



IBM Software Group

# Soluciones on demand para plataforma zSeries

**El valor del software IBM para la modernización de la infraestructura zSeries**

Javier Calavia

*Director de Ventas de Software IBM para zSeries – IBM España*



ON DEMAND BUSINESS™

IBM SWG EXPO 2005, Madrid 24 de Mayo 2005

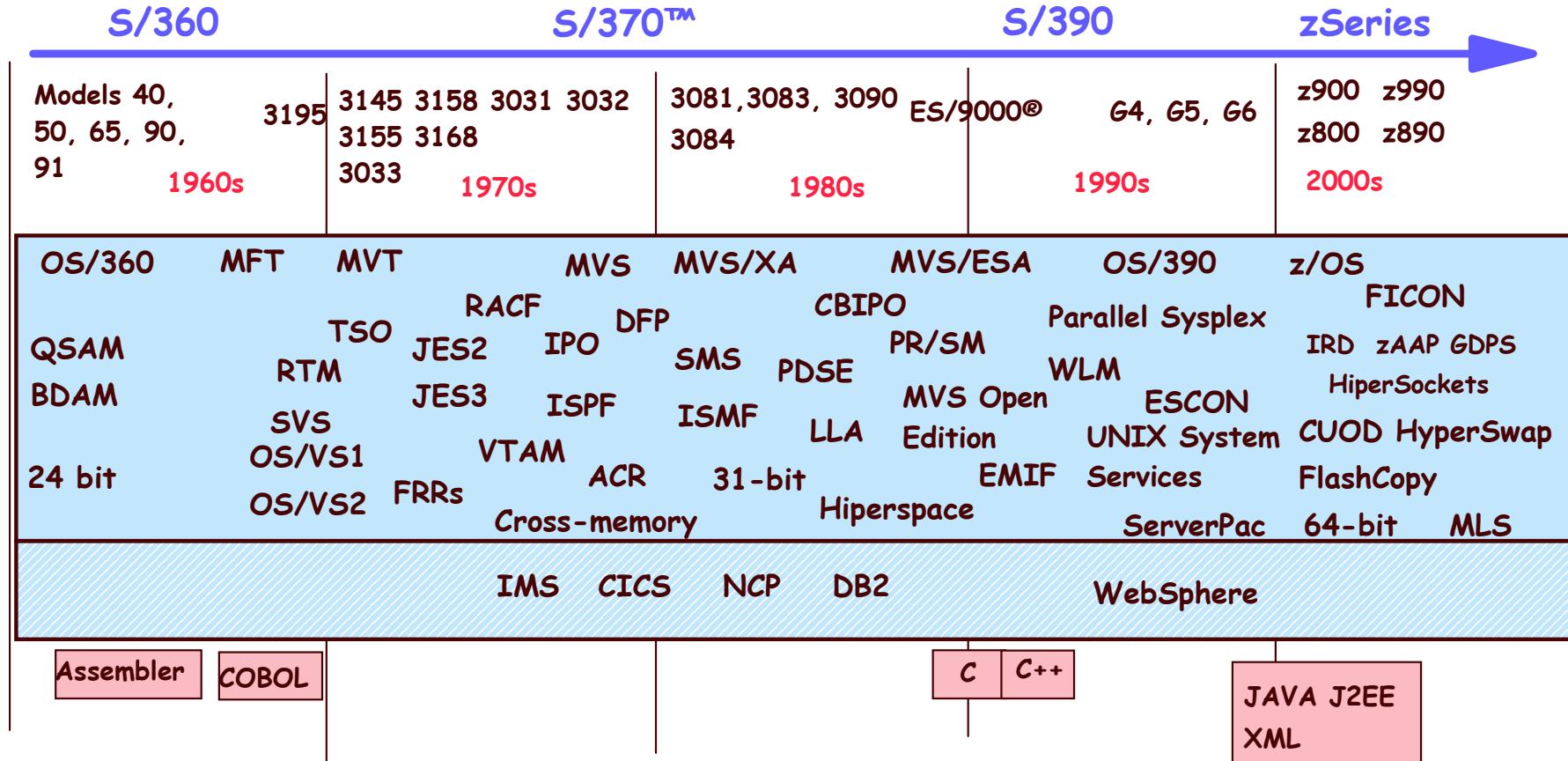
# Soluciones on demand para plataforma zSeries

