

IBM System z Forum



System z Software Update

(2014 Q3 z Software Announcements)

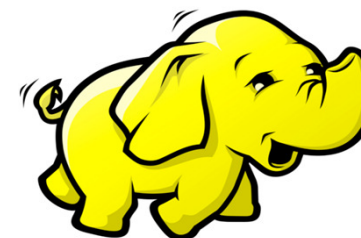
Neale Armstrong

DB2 Client Technical Professional

September 2014



Do you know this character ?



Big Data & Analytics



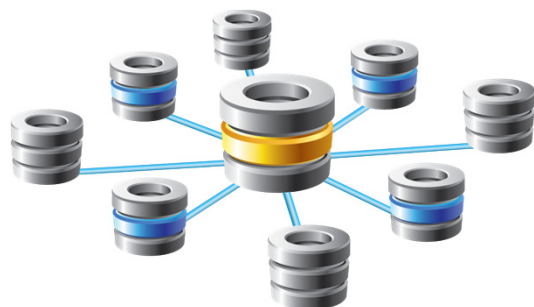
- Mine multiple data sets, apply a range of analytics
- Capture the time-to-value of data
- Embrace cognitive computing

**It's all about data,
and about ALL the data**

Why Hadoop on the Mainframe ?

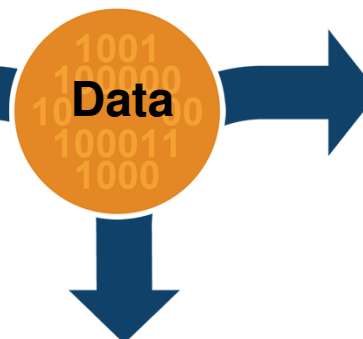
Systems of Record

z/OS is a predominant technology for securely and reliably storing and processing mission-critical transactional data



Systems of Engagement

Hadoop gets a lot of attention for cost-efficiently managing “new age” data – log files, social data, unstructured files etc...



Business value comes from the timely fusion of multiple data sources ...

Business Value

Big Data Characteristics



Big Data Opportunity Areas



What's Included ?

What's included?

