

**z/OS V1R10
Installation Planning Checklist**

z/OS Version 1 Release 10

Installation Plan Checklist

December 2008

This checklist should be used as a **supplement** to available publications. It is not intended to replace publications for planning your installation and migration.

There is an [Installation Plan Skeleton](#) in Appendix A of the *z/OS Planning for Installation*. Use this if you do not have a tool to create an installation / migration plan for z/OS.

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z/OS V1R10 Installation Planning Checklist

Table of Contents

Planning	4-12
Ordering	12
Prepare for System Replacement	13
ServerPac Installation	13
CBPDO	15
Perform Pre IPL Customization	15
ServerPac	16
CBPDO	16
Perform Migration Actions	16
Verify New System	17
Customize System	17
Verify Customized System	17
Migrate to Production	18
Exploit New Function	18
Maintenance after Installation	19
Elements in z/OS	19
Changed Base Elements	19
New Base Elements	20
Changed Optional Elements	20
Withdrawn Features and Functions	21
Elements and Features with No Migration Actions	23
Element Migration Information	23
Elements Requiring Migration Actions from z/OS 1.9	24
Elements Requiring Migration Actions from z/OS 1.8	25
zIIP	25
Cryptographic Support	25
IBM Healthchecker	27
SYS1.PARMLIB changes	27
SYS1. PROCLIB changes	29
System Command changes	28
SMF Record changes	29
New Address Spaces	30
Exits	30
Reminders	31
BCP	32
SMP/E	33
CIM	33
TSO/E	40
C/C++	33
Communications Server	34
UNIX System Services	35
Language Environment	35
DFSMS	36
DFSORT	37
ISPF	37
Integrated Security Services	37

z/OS V1R10 Installation Planning Checklist

Security Server	37
Cryptographic Services	37
Distributed File Service	40
Infoprint Server	38
JES2	38
SDSF	39
JES3	38
HCD	39
IBM Tivoli Directory Server	39
NFS	40
RMF	40

z/OS V1R10 Installation Planning Checklist

Planning

___ Ensure a System z server is available (z10, z9, z990, z900, z890, z800)

___ Validate your migration path is supported

z/OS 1.9 → z/OS 1.10

z/OS 1.8 → z/OS 1.10

Note: *There isn't any toleration/coexistence service available for unsupported migration paths.*

___ Retrieve and review planning books

___ *z/OS V1R10 Planning for Installation*, GA22-7504

___ *z/OS V1R10 Migration*, GA22-7499

Notes:

1. This document is the sole z/OS migration document for system programmers. This document continues to use the narrow definition of migration. Exploitation of new functions is described in the many element and feature documents. (The *z/OS XL C/C++ Compiler and Run-Time Migration Guide for the Application Programmer*, which is directed to application programmers, continues to exist and is not planned for removal.) The migration information in the other element and feature documents has been removed.
2. Use the softcopy z/OS Migration book – it will be more current than the CD or DVD version.

___ *ServerPac: Using the Installation Dialog (Dialog Level 21)*, SA22-7815

___ *z/OS V1R10 Summary of Messages and Interface Changes*, SA22-7505

___ Part 1: Summary of Interface Changes

___ Part 2: Summary of Message Changes

___ *z/OS V1R10 ISPF Planning & Customizing*, GC34-4814

___ *z/OS V1R10 Introduction and Release Guide*, GA22-7502

___ *z/OS Unix System Services Planning*, GA22-7800

___ *IBM Healthchecker for z/OS: Users Guide*, SA22-7994

___ *z/OS V1R10 HCD Planning*, GA22-7525

___ *z/OS V1R10 DFSMS Using the New Functions*, SC26-7473

___ *z/OS V1R10 Communications Server: New Function Summary*, GC31-8771

___ *z/OS V1R10 Common Information Model User's Guide*, SC33-7998

Notes:

1. Information has moved to different books than where you may be used to finding it.
2. Softcopy available from: <http://www.ibm.com/servers/eserver/zseries/zos/bkserv>
3. The latest version of any document can be found at the Internet Library. CD-ROMs and DVDs are not updated as frequently.

