IBM z/OS Strategy & Early Support Program (ESP)

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Notes:
Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here. All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions. This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area. All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products. Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.
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**z/OS Roadmap**

**New Cycle begins**

- V1R4
- V1R5
- V1R6
- V1R7
- V1R8
- V1R9
- V1R10
- V1R11
- V1R12
- V1R13
- V2R1
- V2R2

**Improvement Items:**
- Platform efficiency
- Performance
- Availability
- Scalability
- Simplification
- Openness

**Economics**
- Security
- Workload Enablement
- Performance
- Networking
- Hardware support
- Dynamic Infrastructure

**Annual Cycle begins**

- 9/2002
- 3/2004
- 9/2004
- 9/2005
- 9/2006
- 9/2007
- 9/2008
- 9/2009
- 9/2010
- 9/2011
- 9/2013
- 9/2015

**3 z/OS Release in z/OS Compatibility Window**

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## Annual cycles split functions over multiple releases

<table>
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<th>z/OS V1.7</th>
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Implementing functions over several releases makes it more difficult to see value in each step.
z/OS & z/OSMF Version 2 Statement of Direction April 11, 2012

- **Transition Timing (to 5+3)**
  - Release 11 has **three Years** Support +2 Life Cycle Extension (LCE)
  - Release 12 has **four Years** Support +3 years service
  - Release 13 has **five Years** Support +3 years service
  - **5 + 3 Model transitions** at R13 and continues with Version 2 going forward

- **Migration and Support**
  - Longer support lifecycles align with delivery cycles
  - **Maintaining “N+2” migration paths**, now becomes every two or four years
  - Bridge migration from currently supported releases
  - IBM plans to **deliver hardware support updates between releases (PTFs, Web deliverables)**

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z/OS V2.1 Minimum Supported Hardware

**Minimum Hardware Support:**

- **z/OS V2 support of IBM System z9® servers and above**
  - System z9, IBM System z10®, IBM zEnterprise™ 196 (z196), IBM zEnterprise 114 (z114) and IBM zEnterprise EC12 (zEC12).
  - Not supported: IBM eServer™ zSeries® 990, 900, 890, 800 (z900, z800, z990, z890)

- **z/OS V2 support of 3990-3 Storage Controller and above**

**Current Hardware offers Benefits:**

- Provides a z/OS V2 foundation for future optimization, performance, and reliability.
- Helps enable incremental exploitation of servers in future releases.
- Recompiles using more current compilers to yield potential performance benefits.
- Elimination of dual path offers simplification of development efforts.
- Reduces potential for errors by reducing complexity associated with supporting and testing multiple code paths.

**Other benefits:**

- Server / Control Unit benefits for z/OS, z/OS stack, and ISVs.

**Beginning with z/OS Version 2, IBM plans to require these storage control units and later control units:**

- 3990 Model 3 and 3990 Model 6
- 9393 2105
- 2107 2421, 2422, 2423, and 2424

**Customers with z900, z800, z990, and z890 servers and older storage control units should plan upgrades now in preparation for z/OS V2.**
IBM zEnterprise: an Optimized System

Keep hardware and software levels current to take advantage of performance improvements and platform efficiency
The world is changing. Is your infrastructure ready?

The time is now to…

- **70% of IT budget** is devoted to operations and maintenance\(^1\)
  - Leverage cloud to speed time to market and improve efficiency

- Connected devices will surge to **22 billion by 2020**\(^2\), with digital content rocketing to **8 zettabytes** by 2015 (90% unstructured)\(^3\)
  - Unlock the power of big data to deliver more actionable insight

- The average IT infrastructure is attacked nearly **60,000 times every day**\(^4\)
  - Secure critical information to protect and reduce risk

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1. IDC, Game Changing Virtual Technology: Major Shifts and Innovations that will Forever Change your IT Business
3. IDC, IDC Predictions 2012: Competing for 2020, Doc #231720, December 2011,
4. IBM X-Force Research
The zEnterprise platform is aligned with your business challenges

Leverage Enterprise Data Serving to achieve Data Consolidation with related high-volume transaction processing.