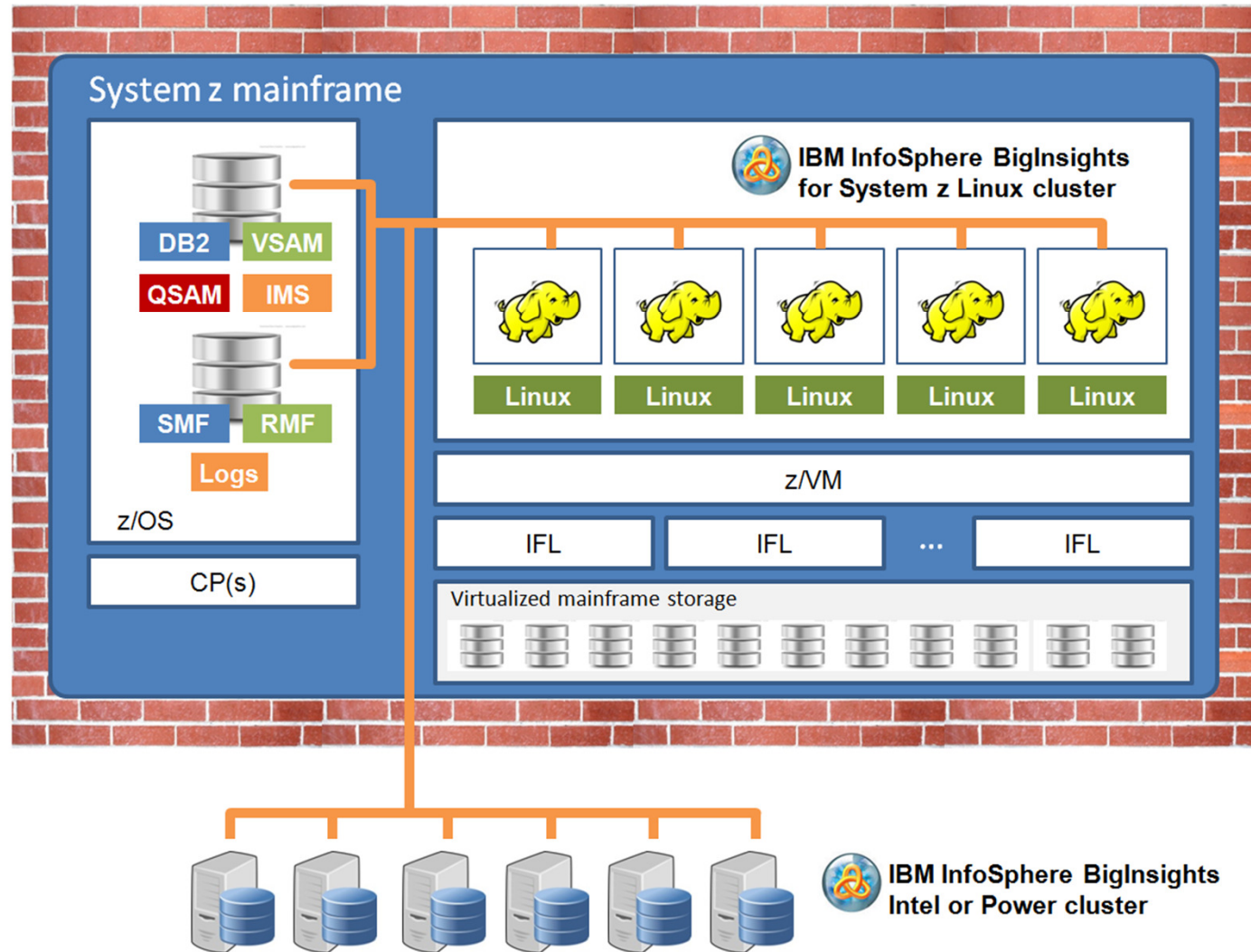
- Enterprise Edition only offered on System z Linux
- Available from Fix Central August 5th, 2014
- GA release based on **BigInsights 2.1.2**
- Support RHEL 6.4
- Apache MapReduce and HDFS only (no GPFS FPO or Adaptive MapReduce)
- Pricing identical to System x and Power – per node/VM licensing, perpetual
- 5-6 nodes recommended per IFL
- While all components shown are entitled, some may need to be run on other platforms in this initial release

Adaptive MapReduce and GPFS FPO are not supported in this release of BigInsights Enterprise Edition on System z.
Other components including Streams and Data Explorer have components that will need to run on other platforms

Big R
Machine Data Analytics Accelerator
Social Media Analytics Accelerator
Text Analytics Accelerator (AQL)
Cognos bundle (business intelligence)
Streams (Real-time processing)
Data Explorer (Search & Exploration)
IIG Integrations, Data Click
Adaptive MapReduce
IBM GPFS FPO
BigSheets
Big SQL
ECLIPSE IDE, developer tools
Web-based management console
Cluster installer
IBM Certified base Hadoop

Infosphere Big Insights V2.1.2 for Linux on System Z

Secure Perimeter



Data Studio 4.1.1

Enhancements in latest release

Data Studio Object Support

- Navigation of objects for DB2 z/OS – More related objects
- Generate DDL - Scope expanded

SQL Scripting

- Outside Data Studio “projects”