___ Understand coexistence and fallback policy for z/OS

___ Review coexistence and fallback service

- See the *z/OS Migration*, GA22-7499, Chapter 2
- Changes to this policy began with z/OS 1.6

z/OS V1R10 Installation Planning Checklist

<i>z/OS Coexistence Levels and Service Support Dates</i>			
z/OS Release	General Availability of z/OS Release Identified in column 1	Service Support of z/OS Release Identified in Column 1 is Available Through	Releases which can coexist with the z/OS Release Identified in Column 1
z/OS V1R7	September 30, 2005	September 2008 ²	z/OS V1R4, z/OS V1R5, z/OS V1R6, z/OS V1R7, z/OS V1R8
z/OS V1R8	September 2006	September 2009	z/OS V1R5, z/OS V1R6, z/OS V1R7
z/OS V1R9	September 2007	Planned September 2010	z/OS V1R7, z/OS V1R8
z/OS V1R10	September 2008	Planned September 2011	z/OS V1R8, z/OS V1R9

Table Notes:

- Marketing and service support for **all** z/OS and z/OS.e Releases 1, 2, 3, 4, 5, 6 and 7 are withdrawn.
- Defect support for z/OS 1.7 is available for a fee through the z/OS 1.7 Lifecycle Extended Service, program number 5637-A01.

— Understand integration test, as performed by IBM.

Notes:

- Customers must still test their applications.
- Semiannual test reports are produced. They are available on the Internet.

IBM Integration Test home page ⇒ <http://www.ibm.com/servers/eserver/zseries/zos/integtst/>

— Read *z/OS V1R10 Introduction and Release Guide, GA22-7502*

Note: This book now contains a chapter on new functions to consider for exploitation. Previously, this information was found in the z/OS V1R4 Migration book, Appendix C.

— Planning and Migration Assistant (PMA)

Use this tool to create reports of what's currently installed on your system and what changes you can expect when you go to a new release.

<http://www.ibm.com/servers/eserver/zseries/zos/smpe/pma/>

Note: PMA can help determine which USERMODs need to be reworked and which just need to be reinstalled. Use the Top or Intermediate Product Migration Changes Report to determine the product migration impacts reviewing the "changed" FMIDs. Then using the LIST SYSMOD USERMOD FORMID (listing the "changed" FMIDs) command.

— Read *z/OS V1R10 Planning for Installation, GA22-7504*.

— Review Table 2 (Chapter 1) - Summary of element, feature, and component name changes, additions, deletions

— Review summary of changes.

— Review base elements and optional features Table 1 in Chapter 1.

These figures provide indicators for:

- whether an element is exclusive or non-exclusive
- identifies the last release the element changed

— Review software requirements in Appendix B.

z/OS V1R10 Installation Planning Checklist

- Review hardware requirements in Appendix C.
Note: Unsupported Hardware policy - Various z/OS elements, such as DFSMS, HCD, JES2, JES3, and MVS, contain code supporting specific hardware servers or devices. In some cases, this device-related element support remains in the product even after the hardware devices pass their announced End of Service date. z/OS may continue to service element code; however, it will not provide service related to unsupported hardware devices. Software problems related to these devices will not be accepted for service, and current service activity will cease if a problem is determined to be associated with out-of-support devices. In such cases, fixes will not be issued.

- Read *z/OS V1R10 Migration*, GA22-7499

(An updated version will be available on the internet around January 31, 2009)

- Understand what “migration” means as it pertains to this book
- Review actions to perform before installing z/OS 1.10
- Review actions to perform before the first IPL of z/OS 1.10
- Review actions to perform after the first IPL of z/OS 1.10

Note: Softcopy for specific migration paths is located at URL:

<http://www-03.ibm.com/systems/z/os/zos/installation/>

- z/OS V1R10 Migration - From z/OS V1R9 to z/OS V1R10
- z/OS V1R10 Migration - From z/OS V1R8 to z/OS V1R10

- Read *ServerPac: Using the Installation Dialog (Dialog Level 21)*, SA22-7815. Applicable to ServerPac users.

Notes:

1. There have been significant changes to ServerPac Dialogs over the last four releases.
2. Users must be at dialog level 16 or higher.

- Update the CustomPac Installation Dialog

Required if first time using ServerPac Installation Dialog with z/OS 1.6 or later

- Understand z/OS system replacement delivery vehicles:

- ◆ ServerPac (entitled)
- ◆ SystemPac (fee) (<http://www.can.ibm.com/custompac>)

- Understand *Software Upgrade* install path via the ServerPac.