## AGENDA

- ▶ **Estrategia de IBM en Software para zSeries** 10'  
*Javier Calavia Dir. SW IBM para zSeries – IBM España*
- ▶ **Estrategia DB2 y herramientas para la gestión de las BBDD** 25'  
*Julio Fernández-Gayoso Dir. Herramientas Inf. Mgmt. IBM EMEA.*
- ▶ **Experiencia de RENFE en el entorno mainframe** 25'  
*Rosa García Responsable de Sistemas Operativos y Software Base. Renfe.  
Ramón Gutiérrez Responsable de Sistemas Abiertos. Renfe.*
- ▶ **Demostración práctica de SW IBM para z/OS (tools de DB2)** 30'  
*Lola Salcedo Especialista técnica en Herramientas Inf. Mgmt. - IBM España*



# Innovación z/OS: Redefiniendo el mainframe durante 5 décadas



Protección de la Inversión en Aplicaciones



# Mainframe Charter: Nuevas capacidades *on demand*

Nuestra intención es:



**INNOVACIÓN**

*Provide leadership in innovation to enhance the use of IBM eServer zSeries to support increasingly integrated and flexible business processes for the on demand business. \*\**

#### **Business Integration**

- z/OS 1.6 and zAAP exploitation
- Communication Controller on Linux (2005\*)

#### **Business resiliency & security**

- GDPS Multi Platform Resiliency for zSeries supporting Linux for zSeries running as z/VM guest (2004\*)
- GDPS Hyperswap Manager (2005\*)

#### **Intelligent Business Director:**

- eWLM for zOS (2004\*)
- eWLM for Linux (2005\*)
- Common Information Model (2005\*)
- IBM Director Multiplatform (2005\*)
- TBSM and TEC for managing business service levels

#### **New, innovative IBM TotalStorage products:**

- DS8000, DS6000 series bring server virtualization technologies to storage subsystems.



**VALOR**

*Enhance the value proposition and lower the cost of computing of zSeries solutions in a way that is compelling, clear, and consistent.\*\**

#### **Flexible & Responsive Pricing Models:**

- Subcapacity pricing for key platform Software
  - Recently adopted by BMC and CA
- Broad portfolio of Capacity on Demand offerings

#### **zSeries ServerProven Rebate Offering\*\*\***

#### **Offerings for Integration and Simplification**

- zAAPs and IFLs
- Application transformation and integration services
- Scorpion Studies

#### **Offerings for Resiliency and Security**

- GDPS®/PPRC Implementation Services (now supports GDPS Multi Platform Resiliency for zSeries)
- GDPS® HyperSwap Manager – 75% savings on select function SA and Tivoli Netview suite
- Base zSeries and z/OS Security workshops

#### **Offerings for System Mgmt and Optimization**

- End to End Systems Management Services
- IT Optimization Solution Offering
- 12-Step Strategic Virtualization Assessment



**COMUNIDAD**

*Support programs designed to foster vitality in the zSeries community, helping to promote a strong application portfolio and world-class support services.\*\**

#### **Broadening ecosystem to enable customer with support and skills**

- Greater support to enable participation
- Over 50 new ISVs with 150 new applications in 2003
- Already 39 new ISVs and 131 new applications through 1H04 and growing

#### **FSS Reference Architectures**

- Live banking demo in MOP

#### **Exponential increase in Scholars Program**

- 70 Universities enrolled
- Targeting 20,000 new zSeries trained people in market by 2010.

