

# *Information Management*

## *... with Linux on System z*

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1 NEW DEFINITION IS ADDED ON THE O.A.B.

1,600+ READS ON Scribd.

13,000+ HOURS MUSIC STREAMING ON PANDORA

12,000+ NEW ADS POSTED ON craigslist

370,000+ MINUTES VOICE CALLS ON skype

98,000+ TWEETS

20,000+ NEW POSTS ON tumblr.

THE LARGEST SOCIAL NETWORK

320+ NEW twitter ACCOUNTS

100+ NEW Linked in ACCOUNTS

13,000+ iPhone APPLICATIONS DOWNLOADED

1 NEW ARTICLE IS PUBLISHED

THE WORLD'S LARGEST COMMUNITY CREATED CONTENT

QUESTIONS ASKED ON THE INTERNET...

100+ Answers.com 40+ Yahoo! Answers

6,600+ NEW PICTURES ARE UPLOADED ON flickr

25+ HOURS TOTAL DURATION

600+ NEW VIDEOS YouTube

50+ WORDPRESS DOWNLOADS

70+ DOMAINS REGISTERED

60+ NEW BLOGS

695,000+ facebook STATUS UPDATES

168 MILLION EMAILS ARE SENT

694,445 SEARCH QUERIES

1,700+ Firefox DOWNLOADS

125+ PLUGIN DOWNLOADS

1,500+ BLOG POSTS

79,364 WALL POSTS

510,040 COMMENTS

# zEnterprise: An Integrated Data & Analytics Engine

57%

Our data is **scattered** in too many places (top response)

89%

Above all else, our data must be **secure** (tied for top response)

89%

When we access data it should appear as a **single source** of the truth (tied for top response)

## Data Ready:

**Enterprise data hub**

**High-volume secure and reliable transaction processing**

**Integrated, real-time operational analytics**

*Enterprise data repository that integrates operational analytics into the fabric of your business for accelerated insight*

Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, October, 2012  
 Base: 207 Global enterprise data analytics professionals  
 © 2012 Forrester Research, Inc. Reproduction Prohibited



## Infrastructure Matters – more than ever:

*Optimized environment delivers high performance analytics and real-time business insights*

### Operational requirements

- *System z is the most available platform you can buy (99.999%)*
- *The security on System z is unsurpassed by any other platform*

### Low Latency of key information

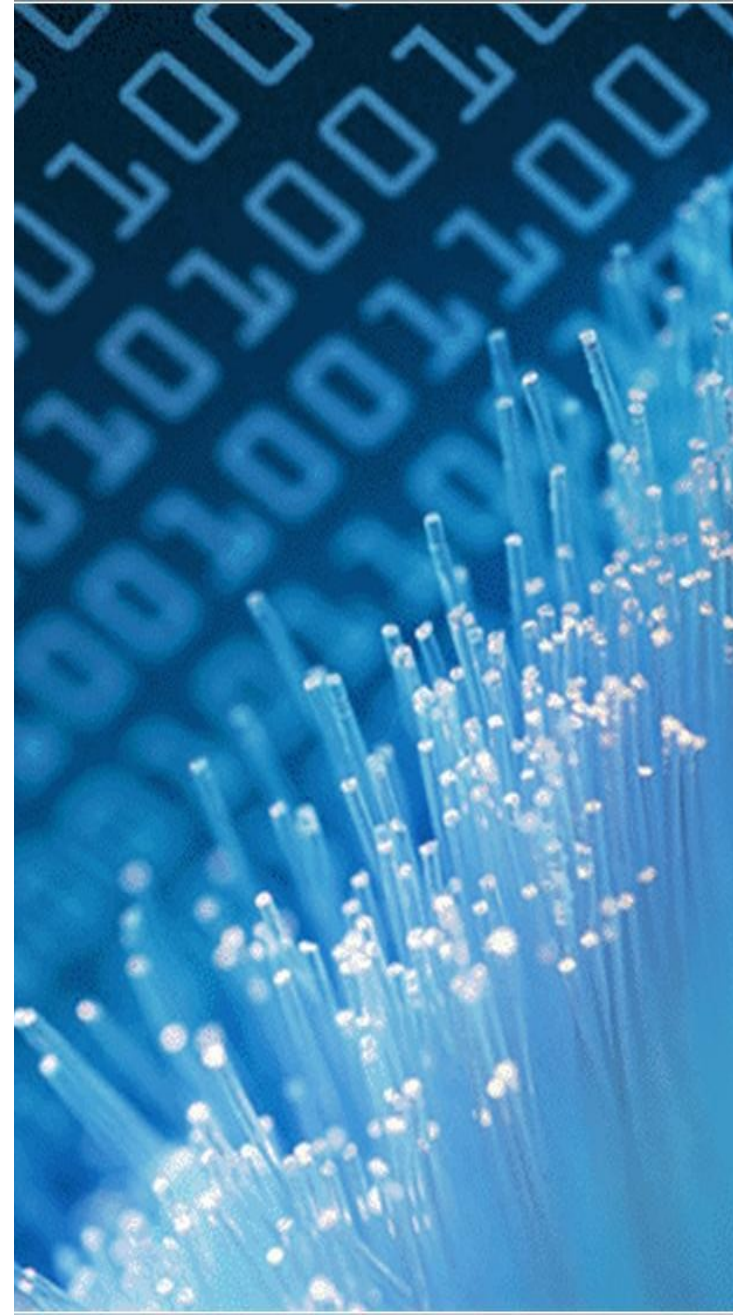
- *A large portion of today's operational data resides on the mainframe*

### Easy Scalability

- *Virtualization enables easy scaling*

### Lower costs through reduced complexity

- *Simplified management*
- *Reduced environmental costs*
- *Greater flexibility to meet changing needs*



# System z: The Information Hub of the Enterprise

## Easy to manage Infrastructure

IBM Smart Analytics System 9700

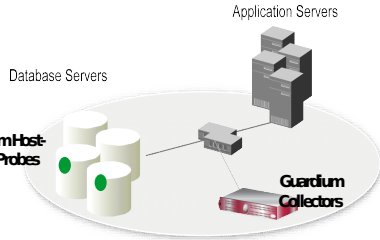


Query Accelerator



IBM DB2 Analytics Accelerator

### Data Administration and Data Protection



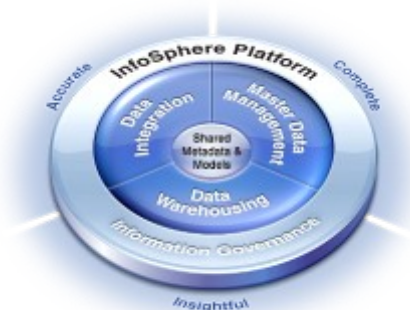
IBM Optim and  
Guardium Software

### Dashboards / Reporting



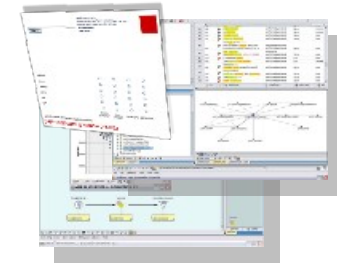
IBM Cognos  
Software /  
QMF

### Master Data, Data Warehouse and Data Integration



IBM InfoSphere Software

### Data Mining and Statistics



IBM SPSS Predictive  
Analytics Software

# End-to-End Information Management End-to-End

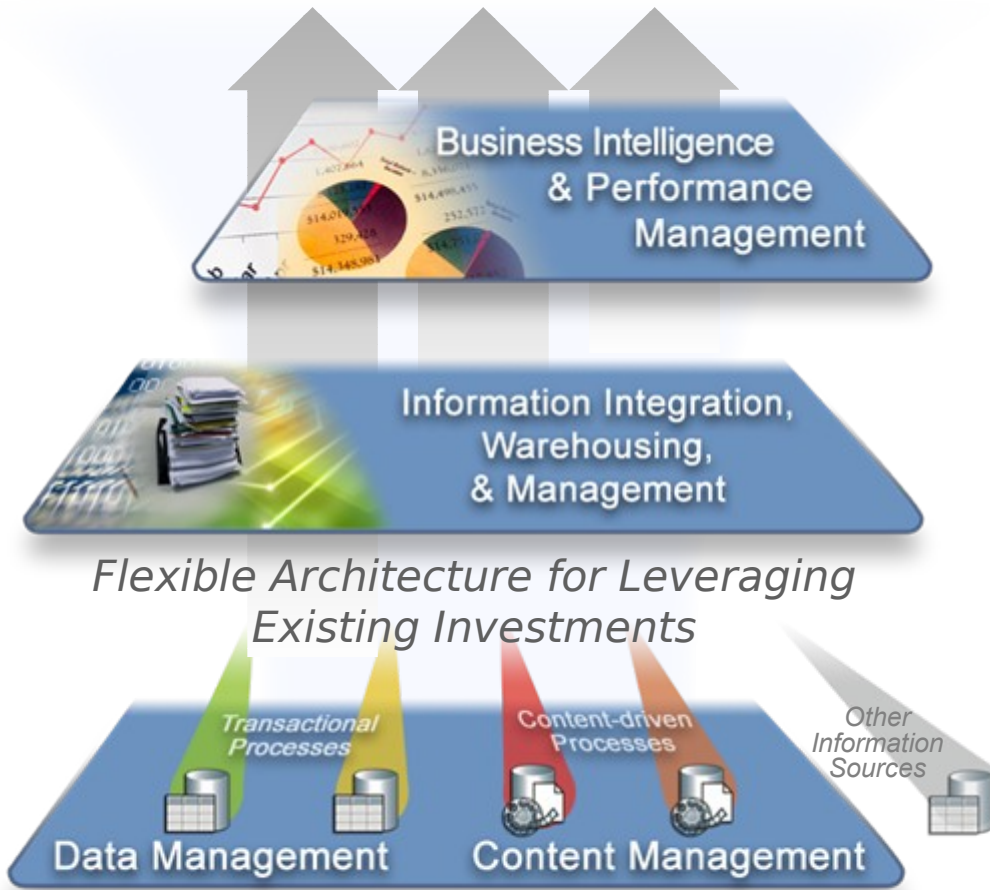
Unlocking the Business Value of Information for Competitive Advantage