- Understand enable/disable support for elements in z/OS.

- Ensure IEASYSxx used for IPL points to the proper IFAPRDxx for z/OS and reflect the program number for z/OS

- Understand terms and conditions when enabling elements/features of z/OS.

- Understand service integration levels.

Note: Documented in *z/OS Planning for Installation*, Chapter 1.

Service integration levels are identified by a unique SOURCEID assigned to each PTF. The integration-tested service level is tagged with a SOURCEID of ZOSV1Rn. Where “n” is the z/OS release.

- Understand Recommended Service Upgrade (RSU).

z/OS V1R10 Installation Planning Checklist

An RSU is a regular service upgrade (++)ASSIGN statements with a sourceid=RSUyymm)
IBM recommends for installation.

*Note: RSU is redefined. Referred as Consolidated Service Test (CST). See
<http://www.ibm.com/servers/eserver/zseries/zos/servicetst>*

___ Plan and schedule z/OS education.

IBM courses are available for z/OS. The existing curriculum is updated as needed. For
schedules and enrollments:

- ◆ Call 1-800-IBM-TEACH
- ◆ World Wide Web - IBM Global Campus URL: <http://www.ibm.com/training/us/catalog/zseries>

___ Understand Coexistence and fallback (Chapter 1: *z/OS Planning for Installation*)

___ Identify product library requirements:

- *The z/OS V1R10 Information Roadmap, SA22-7500*, contains titles and order numbers for books, for all elements and products, which are part of z/OS.
- Books are available in softcopy on CD-ROM or DVD and through the Internet at <http://www.ibm.com/servers/eserver/zseries/zos/bkserv/>
 - The internet level will always contain the latest information.

New books for z/OS 1.10

- A new book has been added to the MVS library providing capacity provisioning information:
 - *z/OS MVS Capacity Provisioning User's Guide*, SC33-8299
- A new book has been added to the IBM Tivoli Directory Server library providing information on writing Lightweight Directory Access Protocol (LDAP) client applications:
 - *IBM Tivoli Directory Server Plug-in Reference for z/OS*, SA76-0148
- A new book has been added to the Infoprint Server library describing the Infoprint Server Printer Inventory for Print Services Facility (PSF):
 - *z/OS Infoprint Server Printer Inventory for PSF*, S510-7703
- A new book has been added to the JES library providing application programming information for both JES2 and JES3:
 - *z/OS JES Application Programming*, SA23-2240
- A new book has been added to the Language Environment library providing migration information for Enterprise COBOL for z/OS:
 - *Enterprise COBOL for z/OS Migration Guide*, GC23-8527

Changed Books for z/OS 1.10:

- Some information from existing JES books has been moved to a new book, *z/OS JES Application Programming* :
 - From *z/OS JES2 Initialization and Tuning*: "JES2 Spool Data Set Browse" in Appendix B and Appendix C, "The External Writer".
 - From *z/OS JES3 Initialization and Tuning*: Appendix A, "The External Writer".
 - From *z/OS MVS Using the Subsystem Interface*: Chapter 4, "JES Client/Server Print Interface".

Deleted books for z/OS 1.10

- *z/OS MVS™ Data Areas*, Volumes 1–5. MVS data areas will not be produced as formal books, but will be posted to the Web instead to accommodate timely updates.

z/OS V1R10 Installation Planning Checklist

New books for z/OS 1.9

- A new book has been added to the Cryptographic Services library to provide information about writing PKCS 11 applications:
 - *z/OS Cryptographic Services Writing PKCS 11 Applications*, SA23-2231
- A new book has been added to support the new z/OS element, METAL C Runtime Library:
 - *z/OS Metal C Programming Guide and Reference*, SA23-2225
- Two new books have been added to support the new z/OS element, REXX Alternate on System z
 - *IBM Compiler and Library for REXX on System z: User's Guide*, SA23-2234
 - *IBM Compiler and Library for REXX on System z: Diagnosis Guide*, SA23-2235