\*\* Excerpted from the Mainframe Charter – August 2003

\*\*\* US and Canada Only



# Soluciones Software IBM para zSeries

## Actualización de la Plataforma Z

(Tecnología, precios por consumo –WLC Subcapacidad)

### Herramientas integradas

IMS  
v9

DB2  
v8

CICS  
v3

NetView  
v5.2

WebSphere  
v6

WebSphere  
MQ v6

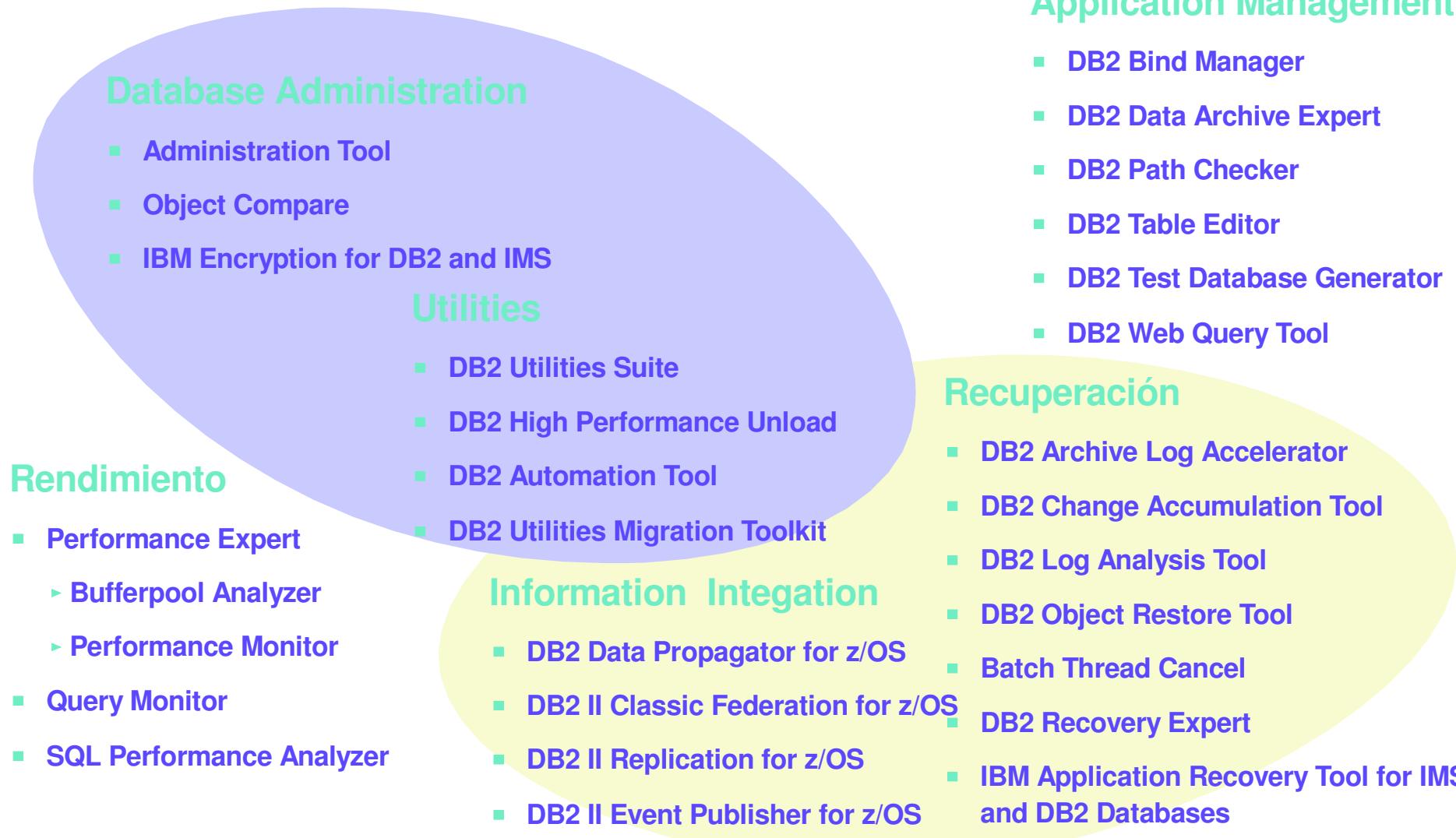
### Sistema Operativo z/OS 1.6

### zSeries Hardware & zAAP



-  zSeries Hardware and Firmware
-  Operating Systems
-  Operating System Features
-  Major Software Subsystems
-  Performance Monitor and Analysis
-  Customer/ISV Applications
-  Benefits