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

**Business Optimization**

## Better Business Outcomes

**End-to-End Capabilities**



Plan, understand and optimize business performance

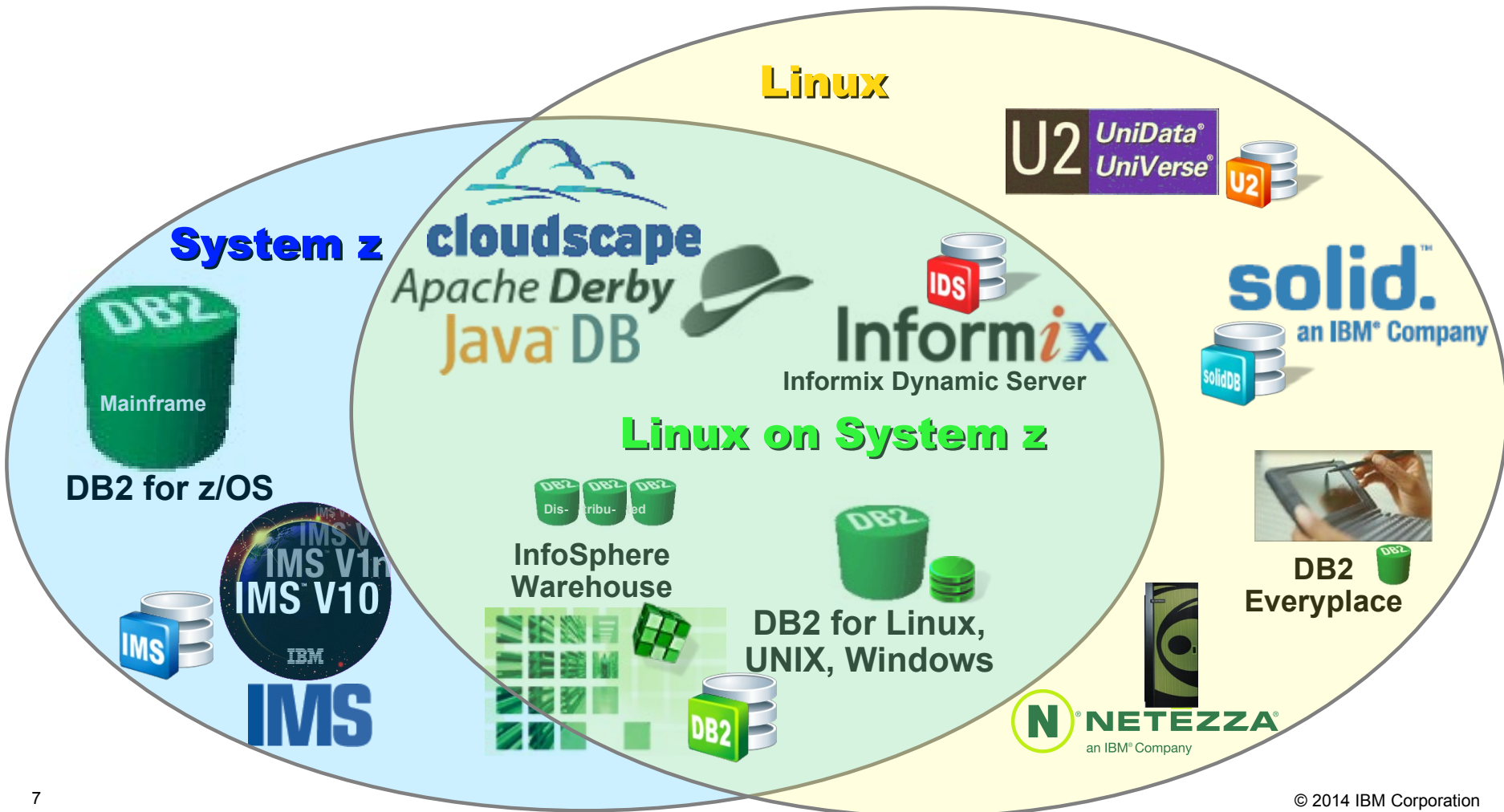
Establish, Govern, and Deliver Trusted Information

Optimize content-based Operational & Compliance Processes

Manage data / content over its lifetime

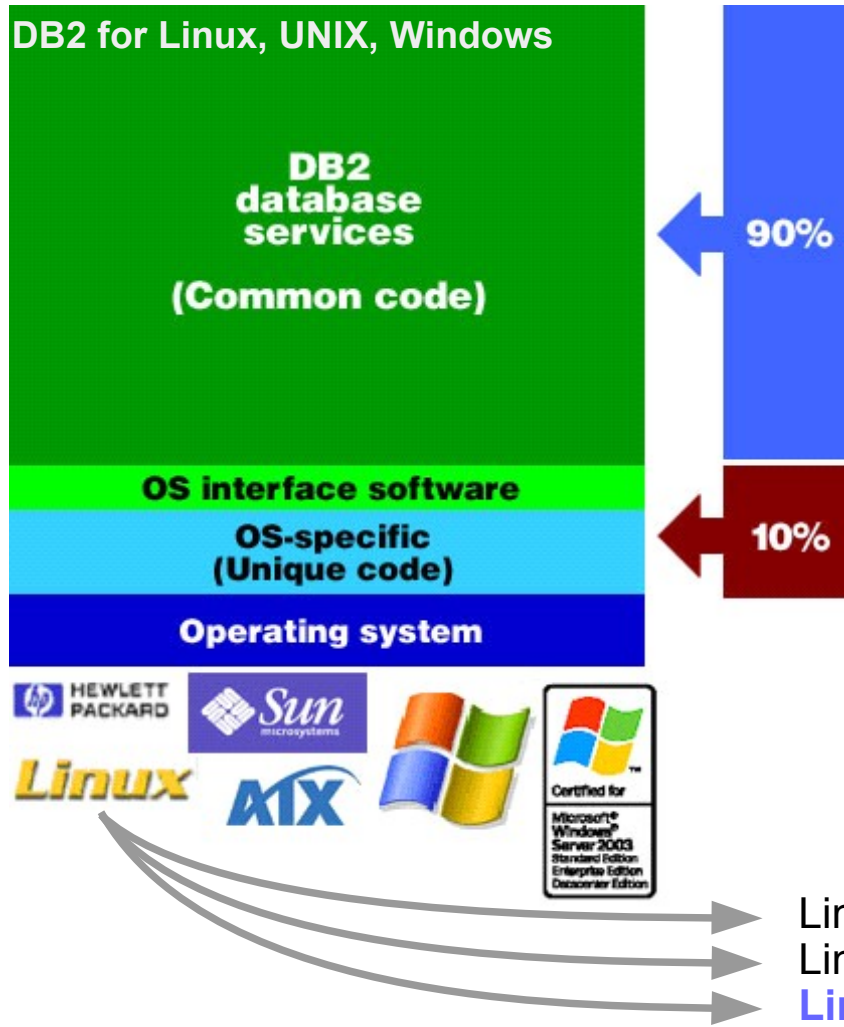
# IBM Data Servers – Available for Linux (on System z)

Due to IBM's long history in database technology and due different customer needs, various IBM databases are available, like for example:





# DB2 for Linux, UNIX and Windows (LUW) Common Code across multiple Platforms



Due to the common code base DB2 for LUW is available on many platforms (like Linux, AIX, Solaris, HP-UX and Windows) and in all supported languages simultaneously (no porting).

Code is compiled and tested on every platform every night.

The “other” DB2 versions (non LUW):

- DB2 for z/OS
- DB2 for i OS
- DB2 Everyplace
- DB2 z/VSE

are based on different code bases !



# DB2 UDB Packaging

- Single set of DB2 Editions
  - Combined DB2 and InfoSphere Warehouse Editions
- Something for everyone
  - Single users
  - Single servers
  - Small Businesses
  - Departments
  - Large enterprises

**DB2 Workgroup Server or DB2 Express**  
Core functionality and Base capacity

**DB2 Enterprise Server or DB2 Advanced Workgroup Server**  
Core functionality or Base capacity

**DB2 Advanced Workgroup and Advanced Enterprise Server Editions**  
Advanced functionality and Full capacity

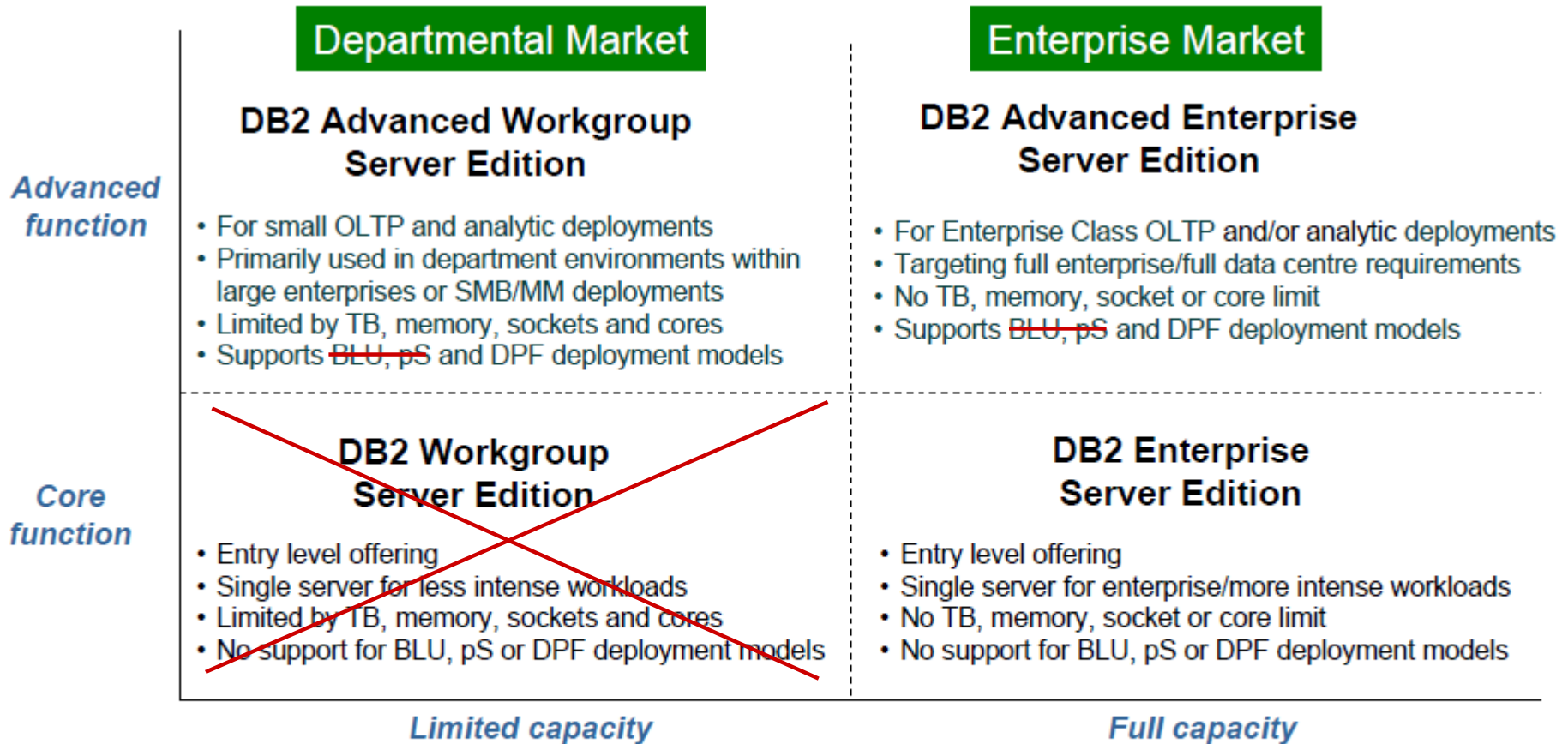
**Low cost of entry**

**Mid Level**

**Highest Value**

# DB2 10.5 Simplifies Product Packaging

One Set of Editions for Both Transactional and Warehouse Workloads



Linux on System z

<b>DB2 Developer Edition</b>
<b>DB2 Express and DB2 Express-C</b>

DB2 on Linux on System z is supported only on DB2 Enterprise Server Edition, DB2 Advanced Workgroup Server Edition and DB2 Advanced Enterprise Server Edition.

