

Business Process Management para z/OS

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Agenda



→ *Fundamentos de negocio*

- *Propuesta de valor de BPM*
- *Automatización de procesos*

→ *BPM v7.5 en z/OS*

- *Agility for Business Process on z/OS*
- *The z/OS Platform and zEnterprise Environment*
- *BPM for z/OS and Co-Location*
- *IBM BPM Process Server 7.5 for z/OS*



BPM es una disciplina que combina ***personas, información y sistemas*** para ***eliminar las ineficiencias, reducir costes e impulsar la productividad, acelerando el tiempo de mejora en los procesos y la innovación en el negocio.***



- **Crea** modelos de negocio innovadores con nuevos y diferenciadores productos y servicios para incrementar los ingresos.
- **Racionaliza** las actividades de personas dispares, socios, servicios y sistemas para optimizar costes.
- **Reduce:**
 - Gastos mediante nuevas facilidades de autoservicio entre clientes y suministradores
 - Riesgo de no-conformidades
 - Errores debidos a tareas manuales
 - Ciclos de Tiempo (Time to Market)

- **Procesos Explícitos:** Existe conocimiento en la Organización del Procedimiento.
- **Procesos Medibles:** Existen métricas que permiten valorar la eficiencia de un proceso.
- **Procesos Documentado:** Los procesos pueden documentarse y conocerse.

Monit. Eventos & Actividades

Simulación & Optimización

Colaboración

Gestión Contenidos

Gestión Reglas Negocio

Diseño & Desarrollo de Modelos

Registro & Repositorio

Admón & Gestión de Sistemas

Ejecutor de Procesos

Conectividad (Adaptadores & ESB)

Procesos y tipos de BPMS



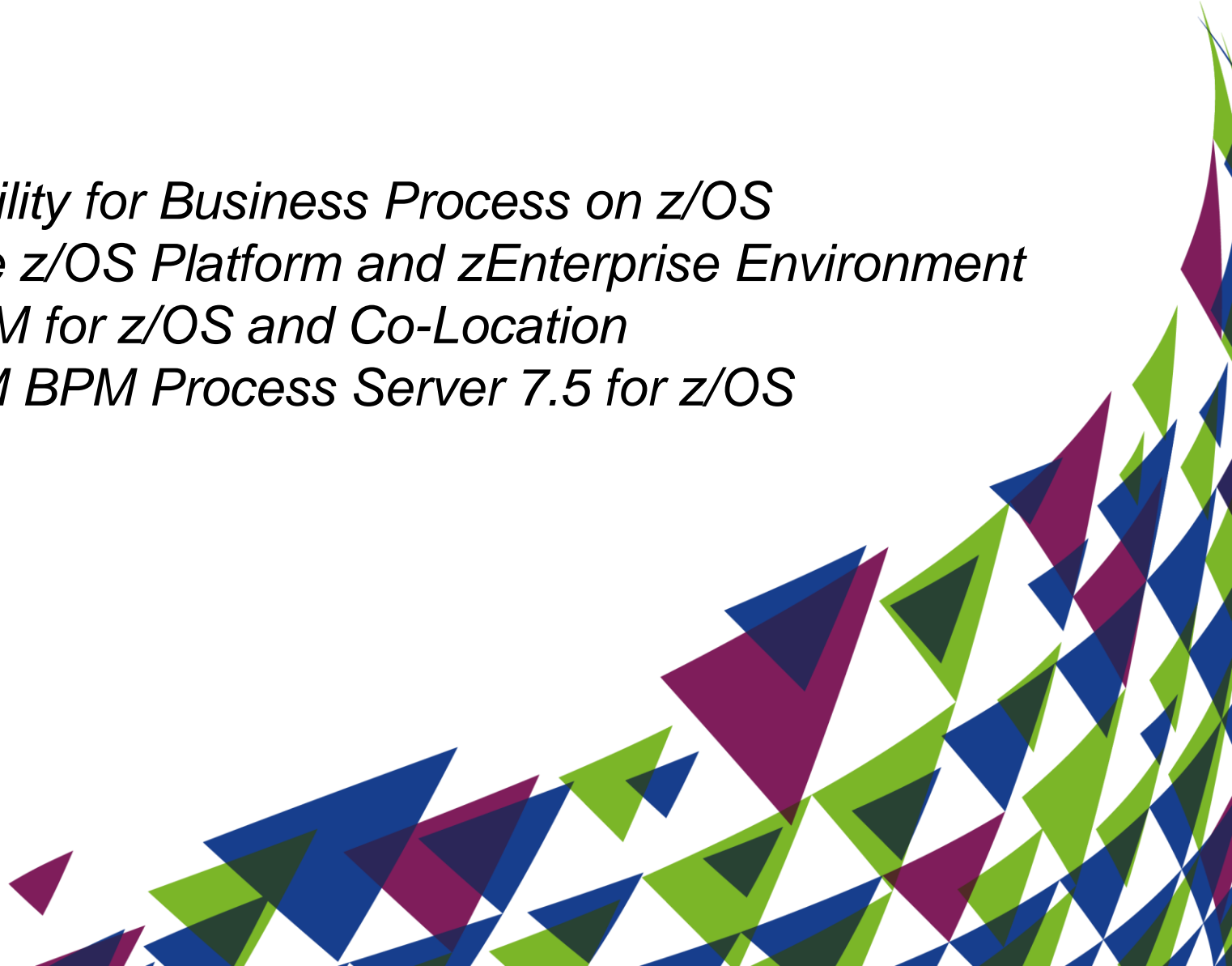
| Características de los Procesos | Ejemplo | Funcionalidades | Tipología |
|----------------------------------|---|--|------------------------------|
| Intensivos en Integración | <ul style="list-style-type: none"> • Administración de pedidos • Apertura de Cuentas • Procesamiento Directo | <ul style="list-style-type: none"> • Herramientas de Integración • Gestión de Transacciones • Gestión de perfiles de asociados | • BPMS basado en Integración |
| Intensivos en Personas | <ul style="list-style-type: none"> • Procesamiento de Reclamaciones • Contratación de Personal | <ul style="list-style-type: none"> • Portal de Lista/Flujo de Tareas • Desarrollo Interfaz Usuario • Gestión Organizativa • Gestión de Formularios | • BPMS basado en Personas |
| Intensivos en Documentos | <ul style="list-style-type: none"> • Gestión de Contratos • Cuentas a Pagar • Resolución de Reclamaciones | <ul style="list-style-type: none"> • Gestión de Documentos • Captura & archivado de Imágenes • Gestión de Archivos | • BPMS basado en Documentos |
| Intensivos en Decisiones | <ul style="list-style-type: none"> • Colocación de Emisiones • Generación de Prestamos | <ul style="list-style-type: none"> • Motor de Reglas de Negocio • Inteligencia de Negocio | |

Forrester Process Taxonomy

¿Necesitas automatización de procesos?

- ¿Estás seguro de que tus procesos hacen lo que piensas que hacen? ¿Qué situaciones de clientes o exigencias legales requieren de procesos?
- ¿Qué impacto tienen en el revenue o en el coste los procesos ineficientes?
- ¿Qué problemas acarrearán los cuellos de botella y las desviaciones (o excepciones) en los procesos?
- ¿Sabes qué procesos clave son los que tienen más excepciones que deben ser tratadas manualmente? ¿Qué impacto tienen esas excepciones en el negocio?
- ¿Cuánto tiempo lleva a la organización de IT hacer cambios en los procesos de embebidos en las aplicaciones hoy existentes? ¿Cuánto querrías que fuese?
- ¿Cuántas oportunidades de negocio dejas correr por no tener una visión en tiempo real de los procesos clave?

- *Agility for Business Process on z/OS*
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Leverage