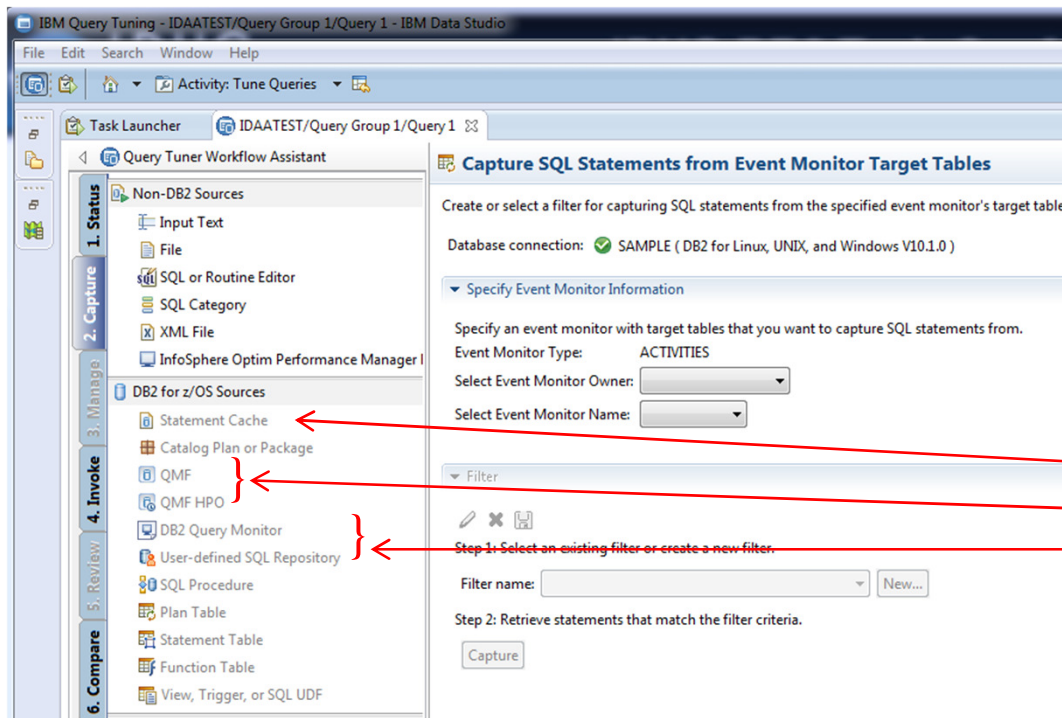
Big SQL for Infosphere Big Insights:

- Browse and navigate Hadoop tables & contents
- Create Big SQL physical data models (PDM)
- Generate and run DDL from Big SQL PDMs or Hadoop tables
- Use Visual Explain to view the access plans of Big SQL

Optim Query Workload Tuner – Improved Acceleration Advisor (pre-req : Data Studio V4.1.1)

Quantitative Assessment of IDAA benefits to existing workload

- Without any service interruption
- Without IBM performance tools dependency



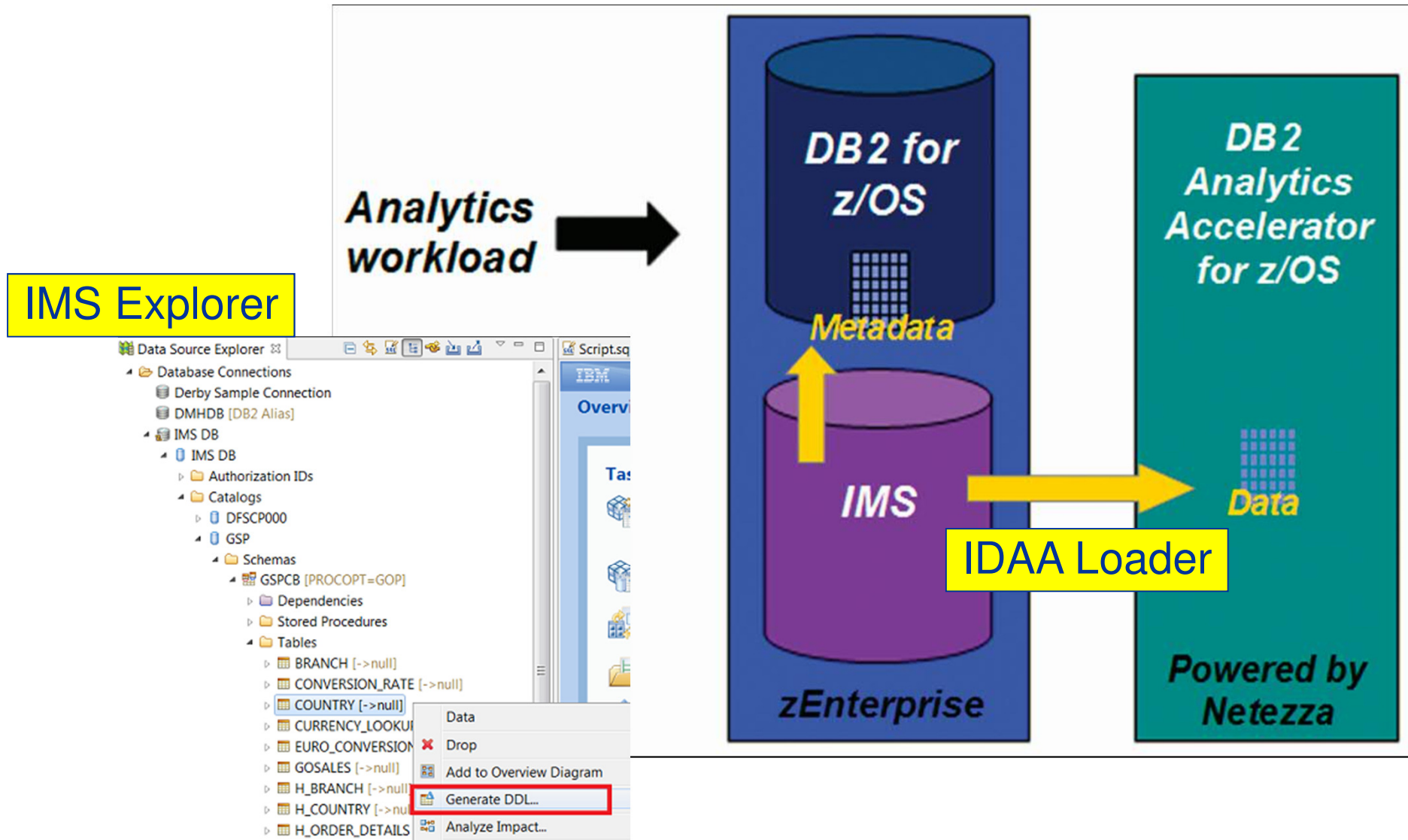
Acceleration Advisor (IDAA Evaluation)