BLU technology, is not available on Linux on z at this time

## DB2 Offers A Standards Based Development Environment

### ■ Easy application development and deployment

- Support for the latest languages and versions
- Support for the latest environments, including Visual Studio, Eclipse, and pureQuery
- Support for multiple SQL dialects and procedural languages
- Accelerate development of custom and built-in packages

### ■ Easy Web services

### ■ Choice of query languages and APIs

- SQL, XQuery, XPath, CLPPlus, JDBC, SQLJ, ODBC, ADO, .NET, CLI, OLE-DB, and more



Borland<sup>USA</sup>



Rational. software



WebSphere. software

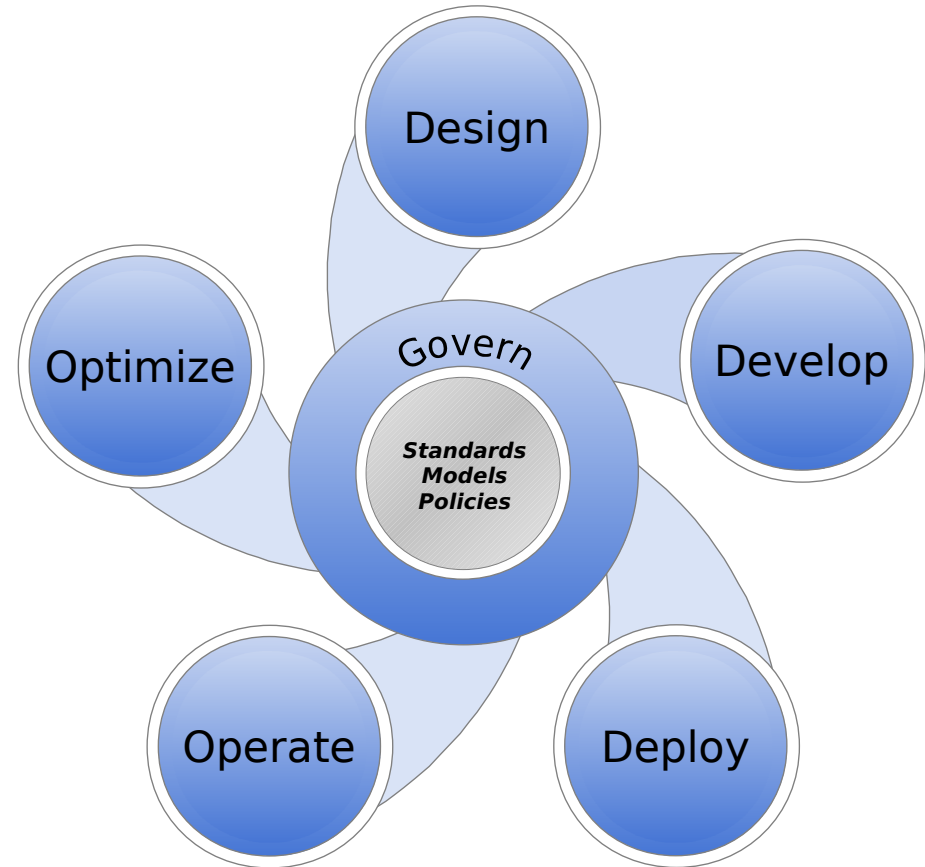
## IBM InfoSphere Optim – Integrated Data Management



Processes and technology for managing mission critical application data throughout its **life-cycle**.

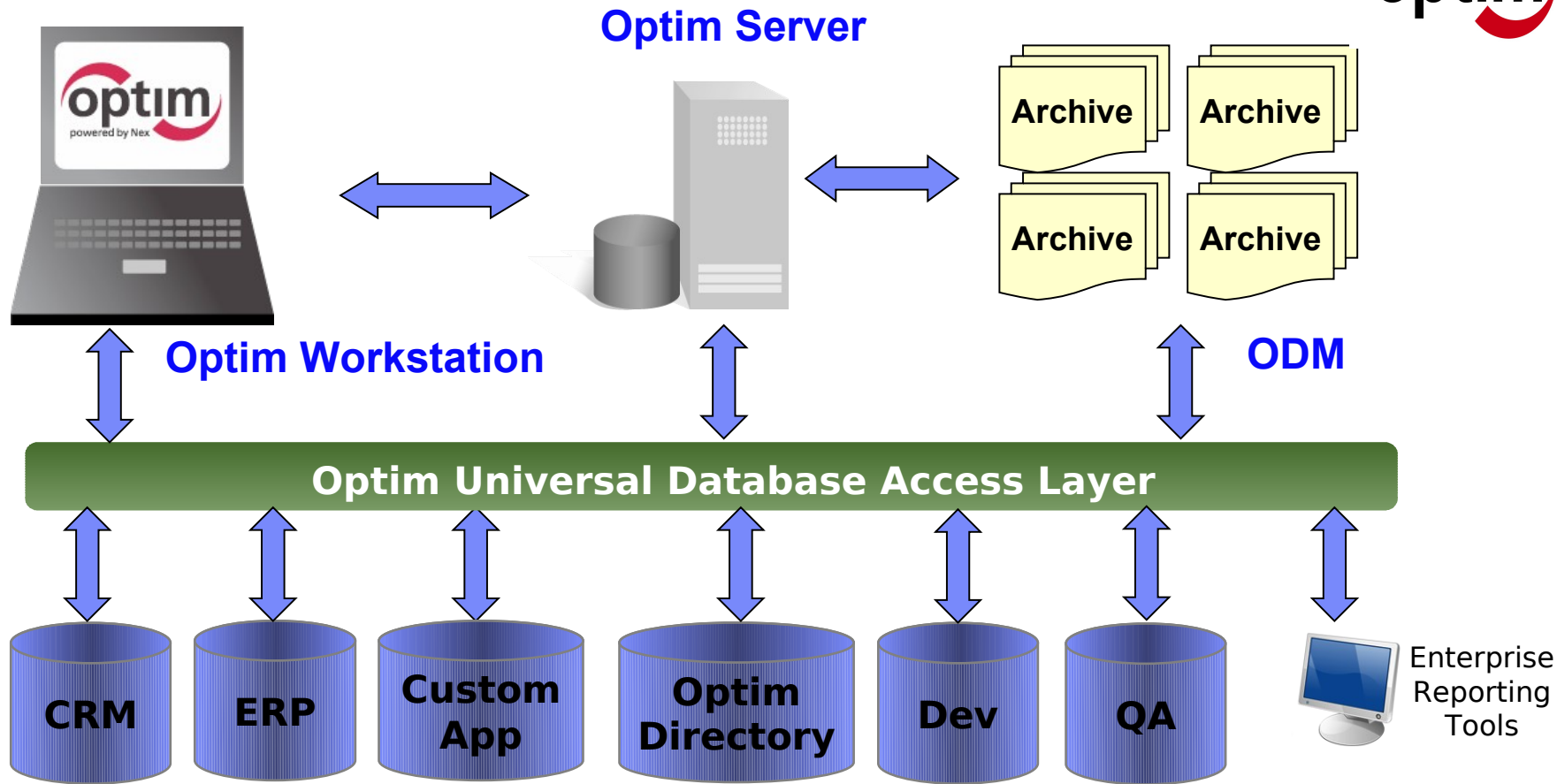
Solves business problems:

- Data Growth
- Retention & Discovery
- Data Privacy
- Test Data Management
- Application Upgrades / Migration of Data
- Application Retirement





# IBM InfoSphere Optim Architecture



**Optim Workstation** - Optim installed on a Windows PC capable of performing all Optim functions directly against a data source or by connecting to an Optim Server.

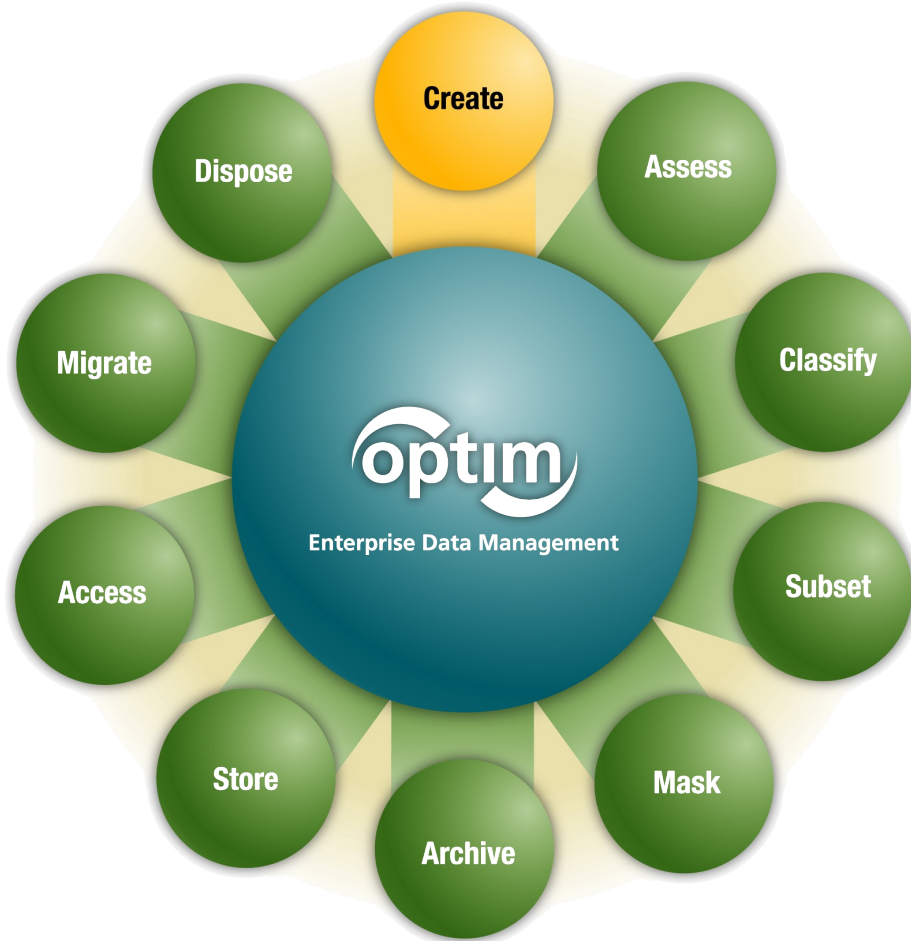
**Optim Server** - runs on a Unix or Windows server that handles requests from Optim WS or the cmd-line.

**Open Data Manager (ODM)** - Allows access to archive files as an ODBC data source (or archived tables).

## IBM InfoSphere Optim – Integrated Data Management



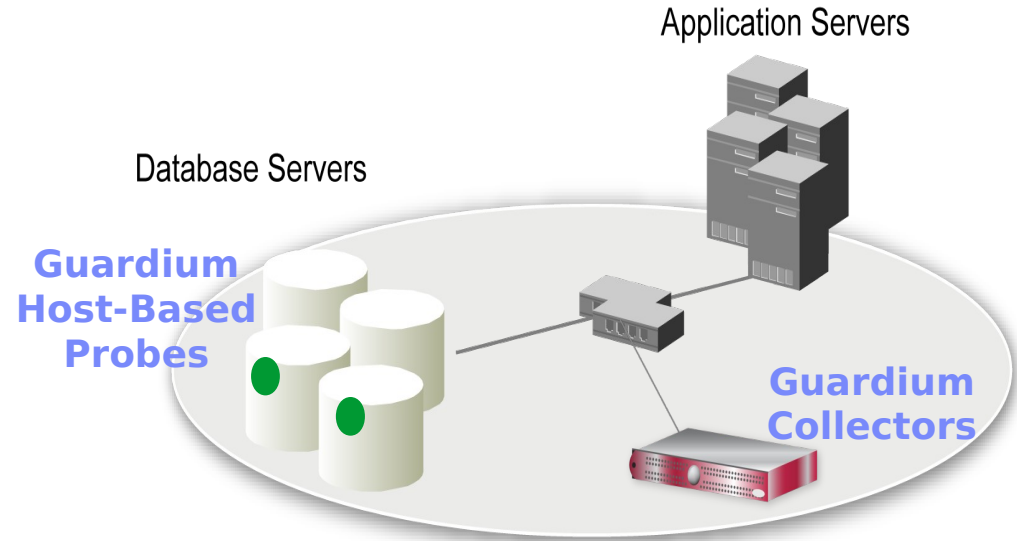
IBM InfoSphere Optim Integrated Data Management solutions manage data from requirements to retirement. Boost performance, empower collaboration, and improve governance across applications, databases and platforms.