# Catálogo de herramientas DB2 para z/OS



# Catálogo de herramientas IMS para z/OS

## Database Administration

- IMS HALDB Conversion and Maintenance Aid
- IMS HD Compression Extended
- IMS Library Integrity Utilities
- IMS Sequential Randomizer Generator
- IMS Database Repair Facility
- IMS Online Reorg Facility
- IMS Parameter Manager

## Utilities Management

- IMS DB Control Suite
- IMS HP Fast Path Utilities
- IMS HP Load
- IMS HP Unload
- IMS HP Pointer Checker
- IMS Prefix Resolution
- IMS Index Builder
- IMS Parallel Reorg

## IMS Transaction Management

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

## Information Integration

- IMS DataPropagator
- Websphere II Classic Federation
- Websphere II Event Publisher for IMS

## IMS Performance Management

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

## IMS Recovery Management

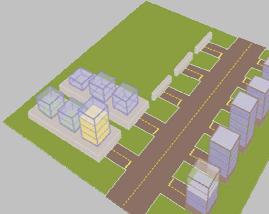
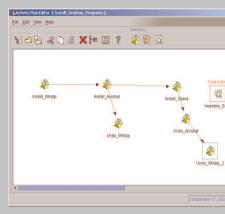
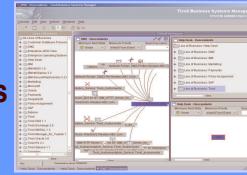
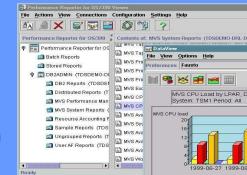
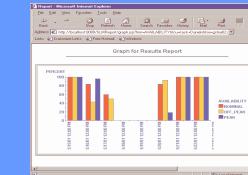
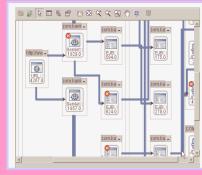
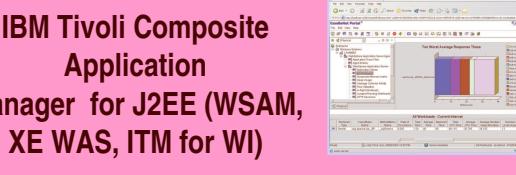
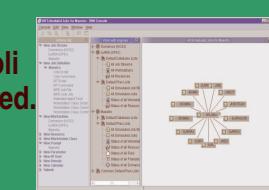
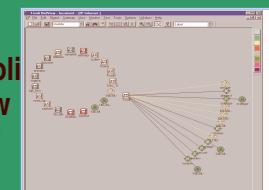
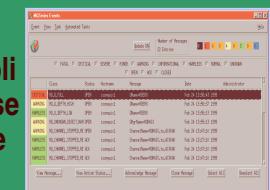
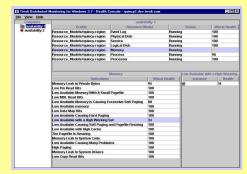
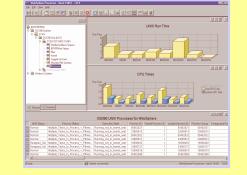
- IMS DEDB Fast Recovery
- IMS Database Recovery Facility
- IMS HP Change Accumulation
- IMS HP Image Copy

## Application Management

- IMS Batch Backout Mgr
- IMS Batch Ter Simulator
- IMS Connect
- IMS Connect Extensions
- IMS MFS Reversal Fac
- Data Encryption for IMS and DB2