Simplify



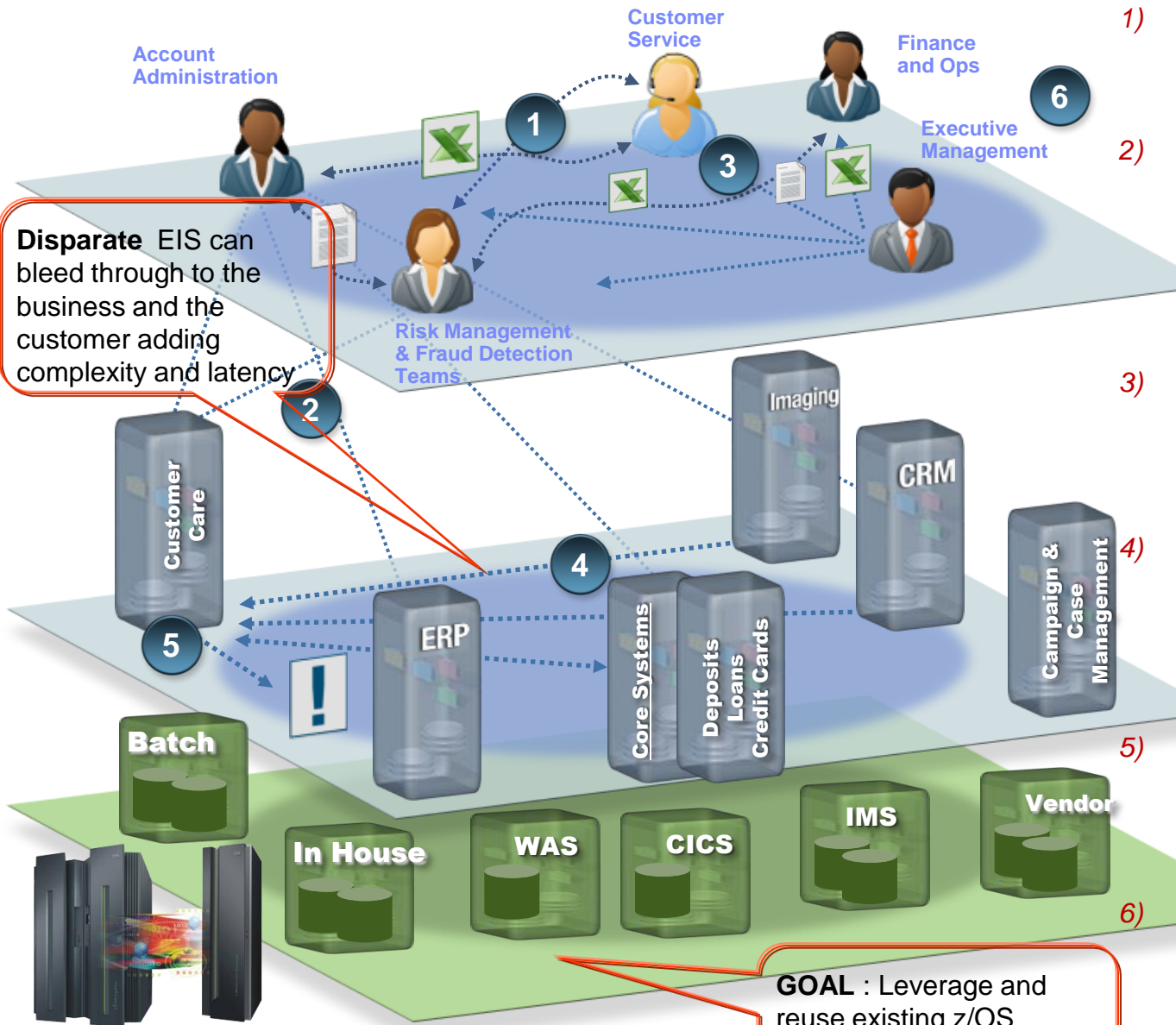
Unify



- **Leverage** mission-critical applications & processes
- **Simplify** through co-location on z/OS of processes that frequently interact with CICS, IMS, or DB2
- **Unify** through powerfully simple process improvement and seamless deployment
- [Check out](#) the new offer on the Web!



Typical Process Problems in a System z Environment



- 1) "Customer initiates Account Opening"
Unstructured tasks and communication slow the process
- 2) "Account Opening Service retrieves customer/product data from repositories"
Inefficient working environment spans systems, adversely affecting reuse potential
- 3) "Assess financial risk associated with the customer for this account"
Inconsistent prioritization, with rapid change being difficult to manage
- 4) "Customer Care process is triggered so that the bank staff can make the right decisions"
Incomplete or inaccurate data flow between systems affects decisions
- 5) "Account is created in the Product Processor"
Lack of control over system & events (exception handling) slows processes
- 6) "Account information returned to the customer"
Poor visibility into process performance makes process optimization difficult

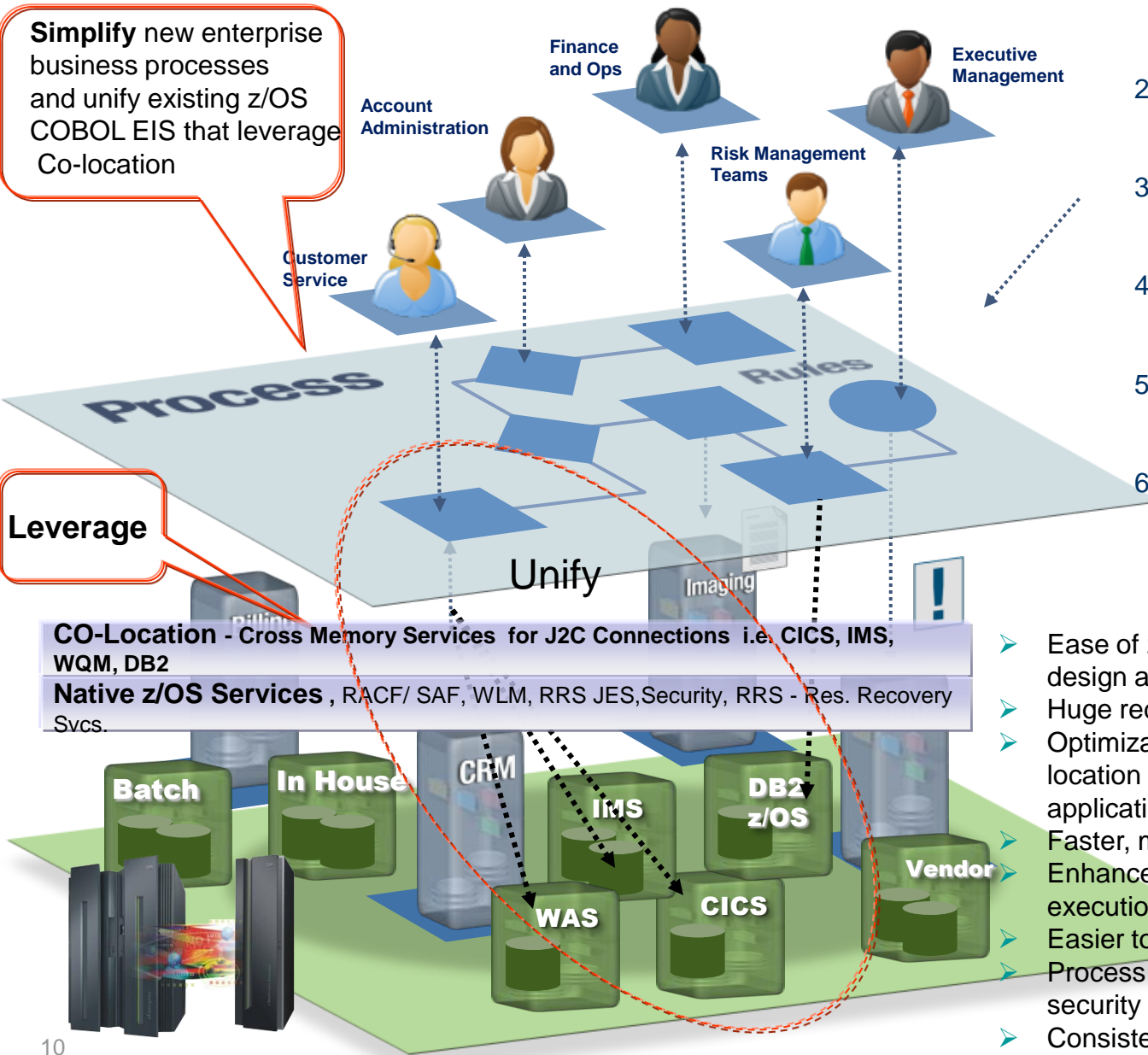
BPM on System z Brings Order to the Chaos

Extract maximum business value from existing assets



Simplify new enterprise business processes and unify existing z/OS COBOL EIS that leverage Co-location

Leverage



CO-Location - Cross Memory Services for J2C Connections i.e. CICS, IMS, WQM, DB2
Native z/OS Services, RACF/ SAF, WLM, RRS JES, Security, RRS - Res. Recovery Svcs.

