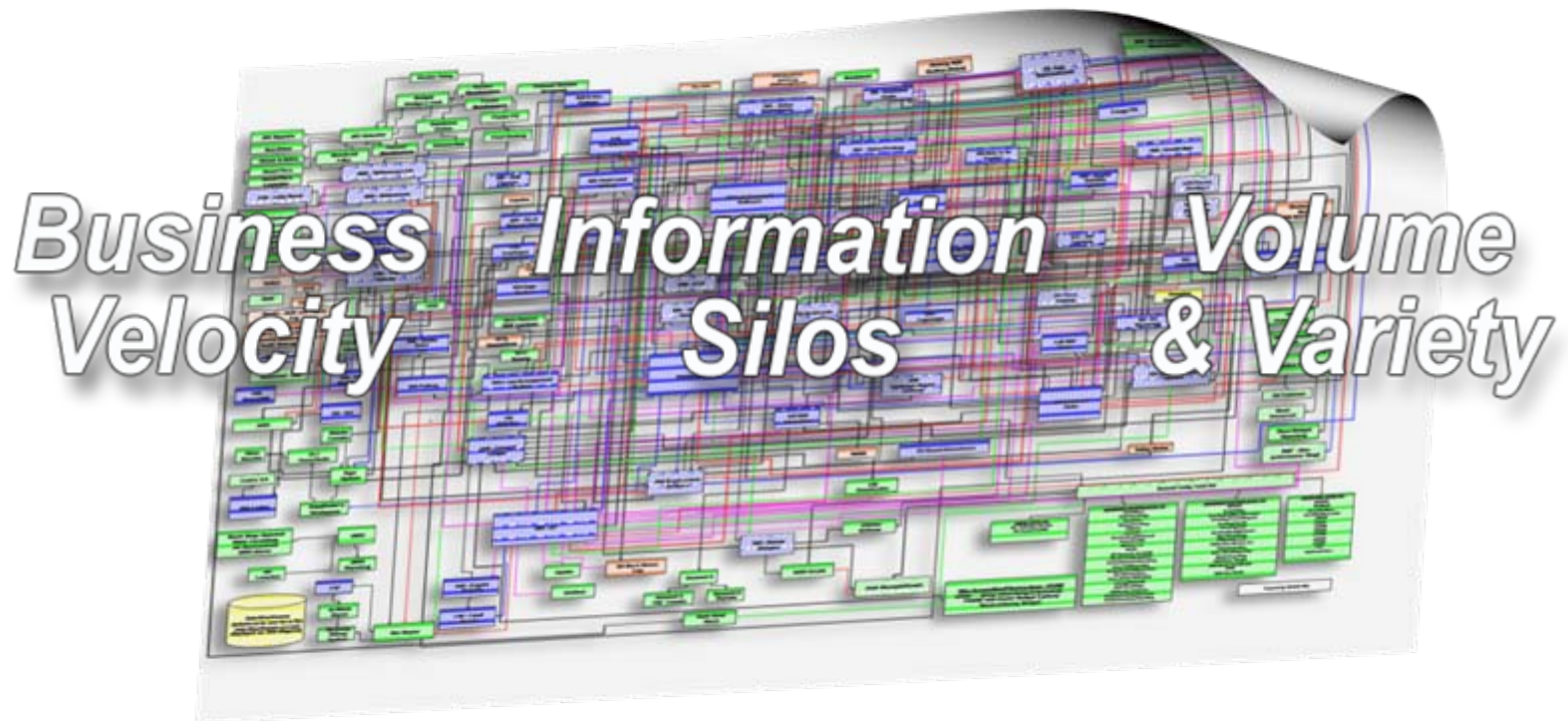
...

**INFORMATION  
 IS A  
 STRATEGIC  
 ASSET**

**5X more value creation by  
 60%+ of CEOs: Need to do  
 organizations using  
 a better job leveraging  
 information effectively  
 information**

**People can spend up to 70%  
 of their time looking for  
 information**

# Why is it Challenging to Leverage Information?



*Lost  
time*

*Reduced  
service*

*Increased  
costs*

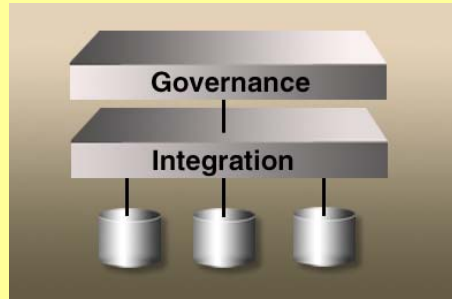
*Lost  
revenue*

# Incremental Benefit Paths for System z Workloads

↑ Reliability & Control

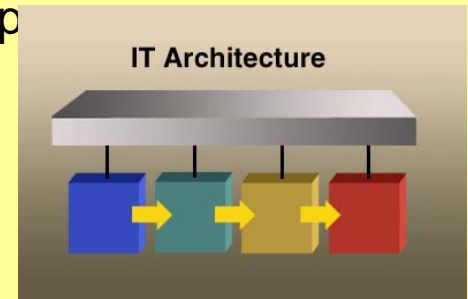
## ↑ Accuracy/ Control / Reliability

- Information integration
- Data and app governance
- Security hub



## Create Dynamic Adaptability

- Composite app
- Business mash-up
- SOA hub



Foundational  
*Basic*

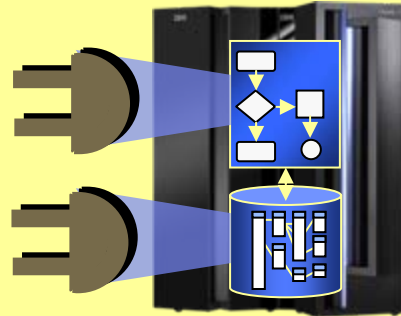
Extend  
End-to-End

Transform

Adapt  
Dynamically  
*Advanced*

## ↑ Access to Function & Information on System z

- Exposing traditional apps & data for quick & easy access: Service enablement



## ↑ Performance / Manageability

- Creating new Web apps
- Consolidate apps & data
- Web 2.0
- Dynamic warehousing



↑ Performance, cost management, responsiveness



# System z and Information On Demand

## Unlocking the Business Value of Information for Competitive Advantage

Optimization

Customer & Product Profitability    Financial Risk Insight    Workforce Optimization    Dynamic Supply Chain    Multi-Channel Marketing

**Business Optimization**

**Better Business Outcomes**

*End-to-end Capabilities*



**Business Intelligence & Performance Management**  
Better understand & optimize business performance

**Information Integration, Warehousing & Management**  
Create a single version of the truth, managed over time

Automation



**Enterprise Content Management, Enterprise Data Management**  
Establish & manage data and content over its lifecycle

# Information On Demand and SOA

Two sides of the same coin...

SOA provides business flexibility

IOD provides the trusted information needed by your services



*“You will waste your investment in SOA unless you have enterprise information that SOA can exploit.”*

**– Gartner Research**

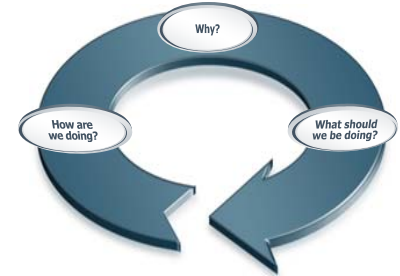
# New Information On Demand Software for System z

*Better business decisions, faster and with a lower overall TCO*

## Cognos 8 Business Intelligence for System z

**Coming!**

Single solution for reporting, analysis, dashboards and scorecards  
 Delivers a competitive advantage for organizations with operational information on System z  
 Accepting participants for a beta program on Cognos 8 for Linux on System z.



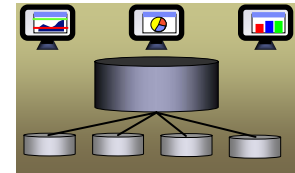
## DB2 for z/OS Value Unit Edition

**Now Available**

New one-time-charge offering that simplifies the deployment of new application workloads  
 Strengthens the role of System z as a cornerstone for key business initiatives such as SOA, DW, BI & SAP  
 Delivers pureXML which optimizes information availability in the New Enterprise Data Center

## Data Warehousing on System z

More than 50 new features in the last two releases of DB2 for z/OS supporting warehousing  
 Information Server for System z - brings new scalability, information consistency and performance to System z customers



## InfoSphere Master Data Management Server for System z

**Coming!**

More effectively manage high-value operational information  
 ■ Customers, suppliers, partners, product materials and employees  
 Addresses and solves the root cause of master data complexity

**Information on Demand Software Stack is now on System z**



## IM z product enablement in 2007/8

- **December 2007**    **Information Server for z series GA**
- **December 2007**    **CM on z/OS V8.4 GA**
- **February 2008**    **Cognos for z series announce**
- **February 2008**    **DB2 VUE announce and GA ( DB2 V9)**
- **March 2008**    **DB2 VUE GA ( DB2 V8)**
- **March 2008**    **MDM server for z series Announce**
- **April 2008**    **Cognos on z Linux Beta**
- **May 2008**    **Cognos on z Linux GA**
- **May 2008**    **MDM server on z Linux eGA**
- **4Q 2008**    **Cognos on z/OS Beta**
- **4Q 2008**    **Filenet CE and PE on DB2 z/OS**

# IMS Roadmap



## Most new releases every 2-3 years

- IMS 9 GA October 2004, IMS 8 GA October 2002
- IMS 10 QPP started Jan 2007
- IMS 10 GA October 2007
- IMS 10+1 development/test well underway
- IMS 10+2 in design phase

## Two current supported field releases

- N-2 release out of service 1 year after current release GA

## Key focus areas for new versions

- Scalability, performance, throughput, RAS
- Ease of use, automation, lessen skill requirement
- SOA application integration, standards, compliance