Deleted books for z/OS 1.9

- *z/OS Communications Server: APPC Application Suite User's Guide*, SC31-8809
- *z/OS Communications Server APPC Application Suite Administration*, SC31-8835
- *z/OS Communications Server: APPC Application Suite Programming*, SC31-8834
- *z/OS Security Server Firewall Technologies Guide and Reference*, SC24-5922

Changed Books for z/OS 1.8:

- *z/OS DFSMSdss Storage Administration Reference*, SC35-0424, and *z/OS DFSMSShsm Storage Administration Reference*, SC35-0421, have been merged into the *z/OS DFSMSdss Storage Administration Reference*, and **retitled to** *z/OS DFSMS Storage Administration Reference*, SC26-7402
- *z/OS ISPF SCLM Reference*, SC34-4818, has been **merged** into *z/OS SCLM Project Manager's and Developer's Guide*, *z/OS ISPF Software Configuration and Library Manager Guide and Reference*.

Deleted Books for z/OS 1.8:

- *z/OS Managed System Infrastructure for Operations Setting Up and Using*, SC33-7968
- *z/OS MVS Diagnosis: Procedures*, GA22-7587. (Information previously contained therein has been included in a new system-level book, *z/OS Problem Management*, G325-2564).
- *z/OS MVS Recovery and Reconfiguration Guide*, SA22-7623. (Information previously contained therein has been moved into element-specific or function-specific documentation.)
- *z/OS Communications Server: AnyNet Sockets over SNA*, SC31-8831
- *z/OS Communications Server: AnyNet SNA over TCP/IP*, SC31-8832

New z/OS 1.8 book information:

- A new system-level book, *z/OS Problem Management*, G325-2564, has been created to consolidate all z/OS problem determination and management information.
- *IBM Tivoli Directory Server (ITDS) Client Programming for z/OS*, SA23-2214.
- *IBM Encryption Facility for z/OS: User's Guide*, SA23-1349.

- ___ Identify non-IBM (ISV) product requirements.
- ___ Contact Vendors

Notes:

- 1) Review ISV product support with z/OS

___ Software Developers Supporting z/OS 1.10

<http://www-03.ibm.com/systems/z/os/zos/software/isv110.html>

- 2) Fee offerings (SystemPac) include many ISV products. See the SystemPac product checklist.

z/OS V1R10 Installation Planning Checklist

___ Identify coexistence and fallback service.

- ___ See *z/OS Migration (GA22-7499), Chapter 2*
- ___ Review PSP bucket for additions

Notes:

1. Use the ePSP (enhanced PSP) Tool to programmatically obtain all the coexistence service. It is located in the dependency section of the ZOSGEN PSP bucket.
2. Alternatively, SMP/E 3.5 (shipped with z/OS 1.10) may be used

___ Program directories for all elements and products are included in both ServerPac and CBPDO orders. They are located in data set "hlq.PGMDIR". Member \$INDEXPD is an index pointer to locating the correct program directory for each element/product. Some are available from the internet at: <http://www.ibm.com/servers/eserver/zseries/zos/installation/#resource>

___ Identify software requirements for z/OS elements and features. Review *Appendix B* in *z/OS Planning for Installation*

___ Identify usermods and user exits to be installed. Refer to:

- *z/OS V1R10 DFSMS Installation Exits, SC26-7396*
- *z/OS V1R10 JES2 Installation Exits, SA22-7534*
- *z/OS V1R10 MVS Installation Exits, SA22-7593*

___ Identify user SVCs to be installed.

___ Obtain PSP upgrades:

Notes:

1. PSP buckets can be obtained from Technical help Database at:
<http://www14.software.ibm.com/webapp/set2/psp/srchBroker> and by using the *Enhanced PSP Tool* at: <http://www14.software.ibm.com/webapp/set2/psp/srchBroker>

UPGRADE=ZOSV1R10 SUBSET=exclusive element name by FMID, or
=FMID/yymm, or
=descriptive name

UPGRADE=ZOSV1Rx SUBSET=ZOSGEN Note: x = Release of z/OS

ServerPac dialogs: UPGRADE=ZOSV1Rx SUBSET=SERVERPAC

2. PSP buckets are removed from ServerPac and CBPDO

3. Non-exclusive elements: Located in product specific program directory.

- ___ Review z990, PSP bucket (if applicable), for latest z990 service
- ___ Review z890, PSP bucket (if applicable), for latest z890 service
- ___ Review System z9 buckets (if applicable), for latest z9 EC and z9 BC service
- ___ Review System z10 bucket (if applicable), for latest z10 service
- ___ Review z/OS functional PSP bucket for zIIP, z9 and z10

___ Review hardware configuration:

- ___ Ensure the planned hardware configuration is reflected in the IODF and IOCP

___ Ensure any hardware requisites are satisfied.

z/OS V1R10 Installation Planning Checklist

- Configure LPARs to use only central storage when z/OS is on a zSeries and Systems z9 or z10. z/OS on a zSeries and System z9/z10 server does not support expanded storage.