- 1) Automated workflow and decision making
- 2) Reduce errors and improve consistency
- 3) Standardize resolution across geographies
- 4) Leverage existing systems and data
- 5) Monitor for business events and initiate actions
- 6) Real-time visibility and process control

Customer Benefits:

- Ease of z/OS assets reuse with simplified design and specialized tooling
- Huge reduction in manual work & errors
- Optimization of z/OS resources through co-location of processes with z/OS data and applications
- Faster, more consistent issue resolution
- Enhanced usage of performance & process execution on z/OS platform
- Easier to manage the business
- Process integrity & stability with enhanced security
- Consistent case handling

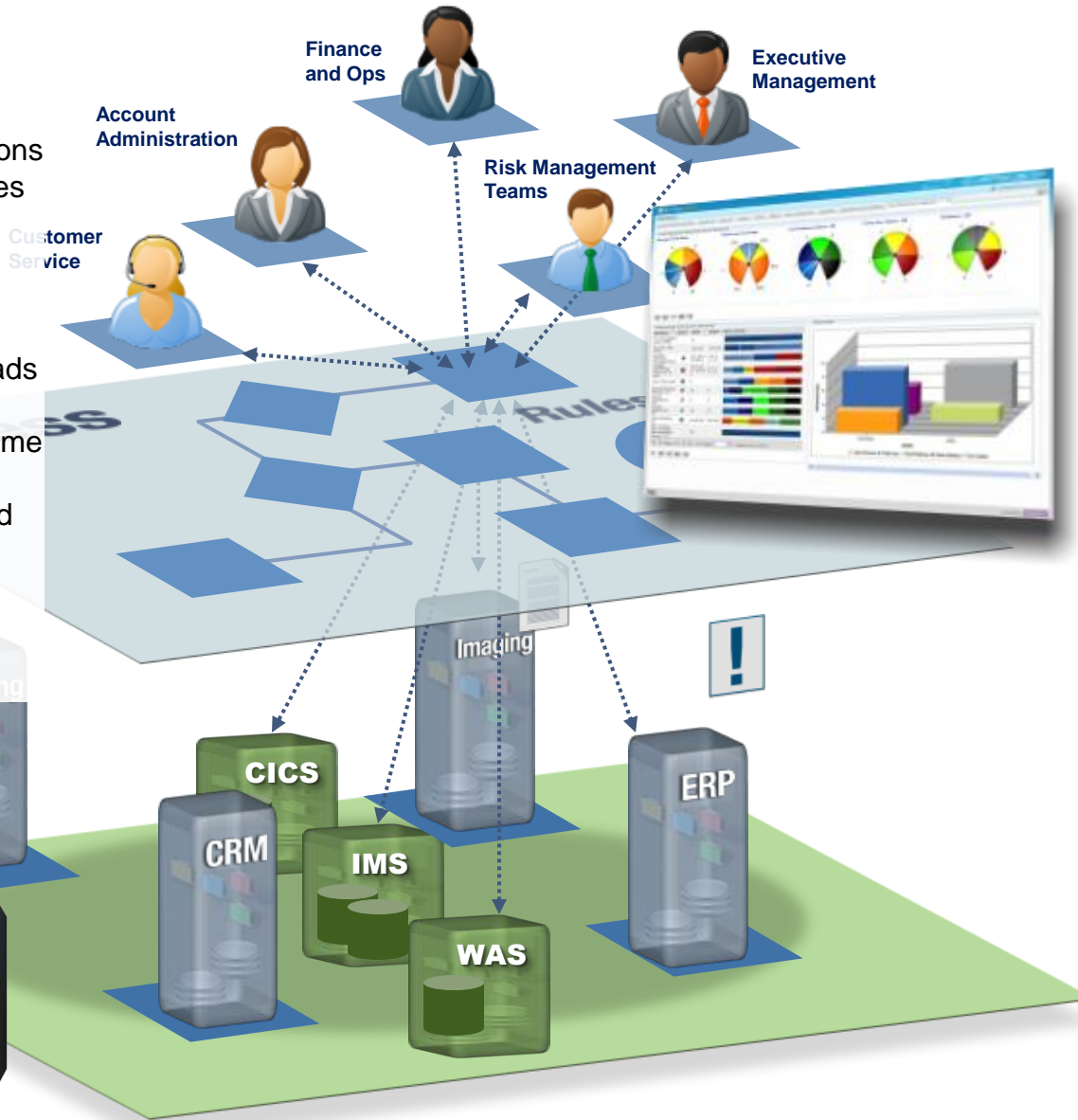
Business Monitor on System z for End-to-End Visibility



Monitors in-process, correlates individual transactions, provides dashboards

Frustrations

- Process exceptions wasting resources and increasing costs
- Ineffective inventory management leads to lost sales
- Poor response time results in lower customer sat and exposure to risk
- Supply chain disruptions increase costs

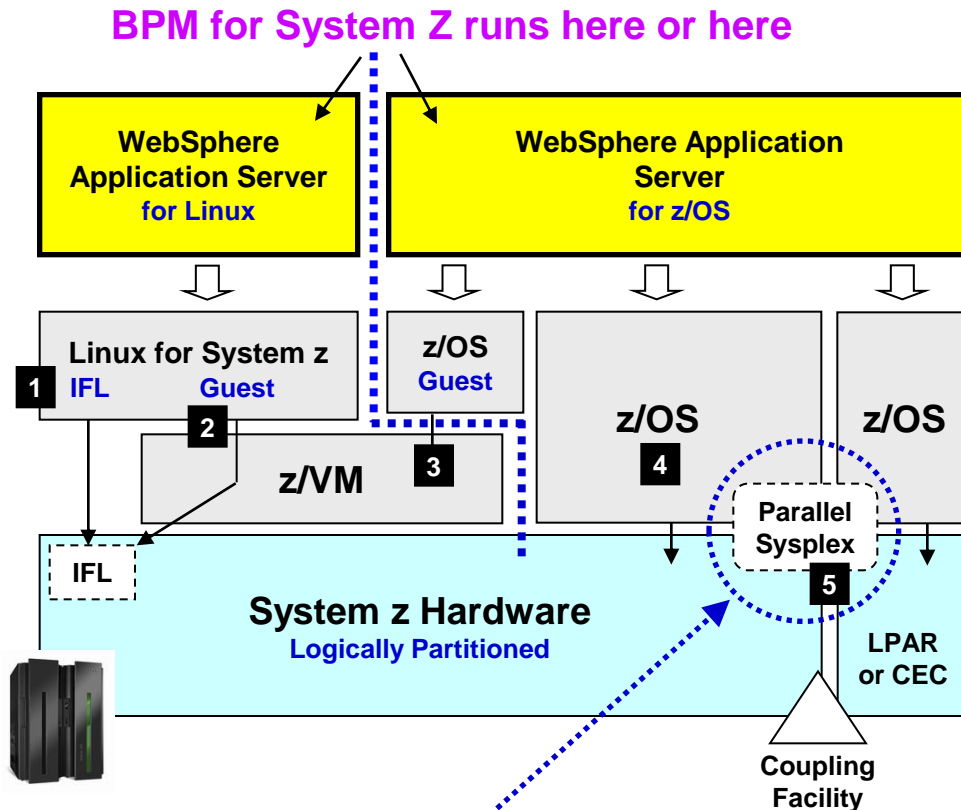


Benefits

- Monitor metrics, business situations, and events in real-time
- User customizable dashboards to ensure targeted, relevant information
- Feed and correlate alerts with business event processing for enhanced pattern visibility
- Interact directly with processes in real-time
- Predict future values of KPIs based on historic and cyclic trends
- Trigger alerts when predicted values indicate a problem detection

BPM V7 for System z, z/OS, Linux, and WebSphere Application Server

Here's a mapping of how the two flavors of WebSphere Application Server can be hosted on System z hardware:

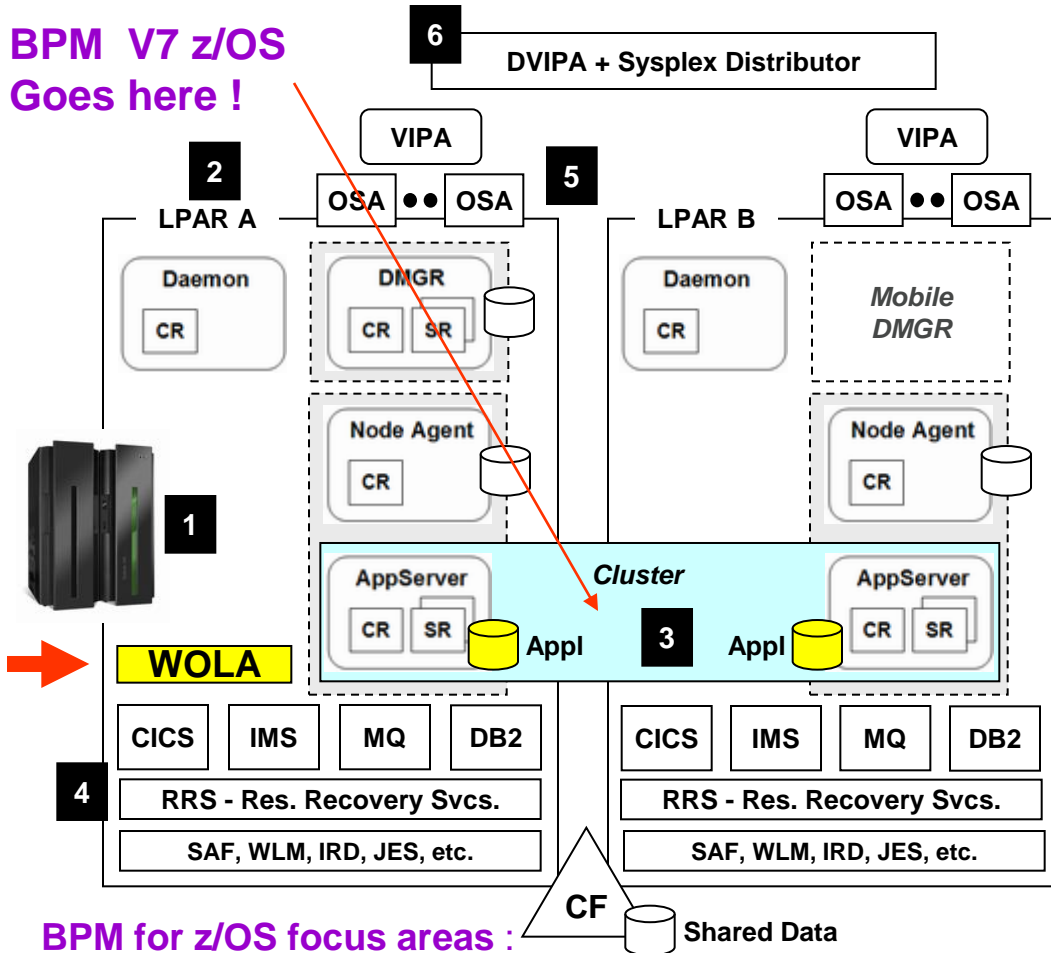


1. **Linux for System z directly on IFL**
Possible, but not very common. Solution where no zVM skills exist
2. **Linux for System z as guest on zVM**
Very common. This provides excellent virtualization with z/VM with Linux running as a guest. Runs on the IFL.
3. **z/OS as guest on z/VM**
Another example of zVM's virtualization capabilities. WAS z/OS as guest typically in a development or test environment.
4. **z/OS in a non-Sysplex environment**
WAS runs directly on z/OS with no z/VM virtualization. No Sysplex more common in test environments or small production.
5. **z/OS in a Parallel Sysplex environment**
This is the flagship environment. This is where high availability, scalability and maximum platform exploitation takes place.

- Four basic rules, applied here in the form of questions, can help to determine whether to deploy on System z:
 - Is the hardware current (z10, z196), that is - is the customer positioned to take advantage of the latest hardware capabilities and the best software pricing?
 - Does the business application require frequent access to z/OS data (DB2 z/OS or IMS-DB) or transactions (CICS, IMS, WebSphere MQ)?.
 - Are the related workloads highly dynamic, unpredictable, or of high business value?
 - Can the workloads take advantage of specialty processors (IFLs, zIIPs, or zAAPs)?

It's all about redundancy *and* integration with platform HA / DR function

**BPM V7 z/OS
Goes here !**



BPM for z/OS focus areas :

H/A-DR, Local Connections, DS, Q Sharing and DB2 z/OS strengths

We show two operating system instances. That can be higher for greater availability and more manageable failover

1. **Redundant and fault-tolerant hardware**
System z hardware design has many layers of fault tolerance and redundancy.
2. **Redundant z/OS instances**
Either through logical partitioning (LPAR) or separate physical machines.
3. **Clustered WebSphere z/OS servers**
Multiple application servers grouped into a logical unit for application deployment and management
z/OS exclusive: dynamic SR expansion (more coming up)
4. **Redundant data resource managers with Sysplex shared data**
Multiple resource managers instances with shared data in CF and a global syncpoint manager (RRS)
5. **Redundant network adapters hidden behind Virtual IP address**
On the front end, multiple network interfaces with a moveable virtual IP address protecting against outage
6. **Workload distribution hidden behind distributed virtual IP and Sysplex Distributor**
Further abstraction of real IP addresses behind a virtual IP that can be swapped across images in a Sysplex, with Sysplex Distributor providing TCP connection distribution based on WLM

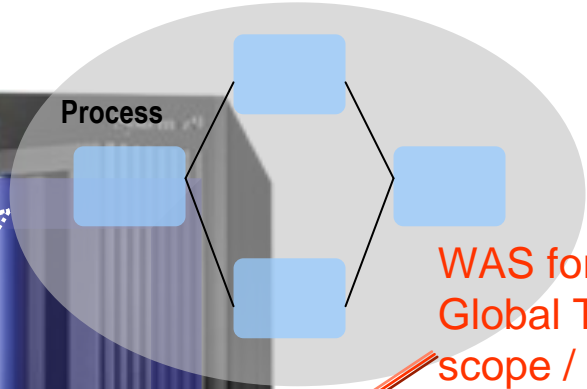
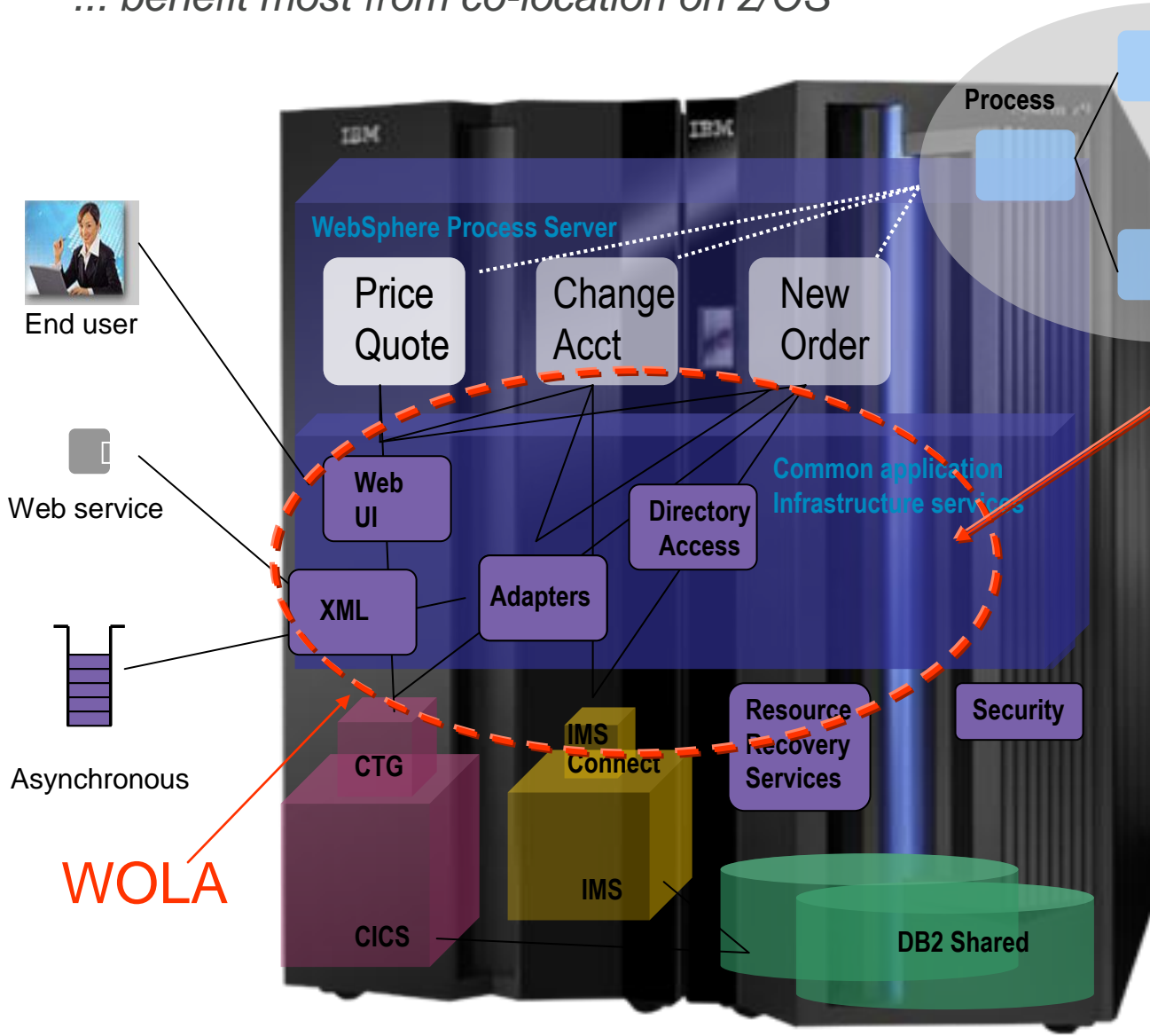
The z/OS Platform Environment BPM and Co-Location



Processes that frequently interact with CICS, IMS, DB2 z/OS



... benefit most from co-location on z/OS



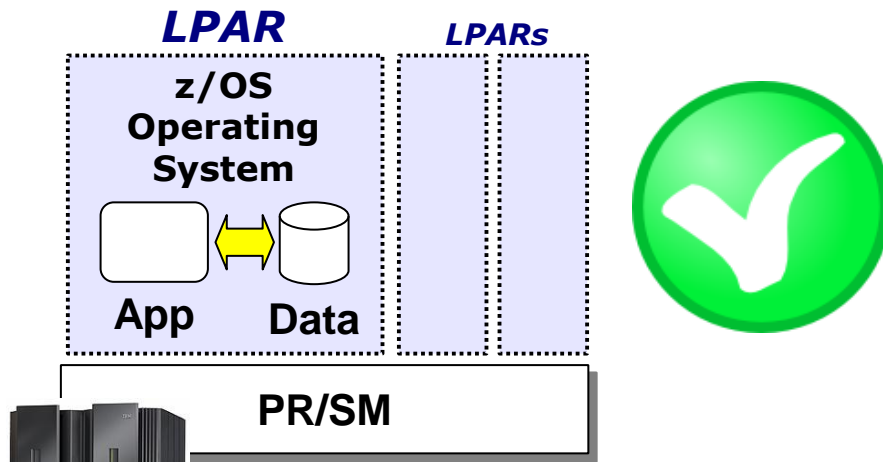
Process management enables automated & efficient service oriented implementations.