# IMS 10

## *Reduce management cost and accelerate use of data*

Accelerate Integration in a Service Oriented Architecture

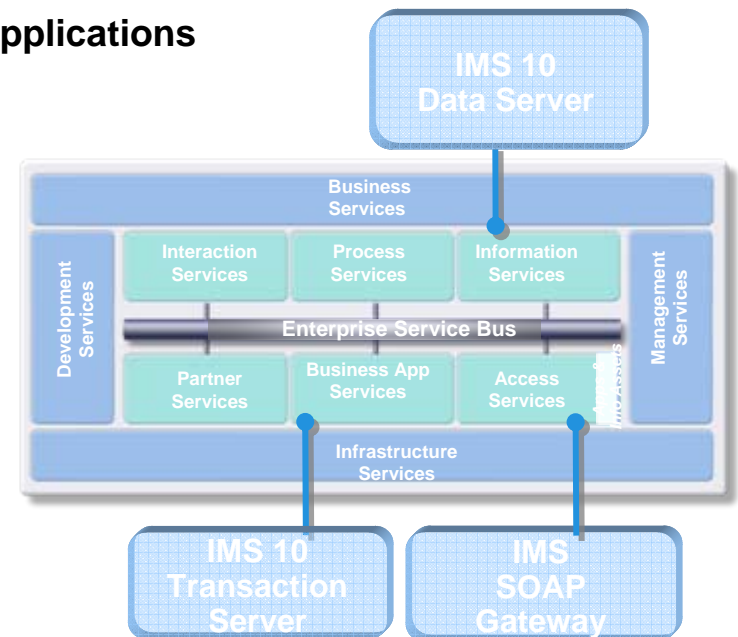
- **Enable IMS as client and server to participate in SOA environments**
- **XQuery support and broader XML and Java Tools**
- **Reusable IMS services for SOA business flexibility**
- **Easier to expose IMS transactions as web services**
- **Application Connectivity - Reduced time/cost to integrate applications**

Reduce operational costs

- **Simplified development reduces time to value**
- **Enhanced commands ease operations management**
- **IMS tools suite enhanced and ready for IMS 10**

Improve Reliability, Performance, and Security

- **New Database Recovery Control - reduces recovery time**
- **Greater Multiple Systems Coupling bandwidth improves performance**
- **Fast Path and Utilities enhancements**



# What our customers are saying about IMS



*George Sharp, Manager IMS  
Support group for Verizon Telecom,  
Business and Wireless entities*

"Verizon processes in excess of 4 billion IMS transactions each month. IMS continues to provide both the performance benefits and data integrity guarantee that our business customers demand!"



**Wang Chen,**  
Manager, Database Technical Services

"Over the years, upgrading to new versions of IMS has gone smoothly and without any application impact. Now, with IMS 10, we expect to further simplify our development environment which will help us reduce time-to-market for new services"



**Steven Clanton,**  
*Senior Technology Specialist, Caterpillar*

"The IMS SOAP gateway allows us to expose IMS transactions as web services and provides access from any client capable of submitting SOAP requests, without additional software requirements."

# IMS SOA Program – 3 Steps

**STEP 1 - 1 Day Regional  
Multi-Customer  
Seminar**

- *IMS SOA Overview*
- *Awareness and High-level Education – Process and tools*
- *CTA: On-site workshop*



**STEP 2  
1 Day On-site  
Customer Workshop**

- *Cross BU Awareness and Education  
MF and Open Systems A/D teams*
- *Answer their specific questions*
- *CTA: Identify SOA Project*



**Education**  
**Step 3+  
Support IMS SOA Project**  
**Consulting Svcs**

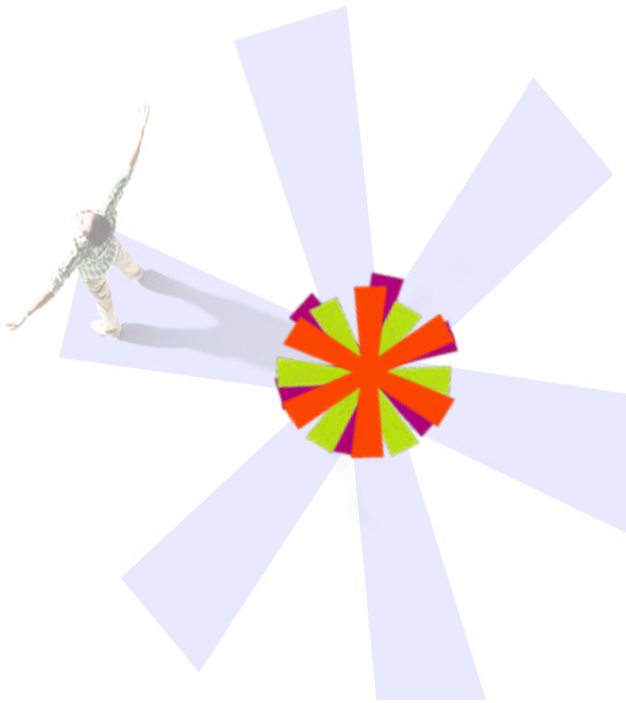
- *Design, develop and deploy  
new services quickly*
- *Advocates keep in touch*
- *CTA: Customer reference*



## DB2 for z/OS v8 Field Update:

- ✓ More than 50% of WW MIPS & Customers on V8
- ✓ More than 95% of the top 200 Customers

- Fewer Sev 1 APARs with quicker turnaround
- Fewer multisystem outages
- Lower overall PMR volume
- Lower PE rate



# DB2 for z/OS with the z10 and z/OS

*Supporting System z innovation, raising the IT bar and taking System z to the next level of...*

## **... scalability and performance**

- z10 CPUs, memory, I/O and network bandwidth means:
  - Significantly improved SQL performance
  - Improved connectivity for remote apps, especially batch inserts for large queries
- New machine instructions
- Reduced allocation and catalog overhead
- Infiniband CF links
- HiperDispatch
- More efficient disk usage minimizes disk constraints
- More efficient XML parsing
  - Up to 30% performance improvement
  - Up to 100% XML parsing on zIIP / zAAP
- Hash DSAB Searches brings faster startup/restart
- Basic HyperSwap
- zIIP assisted XRC



# DB2 & IBM zIIP add value to database work

Portions of the following DB2 for z/OS V8 workloads may benefit from zIIP\*:

- 1 - ERP, CRM, Business Intelligence or other enterprise applications
  - Via DRDA over a TCP/IP connection (enclave SRBs, not stored procedures or UDFs)



## 2 - Data warehousing applications\*

- Requests that use parallel queries, including star schema

## 3 - DB2 Utilities LOAD, REORG & REBUILD\*

- DB2 utility functions used to maintain index structures

## 4 - DB2 9 for z/OS Remote native SQL procedures

## 5 - DB2 9 XML parsing via DRDA to fully utilize zIIP (statement of

direction)\* zIIP allows a program working with z/OS to have all or a portion of its enclave Service Request Block (SRB) work directed to zIIP. Above types of DB2 work are those running in enclave SRBs, of which portions can be sent to zIIP.

# DB2 9 for z/OS

## Addressing Corporate Data Goals

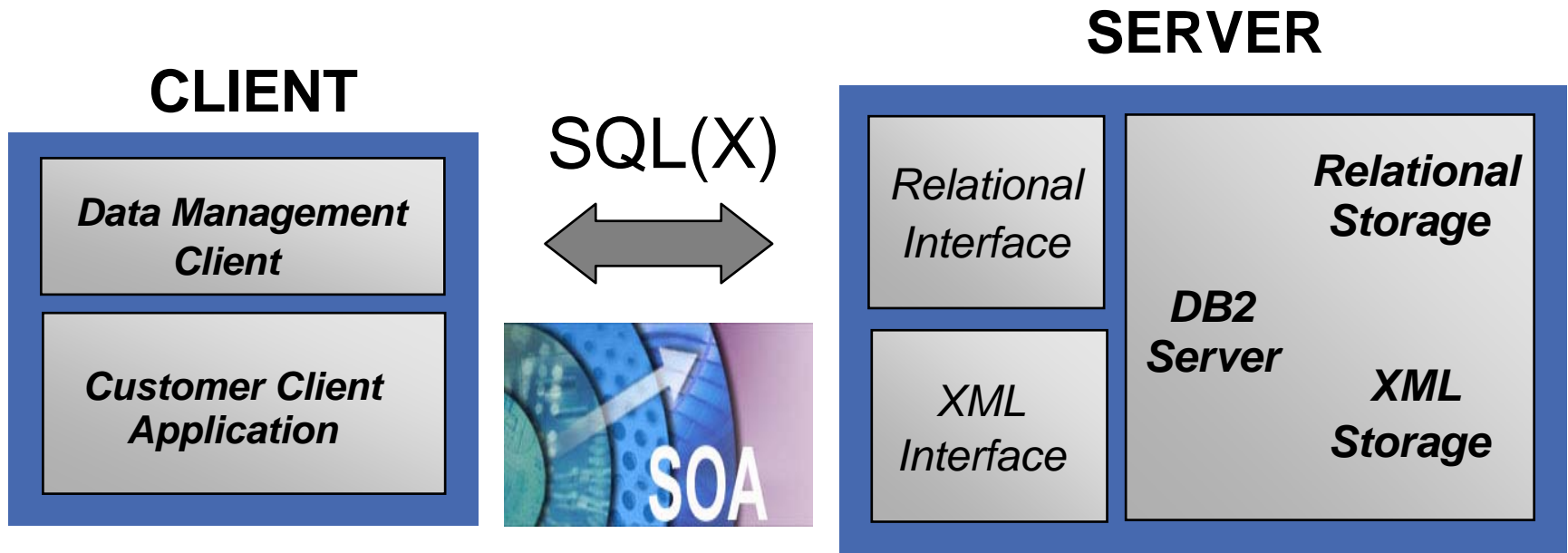
<p><b>SOA Enablement</b></p>	<ul style="list-style-type: none"> <li>• pureXML</li> <li>• Optimistic locking for WebSphere</li> <li>• LOB performance, usability</li> </ul>
<p><b>Dynamic Warehousing</b></p>	<ul style="list-style-type: none"> <li>• Many SQL improvements</li> <li>• Dynamic index ANDing</li> <li>• Histogram statistics</li> <li>• New built-in OLAP expressions</li> <li>• Optimization Service Center</li> </ul>
<p><b>Simplification, Reduced TCO</b></p>	<ul style="list-style-type: none"> <li>• Index compression</li> <li>• Partition By Growth tables</li> <li>• Cloned tables</li> <li>• Volume based backup / recovery</li> </ul>
<p><b>Workload Consolidation</b></p>	<ul style="list-style-type: none"> <li>• More online schema changes</li> <li>• Online REBUILD INDEX</li> <li>• Trusted context and ROLES</li> <li>• Parallel Sysplex clustering improvements</li> </ul>





# XML Capabilities Inside the Engine pureXML™

**Performance, Performance, Performance**



Native storage    Schema    Index    Functions    Utilities



# XML – a powerful but costly language

- Example: look up IBM stock price

DATA PASSED: IBM 94

5 chars  
Traditional

SAMPLE CODE:  
`<SOAP-ENV:Envelope  
 xmlns:SOAP-ENV=  
 "http://www.w3.org/2001/06/soap-envelope"  
 SOAP-ENV:encodingStyle=  
 "http://www.w3.org/2001/06/soap-encoding">  
 <SOAP-ENV:Body>`

272 chars  
with XML  
and SOAP

```

<Signature Id="MyFirstSignature" xmlns="http://www.w3.org/2000/09/xmldsig#">
  <SignedInfo>
    <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2000/CR-xml-c14n-20001026"/>
    <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#dsa-sha1"/>
    <Reference URI="http://www.w3.org/TR/2000/REC-xhtml1-20000126/">
      <Transforms>
        <Transform Algorithm="http://www.w3.org/TR/2000/CR-xml-c14n-20001026"/>
      </Transforms>
      <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
      <DigestValue>YWJjZGxma3NqamRlZmZnaGlvZGZrbGZramFzZGw7Cg==</DigestValue>
    </Reference>
  </SignedInfo>
  <SignatureValue>
    YWJjZGxma3NqamRlZmZnaGlvZGZrbGZramFzZGw7Cg==
  </SignatureValue>
  <KeyInfo>

```

919 chars  
with XML,  
SOAP and  
digital  
certificate

Many  
chars  
with XML,  
SOAP,  
certificate  
encryption

<And a lot more coding than I can imagine>

# DB2 pureXML Industry Bundles

- **Demonstrations and samples using industry standard XML formats with DB2 pureXML**

- Quick start for customers and partners based on popular industry standard XML:

- ACORD for Insurance (enabled for DB2 for z/OS)
- CDISC for Clinical Data
- FIXML (enabled for DB2 for z/OS) for Banking
- FpML and MISMO for Financial Services



- Data Model with registered XML schemas and XML documents stored in DB2 pureXML database.