- Create via the application and Optim
- Assess applications and data
- Classify data on its business value and access requirements
- Subset from production to non-production environments
- Intelligent masking to protect privacy
- Separate seldom used historical transactions from current data
- Store Anywhere
- Access data any way!
  - Native Application Access
  - Application Independent Access
- Migrate data between environments, applications and databases
- Enforce disposal policies
  - Prevent information assets from becoming information liabilities

## Guardium Secures & Protects High-Value Databases

- Real-time, automated database auditing and activity monitoring
- Governance policy management, execution, enforcement and validation
- Vulnerability assessment, blocking and threat prevention
- Support for complex, heterogeneous database and application environments
  - DB2, Informix, Oracle, SQL Server, Sybase, Teradata and more
  - SAP, Oracle E-Business Suite, Siebel, PeopleSoft, JD Edwards and more

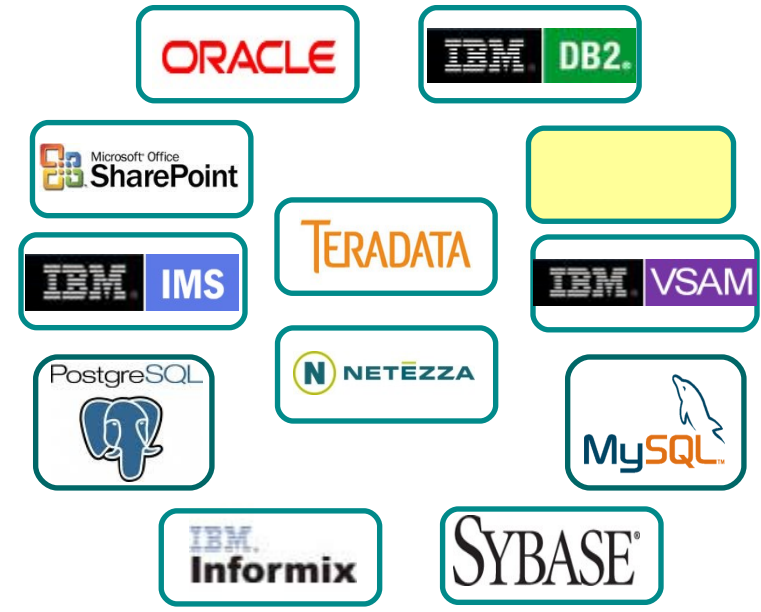
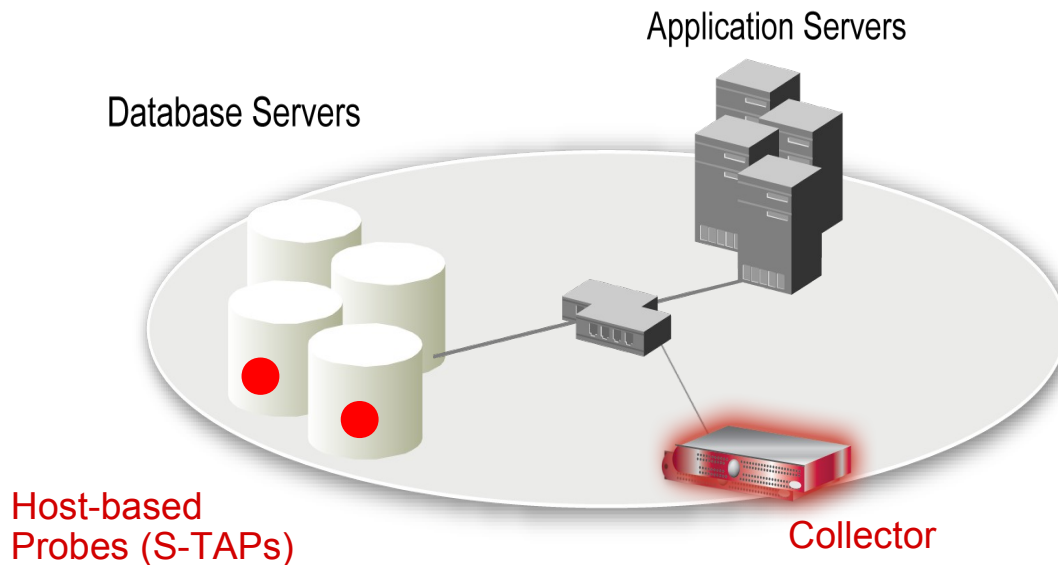


### *Guardium Solution*

- Hardened appliance and software-only implementation options
  - Secure, noninvasive, minimal impact on database performance

# Real time database monitoring and protection with InfoSphere Guardium

Guardium®

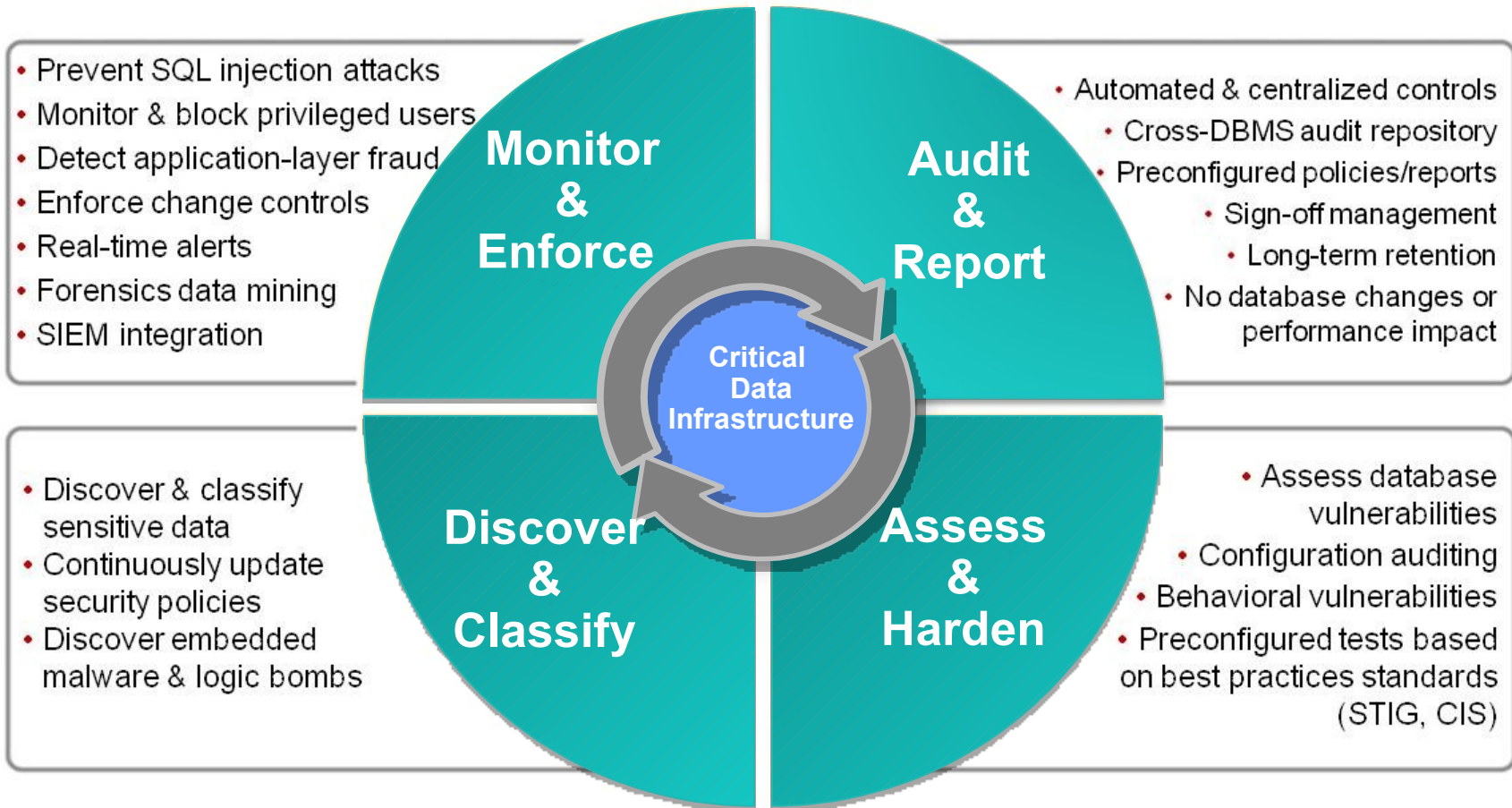


- Non-invasive – no DBMS or application changes
- Does not rely on DBMS-resident logs that can easily be erased by attackers, rogue insiders
- 100% visibility including local DBA access
- Minimal performance impact

- Cross-DBMS solution
- Granular, real-time policies & auditing
  - *Who, what, when, how*
- Automated compliance reporting, sign-offs and escalations (financial regulations, PCI DSS, data privacy regulations, etc.)