Capitalize on Data Serving strengths to serve your business applications:

Capitalize on System z qualities of service for Data Integrity and RAS

Align your zEnterprise deployments with leading models for IT and Business Process management using Cloud Computing

Leverage your Operational Data to attain the Analytics you need to manage and grow your business

Leverage Virtualization Leadership to drive Infrastructure consolidation

Intelligent Workload Optimization

Strategic Foundations

RAS

Consumability

Security

Continuous Availability

Storage Management

Performance Management

Cloud Computing

Industry Frameworks

• High transaction rates
• High Quality of Service
• Peak workloads
• Resiliency and security

• Compute or I/O intensive
• High memory bandwidth
• Floating point
• Scale out capable

• Scale
• High Quality of Service
• Large memory footprint
• Responsive infrastructure

• Highly threaded
• Throughput-oriented
• Scale out capable
• Lower Quality of Service
Statements of Direction*

Reminders:

- z/OS V1.13 is planned to be the last release to provide the z/OS Capacity Provisioning support that utilizes the System z API for communication with the Support Element (SE) or Hardware Management Console (HMC).
  - This protocol is based on IP network connection using SNMP.
  - IBM recommends configuring the Capacity Provisioning Manager for communication via the z/OS BCP Internal Interface (BCPii) protocol. The SE and HMC support for the System z API remains, and is not affected by this withdrawal of support.

- z/OS V1.13 is planned to be the final release for which the IBM Configuration Assistant for z/OS Communications Server tool that runs on Microsoft Windows will be provided by IBM
  - Currently an as-is, non-warranted web download
  - Use the supported z/OSMF Configuration Assistant application instead

- z/OS V1.13 is planned to be the last release to support a staged migration for JES2 and JES3. Future releases will require you to migrate to all elements of z/OS at the same time, including JES2, JES3, or both.

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What you need to know about Early Support Programs

- Early Support Program (ESP) background
- ESP overview
- Customer benefits
- Customer responsibilities
- IBM responsibilities
- Customer comments
- Summary
What is an Early Support Program (ESP)?

A program for customers to install, validate, use and comment on IBM products/solutions prior to General Availability.

Program Objectives

- Evaluate new hardware and software in customer environments
  - Verify installation, migration, technical validation, documentation, and user experience
  - Ensure that the product meets/exceeds customer needs and expectations
- Improve Product Quality
- Improve Customer Satisfaction
- Validate IBM's support structure
- Provide feedback to development and support organizations
- Strengthen IBM/Customer partnerships
- Solicit and incorporate customer suggested enhancements as appropriate
- Obtain references, endorsements and/or testimonials
Proven experience with z/OS Early Support Programs

- IBM has conducted ESP for most releases of the mainframe operating system (MVS, OS/390, z/OS).
- 268 customers have participated in z/OS ESPs since 2001. Many customers repeat the ESP experience for later releases.
- Satisfaction ratings for the ESP Program are 100%.
- About 50% of ESP customers migrate to production by GA of product.
- Provides a structured environment that results in a faster migration.
What happens during a z/OS ESP?

- z/OS Software installation/validation approximately 5 months.
- Planning calendar is almost the same for each z/OS release.
- Customer feedback is provided throughout ESP period.

Program Exit

<table>
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<tr>
<th>4Q</th>
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<tr>
<td>Request for Nominations</td>
<td>Offer Call / Customer Invitation</td>
<td>Complete Contracts / Critical ISVs List</td>
<td>Customer Education</td>
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<tr>
<td>Installation Plan Review</td>
<td>Place Order / Provide Products &amp; Documentation</td>
<td>Installation, Validation &amp; Migration Period</td>
<td>Provide Feedback During ESP</td>
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ESP Customer Education is offered to explain changes in the new z/OS Release

- z/OS ESP education targeted for April/May
- Multiple delivery vehicles
  - Traditional classroom: Poughkeepsie (US) and Montpellier (France).
  - Audio conferencing.
  - Web conferencing.
- Concentrates on changes and new functions
  - Not intended as new user education.
- Instructors are developers who delivered the new function
- Scheduled prior to shipment of ESP code
- Duration: up to 1 week depending on release
- Education materials provided to attendees
Support from different areas is provided during the ESP

- **Early product availability**
  - z/OS ESP code is provided as a PDO or ServerPac. It is ordered using a standalone checklist or online via IBM ShopZ.

- **Installation Assistance**
  - Installation Plan Reviews (IPR) with experts from the IBM Washington Systems Center and IBM PSSC Montpellier Center are available and strongly encouraged.

- **Service**
  - Identified by your assigned customer number.
  - Normal service process via Level 1 and Level 2.