- Ensure z/OS V1R10 runs on a supported server (zSeries and System z9, z10 only)
Note: Must IPL in z/Architecture mode (31-bit not allowed)

- Ensure proper coupling facility levels are installed
See <http://www.ibm.com/eserver/zseries/psocftable.html>

- Identify system software parameter and procedural updates:
 - SYS1.PARMLIB
 - SYS1.VTAMLST
 - JESPARMS
 - /etc

Note: IBM defines directories in the /etc directory but does not install files there. Because the configuration and customization data in your existing /etc directory might not be correct for the new system, you might need to make changes to the files in your new /etc directory. IBM recommends these changes before the first IPL of the new system.

 - /var

Note: During the installation of the OCSF Base component of the Cryptographic Services base element, files are created in the /var directory. If you have other files under your existing /var directory, then you will have to merge the old and new files under /var. The easiest way to do this is to create a copy of your current /var HFS and then copy the new /var files into the copy.

- Identify required updates to program language options.
Note: IBM-supplied default language options will be used.

- Identify changes to system commands
Refer to: *z/OS V1.10 Summary of Message and Interface Changes, SA22-7505 –Part 1* and *z/OS 1.8 z/OS MVS Commands manual, SA22-7627.*

- Identify changes to messages
Refer to: *z/OS V1.10 Summary of Message and Interface Changes, SA22-7505 - Part 2*
 - Contains new, changed and deleted messages

- Identify changes to macros
Refer to: *z/OS V1.10 Summary of Message and Interface Changes, SA22-7505 - Part 1*

- Identify changes to SMF records
Refer to: *z/OS V1.10 MVS System Management Facilities (SMF), SA22-7630*

- Identify changes to Callable Services
Refer to: *z/OS V1.10 Summary of Message and Interface Changes, SA22-7505 - Part 1*

- Identify changes to MVS control blocks
Refer to: *z/OS V1.10 Summary of Message and Interface Changes, SA22-7505 - Part 1*

- Identify changes to IPCS commands

- Identify required updates to operational procedures.

- Identify required updates to system automated operations.

z/OS V1R10 Installation Planning Checklist

- ___ Identify Custom-Built FCBs to be installed.
- ___ Identify required updates to administrative procedures.
Some areas you should examine are:
 - ◆ Security procedures
 - ◆ Procedures for adding, deleting, and changing user IDs
 - ◆ Application implementation procedures
 - ◆ Problem management procedures
 - ◆ Change management procedures
 - ◆ Test procedures
 - ◆ Recovery procedures
 - ◆ Data management procedures.
- ___ Identify subsystem migration requirements.
 - ◆ Identify any hardware/software changes required to accommodate existing subsystems such as CICS, IMS, DB2, MQ Series and JES on the new z/OS system.
- ___ Identify items affected by changed interfaces
- ___ Run an SMP/E REPORT CROSSZONES command and review the resulting report to ensure other product service dependencies are met.
Note: This report can also be set up to ensure coexistence/toleration service is installed when migrating from one version/release to another.
- ___ Identify changes affecting applications.
- ___ Identify new address spaces
- ___ Review or establish backup and recovery procedures.
- ___ Review or establish testing environment.
- ___ Review or establish service procedures.
- ___ Identify impact which may affect other platforms
 - ___ Perform necessary work on other platforms
- ___ Obtain DASD volumes for installation.
 - Total DASD space for z/OS is documented in *z/OS Planning for Installation, GC28-1726 and program directory for z/OS*
 - Additional DASD space will be required for additional products outside of the z/OS product
- ___ Add or change volumes to keep z/OS root system in a single data set. [not required, but for ease of management]
- ___ Satisfy driving system requirements for ServerPac:
 - See *z/OS Planning for Installation*
 - A Customized Offerings Driver, 5665-343, is available when driving system requirements cannot be met. This driver is entitled for z/OS customer.
 - Minimum driving system level is z/OS V1R8 with PTFs. See *Chapter 3, Table 9*.
 - An HFS containing the z/OS UNIX pax utility is required to unload the HFS from the driving system.