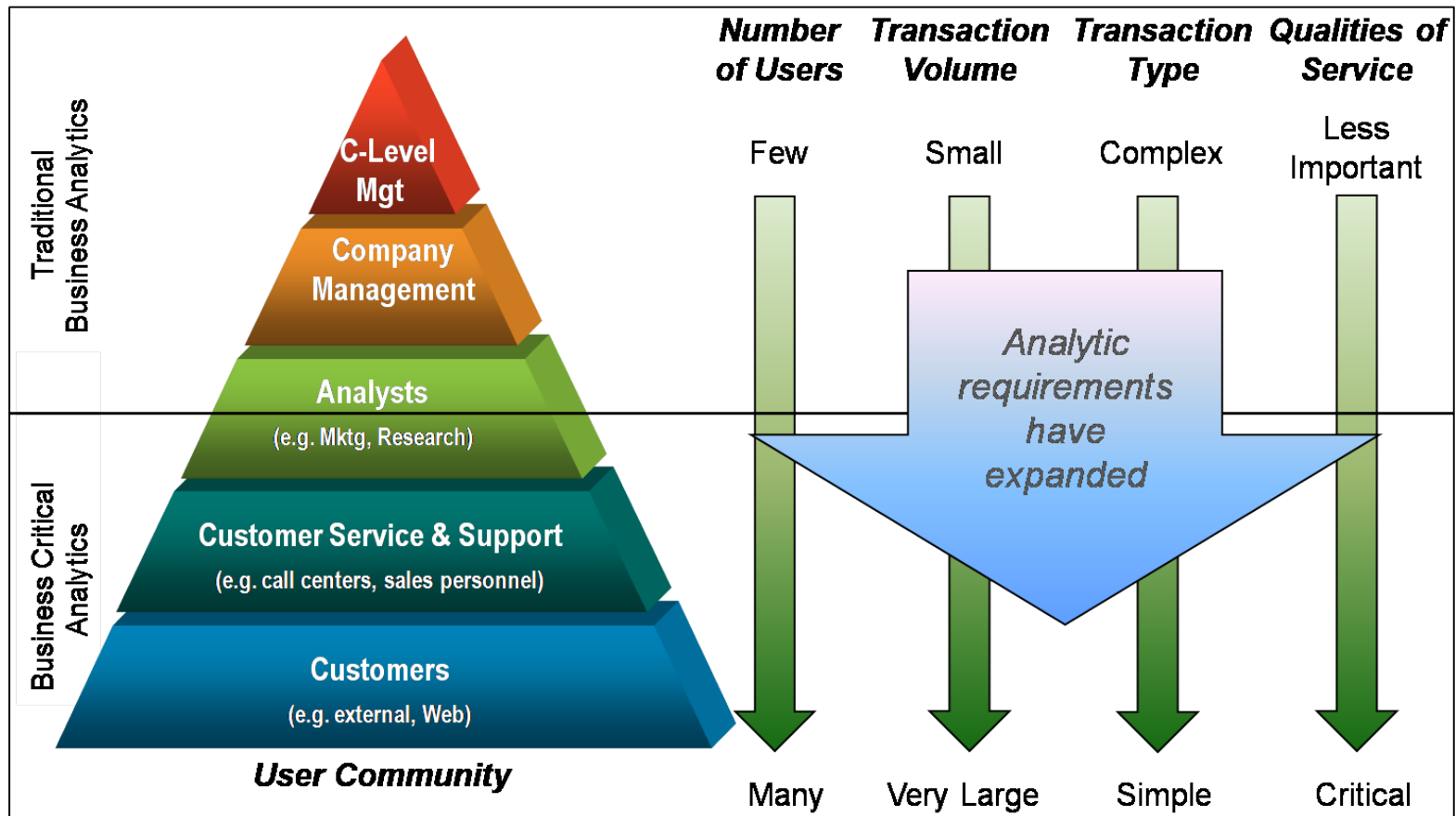
# Guardium Addresses the Full Lifecycle

**Guardium**<sup>®</sup>

## Why System z for Analytics ?

# More users across the organization want access to mission-critical analytics

For up-selling, cross-selling, fraud detection, ...  
At the time of impact / business transaction



# Analytics require the same qualities of service as your business critical applications/transactions






Timely, accurate and secure information	Superior availability, scalability and performance	Reduced costs and complexity	Rapid deployment and expansion
<ul style="list-style-type: none"> <li>• Co-location of data warehousing, business analytics, transactional data</li> <li>• Reduced data movement</li> <li>• Lower latency and near real-time data</li> <li>• Rapid acceleration of complex queries</li> <li>• Real-time scoring</li> </ul>	<ul style="list-style-type: none"> <li>• High security (EAL5+)</li> <li>• High availability (99.999% )</li> <li>• Performs at 100% capacity</li> <li>• Prioritization of critical queries &amp; workloads</li> <li>• Integrated disaster recovery</li> </ul>	<ul style="list-style-type: none"> <li>• Non-disruptive growth - processors, disk, memory added dynamically without outage</li> <li>• Pre-install then activate as needed</li> <li>• Flexible deployment options</li> </ul>	<ul style="list-style-type: none"> <li>• Centralized, scalable infrastructure</li> <li>• Virtualization</li> <li>• Start with your final architecture</li> </ul>





# Overview of product portfolio


## Business intelligence and predictive analytics

- Cognos Business Intelligence for Linux on System z 
- Cognos Business Intelligence for z/OS
- SPSS Analytical Decision Management for Linux on System z
- SPSS Collaboration and Deployment Services for Linux on System z 
- SPSS Modeler for Linux on System z
- SPSS Statistics for Linux on System z
- DB2 Query Management Facility (QMF) 



## Planning, analysis and forecasting

- Cognos TM1 for Linux on zEnterprise 
- Capacity Management Analytics 

## Data warehousing

- DB2 Analytics Accelerator for z/OS 
- InfoSphere Information Server on System z

## Deployment options

- zEnterprise Analytics System 9700 
- zEnterprise Analytics System 9710
- Enterprise Linux Server for Analytics 

<http://www.ibm.com/software/os/systemz/badw/>

# Enterprise Linux Server for Analytics (Solution Edition)

A single centralized BI environment



**OPTIONAL:**

## PureData for Analytics

- *High Speed performance*
- *Standalone appliance*
- *Network attached to Z*
- *Terabytes of data*
- *Standard interfaces*
- *Integrated installation services*

**High performance, parallel computation**

# zEnterprise Solutions for Analytics

*Streamlining a multi-platform infrastructure*

## Integrated

*Integrate insights from various forms of data, into your business processes. Bring analytic applications to the data*



**Centralized Data**  
Fast query execution times

**PureData System For Analytics (Netezza)**

**Complex Queries**  
Multi-dimensional queries  
Scanning large tables,  
And doing aggregations  
Appliance with large vols data

### Workload characteristics

#### Operational BI queries

Short queries,  
High concurrency,  
Index access to data,  
Returning small amounts of data  
Standard disk – with wide range of data amts

# IBM PureData System for Analytics (Netezza)

Optimized exclusively for analytic data workloads

## PureData System for Analytics

*Delivering data services  
for analytics*



### Speed

- 10-100x faster than traditional custom systems\*
- Patented MPP hardware acceleration (Massively Parallel Processing)

### Simplicity

- Data load ready in hours
- No database indexes
- No tuning
- No storage administration

### Scalability

- Peta-scale data capacity

### Smart

- Designed to runs complex analytics in minutes, not hours
- Richest set of in-database analytics



# Querying the PureData System for Analytics

## *Reporting & Analysis*

- IBM Cognos
- IBM SPSS
- IBM Unica
- Information Builders
- Kalido
- KXEN
- Microsoft Excel
- MicroStrategy
- Oracle OBIEE
- SAP Business Objects
- SAS
- Actuate



OLE-DB  
JDBC  
ODBC  
SQL



## Overview of product portfolio

### Key Offerings for Analytics on System z Enterprise Linux Server for Analytics

Cognos & SPSS & ILOG

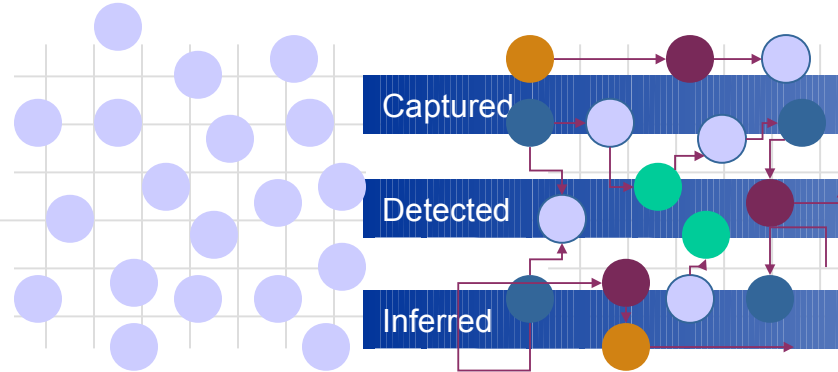
IBM DB2 Analytics Accelerator (IDAA)

zEnterprise Analytics System 9700/9710

# Business Optimization

## Different Types of Analytics

Analytics Sophistication →



What is happening	What could happen? <i>Simulation</i>		
How many, how often, where?	What if these trends continue? <i>Forecasting</i>	How can we achieve the best outcome? <i>Optimisation</i>	
What exactly is the problem?	What will happen next if? <i>Predictive Modelling</i>	How can we achieve the best outcome and address variability? Stochastic Optimisation	Extracting insight, concepts and relationships
What actions are needed?			

### Descriptive Analytics

**Cognos**  
software

- Reporting
- Querying
- Dashboarding
- Scorecarding
- Alerting
- Analysis

### Predictive Analytics



- Data Collection:
- Statistics
- Modeler
- Collaboration & Deployment

### Prescriptive Analytics



- Business Rules, BRMS
- Visualization
- Decision Support
- Supply Chain Opt.

### Content Analytics



- Big Data / Big Insights
- Map / Reduce
- Cognos Content Analytics (CCA, also using UIMA)

# Enterprise Linux Server for Analytics

A single centralized BI environment



## **Enterprise Linux Server foundation:**

- *Easy deployment*
  - *Cost-effective Linux environment*
  - *Underlying hardware/software for Linux environment*
  - *Leading virtualization for simplified scalability*
  - *High availability to access information*

## **Linux based Analytics:**

- *Suite of analytic tools: Cognos, SPSS*
- *Reporting, operational and real-time analytics*
- *Easy interface for business users*
- *Drill down capabilities*