# Catálogo soluciones de automatización de Tivoli

<b>Orchestration &amp; Provisioning</b>	<b>IBM Tivoli Intelligent Orchestrator</b> 	<b>IBM Tivoli Provisioning Manager</b> 	<b>IBM Tivoli Configuration Manager</b> 	
<b>Business Service Management</b>	<b>IBM Tivoli Business Systems Manager</b> 	<b>IBM Tivoli Decision Support/390</b> 	<b>IBM Tivoli Service Level Advisor</b> 	
<b>Composite Application Management (CAM)</b>	<b>IBM Tivoli CAM for Transaction Tracking (TMTP, WSA, WRM, ETEWatch)</b> 	<b>IBM Tivoli Composite Application Manager for J2EE (WSAM, XE WAS, ITM for WI)</b> 	<b>OMEGAMON XE for WBI</b> 	
<b>Event Correlation &amp; Automation</b>	<b>IBM Tivoli System Automation Family</b> 	<b>IBM Tivoli Work Sched. Suite</b> 	<b>IBM Tivoli NetView Family</b> 	<b>IBM Tivoli Enterprise Console</b> 
<b>Resource Monitoring</b>	<b>IBM Tivoli Monitoring Family</b> 	<b>IBM Tivoli OMEGAMON Family (zSeries and Distributed)</b> 		



# Tivoli Performance Automation

## Business Service Management

### INFRASTRUCTURE MANAGEMENT

Tivoli Performance Modeler  
Tivoli Information Manager  
Tivoli Web Access for Information Manager

Tivoli Decision Support for z/OS  
TDS Accounting Workstation for z/OS  
WPS Worldwide Programming Studio  
SPSS Statistical Package for Social Sciences

Business Service Management

Infrastructure Orchestration

Availability Security Optimization Provisioning

## Infrastructure Orchestration

### Availability

#### PERFORMANCE MANAGEMENT

Tivoli OMEGAMON DE for z/OS

Tivoli OMEGAMON XE for  
 ➤z/OS  
 ➤CICS  
 ➤DB2 for z/OS  
 ➤IMS  
 ➤zLinux and zVM  
 ➤Unix System Services (USS)  
 ➤Cryptographic Coprocessors  
 ➤Mainframe Networks  
 ➤z/OS Storage

Tivoli Monitoring for Network Performance

### Availability

#### COMPOSITE APPLICATION MANAGEMENT

CAM - OMEGAMON  
 Tivoli OMEGAMON XE for  
 ➤WebSphere Business Integration  
 ➤WebSphere Business Integration on z/OS  
 ➤WebSphere Application Server  
 ➤WebSphere App. Server on z/OS  
 ➤BEA WebLogic

#### CAM - WSAM

Tivoli WebSphere Studio Application Manager (WSAM)

#### CAM - TMTP

Tivoli Monitoring for  
 ➤Transaction Performance  
 ➤Transaction Performance for z/OS

#### CAM – WEB SUPPORT

Tivoli Monitoring for Business Integration  
 Web Response Time Monitor  
 Web Segment Analyzer  
 ETEWatch

### Availability

#### OPERATIONS MANAGEMENT

Tivoli NetView for z/OS  
 Tivoli NetView Distribution Manager  
 Tivoli NetView Access Services  
 Tivoli NetView FTP

Tivoli System Automation  
 Tivoli System Automation for Multiplatform

#### AF/OPERATOR

#### AF/REMOTE

### Optimization

#### PRODUCTION CONTROL

Tivoli Workload Scheduler  
 Tivoli Workload Scheduler for z/OS  
 Tivoli Output Manager  
 Tivoli Automated Tape Allocation Manager  
 Tivoli Allocation Optimizer  
 Diversified Software Systems (DSSI)  
 ➤Job/SCAN  
 ➤Docu/TEXT

#### zSERIES STORAGE MANAGEMENT

Tivoli Storage Manager for z/OS  
 Tivoli Storage Optimizer  
 MainStar Product Suite

### Security

#### zSERIES SECURITY MANAGEMENT

Tivoli RACF Administrator Workbench  
 Tivoli Access Manager for z/OS  
 Tivoli Identity Manager for z/OS