Running it on System z delivers:

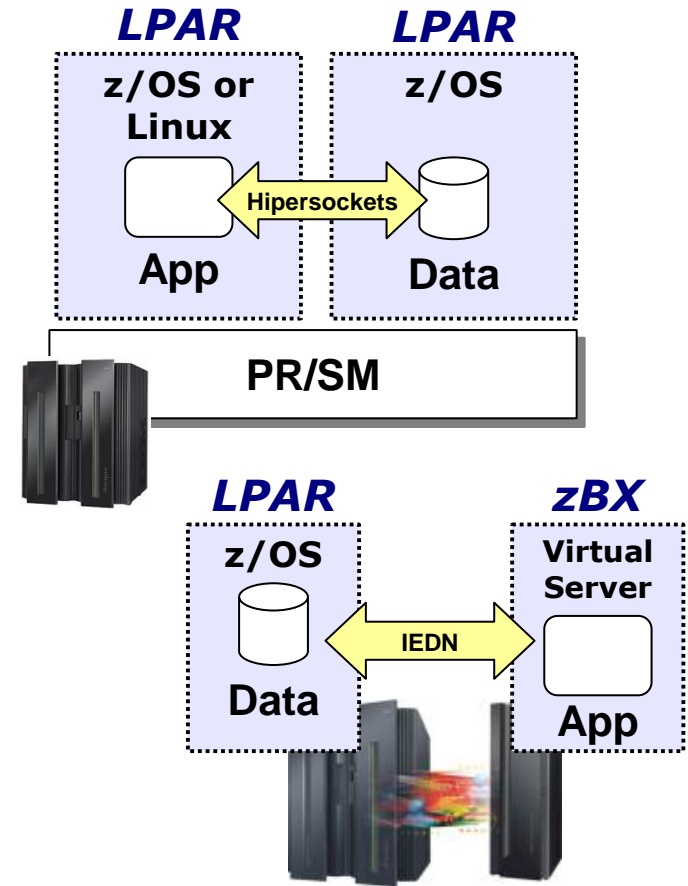
- Enterprise-class operation
- Performance improvements
- Virtual network between assets on z
- Enhanced security
- Consistent backup and recovery, process integrity
- Continuous Availability

"Co-Location"

We use the term "co-location" to mean the application and the data source resident on the *same instance of z/OS*:

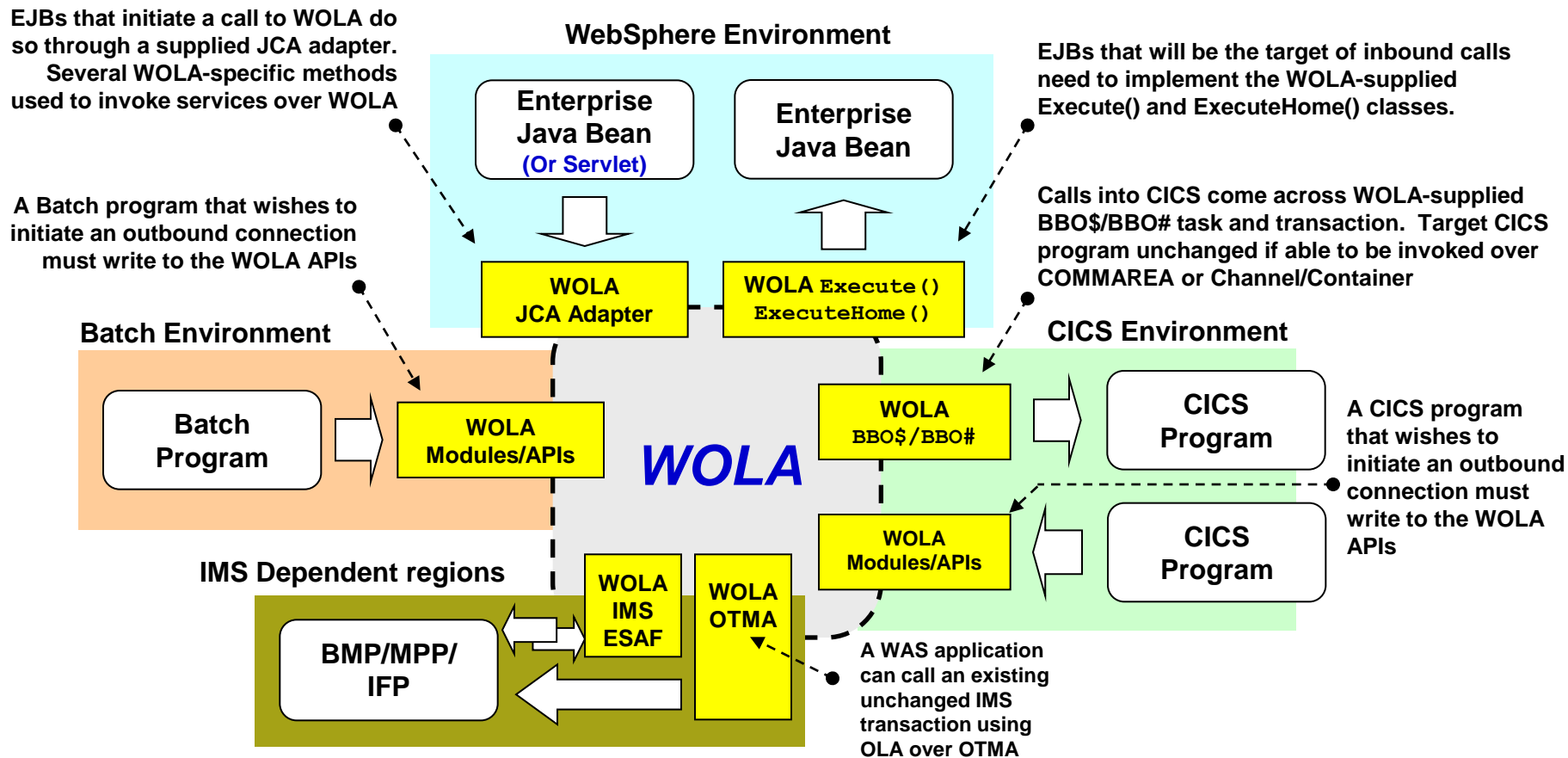


**Exploiting
cross-memory
co-location
services of z/OS**



May be applicable to business needs, but this is not what we mean by "co-location"