- Sample XML queries

- Example services:

- Create, Replace, Update, Delete and Query
- Atom feeds
- XForms



Learn more from alphaworks at:

<http://www.alphaworks.ibm.com/tech/purexml>

# DB2 XML partners

## AgencyPort

AgencyPort is the leading provider of web-based new business, endorsement and renewal solutions designed specifically for property and casualty insurers.



## Altova - XML development tools

Altova is the provider of the world's leading XML development tools, including XMLspy the industry standard XML development environment. **Coral8 - Complex Event Processing**



## Coral8

The Coral8 Engine enables you to build and deploy powerful Complex Event Processing (CEP) applications for any enterprise business function that can benefit from real-time awareness.



## Exegenix - Document Conversion to XML

Exegenix technology converts content into XML quickly, accurately, and cost-effectively, with no re-keying, and no dependency on consistently-formatted input.



## JustSystems - Rapid XML Application Development

The combination of xfy from JustSystem and DB2 9 allows users to quickly assemble XML applications to access and manage a wide range data.



## Napersoft - Customer Communications Management

Napersoft provides Customer Communications Management solutions with its family of WebDemand360 Correspondence Manager for WebSphere offerings and DB2 9.



## Nextance - Contract Performance Management

Nextance offers Contract Performance Management solutions that take full advantage of DB2 9 XML capabilities.



# DB2 9 and pureXML



ADP Nederland BV uses Extensible Markup Language (XML) as its main interface language between IT components. They moved to DB2 9 for z/OS to improve efficiency and flexibility in managing XML documents along with their existing relational data management infrastructure.

## Benefit

The ability to store and retrieve XML and relational objects directly in one database will drive a **20% improvement in operating efficiency** over their existing Windows XML implementation.

Lower Development Costs

- ***Reduced code and development complexity***

Greater Business Agility

- ***Easily accommodate changes to data and schemas***
- ***Update applications rapidly and reduce maintenance costs***

Improved Business Insight

- ***Access to unexploited***  
***“Not a bolt-on or band-aid approach, this is XML without compromise” – Univar USA***

## DB2 9 for z/OS Performance Improvements

- **Performance / Scalability Enhancements**
  - Especially Insert, Update & Delete
- **Query / Access Path Performance Enhancements**
- **Significant CPU time reduction in most utilities**
- **Other Performance Enhancements**
  - Native SQL procedure, index compression
  - LOBs, Varchar
- **Synergy with new hardware: zIIP, MIDAW, DS8000, ...**
- **Improved virtual storage usage Below 2GB DBM1**





## DB2 9 for z/OS Value Unit Edition (VUE)

### New Workload Offering available OTC

- **Designed for New Workload in new and existing DB2 for z/OS customers by**
  - Offering customers DB2 9 as OTC for qualified net new workloads on z/OS
  - Net new workloads limited to commercial (packaged) applications, data warehouses, and WebSphere. Applications running on a measurable standalone machine or LPAR.
  - Customers can now add new applications and workload to System z without affecting their MLC cost.
  
- **Strengthens System z role as a cornerstone for new applications and projects such as SOA, data warehousing, operational BI, ERP, and more**

# Data Serving Solutions:

## **IBM Rapid Deployment of z/OS and DB2**

*This solution offers new customers the ability to deploy a new z/OS & DB2 foot print within hours. This targets customers new to System z, particularly in emerging markets.*

Announce: **November 13, 2007**

Availability: **November 30, 2007**

### ▪ Solution Value Proposition:

- **This solution assists new customers with the installation and implementation of z/OS and DB2 data sharing environment. IBM STG Lab Services delivers a new mainframe system that is optimized for use as a data server within hours. The data serving environment is defined using IBM best practices and is configured for high availability and high scalability.**
- **Provides a centralized data server, avoiding fragmented silo's of data that inhibit growth, integration, and business efficiency.**
- **Eliminates lack of installation skills as inhibitor to new customers for z/OS-DB2 environments.**

Target Audience (inc. Core, Invest and/or Acquire):

- **This new service is intended for customers new to z/OS who want a high availability (DB2 data sharing, parallel sysplex) environment deployed quickly.**
- **Invest and Acquire: new SMB accounts and white space customers who do not have System z installed.**

**-25 In very unique situations, aligned and Integrated Accounts with specific needs (i.e., within divisions, distribution centers, POCs,**



# A Single View of the Enterprise Drives the requirement for Data Warehousing



- **Data volumes rise**
- **Amount of historical Information grows**
- **Number of users grows**
- **Questions are more numerous and sophisticated**
- **Schema complexity grows**
- **Workload mixture changes**
- **Development time shrinks**

# Factors that Influence Data Warehouse on System z Platform Selection

- ✓ Existing infrastructure
- ✓ Platform preferences and skills in-house
- ✓ Budget/Cost
- ✓ Server Consolidation
- ✓ Market trends in warehousing solutions and vendors
- ✓ Complexity
- ✓ Competitive influences
- ✓ Mergers and acquisitions or consolidations
- ✓ Data or application sources
- ✓ Business processes required and business drivers
- ✓ Reliability, Extremely High Availability, Security



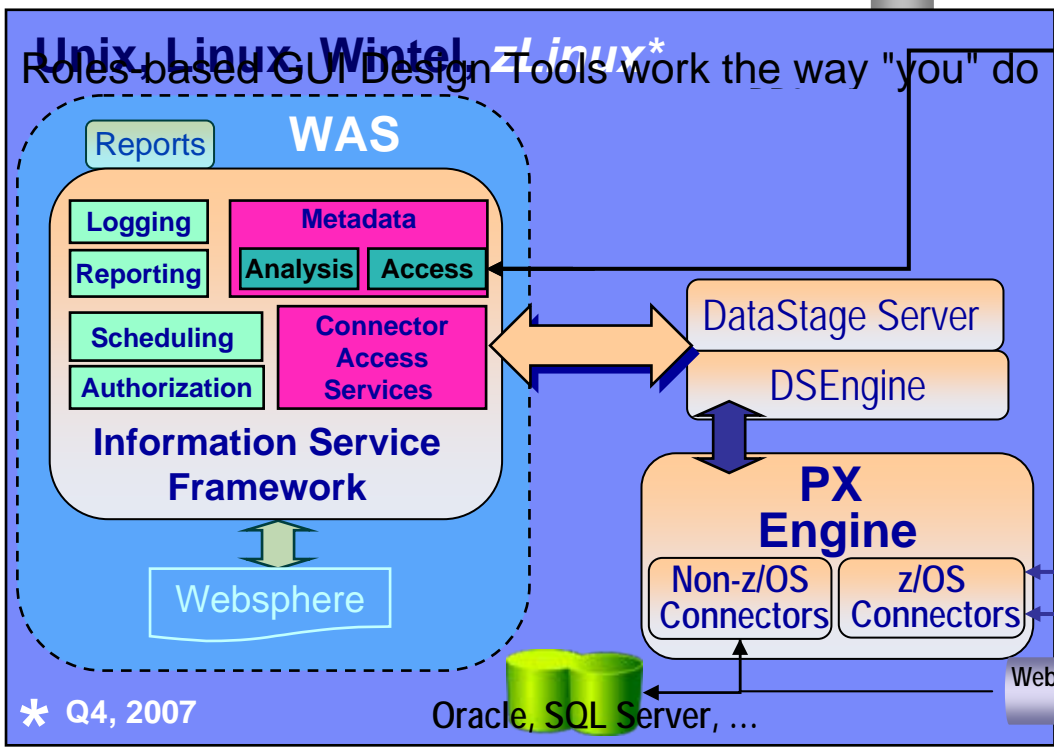
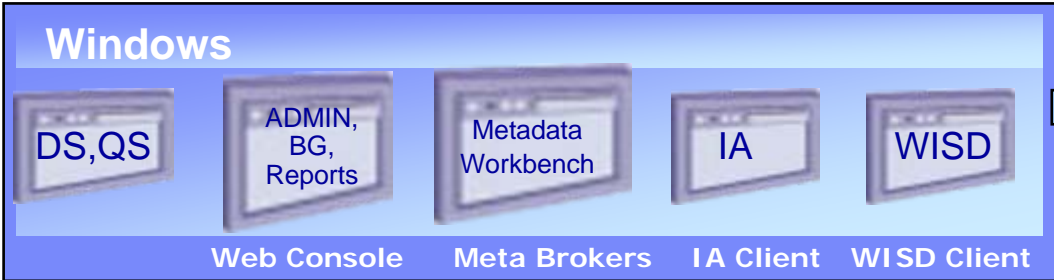
# IBM Information Server for System z