### Provisioning

#### zSERIES LICENSE MANAGEMENT

Isogon  
 ➤SoftAudit  
 ➤Vista



# Catálogo de productos

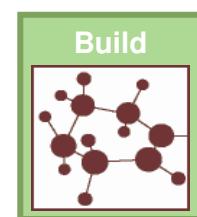
## WebSphere en Z

### Problem Determination Tools

- File Manager
- Fault Analyzer
- Debug Tool
- Debug Tool Utilities
- IBM Application Monitor
- IBM Workload Simulator

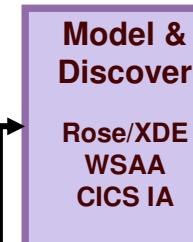
### CICS Tools

- CICS Interdependency Analyzer
- CICS Performance Analyzer
- OMEGAMON XE for CICS
- CICS Business Event Publisher
- CICS VSAM Transparency
- CICS Batch Application Control
- IBM Session Manager
- CICS VSAM Recovery
- CICS VSAM Copy
- CICS OTTO
- CICS Configuration Manager
- and more coming soon!

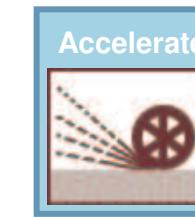


### WAS/z Tools

- WS Application Monitor
- WS Workload Simulator
- WS Asset Analyzer
- WS Enterprise Developer



### Rational Tools



### Rational/z Tools

- Function Tester Extension
- Performance Tester
- Application Lifecycle Manager

### Host Integration Tools

- Personal Communications
- Host Publisher
- Host On Demand
- Host Access Transformation Server

### Runtimes

- WebSphere Application Server
- CICS, IMS, DB2
- Enterprise COBOL/PL/I
- Host Access Transformation Server

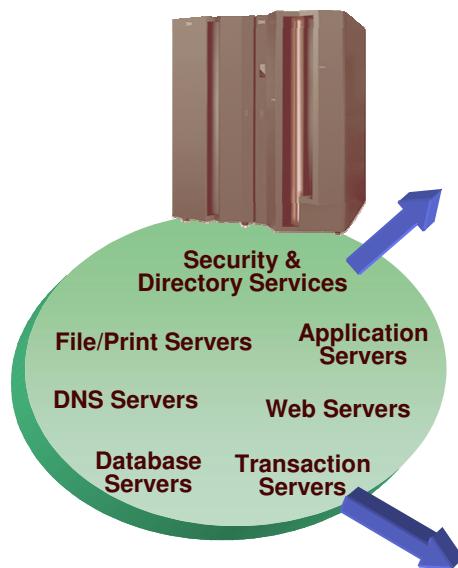


# Evolución de las métricas de precios del SW IBM para Mainframe

- **1994 Introduction of PSLC (Parallel Sysplex License Charge)**
  - ▶ about 25-30 % reduction on prices where multiple systems were involved as parallel sysplex
  - ▶ mainframe systems are moving from small/few workloads to fast growing Sysplex environments
- **1998 - NALC (New Application Licence Charge) for new workloads**
  - ▶ large discounts on Operating System charges
  - ▶ geared to encourage development of new ebusiness apps on mainframe
- **1999 - GOLC (Growth Opportunity License Charge) announced for Multiprise 3000 with pricing/mip much less than on other comparable capacity systems**
- **September 2000 - zSeries tools offering launched**
  - ▶ IBM enters Tools market and becomes an alternative to major ISV
- **2000 - zSeries with Workload License Charge (WLC) and sub-capacity pricing**
  - ▶ introducing new revolutionary price to facilitate growth that the On Demand business requires. Customers can now grow e-business workloads as needed(req. zOS in 64-bit mode & SCRT)
- **2002**
  - ▶ zELC pricing for z800, again with lower price points
  - ▶ Transformed WLC from LPAR defined capacity to LPAR utilization
  - ▶ Introduced WLC Level 4, reduced WLC Level 5, Introduced WLC Level 6 and WLC Level 7
- **2003**
  - ▶ **z990 with reduced pricing MSUs** (Mainframe Charter) - approx 10%
  - ▶ announcement of **eNALC** price levels (with dramatic price cut on zOS)
  - ▶ **eWLC**(entry Workload license charge) for z800 allowing subcapacity pricing
  - ▶ 3 MSU Base Charge for Workload License Charges
  - ▶ Reduced z/OS WLC charges for WLC Environments < 315 MSUs
- **April 7th, 2004 - 40th anniversary of Mainframe - z890 announcement**
  - ▶ **On/Off Capacity on Demand** (On/Off CoD) capable
  - ▶ zSeries Software Tools Starter Pack Promotion
  - ▶ **zAAP** (zSeries Application Assist Processor) – New processor type dedicated exclusively for Java workloads under z/OS
- **August 2004 - extended IPLA Tools Sub-capacity charging availability**