The WOLA Interface

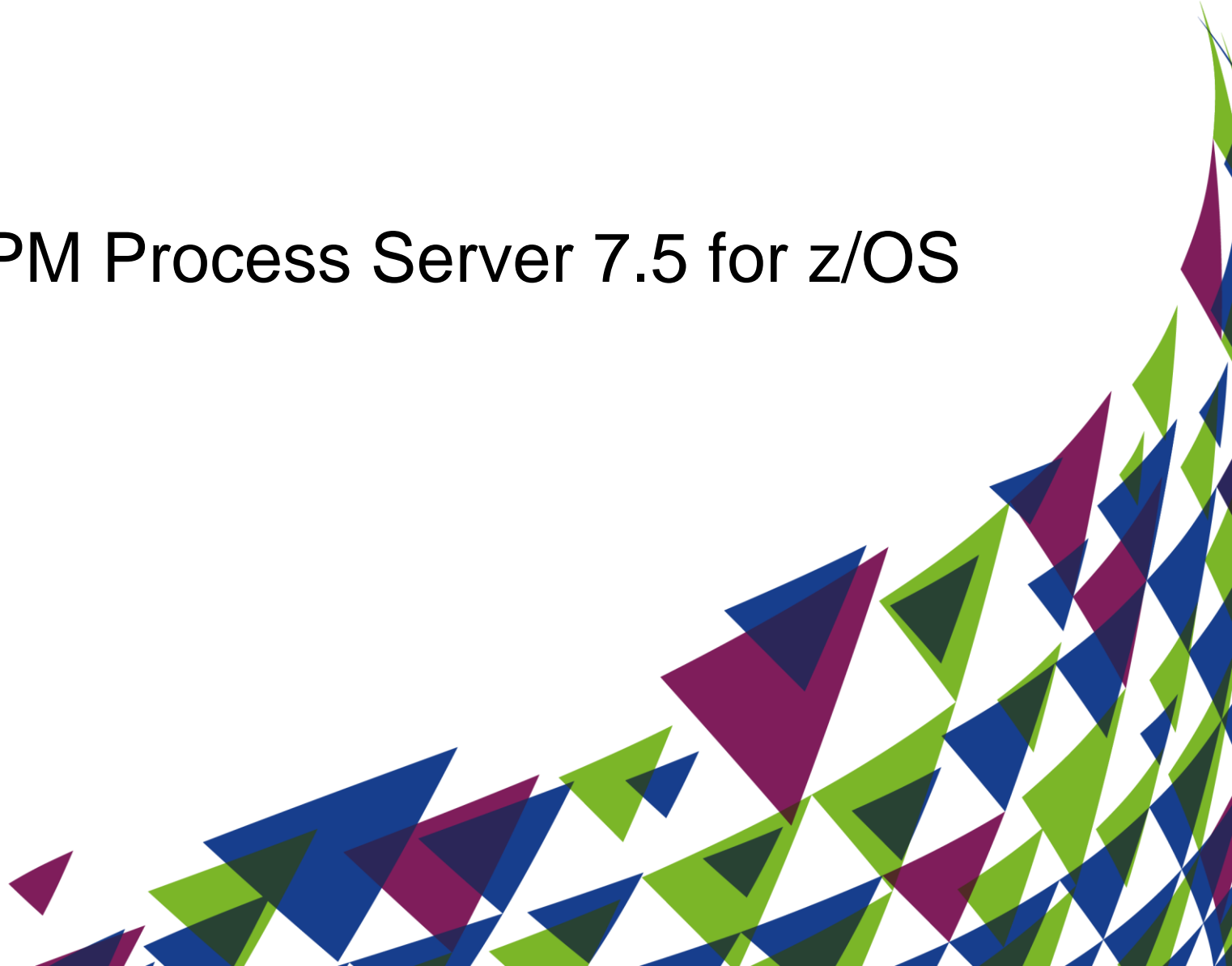



You make modules/classes available: STEPLIB, DFHRPL, DFSESL, ola.rar and ola_apis.jar

Batch CICS IMS WAS Development Tool




IBM BPM Process Server 7.5 for z/OS



 **Process End-Users**
Process Owners

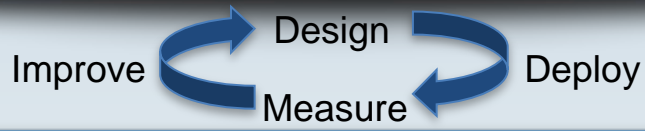
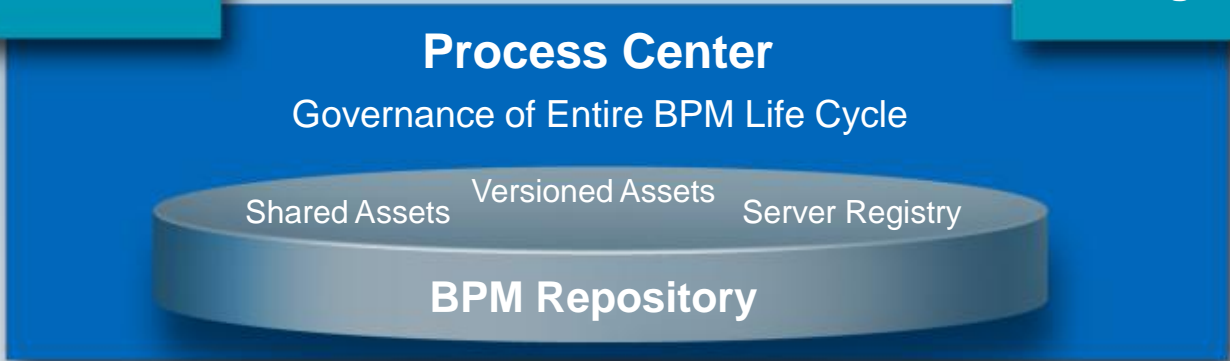
 **Business & IT Authors**