## *Benefits of this architecture*

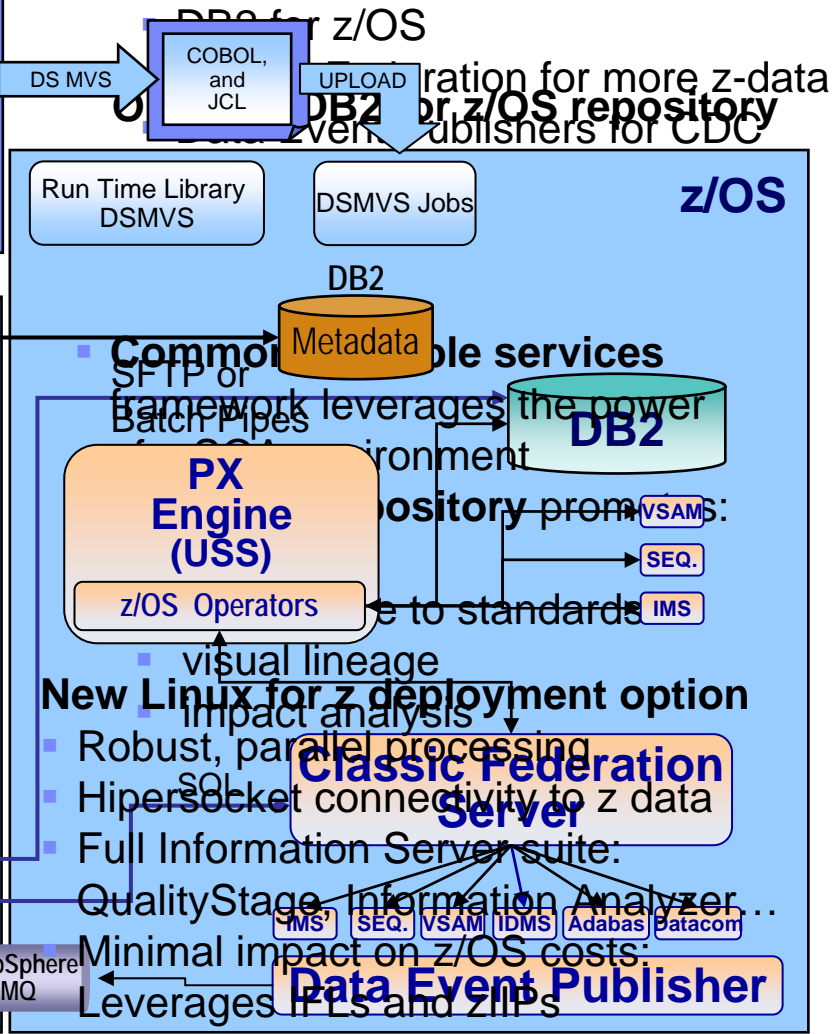
- **Greater Efficiency Leveraging System z**
  - **z/OS MIPs consumption dramatically reduced vs. USS or MVS approaches**
    - **Minimizes impact on other z/OS software costs**
  - **All Job Processing is on zLinux (except the z/OS data access)**
  - **DB2 workload on z/OS can qualify for offload to ZIIP specialty engines**
- **High performance z data connectivity**
  - **Batch Pipes for DB2 load, DRDA to DB2 over hipersockets**
  - **SQL to Classic over hipersockets**
  - **Integration with MQ and therefore with the Data Event Publishers**
- **Seamless integration with other IBM Information Server platforms**
  - **Same operational architecture and metadata Repository**
  - **Eliminates deployment issues**
  - **Maintains value of DataStage for z/OS investments**

# IBM Information Server Technology Model

A flexible, multi-platform solution



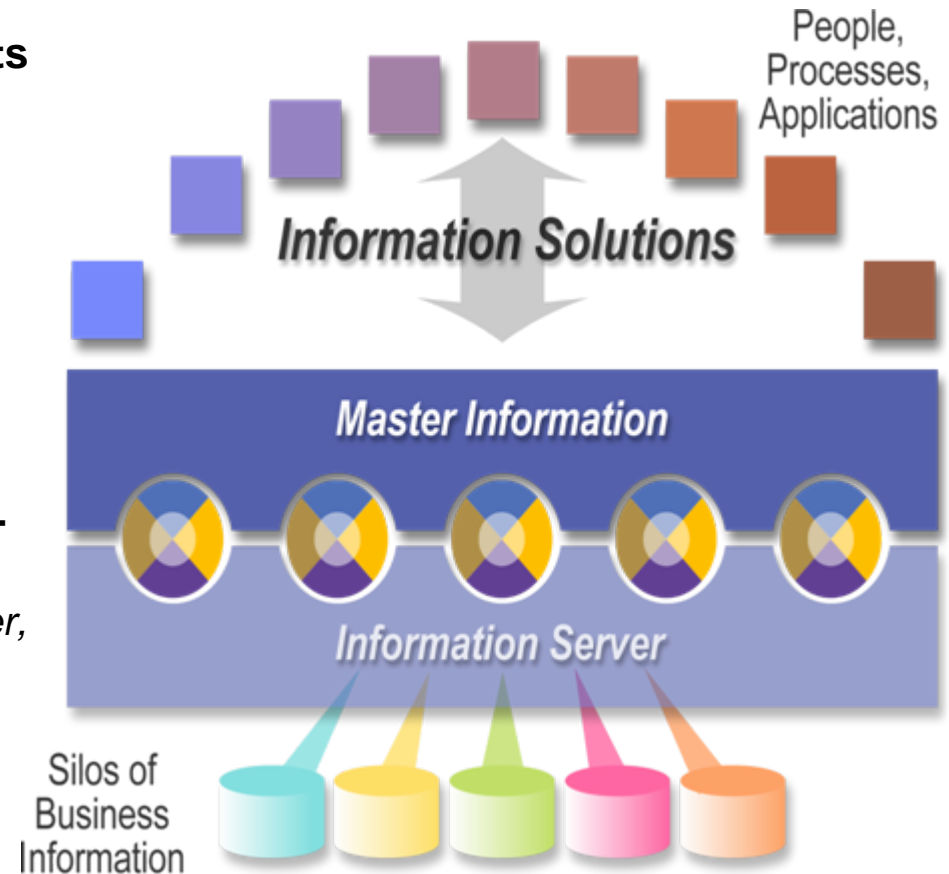
**Rich connectivity with:**  
 Continuous z/OS deployments  
 Application & OS updates





# Information Solutions Delivers Business Innovation

- **Configure solutions to address our clients toughest Information Intensive Business Challenges, such as:**
  - Customer-centricity
  - Product and service optimization
  - Risk & compliance
  - Threat & fraud intelligence
- **Built from an integrated system for Multi-form Master Data Management**
  - *Multi – Domain ( Partner, Product, Customer, Account, Location*
  - *Multi – Style (Collaborative, Operational , Analytical*
- **Based on IBM Information Server**

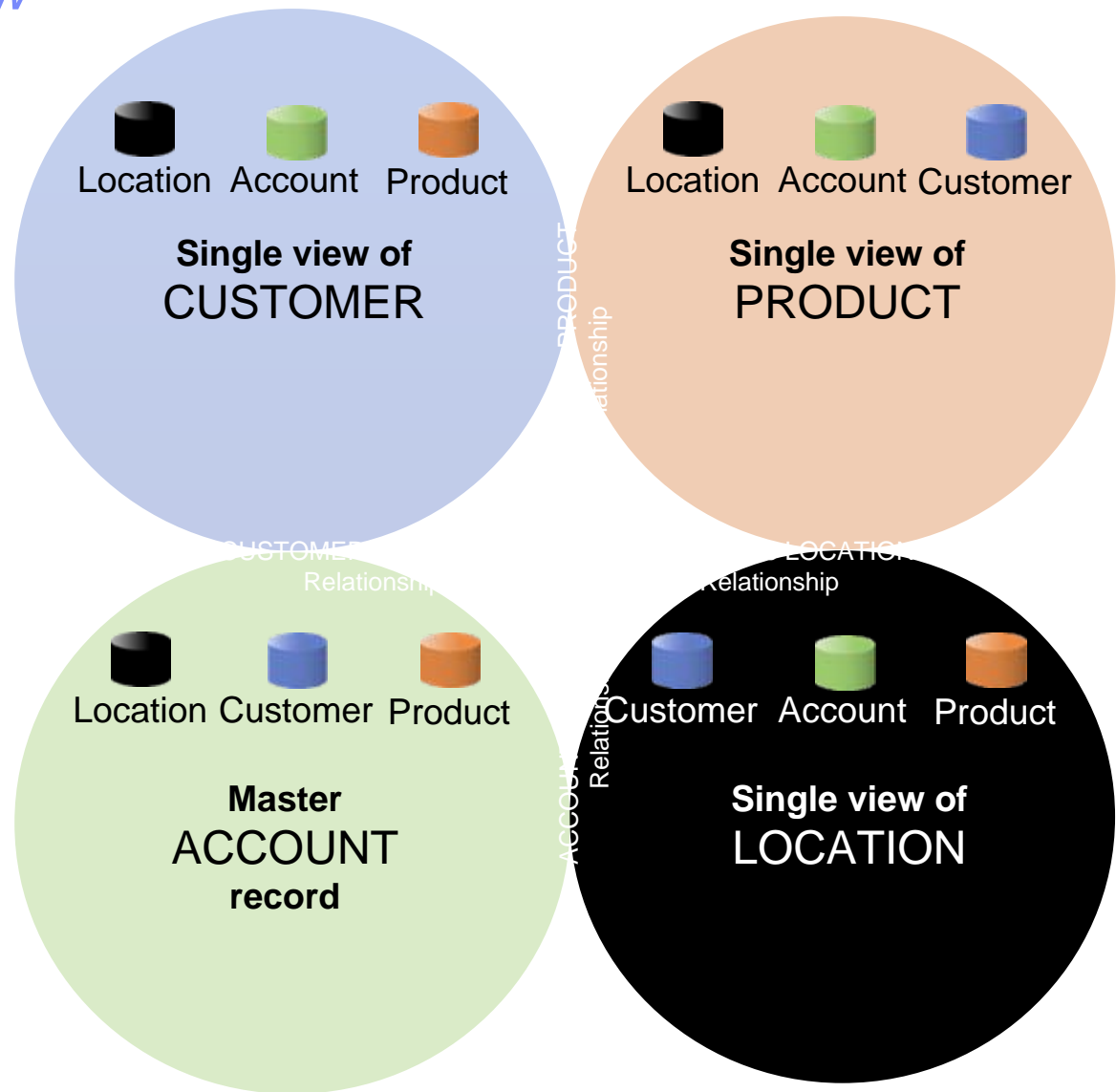




# The Evolution of the Master Data Management Market

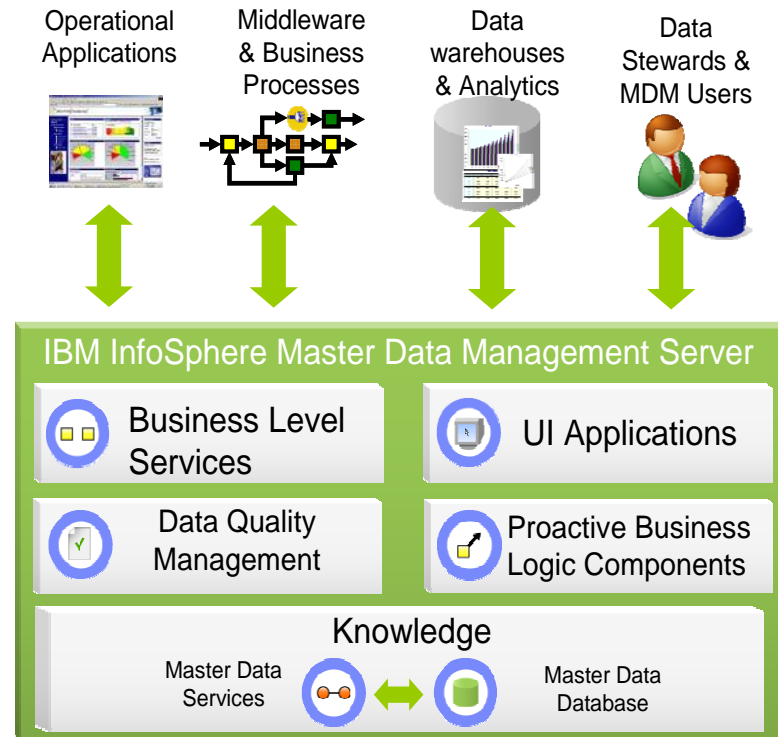
*Clients demand MDM now*

- Organizations recognize the commonality among MDM projects
- The market requires a common MDM strategy and application
- Clients continue to identify a starting point, often a single domain, and plan to grow over time



