z/OS 3.2 IBM Education Assistant

Solution Name: z/OS 3.2 Installation

Solution Element(s): z/OS 3.2 Product

July 2025

Agenda

- Trademarks

- Objectives

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- Driving & Target System Requirements

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Trademarks

- For a list of trademarks, see:
  https://www.ibm.com/legal/copyright-trademark

- Additional Trademarks:
  - None

Objectives

- Understand how to install z/OS 3.2 using Portable Software Instance (ServerPac) and content of the release (FMIDs being changed, added, and upgraded)
  - Element(s)/Component(s): z/OS (5655-ZOS) with Portable Software Instance (ServerPac) (5751-CS9)

Presentation Overview

- ## Who (Audience)
  - z/OS system programmers who install z/OS 3.2 Portable Software Instance (ServerPac)

- ## What (Solution)
  - z/OSMF Portable Software Instance exploitation for the installation of z/OS 3.2 and any z/OS program products ordered on ShopZ
  - z/OSMF Software Management deployment operation supports creating a new master catalog, merging datasets, along with all existing customization capabilities (data set names, placement, indirect cataloging, and other tasks)
  - z/OSMF Workflows for software configuration for products in Portable Software Instance (ServerPac)

- ## Wow (Benefit / Value, Need Addressed)
  - The z/OS system programmer can install z/OS using a common packaging format, aligned with other leading z/OS platform software vendors, that is simpler to install and configure in a guided and helpful graphic user interface

Installation - Documentation

- Planning for z/OS 3.2 installation
  - Review installation and upgrade documentation
    - z/OS 3.2 Planning for Installation (GA32-0890-70)
    - z/OS 3.2 Upgrade Workflow
    - z/OS 3.2 Program Directory for CBPDO install

  - z/OS 3.2 does not provide PSP buckets. Please refer to the service information for IBM Z products for equivalent information in lieu of PSP buckets. The new process uses FIXCAT to https://www.ibm.com/support/pages/node/7127792

Installation - Upgrade & Coexistence Considerations

- z/OS 3.2 is supported for coexistence, fallback, and upgrade with z/OS 3.1 and z/OS V2R5

- Coexistence and fallback PTFs must be installed on lower z/OS systems which coexist with z/OS 3.2

  - Use the REPORT MISSINGFIX command with a FIXCAT (fix category) of IBM.Coexistence.z/OS.3.2 after receiving the latest HOLDDATA to identify PTFs for the lower z/OS releases

    - Note: The naming convention has changed for FIXCAT to remove the 'V' & 'R' (example: instead of V3R2, it is now 3.2)

Driving System Software Dependencies

- Driving system requirements (system on which installation is done)
  - The driving system requirements for installing z/OS 3.2 are as follows:
    - z/OS V2R5 or higher, plus the PTFs that are identified with the following SMP/E Fixcat
      - IBM.DrivingSystem-RequiredService
    - Use the SMP/E REPORT FIXCAT command to verify that all required PTFs are installed on your driving system. An example of that command is:
      - SET BDY(GLOBAL).
      - REPORT MISSINGFIX ZONES(DRVTARG)
      - FIXCAT(IBM.DrivingSystem-RequiredService).
    - Package Signing - PTFs will be included in the driving system SMPE FIXCAT

- z/OS 3.2 Planning for Installation describes the driving system requirements

Target System Software Dependencies Part 1

- Install required service for IBM products
  - Use the REPORT MISSINGFIX command and use FIXCAT(IBM.TargetSystem-RequiredService.z/OS.3.2) to identify required PTFs that must be installed
    - Note: The naming convention has changed for FIXCAT to remove the 'V' & 'R'. (example: instead of V3R2, it is now 3.2)

- If upgrading from an earlier release of z/OS, you can use the product levels on z/OS 3.2 that you used on your prior z/OS release. Product levels must be still service-supported, with the following exceptions:
  - If you are using any products in Appendix B 'IBM middleware and application products that require a specific version to run on z/OS 3.2', you must use the product levels shown in the z/OS Planning for Install Book.
  - If you are using any functions in Appendix B 'Functions of z/OS 3.2 that require specific z/OS optional features or IBM products', and those functions have dependencies on IBM middleware or application products, you must use the product levels shown (or later).