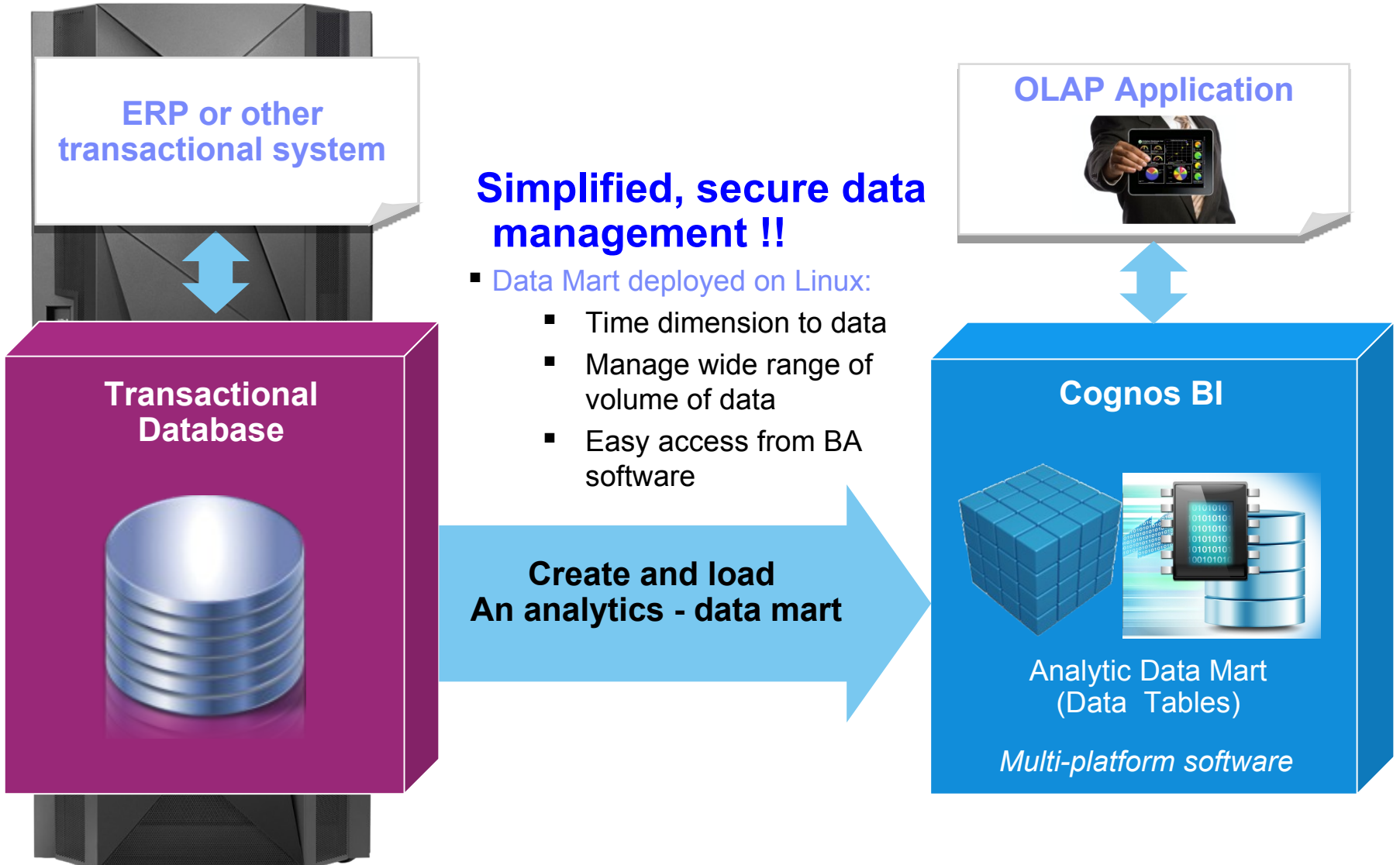
## **OPTIONAL:**

- *IBM Lab Services:*
  - *Cognos Deployment Planning Workshop*

Leverage existing distributed databases

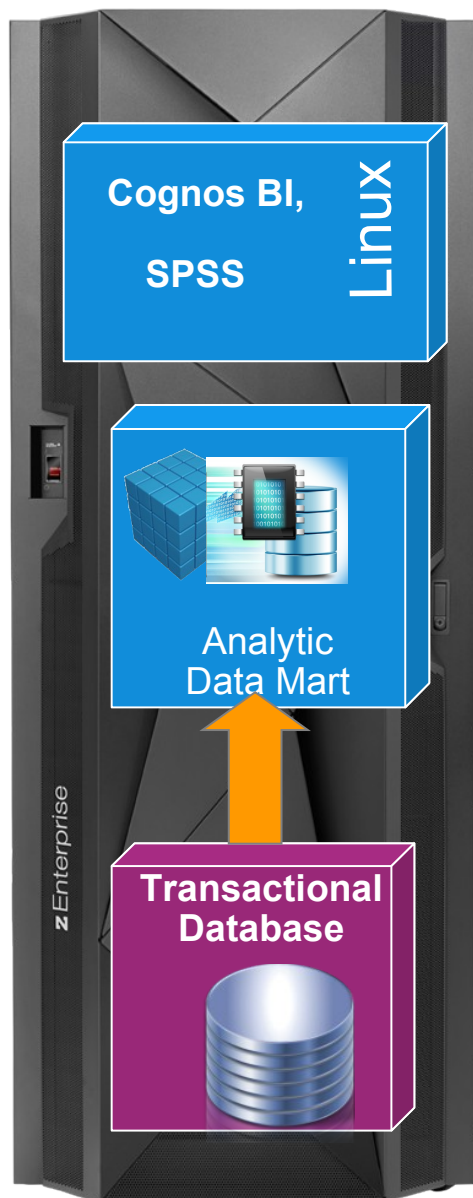
- on Linux on System z
- on distributed Unix/Intel servers

# Data Mart created from Transactional Data on Linux





## Analytics in a Box -



*Simplified Management –  
easy to move data  
easy to grow*

*Leading virtualization*

*easy performance management  
maximize ROI on investments  
simple multitasking - logical partitions  
- complete simulation of virtual hardware and  
operating environments*

*Leverage existing*

*backup/recovery processes  
firewalls and security*

# Business Intelligence and Predictive Analytics

## Cognos & SPSS

# Cognos

Delivering information when, where, and how each user needs it

*Making information  
...understandable!*



- Delivers information where, when and how it is needed
  - Self-service reporting and analysis
  - Individualized by user
  - Automated delivery of information in context
  - Improved visualization
- Full range of BI capabilities available for Linux
  - Query, reporting, analysis, dashboarding, realtime monitoring(\*), Mobile BI(\*)
  - (\*) not supported on z/OS
- Included in 9700, 9710, ELS for Analytics
  - Latest version of the Cognos BI offering

# IBM Cognos Business Intelligence V10.2.1

## Data Sources

### **Cognos BI for Linux on System z**

- DB2 z/OS 8, 9, 10, 11
- DB2 LUW 9.5, 9.7, 10.1, 10.5
- Oracle 10g, 11g R1, 11g R2, 12c
- InfoSphere Federation Server 9.7, 10.1
- PowerCubes 7.4, 7.5, 8.x, 10.1, 10.2
- Cognos TM1 9.5, 9.5.1, 9.5.2, 10.1, 10.2
- SAP BW 3.5
- MS SQL Server 2012
- Teradata 12, 13, 14
- IMS v12
- InfoSphere BigInsights 2.1

### **Cognos BI for z/OS**

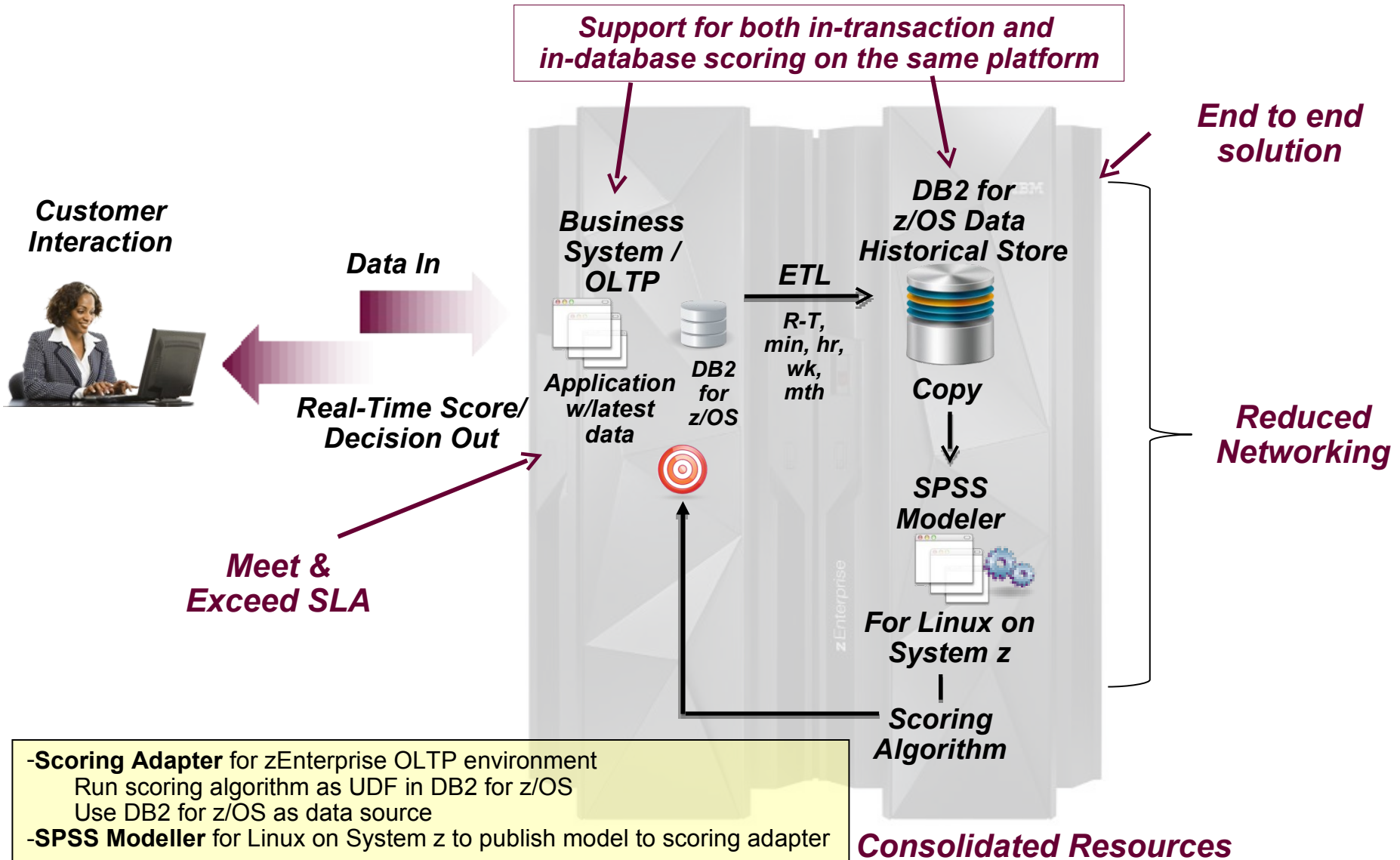
- DB2 for z/OS v10 & 11
- Teradata 14
- Oracle 10g & 11g
- Microsoft SQL Server 2012
- IBM Cognos PowerCube V10.1
- IBM Cognos PowerCube V8.X
- IMS v12

see complete list on <http://www.ibm.com/support/docview.wss?uid=swg27037784>





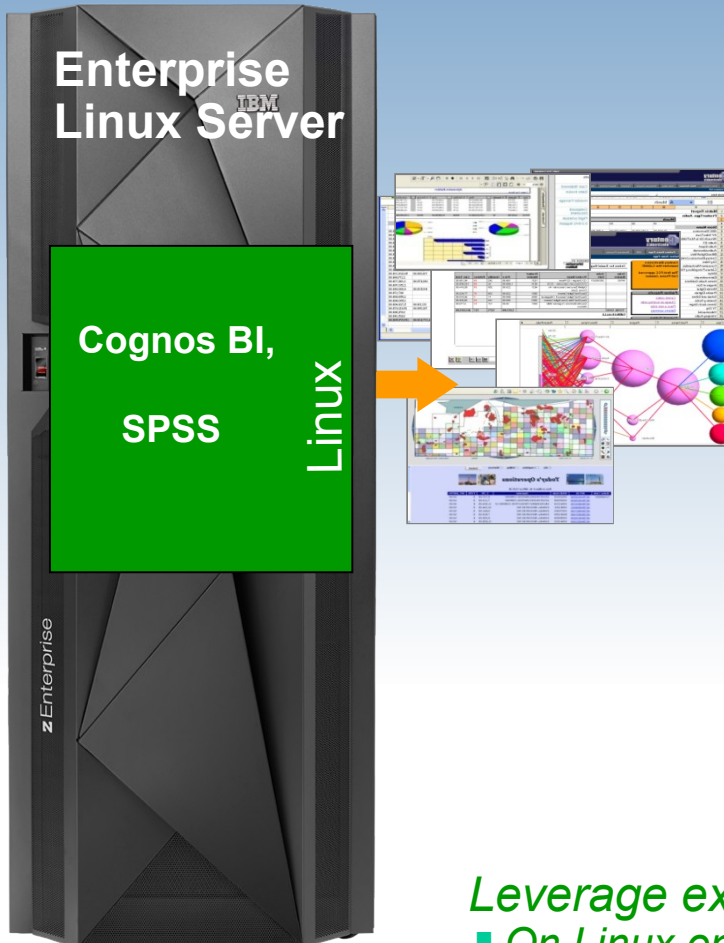
# Integrated Real-time Scoring solution on zEnterprise



- Scoring Adapter** for zEnterprise OLTP environment
  - Run scoring algorithm as UDF in DB2 for z/OS
  - Use DB2 for z/OS as data source
- SPSS Modeller** for Linux on System z to publish model to scoring adapter

# Cognos & SPSS with Enterprise Linux Server for Analytics

## A single centralized BI environment



- **Enterprise Linux Server foundation:**
  - Easy deployment
    - Cost-effective Linux® environment
    - Underlying hardware/software for Linux environment
    - Leading virtualization for simplified scalability
    - High availability to access information
- **Linux based Analytics:**
  - Suite of analytic tools: Cognos®, SPSS®
  - Reporting, operational and real-time analytics
  - Easy interface for business users
  - Drill down capabilities
- **OPTIONAL:**
  - IBM Lab Services:
    - Cognos Deployment Planning Workshop

*Leverage existing distributed databases*

- *On Linux on System z*
- *On distributed UNIX®/Intel® servers*

# IBM Capacity Management Analytics ... leveraging Cognos & SPSS

Everything necessary for the cost effective analysis of zEnterprise usage, service objectives, resource utilization, system tuning, accounting, cost recovery, and more.....