# IBM InfoSphere MDM Server Value Proposition

- **The first multi-domain, multi-function MDM product in the market**
- **Packaged to address all types of MDM implementations**
  - From small entry-level projects through to strategic transaction-hub deployments
  - Allows clients to grow as required by implementing existing functionality
  - Significantly lowers client risk and time/cost to implement
- **SOA Library - 800 pre-packaged business services**
  - Significant out of the box product functionality
  - Reduces total cost of ownership
- **High Performance & scalability**



# IBM InfoSphere MDM Server – Key Features

- **Extensive Party (Customer) Domain capabilities**

- Market-leading CDI functionality
- New in this release
  - Know-Your-Client Compliance
  - Know-Your-Client Questionnaire
  - Data Stewardship UI Enhancements

- **New Account Domain**

- Managed Accounts – account bundles & relationships
- Allows organizations to service “bundles” and “value packages”

- **New Operational Product Domain**

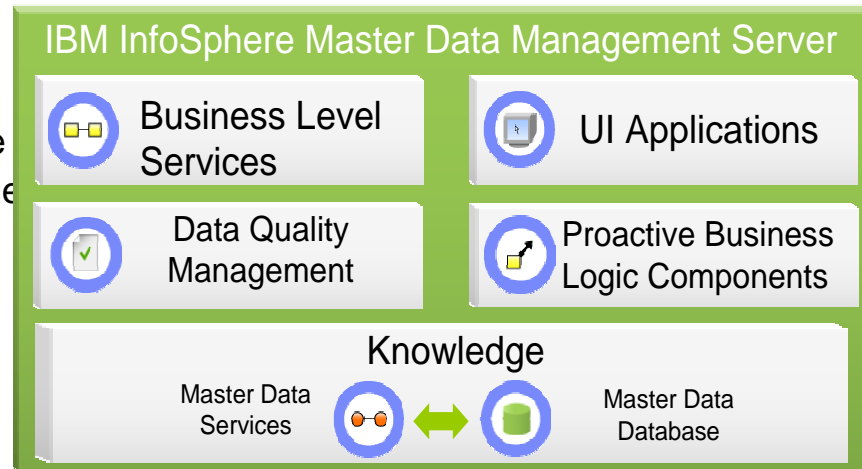
- Products, categories, hierarchies, and terms and conditions

- **Integration with Information Server v8 – data quality, data integration**

- **Integration with Content Management & FileNET**

- **Natural Upgrade Path for WCC Customers**

- Builds on WCC and WCC technology
- Fully backward compatible with WCC v7
- Same as normal WCC Upgrade



# DB2 and IMS Tools

## ***Reducing TCO is our first focus***

- ✓ Provide autonomic features to add capability and simplify operations
- ✓ Avoid tedious tasks and reduce errors
- ✓ Preserve your investment in z/OS applications and databases

**2007: Reduce your TCO  
Increase your value**

**2000: Reduce your TCO**

**2001-2002 Product  
replacements**

**2003-  
Day 1 Support**

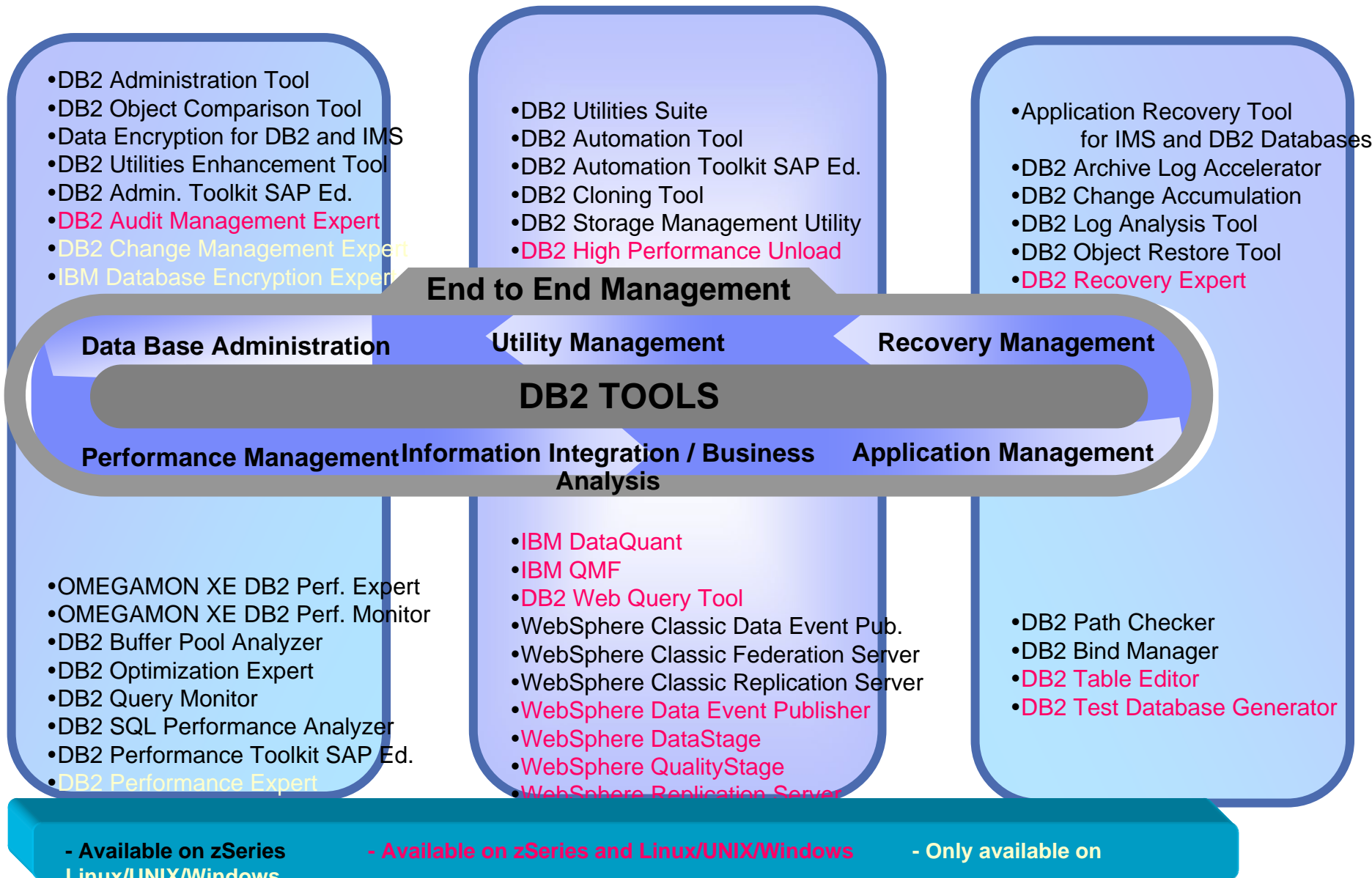
**2003: Integration of  
products, new capabilities,  
better performance**

**2004 Autonomic Computing and  
End to End Monitoring**

**Investment**



# DB2 Tools Solution Portfolio



# IMS Tools Solution Portfolio

- Data Encryption for IMS and DB2 DBs
- IMS Database Repair Facility
- IMS HALDB Conversion and Maint. Aid
- IMS HD Compression-Extended
- IMS Library Integrity Utilities
- IMS Online Reorganization Facility
- IMS Parameter Manager
- IMS Sequential Randomizer Generator
- IMS Sysplex Manager
- IMS Tools Knowledge Base

- IMS High Performance Fast Path Utilities
- IMS High Performance Load
- IMS High Performance Pointer Checker
- IMS High Performance Prefix Resolution
- IMS High Performance Unload
- IMS Index Builder
- IMS Parallel Reorganization
- IMS Database Control Suite

- IMS Application Recovery Tool for IMS and DB2 Databases
- IMS Database Recovery Facility
- IMS DEDB Fast Recovery
- IMS High Perf Image Copy
- IMS High Perf Change Accumulation

## End to End Management

**Data Base Administration**

**Utility Management**

**Recovery Management**

**IMS TOOLS**

**Performance Management**

**TM Management**

**Application Management**

- IMS Buffer Pool Analyzer
- IMS Network Compression Facility
- IMS Performance Analyzer
- IMS Problem Investigator
- Tivoli OMEGAMON XE for IMS

- IMS Command Control Facility
- IMS ETO Support
- IMS HP Sysgen Tools
- IMS Queue Control Facility

- IMS Batch Terminal Simulator
- IMS Batch Backout Manager
- IMS Connect Extensions
- IMS MFS Reversal Utilities
- IMS Program Restart Facility

# The Latest News on Tools

## *Reduced Cost of Database Administration*

### Agility

Enhanced

- IBM DataQuant, V1.2
- IMS Tools Knowledge Base **New**
- IMS High Performance Change Accumulation, V1.4

### Performance

New

- DB2 Optimization Expert, V1.1
- OMEGAMON XE for DB2/IMS, V4.1
- DB2 Query Monitor, V2.2
- IMS Performance Analyzer, V4.1
- IMS Problem Investigator, V2.1

Enhanced

### Compliance

New

- WebSphere Replication for DB2 V9.5
- DB2/IMS Audit Management Expert, V2.1
- IBM Data Encryption for IMS and DB2 Databases, V1.1