# El Mainframe es el entorno ideal para...



- Proceso intensivo de transacciones de alto rendimiento
- Cargas intensivas de trabajo E/S
- Gran servidor BD
- Alta flexibilidad y seguridad
- Cargas de trabajo muy variables e imprevisibles
- Aplicaciones de infraestructura de baja utilización
- Rápido aprovisionamiento

Nuevas Cargas de trabajo

Nuevas opciones...

eBusiness

LINUX

ERP



## Ejes estratégicos en 2005

- **Virtualización, Simplificación de la infraestructura & Optimización T.I.**  
Linux for zSeries, LPAR & z/VM qualities
- **Modernización & Integración con el Negocio**  
Websphere, Java, J2EE, Application Integration
- **Flexibilidad & Seguridad**  
Disaster Recovery, BCRS / GDPS , CBU
- **Aplicaciones integradas Corporativas**  
SAP, Siebel, Peoplesoft, Domino
- **Actualización de la plataforma y del middleware**  
zArchitecture, z990, z890, zAAP, IFL, CoD, zOS 1.6, WAS 6, WBISF, DB2 V8, System Tools, T&C, subcapacity pricing, OIO, ELA/ESSOs
- **Aumentar conocimientos externos**  
University program  
IBM & BP Certification  
zAtlas & zChampionship  
Top Tier Program - Senior technical leads and executive support



**IBM Software for zSeries:** [ibm.com/software/zseries](http://ibm.com/software/zseries)

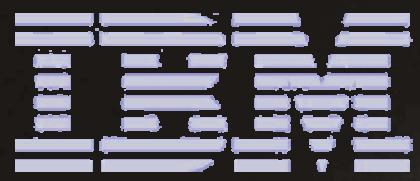
**The Mainstream Newsletter:** [ibm.com/software/zseries/mainstream](http://ibm.com/software/zseries/mainstream)

*The Mainstream –*  
[www.ibm.com/software/zseries/mainstream](http://www.ibm.com/software/zseries/mainstream)

The screenshot shows the IBM Software for zSeries website. On the left, there's a sidebar with links like 'Select a country', '+ Software', 'IBM Software for zSeries', 'How to buy', 'Support', 'News', 'Events', 'Promotions', 'Library', and 'Products A-Z'. Below that is a 'Related links' section with 'Shop zSeries', 'Success stories', and 'Mainframe servers'. The main content area features a banner for 'The Mainstream' newsletter, which is described as the 'IBM eServer zSeries and S/390 software newsletter'. It highlights that it's designed to shorten the path to information. The newsletter includes an 'Editor's note', 'Featured articles', 'Upcoming events', 'New product announcements', 'Systems at Work', 'Objective viewpoints', 'White papers', 'Technical resources', 'The toolbox', 'Cliffhangers', 'Feedback', and a 'Subscribe' link. At the bottom, there's a 'Mainframe Total Cost of Ownership: Managing the Cost Equation' article snippet.



**IBM SOFTWARE EXPO 2005, Madrid 24 de Mayo 2005**



*e*server