z/OS V1R10 Installation Planning Checklist

- Do not specify these LE run-time options as non-overrideable (NOOVR) in CEEDOPT CSECT:
ALL31, ANYHEAP, BELOWHEAP, DEPTHCONDLIMIT, ERRCOUNT, HEAP, HEAPCHK,
HEAPOOLS, INTERRUPT, LIBSTACK, PLITASKCOUNT, STACK, STORAGE,
THREADHEAP, and THREADSTACK (ServerPac requires these to be overrideable)
- ___ Review and update existing standards based on new or changed functions, interfaces
Note: Now documented in *Summary of Messages and Interface Changes*, SA22-7505
- ___ Identify variables required for ServerPac Installation Dialogs
Note: *Description of variables is located in Using the Installation Dialog*, SA22-7815
- ___ Develop plans for exploiting new z/OS functions.
 - ___ See *z/OS V1R10 Introduction and Release Guide*, GA22-7502
 - ___ *z/OS V1R10 DFSMS Using the New Functions*, SC26-7473
 - ___ *z/OS V1R10 Communications Server: New Function Summary*, GC31-8771
- ___ Create an installation and migration plan.
- ___ Identify product/element customization tasks.
Now in *z/OS V1R10 Migration*, GA22-7499 - documented by element
- ___ View product catalog for the chosen delivery vehicle
Note: *The product catalog is available at:*
<https://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp>
- ___ Identify additional required IBM products not on the checklist for reinstallation when selecting a ServerPac or SystemPac.
- ___ Determine the JES level to bring forward - if required.
- ___ Use SoftCap to identify the effect of capacity changes
Note: SOFTCAP is PC-based tool that will evaluate the effect on z/Architecture and S/390 processor capacity when migrating to newer levels of software, including z/OS, CICS and IMS. In addition, SOFTCAP can assess the effect on capacity when converting from 31-bit to 64-bit addressing, which is supported on zSeries and System z9/z10 servers by z/OS.
___ Download from: <http://www.ibm.com/support/techdocs/atsmastr.nsf/WebIndex/PRS268>
- ___ Find alternatives for removed elements and features, if required
 - ___ Refer to *z/OS V1R10 Migration*, GA22-7499, *Chapter 2*
 - ___ See Washington Systems Center Flash, FLASH10451 titled *Withdrawal of z/OS Functions* at <http://www.ibm.com/support/techdocs>
- ___ Upgrade Windows 2000, 95, 98 and NT Workstation clients
IBM no longer supports service for clients running these levels.
- ___ Remove ILM customization, if not already done
- ___ Remove references to deleted data sets and paths
See Chapter 2 in *z/OS V1R10 Migration*
- ___ Verify virtual storage limits are set properly

z/OS V1R10 Installation Planning Checklist

Ordering

ShopzSeries is a web-based ordering tool. Access from web site:

<https://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp> or off the z/OS "How to Buy" home page:
<http://www.ibm.com/servers/eserver/zseries/zos/buy.html> under the z/OS Ordering Information section.

- ___ Place an order for z/OS using ShopzSeries.
 - ServerPac available for Internet delivery
 - Requires SMP/E V3R3 and Cryptographic Services ICSF set up for SMP/E RECEIVE FROMNETWORK processing - **OR**
 - SMP/E V3R4
 - Does not require ICSF, but will use if set-up
- ___ Track software order via the internet: http://service.boulder.ibm.com/software_order_status
- ___ **Order all non-priced optional features**
 - Cannot order separately, must reorder z/OS to receive, if needed later

Prepare for System Replacement

There are several tasks to be done to establish an environment for easing in a new system. They are:

- ___ Separate IBM code from user code. This includes:
 - ◆ Non-IBM products
 - ◆ IBM products not available in checklist
 - ◆ User modifications
 - ◆ User exits.
- ___ Install additional required IBM products into their own set of target distribution libraries.
 - ◆ Install required IBM products which are not available in the ServerPac checklist into their own set of libraries, if at all possible. These libraries should not reside on the IPL volume.
Note: Use the BUILD MCS command to copy products from one pair of target and distribution libraries into another pair of target and distribution libraries. See z/OS SMP/E Commands, SA22-7771, for a full description of BUILD MCS.
- ___ Install non-IBM products in their own set of libraries, excluding the nucleus.
 - ___ Use an alternate LPA libraries for non-ServerPac products.
Notes:
 1. These non-ServerPac products should use alternate LPALIB through the LPALSTxx parmlib member.
 2. Dynamic LPALST is available since OS/390 R4. It requires conversion to PROGxx parmlib member.
 - ___ Use an alternate LINKLIB for non-ServerPac products.
Notes:
 1. Linklist libraries can be added to parmlib member LNKLSTxx or PROGxx.
 2. Dynamic Linklist is available since OS/390 R3. It requires conversion to PROGxx parmlib member.
- ___ Consider using dynamic exit service for user exits.

z/OS V1R10 Installation Planning Checklist

- ___ Standardize data set names and placement.
- ___ Review current procedures and processes for system installation to determine applicability.
- ___ Determine SYS1.PARMLIB usage.

ServerPac Installation

Notes:

1. *ServerPac ships recommended data set layout as the default. Enhancements are made to the ServerPac dialogs in each release.*
 - a. *The shipped HFS data sets can be switched to a zFS.*
 - b. *Link list (LNKLST) data sets will not longer be allocated with secondary extents*
2. *z/OS V1R8 or higher required for installation, plus PTFs*
3. *SMP/E 3.3 is required for ServerPac electronic delivery – SMP/E 3.5 ships in z/OS V1R10.*
4. *Must either have SCEERUN (the Language Environment run-time library) in the link list or edit the installation jobs to add it to JOBLIB or STEPLIB DD statements.*
5. *You can select the JES you want (JES2, including SDSF, or JES3) during installation and you can specify whether the JES SMP/E zones are to be merged with the BCP zones. Previously, both JESes were installed and usually one was deleted afterward.*
6. *If you order a product with your ServerPac which uses ++JAR, you need Java 2 Technology Edition (5655-D35).*
7. *RIM (Related Installation Materials) tapes are eliminated. The RIM files are now the first files on the System and Distribution tape.*
8. **HIPER and PRP (PE resolving PTF) PTFs are no longer ACCEPTed.** *Before z/OS V1R10, all PTFs currently APPLYed in ServerPac were also ACCEPTed. Doing so prevented the ability to back off (SMP/E RESTORE) PTFs, if necessary, after the order was manufactured. Beginning with z/OS V1R10, HIPER and PRP PTFs not yet marked RSU are excluded from ACCEPT processing.*

- ___ Run “one time update” job for z/OS 1.9 ServerPac Dialogs, **if not completed for z/OS 1.6**
The format of the RIM tape has changed. For physical delivery there is an UPDATE job shipped in DOCLIB on the RIM tape. For internet delivery a job called EUPDATE must be run and this job is supplied on the download page. **Failure to perform this update will cause an ABEND 813 during ServerPac RECEIVE processing.**

- ___ Install CustomPac Installation dialogs – Ensure they are at the correct level.

- ___ Invoke CustomPac Installation Dialogs.

- ___ Run installation jobs and check output.

Note: These jobs are documented in the ServerPac: Installing Your Order and are submitted via the CustomPac Dialogs.

- ___ Review integrated SYSTEM HOLDS for possible required actions.

Note: HOLDDATA information is located on the RIM tape. The customized installation guide will provide a pointer to the appropriate data set.

z/OS V1R10 Installation Planning Checklist

SYSTEM HOLD Information

To get a complete view of the system HOLDDATA incorporated into a ServerPac, the following must be reviewed:

- > Unresolved SYSTEMHOLD Report
- > Pre-Analyzed SYSTEMHOLD Report
 - > SYSTEMHOLD Analysis Report

- ___ Run required post-installation jobs from dialogs.
- ___ Identify regressed service, if applicable.
The CustomPac dialogs provide an SMP/E Report SYSMODS job and IFREQ checker.
- ___ Download code to other platforms, if applicable.
- ___ Remove deleted data sets, paths and references - Refer to Table 5 in the *z/OS 1.9 Migration* book.