EXPLAIN with / without Virtual Accelerator
Existing Performance Data
Performance Projections

Dynamic Statement Cache
QMF

Performance Monitors (IBM and Vendor)

IDAA Acceleration of IMS Data



Optim Product Numbering Changes: 11.3 for All

Old



New

IBM InfoSphere Optim
TDM EE for z/OS V9.2



IBM InfoSphere Optim
TDM EE for z/OS v11.3

Optim LUW 9.1



Optim LUW 11.3

Optim z/OS 7.2



Optim z/OS 11.3

IBM InfoSphere Optim v11.3

Key Objectives

**Shift to high growth market opportunities
Big Data, Cloud, Security**

**Increased relevance &
value to clients
(and within IBM)**

**Deep integration with IBM's Big Data Platform
and enable reuse**

**Leverage IBM strengths
across Big Data &
Governance portfolio**

**Simplify user experience &
deployment / adoption**

**Improve
client time to value**

IBM InfoSphere Optim v11.3

z/OS



Privacy & Security

- TDM column masking scripting language (Lua)
- TDM+DP masking of arrays in IMS, VSAM, SEQ
- TDM direct support of ODP libs. Affinity masking & National ID.
- TDM Lookup functions: additional options
- Affinity FPE masking
- Sample Data Privacy Data consistency

Consumability

- More support for data on TAPE
- Dynamic allocation of IMS data sets
- Compare utility override options
- Support for COBOL 5.1 copybooks & z/OS 2.1
- Extract & Archive statistic: uncompressed volume of user data
- DB2 DECFLOAT: improved edit and browse
- DB2 Package Versioning used in Optim z/OS installation

CICS Transaction Gateway V9.1

Mobile integration, robust connectivity, and strong security options



Service enablement

Mobile integration with JSON web services

- *Dynamic routing of mobile workload*
- *Shared tech with CICS TS + z/OS connect*
- *JSON xform from COBOL, C and PL/1*
- *Full monitoring and statistics*

Secure connectivity

SSL for .NET applications

Full NIST SP800-131A compliance

TLS 1.2 secure connections for

- *Java JCA .NET APIs to the Gateway*
- *Gateway to CICS with IPIC connections*

Foundation

Exploit zEC12 hardware with SDK 7.1

Virtualized CICS servers with IBM RTW

- *Build test-suites for Java/JCA ECI applications*

Channel data for request monitoring

API support for latest Windows

Modern connectivity

Connection management

- *For 24x7 continuous operation*

Exploits IPIC heartbeat support

- *Improved availability across larger TCP/IP networks*

z/OS Software Installation Improvements

IBM Installation Manager V1.4

- now available as a separately orderable product for z/OS at no cost

Shop Z HTTPS downloads

From: 19/10/2014 : Shop Z Downloads using HTTPS (HTTP using SSL)

- CBPDO
- ServerPac
- SystemPac
- service orders
- SMP/E RECEIVE ORDER.