**A single, integrated cost effective solution**



**System Management  
Problem Identification and Resolution  
Capacity Forecasting & Real-time Analysis**

**Manage the complete time horizons**



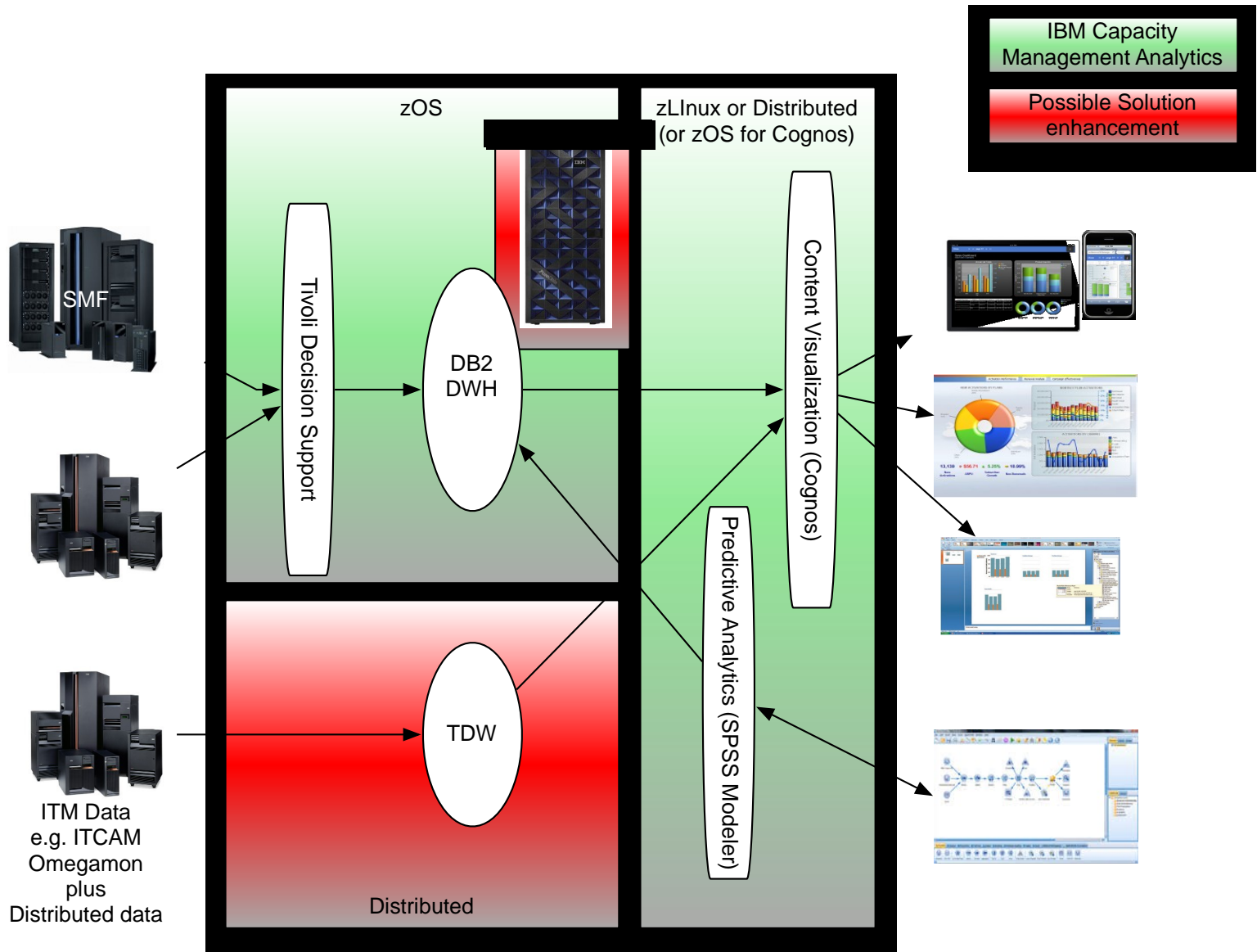
**Historical reporting of past performance  
Forecasting future requirements  
Real-time transaction monitoring**

**Jumpstart your time to value & eases the path to implementation.**



**Built on IBM's easy of use analytics  
Includes prepackaged, interactive reports  
Optional services and education**

# IBM Capacity Management Analytics: Core & Extended Architecture



## IBM DB2 Analytics Accelerator for z/OS

# IBM DB2 Analytics Accelerator

Do things you could never do before!

- What is it?
  - A high performance appliance that integrates Netezza technology with zEnterprise technology, to deliver dramatically faster business analytics
- What does it do?
  - Accelerates complex queries, up to 2000x faster
  - Lowers the cost of storing, managing and processing historical data
  - Minimizes latency
  - Improves security and reduces risk
  - Complements existing investments





# What's new in DB2 Analytics Accelerator Version 4.1

## Delivering critical insight at the speed of business

### Accelerate a broader spectrum of queries

Static SQL, multi-row FETCH, and multiple encodings on the same Accelerator

### Improve Enterprise Robustness & Scalability

Enhanced workload balancing  
Improved incremental update performance  
Enhanced monitoring

### Enhance High Performance Storage Saver

Improved ease of use  
Built-in restore, better access control for archived partitions and protection of moved partitions

### Supports new DB2 and PureData Technology

DB2 11  
PureData Analytics N2001 hardware



## Deployment Options

### IBM zEnterprise Analytics System 9700 and 9710

# IBM zEnterprise Analytics System 9700

*A cost-competitive, integrated combination of hardware, software and services to deliver business critical analytics*



### Preselected

To deliver a comprehensive, end-to-end, flexible solution

### Pretested

To meet business critical analytic demands

### Solution Priced

For deployment as an add-on to an existing zEnterprise system or as a new system

## Core Components in 9700 offering

- **zEnterprise EC12**
  - Available as an additional LPAR on an existing system or as a new system
  - General processors, zIIPs and memory as per workload requirements
- **DB2 Analytics Accelerator**
  - A high performance appliance that integrates Netezza technology with zEnterprise technology, to deliver dramatically faster business analysis
- **DB2 for z/OS Value Unit Edition\***
  - One-time charge price for eligible net new applications or workloads
- **DB2 Utilities Suite**
  - Helps minimize downtime associated with routine DB2 data maintenance while ensuring the highest degree of data integrity
- **z/OS Operating System Stack and z/VM**
- **Storage DS8870**



\*also offered as a Monthly License Charge (MLC)

# IBM zEnterprise Analytics System 9700 Add-on Pack details

## •Data Analytics Pack

### •*Business Intelligence*

- Cognos 10.2.1 BI for Linux for System z
- Cognos 10.2.1 BI z/OS
- QMF Enterprise Edition 11 for System z VUE

### •*Budgeting and Planning*

- Cognos TM1 10.2

### •*Predictive Analytics*

- SPSS Modeler Gold 16
  - SPSS Modeler, SPSS Decision Management, and SPSS Collaboration and Deployment Services
- SPSS Modeler 16 w/ Scoring Adapter for Linux on System z

## ▪Data Integration Pack

### ▪*Data Transformation*

- InfoSphere Information Server for Data Integration 9.1.2 for Linux on System z

### ▪*Data Replication*

- InfoSphere Data Replication (IIDR) for DB2 for z/OS 10.2.1
- InfoSphere Data Replication (IIDR) for Linux on System z 10.2.1

## ▪Fast Start Services Pack

- Select from a set of predefined services for installation and configuration to speed implementation and minimize impact on staff



# IBM zEnterprise Analytics System 9710

***An entry level, integrated solution built on the zEnterprise Business Class footprint to cost-competitively, quickly and securely deliver business reporting and analytics***



## **Preselected**

To deliver a comprehensive, end-to-end, flexible solution

## **Pretested**

To meet business critical analytic demands

## **Solution Priced**

For deployment as an add-on to an existing zEnterprise system or as a new system



## Core Components in 9710 offering

- **zEnterprise BC12**
  - Available as an additional LPAR on an existing system or as a new system
  - General processors, zIIPs and memory as per workload requirements
- **DB2 for z/OS Value Unit Edition\***
  - One-time charge price for eligible net new applications or workloads
- **DB2 Utilities Suite**
  - Helps minimize downtime associated with routine DB2 data maintenance while ensuring the highest degree of data integrity
- **z/OS Operating System Stack and z/VM**



\*also offered as a Monthly License Charge (MLC)

## What's new in 9710 offering ?

### • Refresh of Key Components

#### • Enhanced Business Analytics capabilities with DB2 11 for z/OS

- Faster, more efficient performance for query workloads - Temporal and SQLPL enhancements; Transparent archiving
- Integrates Hadoop and DB2 for z/OS data to support Big Data, and does not require the movement of core data off System z

#### • DB2 Analytics Accelerator v4.1

- Acceleration of more queries (Support of Static SQL)
- Enhanced workload balancing
- High Performance Storage Saver improved ease of use
- Enhanced monitoring