### Efficiency

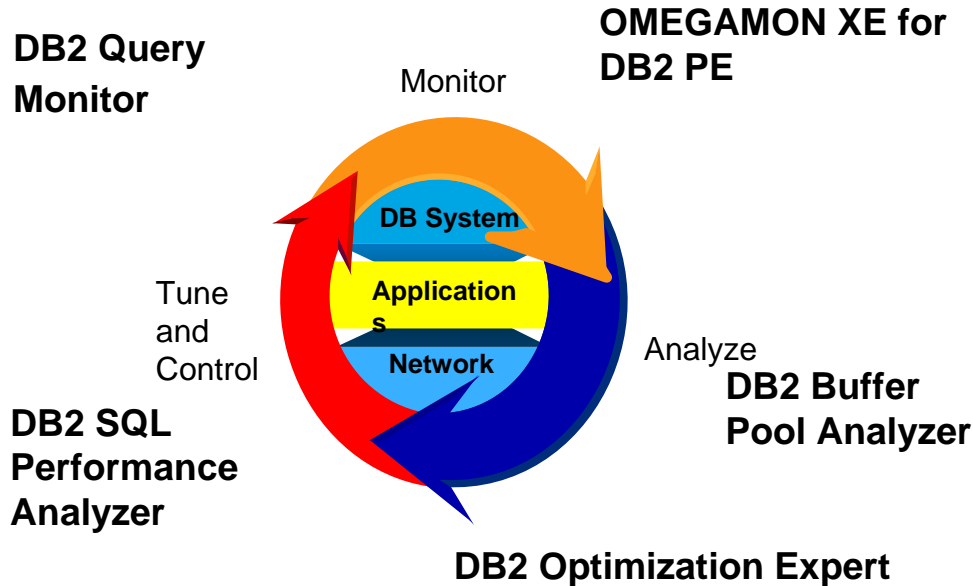
Enhanced

- DB2 Utilities Enhancement Tool, V2.1
- DB2 Recovery Expert, V2.1
- DB2 Cloning Tool, V2.1
- IMS HALDB Conversion and Maint. Aid, V3.1
- IMS High Performance Unload, V1.2
- IMS Connect Extensions, V2.1



# DB2 Performance Management Tools

*Provide tools to monitor and tune DB2 systems and applications to obtain optimal performance and lowest cost*



## Value Statements

- Day-1 support for new DB2 versions/functions
- Reduce TCO by actively supporting DBA in analysis, tuning, and planning
- Leave the choice of the preferred user interface to the user (Classic/ISPF vs. graphical user interface)
- End-to-end monitoring -- be part of the bigger picture

Build **expert knowledge** into the tools, not only **tools for the expert**

## Optimization Service Center and Optimization Expert

### Index Advisor

- Analyzes a workload and recommends indexes
  - Enabling you to select the best index to optimize query and application performance
- These recommendations can be implemented immediately
- Future: recommends MQTs and partitioning

### Key value areas:

- Lowers Total Cost of Ownership by optimal exploitation of DB2 for z/OS
- Increases Quality of Service by proactively solving problems before they occur
- Decreases reliance on zSeries specific skills through autonomies and open tools