Pre-Reqs:

- SMP/E V3.5 (with UO01692), or SMP/E V3.6 (with UO01693)
- CustomPac Installation Dialogue level 26.20.00, or higher
- Set up a keyring and enable the ShopZ CA certificate
- Provide the appropriate HTTPS proxy or SOCKS proxy options

FTPS - still supported.

Tivoli Advanced VSAM Manager

- Storage Administrators deal with large, volatile VSAM data sets spanning multiple volumes, constrained by short windows for offline processing, making it difficult to ensure that critical VSAM data sets are backed up when they need to be, and making it difficult to quickly and efficiently handle migration/consolidation activities
- Advanced VSAM Manager simplifies VSAM data set management in these ways:
 - High-performance data management for VSAM data sets
 - Back up and restore multiple data sets with a single command
 - Fast backup of multiple VSAM data sets to a single file
 - Validate structural and logical integrity during backup
 - Restore data sets with different characteristics
 - Fast creation of alternate indexes



Problem Determination Modernization Solution Pack

Introducing IBM Problem Determination Solution Packs

[➔ Read more](#)

IBM Problem Determination Solution Pack for z/OS

- IBM Debug Tool for z/OS
- IBM Fault Analyzer for z/OS
- IBM File Manager for z/OS
- IBM Workload Simulator for z/OS
- IBM Hour Glass
- IBM Data Set Commander for z/OS

IBM Problem Determination Modernization Solution Pack for z/OS

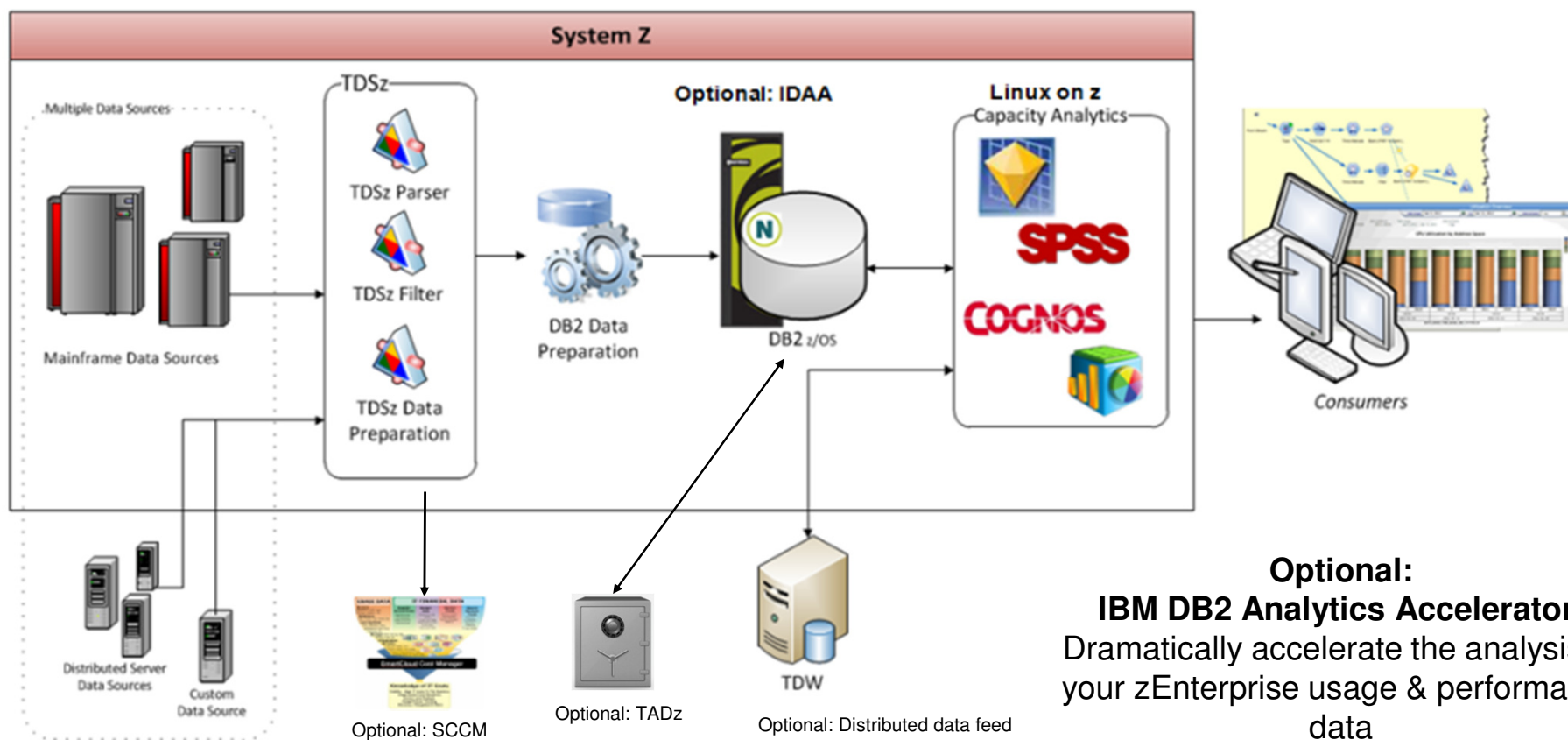
- **IBM Application Performance Analyzer for z/OS**
- IBM Debug Tool for z/OS
- IBM Fault Analyzer for z/OS
- IBM File Manager for z/OS