### • 9710 offering updated to include zBC12

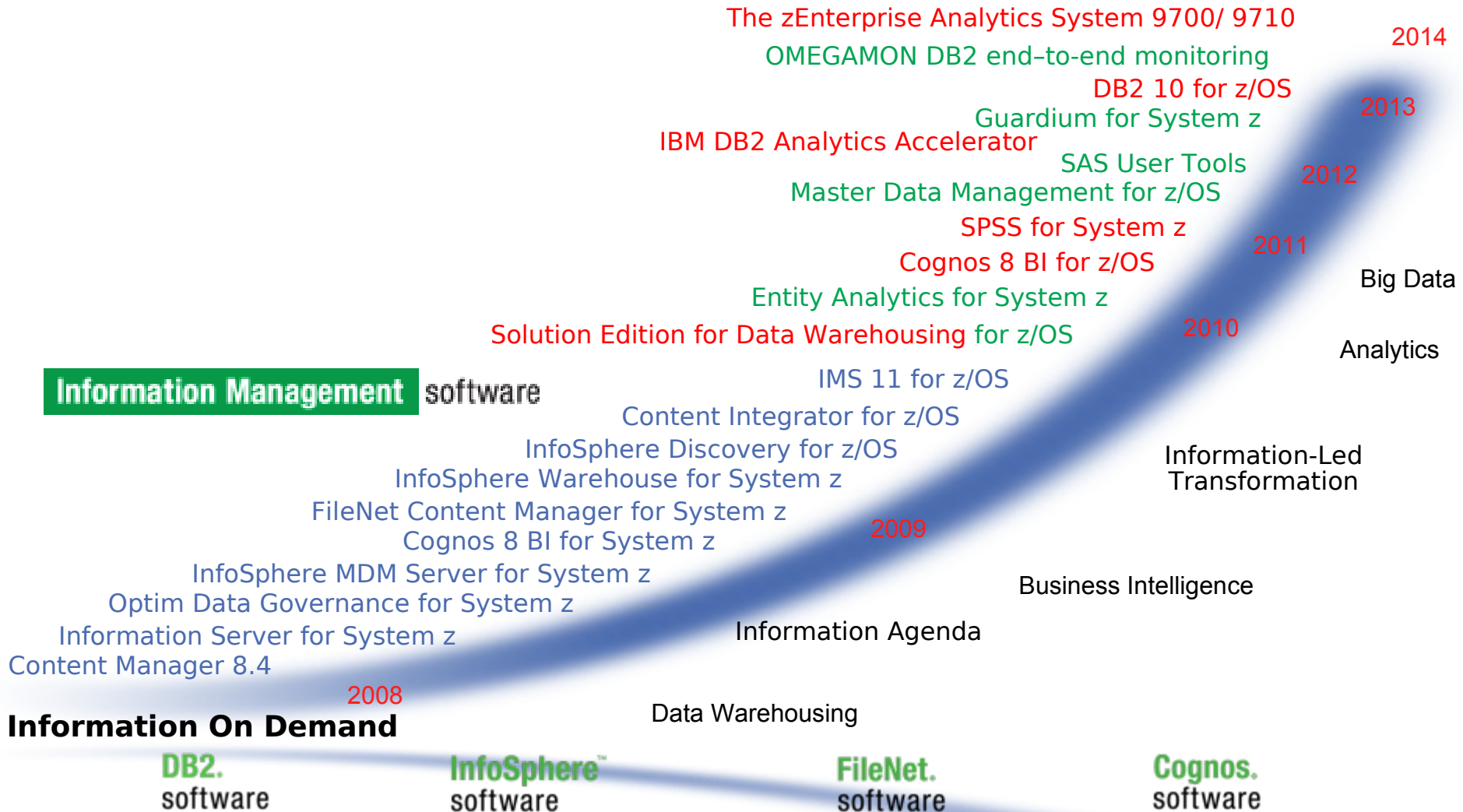
- To meet specific customers size requirements



# Summary

# How IBM answers to Big Data & Analytics customer expectations: The Software View

More new capabilities delivered in the past 6 years than at any point in the mainframe's history



# What Sets zEnterprise Apart for Analytics?

**zEnterprise: Makes the technical challenges the easy part!**



**Timely, accurate and secure information**

**Superior availability, scalability and performance**

- **Co-location** of data warehousing, business analytics, transactional data
- **High security** (EAL5+)
- **Processors, disk, memory added dynamically** without outage
- **Efficient dynamic resource management**
- **Reduced data movement**
- **High availability** (99.999% )
- **Processors, disk, memory added dynamically** without outage
- **Centralized, scalable infrastructure**
- **Lower latency and near real time** data
- **Performs at 100% capacity**
- **Pre-install then activate** as needed
- **Virtualization and an max. level of resource sharing**
- **Rapid acceleration** of complex queries
- **Prioritization** of critical queries & workloads
- **Flexible deployment options**
- **Integrated disaster recovery**

**Reduced costs and complexity**

**Rapid deployment and expansion**

# Business Analytics on System z

## Business Analytics Challenges

The Business Analytics world is changing dramatically and becoming:

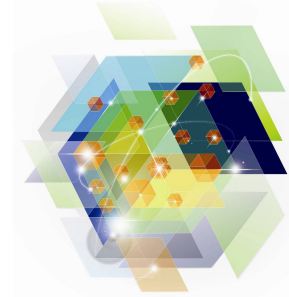
- pervasive across the business
- built in to core operations
- driving real time insights into business transactions

**Traditional approaches:** duplicate data to implement departmental solutions

- are becoming prohibitively expensive
- raise data governance and security issues
- are not responsive enough for real-time needs

## zEnterprise and Analytics

- a new approach where customers can bring the analytics to the data rather than moving the data to the analytics
- As the holder of most of the world's transactional data, System z is uniquely positioned to host both operations and data.
  - ➔ a single version of the truth as the basis for insights across the business
  - ➔ enable core business transactions, analytics applications and operational data to be integrated into a single system supporting transaction rates at enterprise scale



## Infrastructure benefits

- Co-location of data warehousing, business analytics and transactional data
  - ➔ Reduced data movement
  - ➔ Lower latency and near real time data
- Processors, disk, memory added dynamically without outage
- Centralized, scalable infrastructure
- Virtualization
- Start with your final architecture

Analytics on System z highlights at a glance

High security

High availability

Performs at 100% capacity

Prioritization of critical queries & workloads

Integrated disaster recovery

## IBM System z Key Offerings for Business Analytics

IBM zEnterprise Analytics System  
9700/ 9710

Cognos  
SPSS

IBM DB2 Analytics Accelerator for z/OS



Thank you – Any questions ?

**Obrigado**

Portuguese

**Merci**

French

**Thank You**

English

**Gracias**

Spanish

**Danke**

German



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**Thank You**

# Analytics Solutions on System z Query Management Facility (QMF)

## QMF Family Overview

QMF consists of the following components:

**QMF Classic Edition** contains QMF for TSO and CICS® , which supports business users who work entirely from traditional mainframe monitors to access data that is stored in the DB2 Family.

**QMF Enterprise Edition** contains all facets of the Classic Edition, plus:

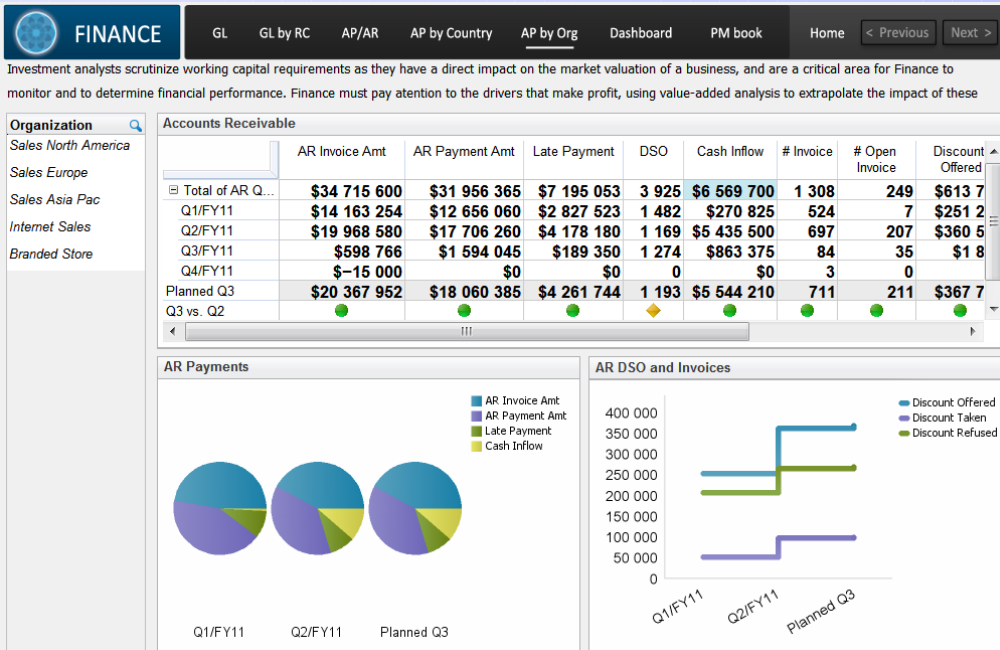
- **QMF High Performance Option (HPO):** Helps database administrators manage QMF objects and performance in the TSO and CICS environments.
- **QMF for Workstation:** Replicates the key functionality of QMF for TSO/CICS on distributed platforms — Windows, **Linux**, and Mac OS X — via a rich desktop development environment and provides an array of BI and Analytical reporting, charting, and dashboard capabilities.
- **QMF for WebSphere®:** Provides a feature set similar to that of QMF for Workstation using a thin-client, browser-based solution. Runs on Windows, Linux, Solaris, AIX®, HP-UX, IBM i®, Linux on System z, and z/OS.
- **QMF Analytics for TSO — NEW!**: Delivers unprecedented charting and statistical analysis capabilities directly to the mainframe.

# Analytics Solutions on System z Cognos TM1 for Linux on zEnterprise

# TM1 is a Performance Management Application Framework

## Where do customers realize TM1's value?

**Performance Management Applications demanding answers in real-time in response to volatility imposed by what-if actions applied to scenario plans.**

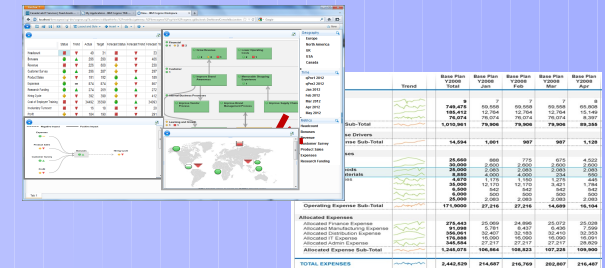


## TM1 Applications

Budgeting, Planning, Forecasting

What-If Modeling

Customer Churn Analysis



Profitability Analysis

Scorecarding

Financial Reporting



# IBM zEnterprise Analytics System 9710 Add-on Pack details

## Data Analytics Pack

- **Cognos BI for zEnterprise v10.2.1 (z/OS and Linux on System z)**
  - Access Big Data using the new Big Insights & HIVE support
  - Reporting leaps forward with the new RAVE visualization capabilities
- **SPSS Modeler Gold 16\***
  - Extends predictive modeling with implementation rules & deployment optimization
  - Integrate predictive analytics & rules into your business processes for actionable results when and where you need them
- **SPSS Modeler 16 with Scoring Adapter (Linux on System z)\***
  - Combine powerful modeling techniques with real time scoring of DB2 for z/OS transactional data
- **Cognos TM110.2 (Linux on System z)**
  - What-If planning and budgeting tools debut on the zEnterprise
  - Performance management including metrics management & score-carding for personal, departmental & enterprise-wide analysis
- **DB2 Query Management Facility (QMF) Enterprise Edition 11 VUE**
  - Addresses QMF customers analytic needs and leverages current DB2 and z/OS investments

\*(Announce 10/29/12 – GA 11/26/13)

# What's new in the Add-on Packs

## Data Integration Pack

A green starburst icon with the word "New" written inside in black text.

- **InfoSphere Data Replication (IIDR) for DB2 for z/OS and Linux**
  - Provides near real-time data replication from supported source databases to DB2 z/OS or Information Server
  - Captures changes in the database as they occur and sends these changes to a target ETL job or DB2 z/OS environment
  - Replicating data into analytics environments results in more timely data, better reporting, and better decision making
- **InfoSphere Information Server for Data Integration for Linux for System z**
  - Enhanced ETL solution with Performance Enhancements for DataStage within InfoSphere Information Server for Data Integration for Linux for System z