### Optimization Service Center (OSC)

- Visual Explain
- Stats Advisor
- Service SQL

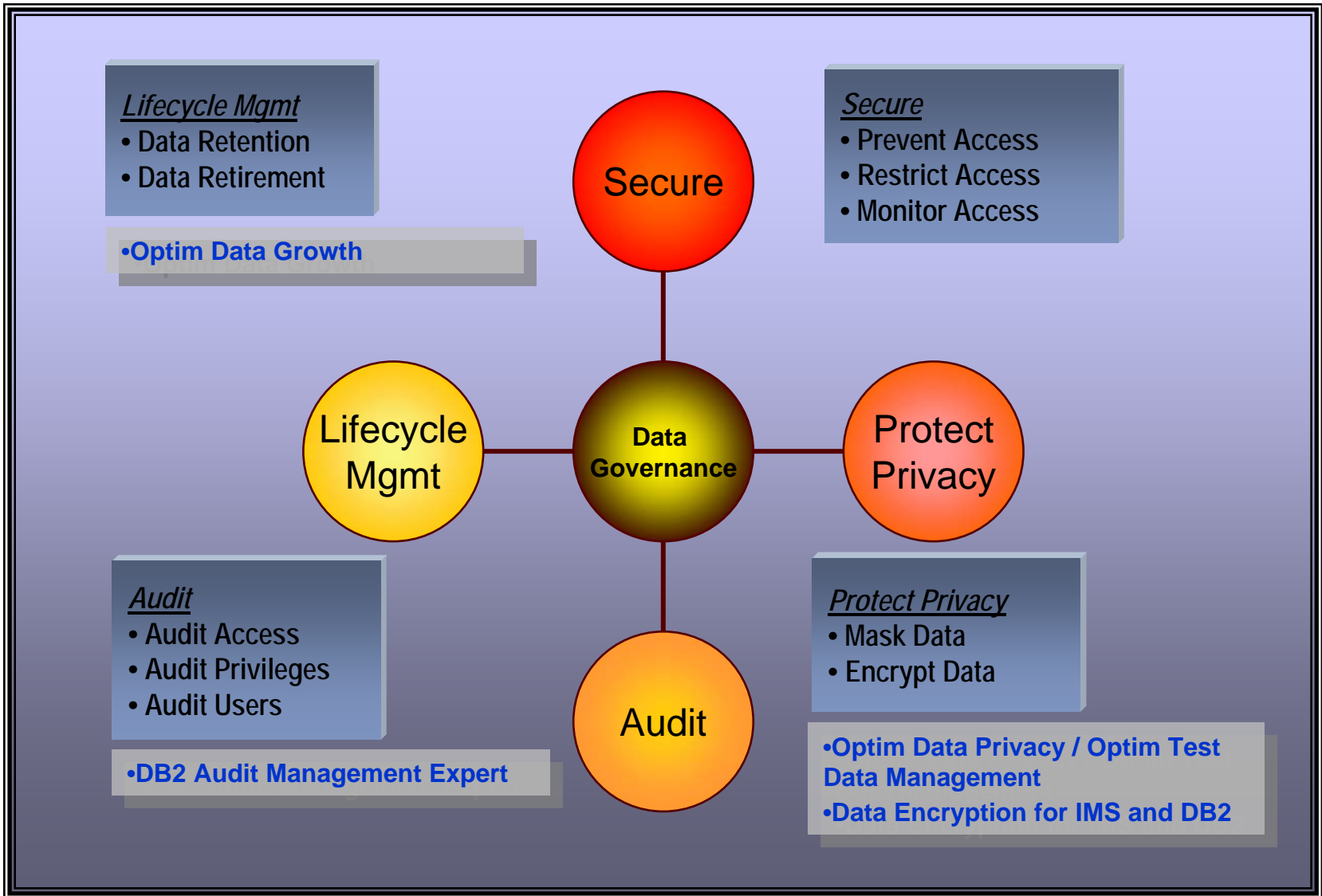
39 Visual Plan Hint \*

### Optimization Expert (OE)

- Index Advisor
- Query Advisor
- MQT Advisor \*

\* scheduled for future release

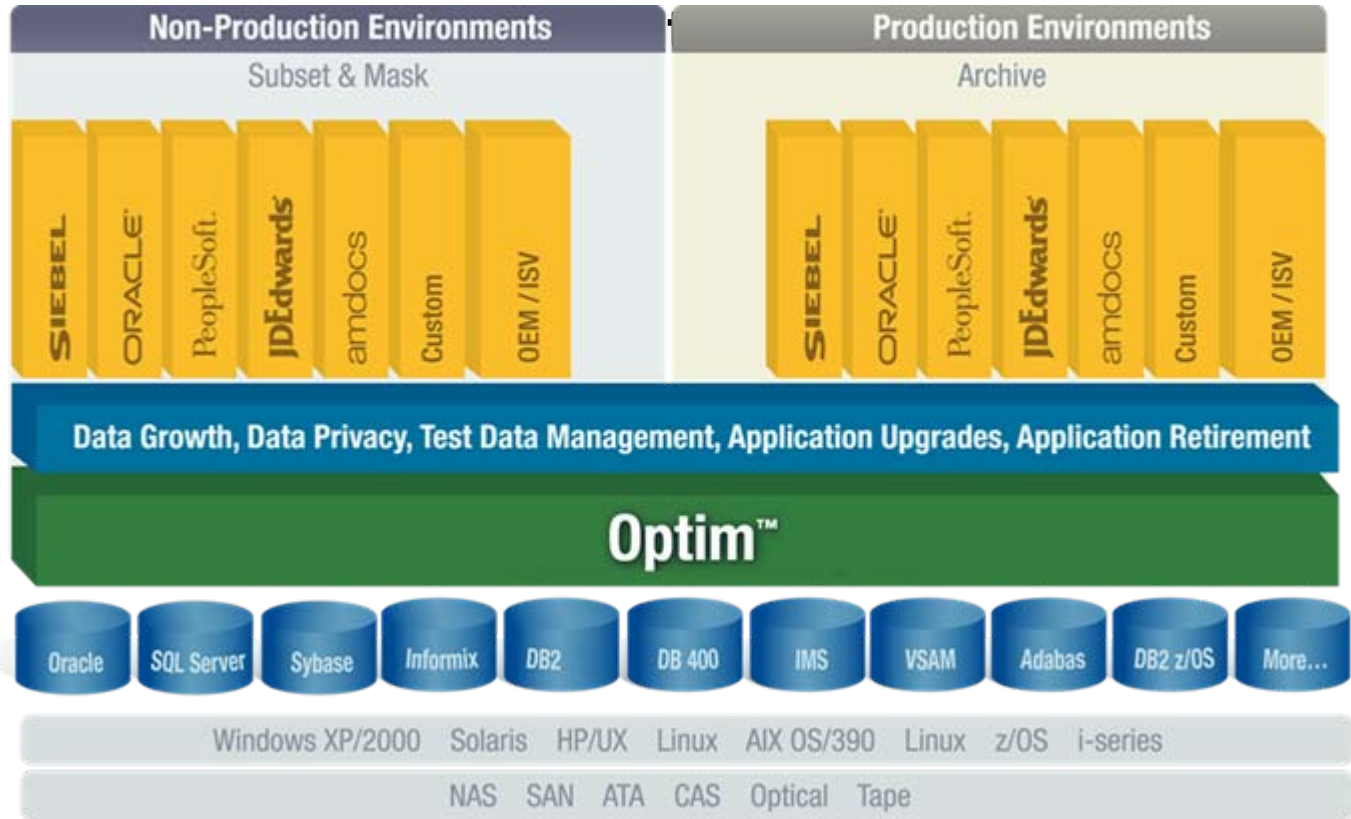
# IBM Data Governance Software



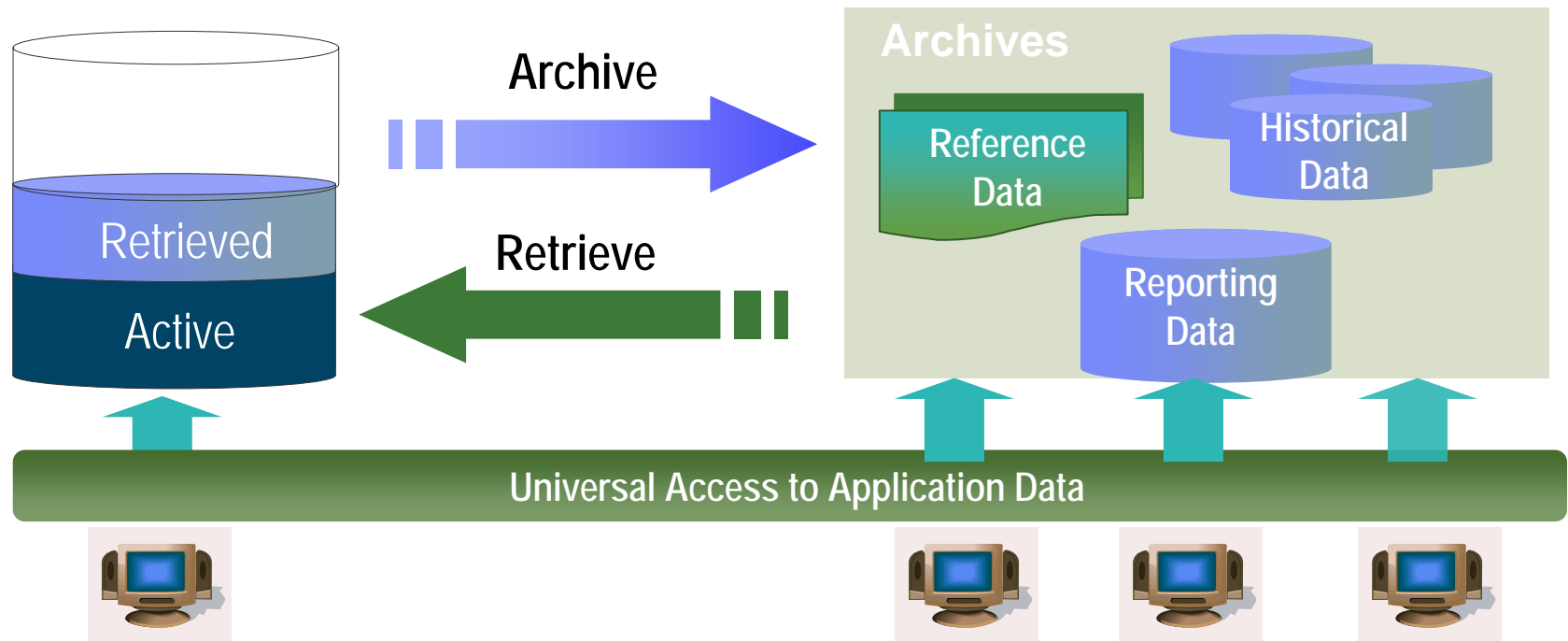
# IBM Optim™

*Innovation to manage the lifecycle of data*

**Scalable solution provides a central point to deploy policies and to extract, store, port, and protect application**

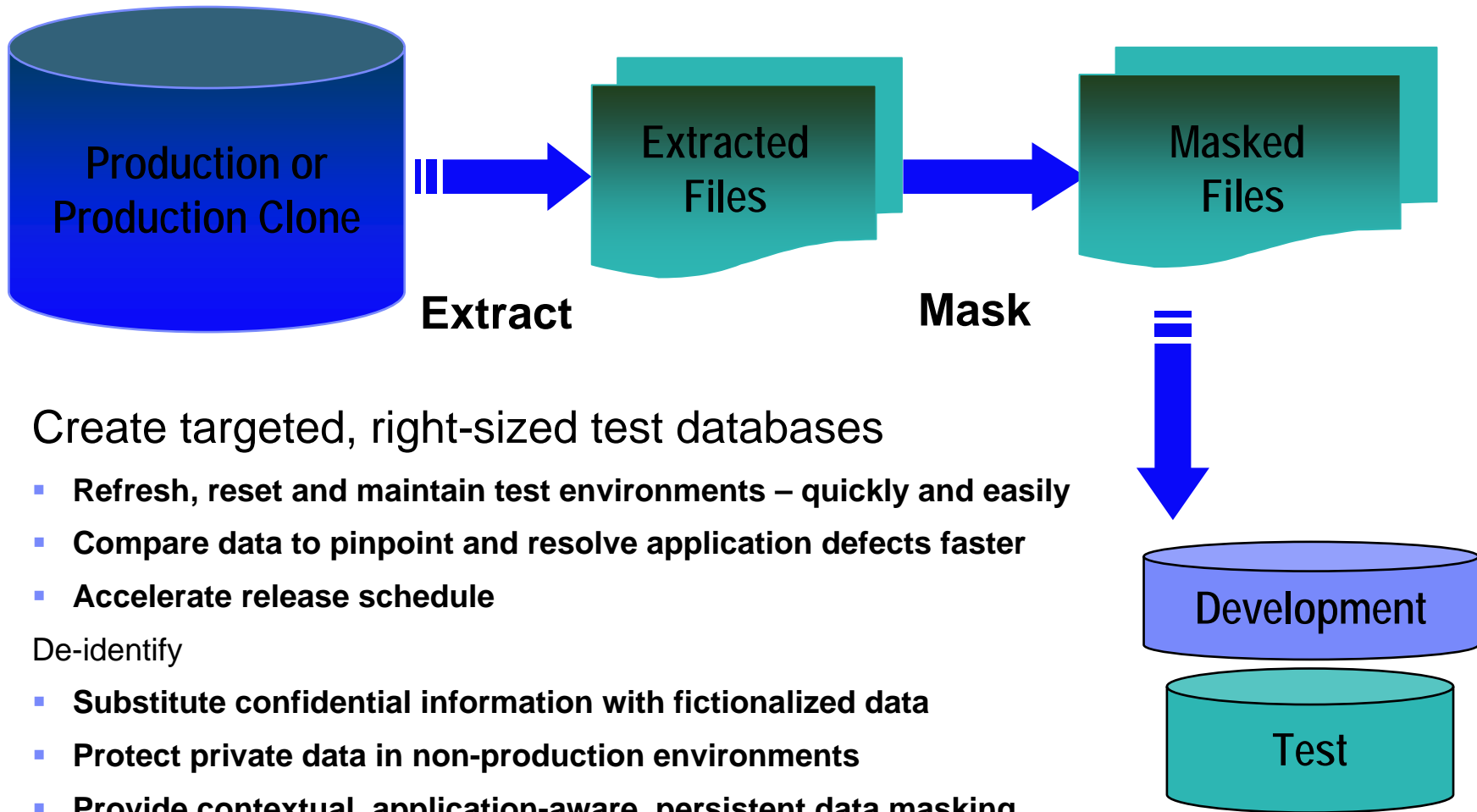


# Optim Data Growth Solution



- Addresses data growth, application retirement, data retention compliance
- Complete Business Object provides historical reference snapshot of business activity
- Storage device independence enables ILM
- Immutable file format enables data retention compliance

# Optim Test Data Management and Data Privacy Solutions



Create targeted, right-sized test databases

- Refresh, reset and maintain test environments – quickly and easily
- Compare data to pinpoint and resolve application defects faster
- Accelerate release schedule

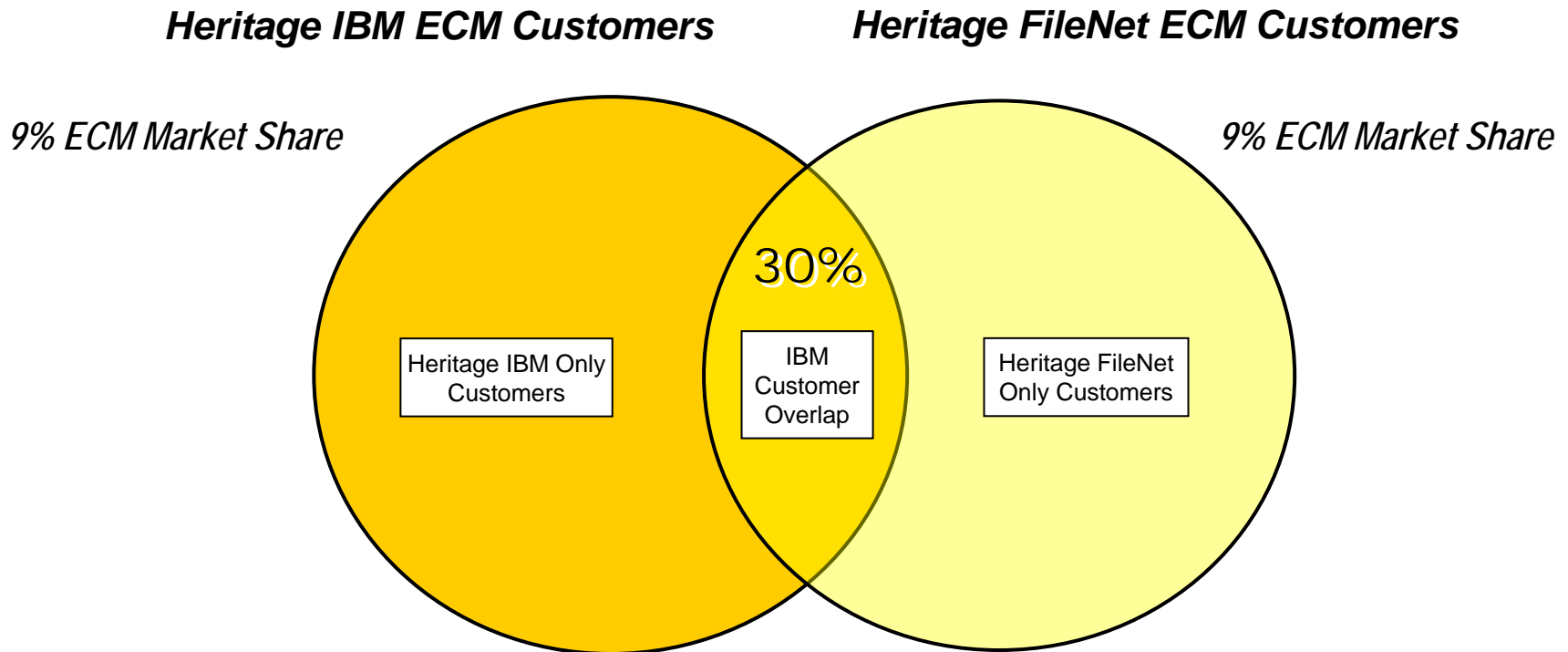
De-identify

- Substitute confidential information with fictionalized data
- Protect private data in non-production environments
- Provide contextual, application-aware, persistent data masking