Capacity Management Analytics V1.2

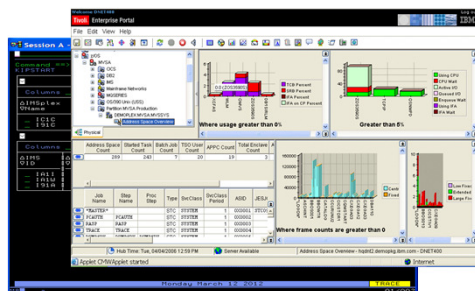
Includes a set of predefined reports and model templates to support

- software cost analysis,
- real-time anomaly detection,
- distributed capacity management

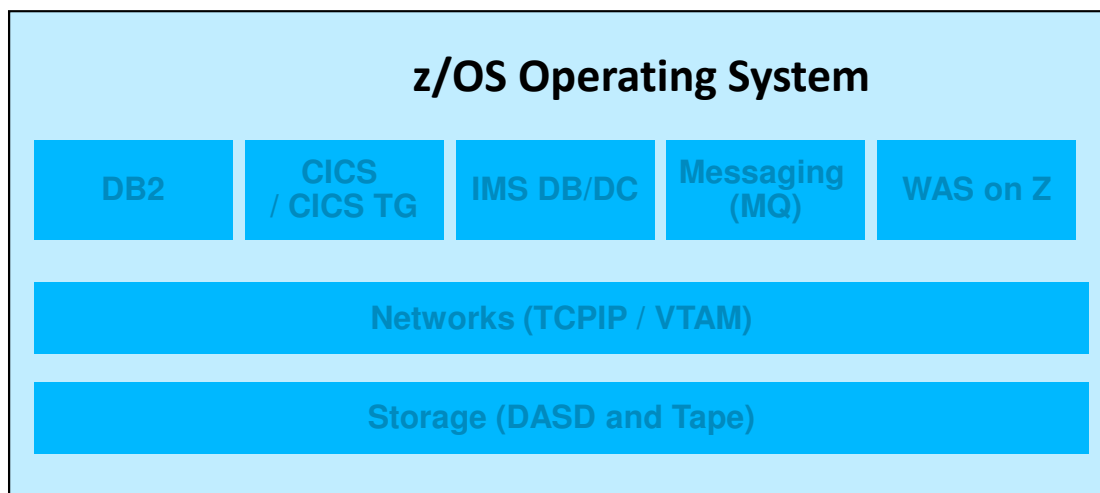


IBM Tivoli OMEGAMON Performance Management Suite for z/OS v5.3.0

- OMEGAMON XE for DB2 PE V5.2
- OMEGAMON XE for Messaging for V7.3
- OMEGAMON XE for CICS V5.3
- OMEGAMON XE for IMS V5.1
- OMEGAMON XE for z/OS V5.3
- OMEGAMON XE for Mainframe Networks V5.1.1
- OMEGAMON XE for Storage V5.3
- OMEGAMON DE for z/OS V5.3
- ITCAM AD V7.1