IT Developers 

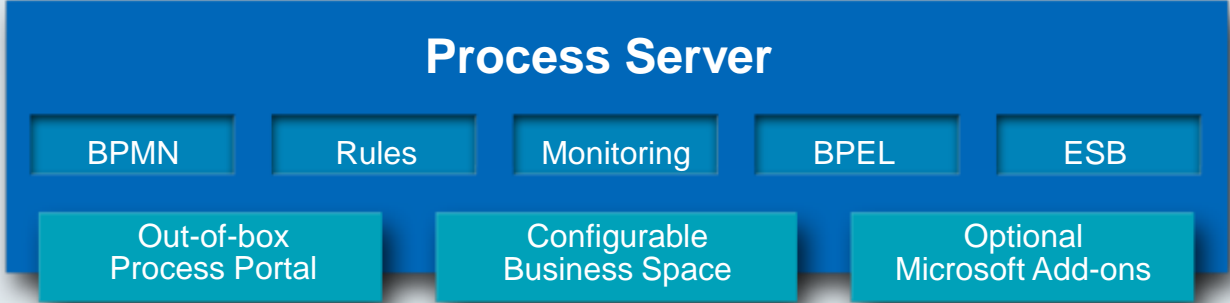
Process Designer

 **Authors & Administrators**

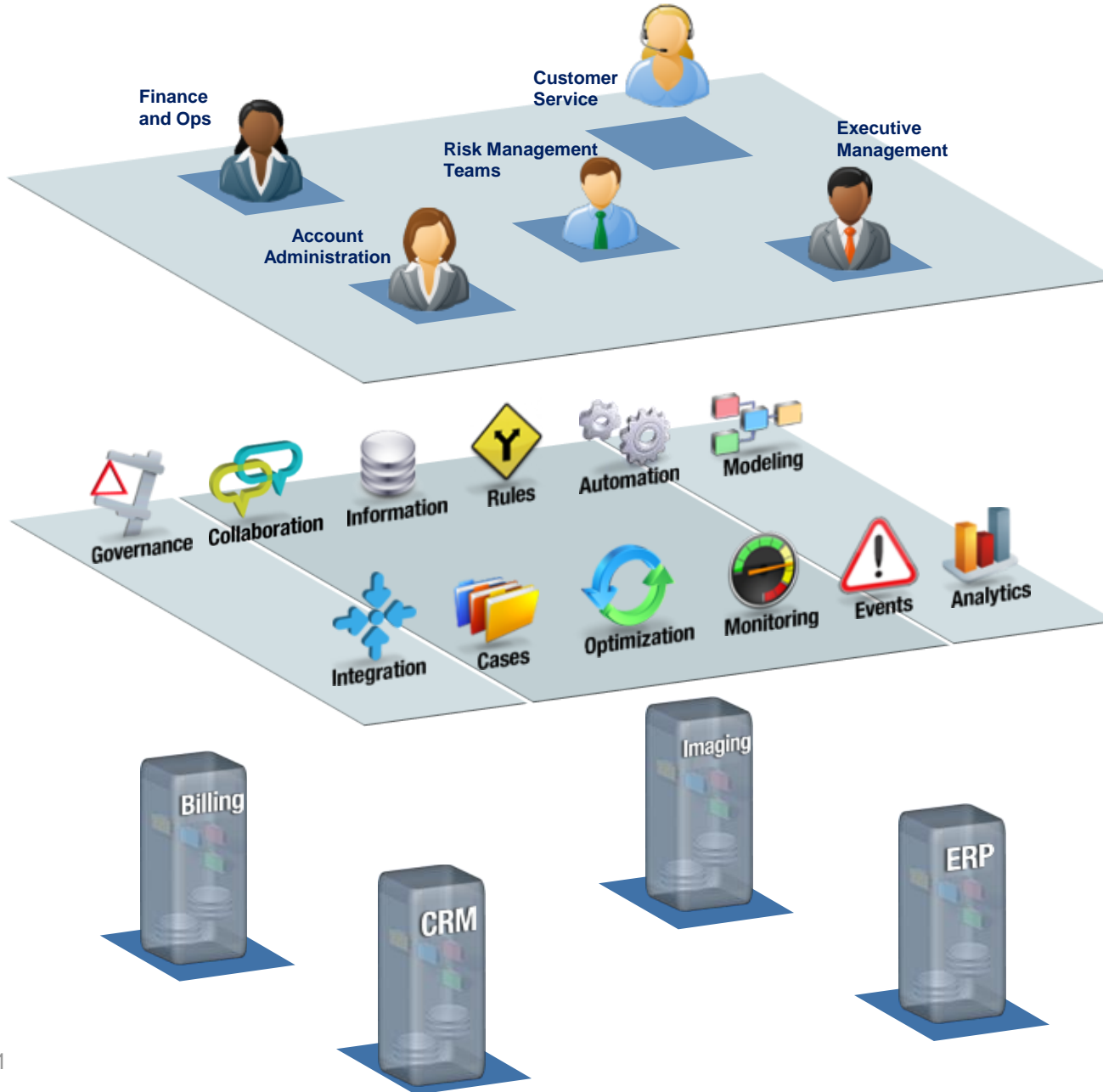
Integration Designer















Backward compatibility, easy migration from WLE & WPS

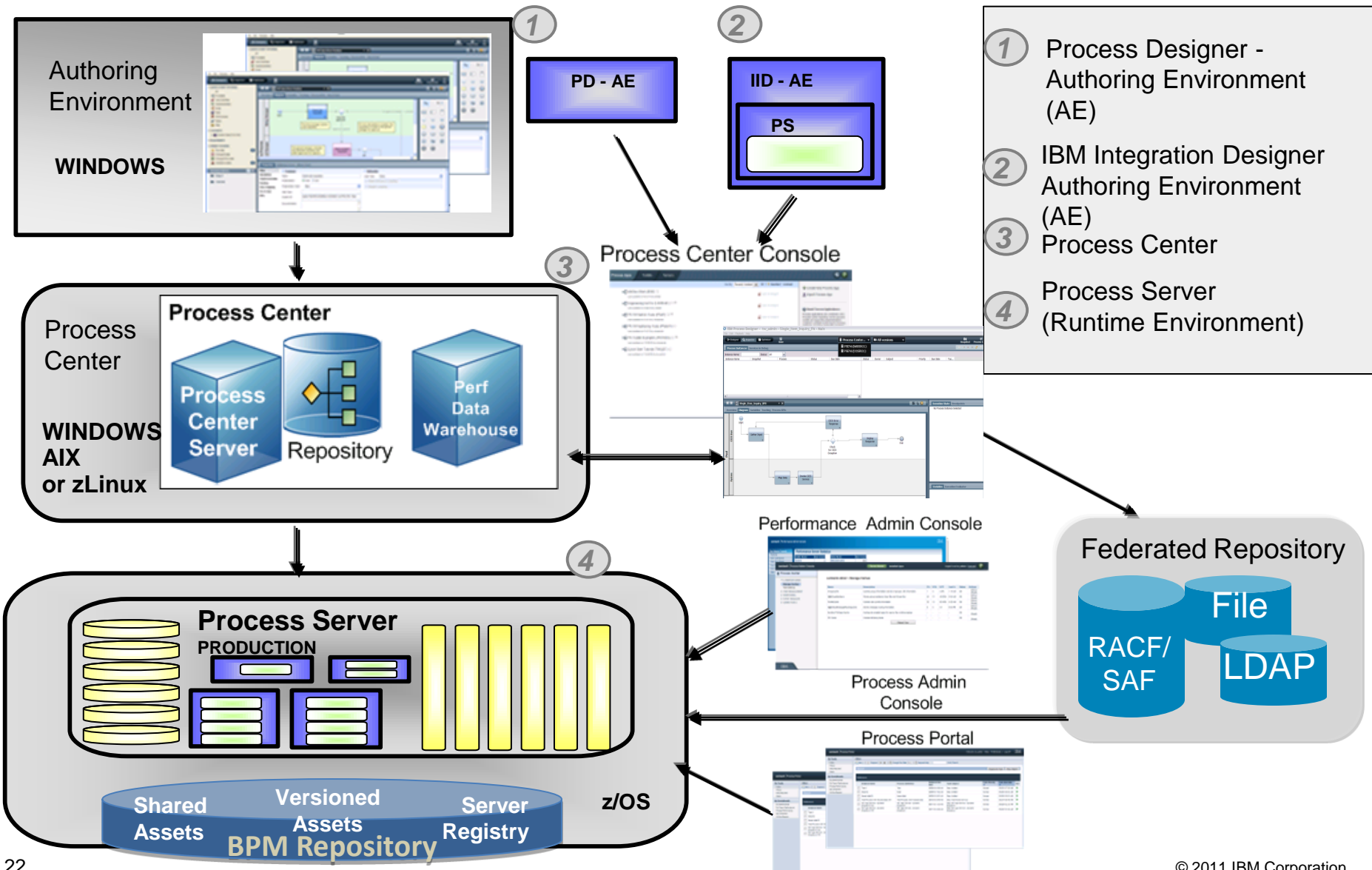


The Essential BPM Capabilities



-  • Modeling
-  • Monitoring
-  • Automation
-  • Governance
-  • Optimization
-  • Rules
-  • Information
-  • Cases
-  • Events
-  • Integration
-  • Collaboration
-  • Analytics

IBM Business Process Manager V7.5 for z/OS



Process Designer

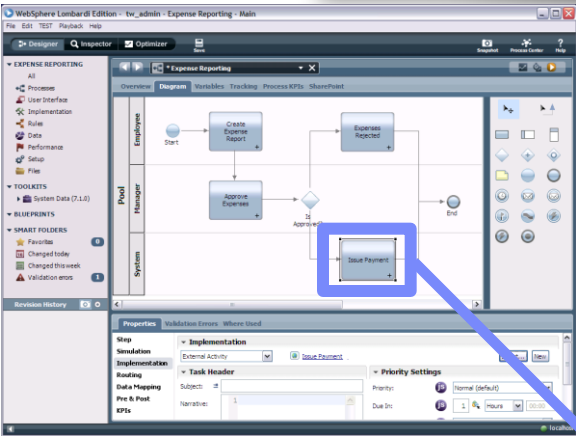
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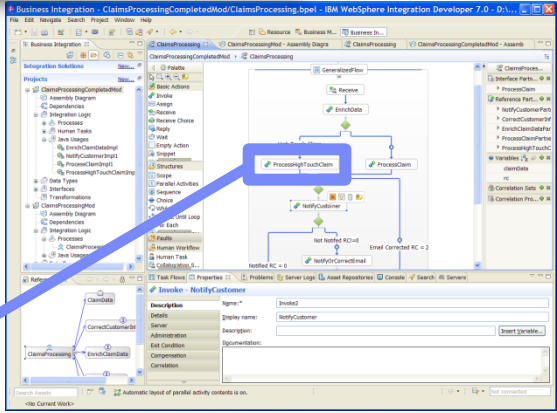
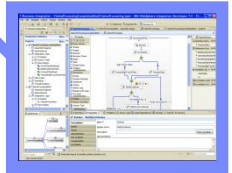
Business & IT Authors



IT Developers



Business Author requires a back-end integration for an Expense Reporting process that he is building



Integration Developer is building a straight-through Credit Check process that has a business exception path requiring human interaction

Seamless Collaboration Across Roles



Business Process Owner

- Authors a Process Application
- Defines Service Interfaces for Implementation by Integration Developer



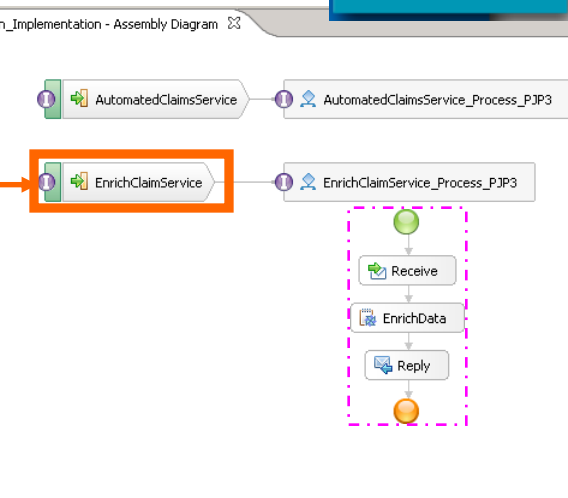
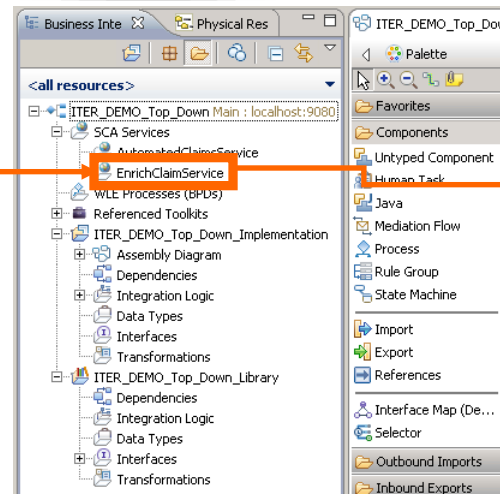
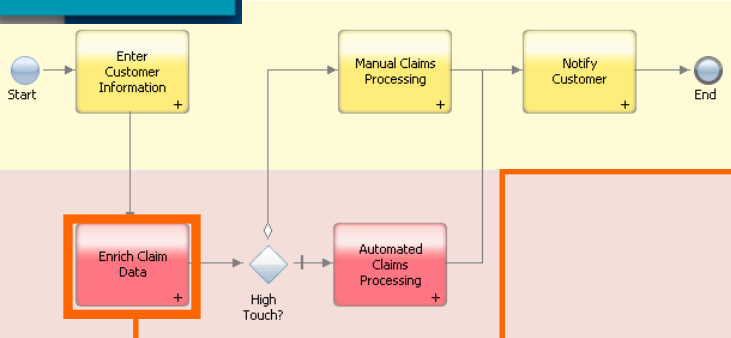
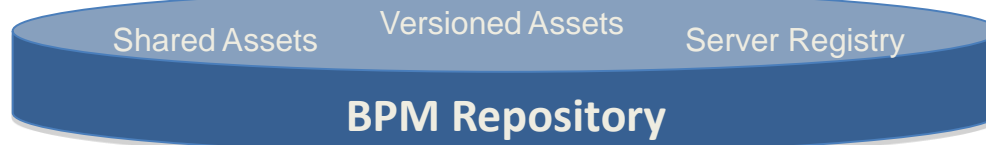
Integration Developer