- **Q&A Support**
  - ESP Forum on IBM Customer Connect website.
  - Weekly status calls with ESP representative.
  - Conference Calls with z/OS Development, as requested.
Participation in an ESP has many benefits

- Early availability of products and documentation
  - Competitive edge: function, performance and cost saving benefits.
- Early Program Education
  - Learn about new functions.
- Assigned Early Program Representative
  - Liaison to Development/Service personnel.
  - Facilitate problem resolution.
- Priority on Customer Problem Resolution
  - Expedited channel to Development.
- ISV assistance
- Q&A Support
  - Forum, Development calls, Information sharing, Early documentation.
- Opportunity to influence future product directions
Listen to what customers are saying about ESP

"Great program! The ability to test code in our environment sure helps work out problems before they hit the critical production systems."

"This program is extremely helpful to us. Thanks!"

"Lengthen the time frame... at least another month."

"The most beneficial parts... were education and forum. Provided us with education on new functions as well as insight into the problems... As a result of this information, our installation and implementation was very smooth."

"... look at new function and determine its usefulness to us. Determine if any changes in the release seriously impact our current methods..."

"... very happy to be able to participate in the [early program]. I hope that our company will be considered for future involvement..."
ESP Forum allows communication from IBM to customer as well as a discussion platform for sharing information between ESP customers

- ESP forum allows customers to ask questions and get feedback from the development teams
- All ESP customers benefit from seeing questions posed by other customers, and responses from IBM development teams and other customers
- ESP forum is monitored to ensure quick response to customer questions (goal is 24 hours for initial contact) to allow customers to proceed with line item validation
- Primary communication vehicle from IBM to ESP participants to ensure consistent information
- Over 600 IBMers monitor the ESP forum in order to respond to customers.
Restrictions and Required Service List is generally provided weekly

### Recommended Service List
- IBM recommends that ESP customers apply ++APARs or PTFs to address known problems; ESP accounts asked to put on service weekly.

### Restrictions List
- IBM notifies ESP customers that certain functions are not yet available for use.

### Updated weekly and posted to ESP Forum
- Currency throughout ESP is critical to keep customers’ systems running

### Fixes are made available via secure FTP site after Integration Test and/or IESP have run successfully.

<table>
<thead>
<tr>
<th>Update ID</th>
<th>APAR #</th>
<th>PTF #</th>
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Assistance with Independent Software Vendors (ISVs) is available during ESP

- Vendors also get early information and access to new z/OS releases through their membership in IBM PartnerWorld
- Customers provide lists of critical vendor products to ESP team prior to shipment of code
- Vendor product list with contact names is returned to customers approximately one month prior to ESP code shipment
- Customer should negotiate with vendor to receive required updates
Latest available Documentation is available during ESP

- Draft New Release and Element Publications
  - Planning drafts available on IBM Customer Connect under “OnDemand Publications”.
- GA level documentation available at GA date
  - Internet access available at GA Announcement.
What are the Customer Responsibilities during an ESP?

- Assign Program Manager to work with IBM
- Sign IBM Confidentiality and Early Program Agreements
- Provide feedback as scheduled
- Install early products, required service and implement on schedules
- Report ESP problems to IBM Support in a timely manner
- Maintain adequate system back-up procedures
- Provide secure environment for early products
- License GA products before ESP exit
  - Accept applicable charges for new technology/code at GA.
- Install GA level service within 30 days of GA
- Dispose of pre-GA documentation/media and unlicensed software at end of program
- Consider being a reference customer
IBM also has responsibilities during the ESP

- Disclose product information to participants
- Provide Early Support Education for z/OS
- Provide ISV contact information, as appropriate
- Assign Early Support Program representative
- Manage Early Support Program process
- Provide Restrictions and Service lists
- Initiate regular conference calls to discuss status and address issues
- Communicate customer feedback to Development
- Review program status for GA Readiness
Contact information:

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System z New Technology Introduction – STG Products

For more information:

IBM Hot Topics Article, “Is there ESP in your Future?” (page 16)
http://publibz.boulder.ibm.com/epubs/pdf/e0z2n171.pdf
Glossary ...

- ESP: Early Support Program
- ISV: Independent Software Vendor
- GA: General Availability
- Q&A: Questions and Answers
- WSC: Washington System Center
- PSSC: Products and Solutions Support Center
- APAR: Authorized Problem Analysis Reports
- PTF: Program Temporary Fix
- CBPDO: Custom-Built Product Delivery Option
THANK YOU