Target System Software Dependencies Part 2

- z/OS 3.2 General Availability (GA) is planned to have an overall dependency on:
  - [5655-JB1]   IBM Semeru SDK for z/OS V21

- For the specific Java dependencies for each element, see z/OS 3.2 Planning for Installation.
  - Note: It is anticipated that over the lifecycle of z/OS Next, newer levels of IBM Semeru Runtime Certified Edition for z/OS will be required. To anticipate future Java dependencies, watch for new IBM Semeru Runtime Certified Edition releases in IBM software announcements.

Target System Hardware Dependencies Part 1

- Processor requirements: (Trademarked)
  - IBM z17, z16, or z15

- z/OS 3.2 DASD - approximate requirements at GA:
  - Target Libraries:
    - z/OS 3.2 - total space required is 11290 3390 cylinders
    - z/OS 3.1 - total space required is 10842 3390 cylinders
      - Delta: +448 3390 cylinders
  - Distribution Libraries:
    - z/OS 3.2 - total space required is 21248 3390 cylinders
    - z/OS 3.1 - total space required is 19911 3390 cylinders
      - Delta: +1337 3390 cylinders

Target System Hardware Dependencies Part 2

- z/OS 3.2 DASD - approximate requirements:
  - Root file system:
    - z/OS 3.2 - zFS space required is 6335 3390 cylinders.
      This means we have hit the limit of 4GB and Extended Addressability is required
    - z/OS 3.1 - zFS space required is 5555 3390 cylinders (with 90% utilization)
      - Delta: +780 3390 cylinders
  - z/OS Font Collection:
    - z/OS 3.2 - zFS space required is 2745 3390 cylinders
  - IBM z/OS Liberty Embedded
    - z/OS 3.2 zFS space required is 3499 3390 cylinders
  - IBM z/OS Container Extensions
    - z/OS 3.2 zFS space required is 5250 3390 cylinders

Overview - Ordering

- Ordering z/OS 3.2
    - Program number 5655-ZOS
    - Order any optional priced or unpriced features that were used with previous z/OS releases

- Key dates
    - z/OS 3.2 General Availability (GA) ordering is planned to begin 9/12/2025 on Shopz
    - z/OS 3.2 General Availability is planned for 9/30/25

Overview - Elements Changing in z/OS 3.2 (1)

- BCP - Base Control Program
- BINDER - Program Management Binder
- COMMSERVER - Communications Server
- CPM - Capacity Provisioning
- DATA GATHERER - z/OS Data Gatherer
- DFSMS - Data Facility Storage Management Subsystem
- DFSORT - Data Facility Sort
- HCD - Hardware Configuration Definition
- HCM - Hardware Configuration Manager
- ICSF - Integrated Cryptographic Service Facility
- IOCP - I/O configuration Program
- ISPF - Interactive System Productivity Facility
- ITDS/LDAP - IBM Tivoli Directory Server / Lightweight Directory Access Protocol
- JES2 - Job Entry Subsystem 2

- LE - Language Environment
- NAS/SKRB - Integrated Security Services-Network Authentication Service Base
- NFS - Network File System Server and Client
- PKI - Cryptographic Services
- PRINT INTERFACE - Infoprint Server - Print Interface
- RACF - Resource Access Control Facility
- RMF - Resource Measurement Facility
- SDSF - System Display and Search Facility
- SYSTEM SSL - Cryptographic Services - System SSL Base
- TSOE - Time Sharing Option
- WebTK - IBM z/OS Client Web Enablement Toolkit
- ZCX - z/OS Container Extensions
- ZFS - ZFS (includes DSFS)
- ZOSMF - z/OS Management Facility

Overview - Elements Changing in z/OS 3.2 (2)

- Elements removed from z/OS 3.2:
  - C/C++ PERF ANALYZER

- Note: CIM was scheduled to be removed in 3.2 but is planned to be removed in the next release.

Summary

- This presentation provided an overview of z/OS 3.2 Portable Software Instance (ServerPac) installation using z/OSMF and installation information when upgrading to z/OS 3.2

- To learn about the z/OSMF installation method:
  https://www.ibm.com/support/z-content-solutions/serverpac-install-zosmf/
  There is a sample portable software instance you can try out now, to learn the process.

Appendix

- Publications
  - z/OS 3.2 Planning for Installation (GA32-0890-70)

- References
  - z/OS 3.2 Upgrade Workflow