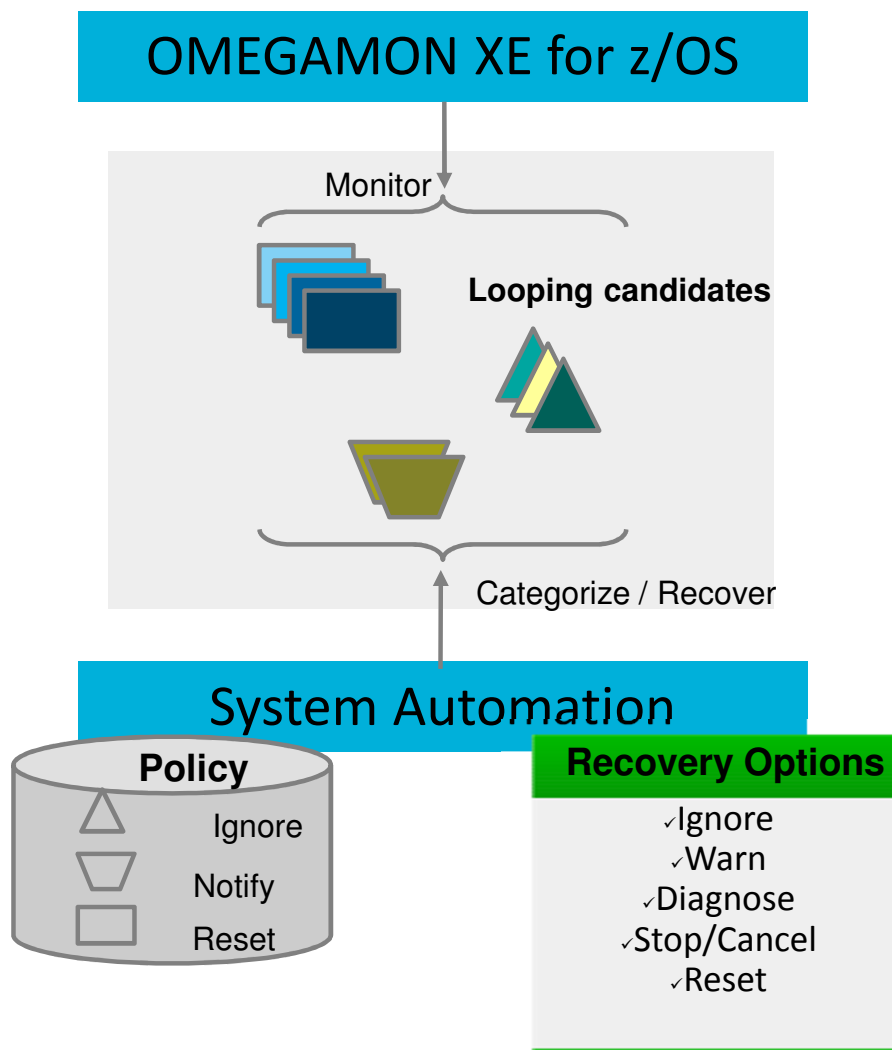


Manage System and Subsystems from single view



- Enhanced 3270 User Interface
- Resource monitoring for DB2, IMS, WAS, MQ, Networks and Storage

Tivoli System Automation V3.5



Productive New Configuration Assistant.

Simplified and improved security of the automation environment.

Standard scenario for looping address space suppression.

The ability to automate IBM System z Advanced Workload Analysis Reporter (zAware).

Application pacing to allow for tighter control of high CPU intensive consumers at start and stop times.

Enhanced message management capabilities.

Tivoli Service Management Suite V1.2

	V1.1	V1.2
Tivoli System Automation for z/OS	V3.4	V3.5
Tivoli Netview for z/OS	V6.2	V6.2
Tivoli Asset Discovery for z/OS	V8.1	V8.1
Tivoli Omegamon Performance Suite	V5.1.1	V5.3

Questions?