# Our ECM Strategy supports our Installed Customer Base

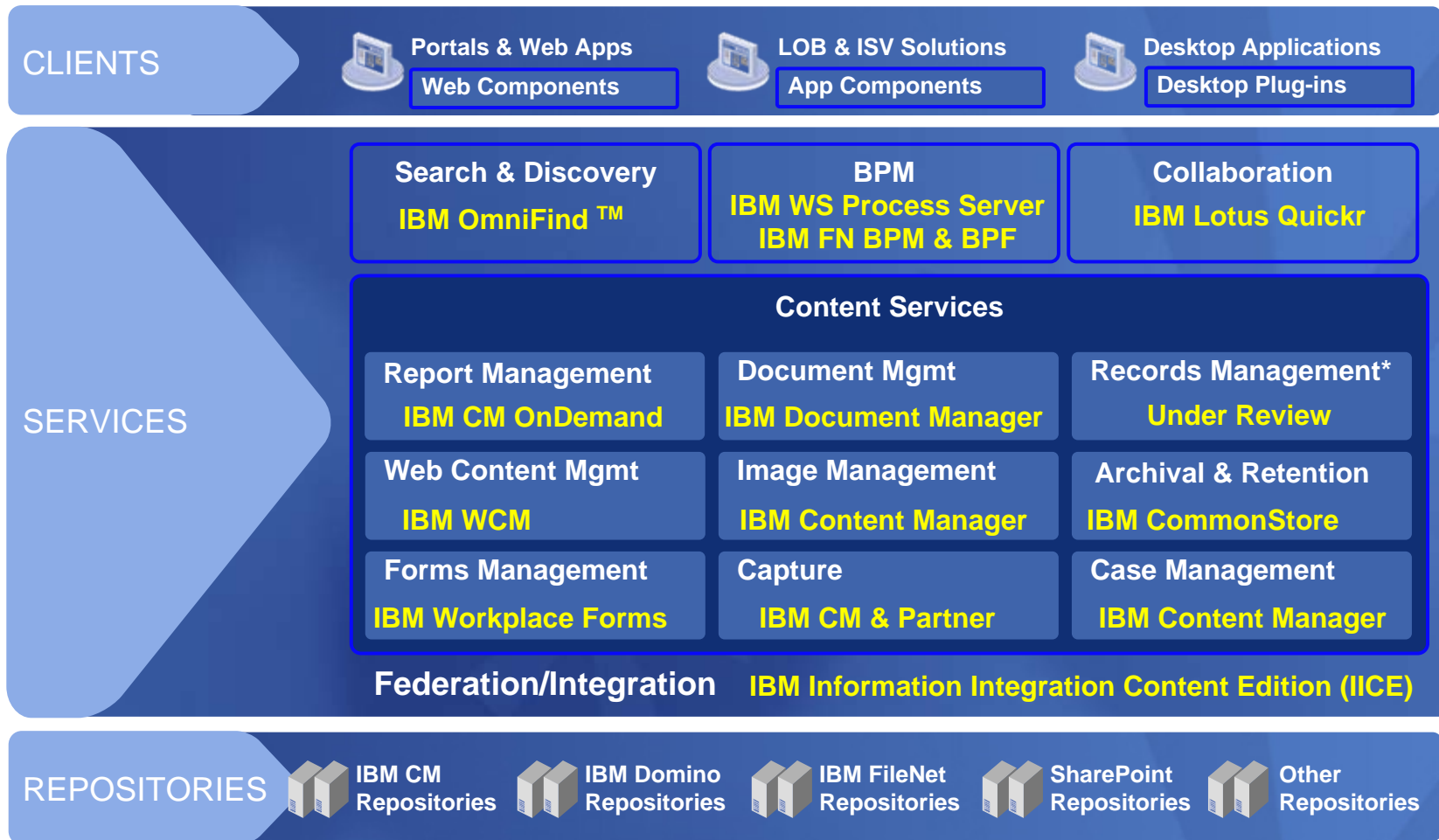
- **Significant Installed Customer Base that have both CM v8 and P8**
- **Significant Customer Investments across CM v8 and P8**
- **Existing Customers are critical to IBM ECM's success**
- **Extend Customer Investments by introducing new integrated capability**

## Combined ECM Customer Base





# IBM Content Management Portfolio capabilities



\*Detailed Product Direction and Product Roadmap will be available in May 2007

# ECM System z Positioning

- **System z continues to provide the industry's premier platform for high reliability, performance, and scale**
- **Content Manager, Content Manager/OnDemand, and ImagePlus are utilized on System z by many of our largest customers, as their mission critical ECM platform**
- **IBM will continue to provide and enhance Content Manager and Content Manager/OnDemand on zOS**
- **IBM will continue to support and maintain ImagePlus**
- **IBM has introducing Content Manager and Content Manager/OnDemand on zLinux**
- **IBM has not announced plans for porting of the Filenet product family to zOS or zLinux, but we plan to support DB2 zOS with Filenet P8 by y/e 2008.**

# Content Manager V8.4 zOS Highlights

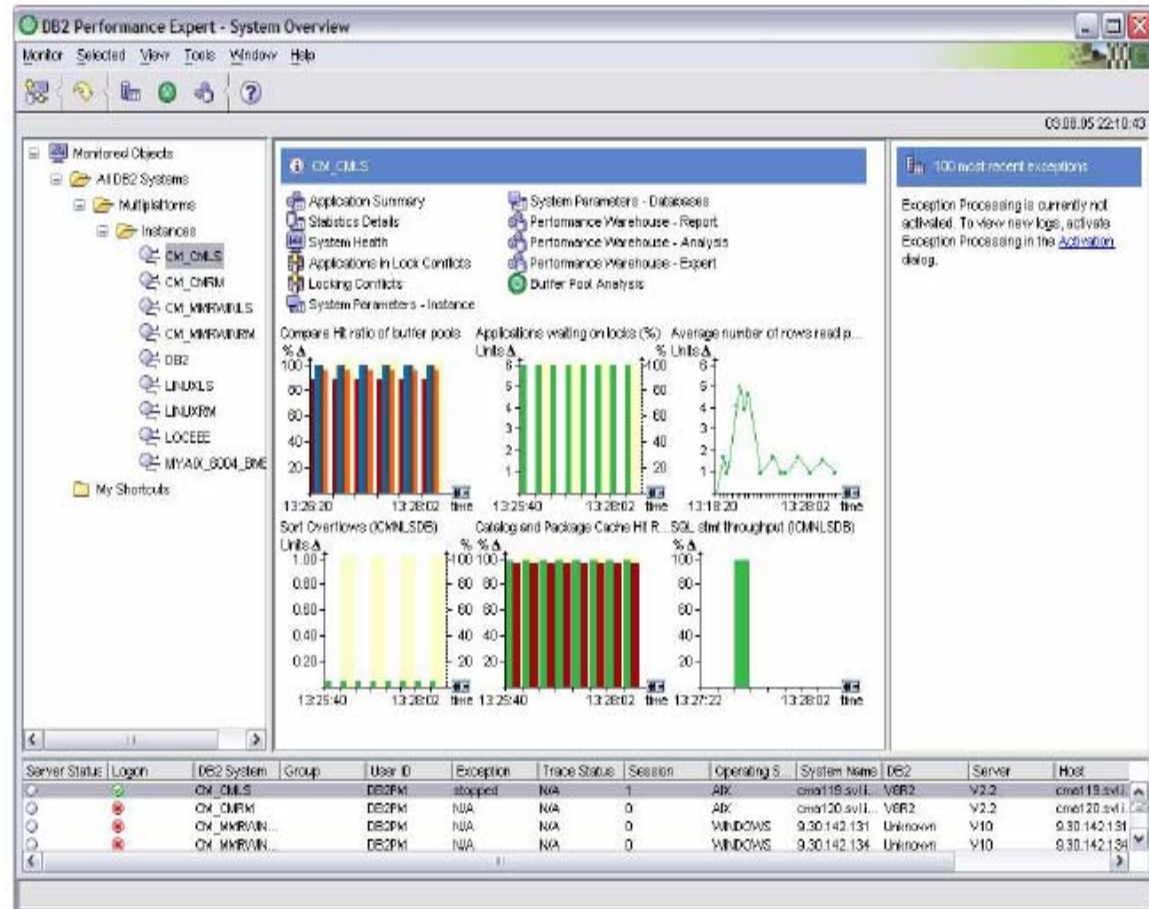
- **z/OS v1.7 - v1.9**
- **DB2 zOS V8.1 or DB2 zOS V9.1**
  - DB2 V9 – compatibility and new function mode
  - DB2 V8 – new function mode
  - *DB2 v7 will no longer be supported*
- **WAS z/OS v6.1 / JDK 5.0**
  - *Support for Java APIs under CICS pending CICS update to support JDK 5.0*
- **Windows 2003, XP, Vista (Including Sys Admin Client)**
  - *Windows 2000 will no longer be supported*
- **Internet Explorer 6 & 7**

## Content Manager V8.4 Highlights (continued)

- **XML API and Web Services**
- **Logging of “retrieve object” events**
- **IPv6 dual-stack support**
- **WAS z/OS v6.1 / JDK 5.0**
  - eClient, Resource Manager, Web Services
  - eClient v5 data sources/connection pooling
- **e-Client – ad-hoc query cancel**
- **ISPF Install front-end (z/OS)**
- **All documentation integrated**
  - reduced use of readme files

# DB2 Performance Expert for Content Manager

- **Optimize & tune DB2 environment**
- **Monitor for performance issues**
  - Database tuning
  - Memory usage & tuning
  - Disk usage
  - Applications
- **Generate alerts when events occur**
- **Record baseline activity**
  - Chart current against past
  - Plan future requirements
- **Separately priced feature of CM**



# Summary

- IOD – complementary to SOA
- Information in motion for business value
- Sustained and growing investment in z software
- Deep synergy with System z and z/OS for industry leading TCO
- Tools that exploit our data bases as soon as they are available
- Total commitment to your success with z

# IBM Information On Demand 2008

[ibm.com/events/InformationOnDemand](http://ibm.com/events/InformationOnDemand)

## Mandalay Bay October 26 - 31, 2008 Las Vegas, Nevada

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- Huge Expo Solution Center
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- One-on-ones with executives and specialists
- Birds of a Feather roundtables

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