- Imports the Process Application
- Generates Service Implementations
- Unit Tests Services
- Delivers Services to Repository



Business Process Owner

- Wires the Implemented Services to the Process
- Unit Test the Process



| Type | Implementation | Count |
|-------------------------------|----------------|-------|
| General System Service | | |
| Automated Processing | | 2 |
| Enrich Claim Data | | |
| SCA Service | | |
| AutomatedClaimsService | | 2 |
| EnrichClaimService | | |

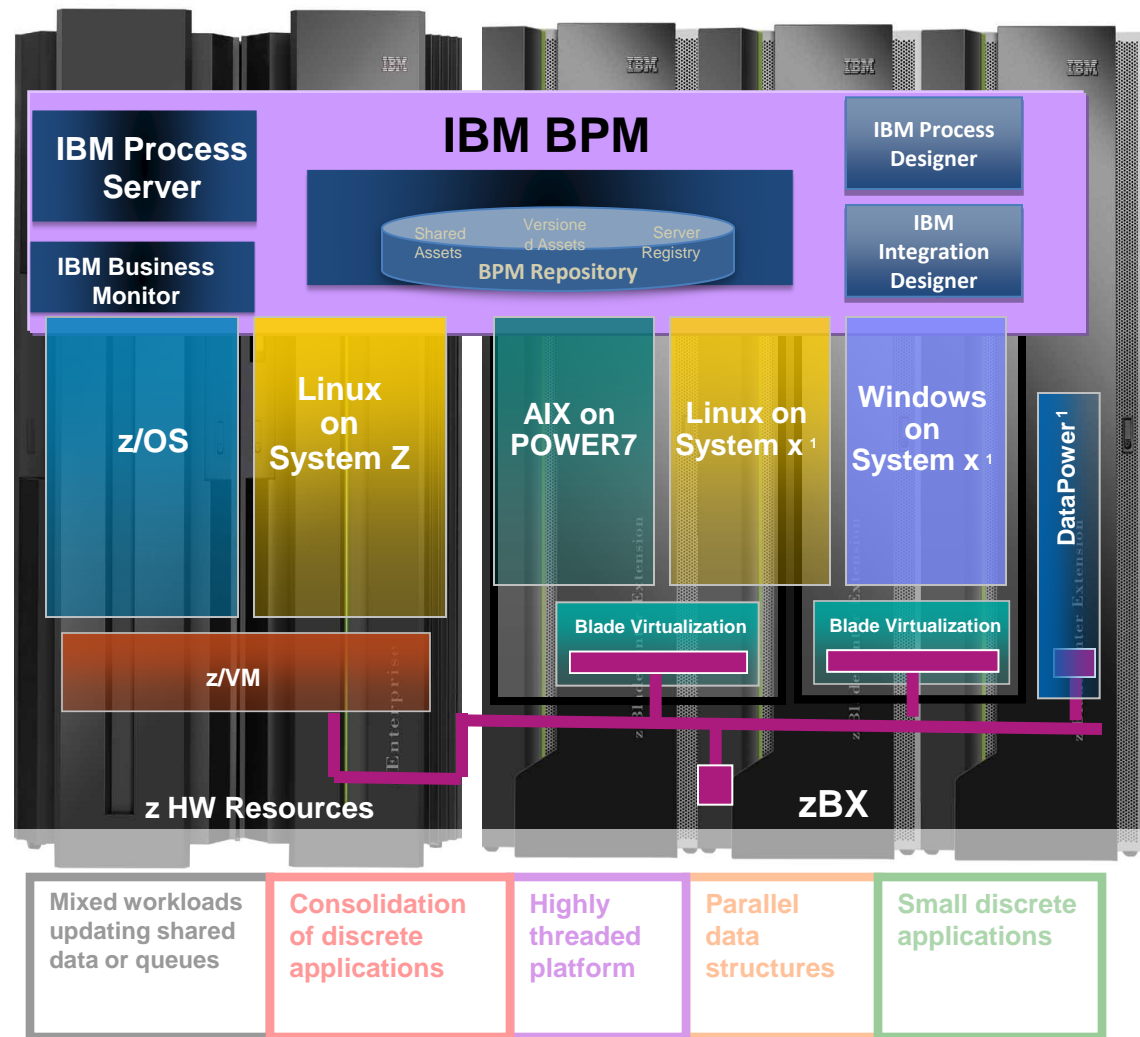


Process End-Users
Process Owners

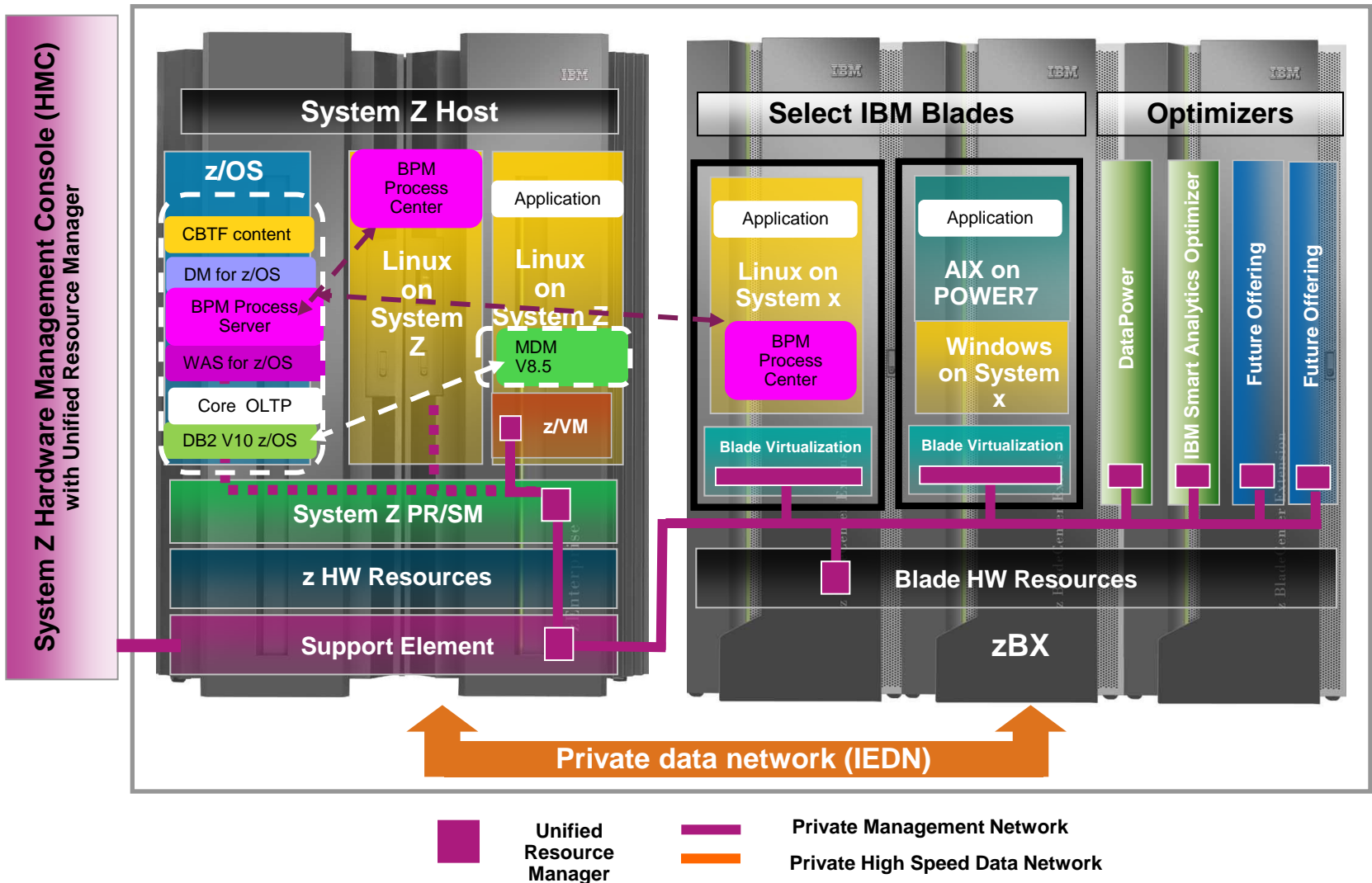


Business & IT Authors
IT Developers

- Modernize enterprise applications with BPM simplicity, visibility, power and governance
- Configure zEnterprise with zBX to meet business process workload on z, zLinux, or zBX-based AIX, Linux, Windows
 - Process Server execution workloads on z/OS
 - Process Center development environment/Repository on zLinux or zBX AIX
 - Authoring (Process Designer and Integration Designer) on Windows based zBX blades



The zEnterprise Environment - A Solution Scenario



Fin de la presentación