CBPDO Installation

- ___ Read the Program Directory for z/OS and other program directories.
- ___ Clone all applicable volumes/data sets (includes HFS and/or zFS)
- ___ Review PSP buckets
 - UPGRADE: ZOSV1R8
 - Subset: ZOSGEN and one for each element
- ___ Follow the steps in the program directories to prepare for installation; to SMP/E RECEIVE, APPLY, and ACCEPT the z/OS FMIDs and service; to run installation and post-installation jobs; and to verify installation.
Notes:
 1. Elements are grouped together based on driving and target system requirements, element dependencies, and natural separation points, called waves and ripples.
Ripples must be processed in the order specified, with all FMIDs in a ripple installed.
 - ◆ Wave 0: FMIDs which should be available on driving system for subsequent wave installs - SMP/E, HLASM and the binder
 - Wave 0 requires z/OS V1R5 with PTFs.
 - Wave 0 requires the target system HFS be mounted on the driving system.
 - ◆ Wave 1: Install all core elements and features of z/OS with the exception of JES2 and JES3 and to service a ServerPac system.
 - Requires z/OS V1R7 with z/OS V1R9 Program Binder, SMP/E and HLASM, plus PTFs
 - ◆ Wave 2: SDSF, JES2 and/or JES3
 - May be combined with Wave 1.
 - Requires z/OS V1R7 with z/OS V1R9 Program Binder, SMP/E and HLASM, plus PTFs
- ___ Use the following recommended blocksizes:
 - ◆ non-RECFM=U: use system determined blocksize (BLKSIZE=0)
 - ◆ RECFM=U: BLKSIZE=32760

z/OS V1R10 Installation Planning Checklist

Download code to other platforms (for example, onto workstations).

Perform Pre-IPL Customization

This includes performing migration actions which must be completed prior to IPLing the target system. The z/OS Migration book identifies all migration actions which must be completed prior to the first IPL, by element.

ServerPac Installation

The following jobs are documented in the *ServerPac: Installing Your Order* and can be run from the CustomPac Installation Dialogs:

- Create IPL text.
- Build stand-alone dump text.
- Set up IPCS environment.
- Set up an ISPF environment.
 - ◆ Ensure proper libraries are concatenated.
 - ◆ Modify ISPF libraries to enable products and elements to be invoked.
- Perform initial customization for individual elements.
- Rework any usermods and user exits required to IPL z/OS.

CBPDO Installation

The following tasks are documented in Program Directory for z/OS and other program directories:

- Create IPL text.
- Build stand-alone dump text.
- Set up a new IPCS environment.
 - Note:
 1. Concatenate the JES2 or JES3 IPCS data sets
- Set up an ISPF environment.
 - ◆ Ensure proper libraries are concatenated.
 - ◆ Modify ISPF libraries to enable products and elements to be invoked.
 - ◆ Ensure logon procedure points to target system's level of IPCS data sets
- Verify IKJTSOxx member points to your desired Broadcast data set
- Remove Broadcast reference in MSTRJCLxx
- Ensure SYS1.SDWDDLPA is in LPALSTxx (wait state 40 if not)
- Ensure the target system's MIGLIB and SASMMOD1 libraries are APF-authorized.
- Perform initial customization for individual elements.

z/OS V1R10 Installation Planning Checklist

- ___ Update the master catalog (CBPDO).
- ___ Rework any usermods required to IPL z/OS.
- ___ Migrate /etc and /var system control files

Perform Migration Actions

The required migration actions depend on what software levels you are coming from and whether you plan to exploit new function.

- ___ Create or migrate IODF, if necessary.
- ___ Modify system control files:
 - ◆ SYS1.PARMLIB
 - ◆ SYS1.PROCLIB
 - ◆ SYS1.VTAMLST
 - ◆ JES initialization deck
 - ◆ /etc and /var
- ___ Review *z/OS UNIX System Services Planning*.
- ___ Set up the proper UNIX System Services environment for z/OS.
Notes:
 1. The OMVS address space starts automatically since OS/390 R3.
 2. Must run full function mode
- ___ Remove ARCHLVL from IEASYSxx. Will default to correct level when running z/OS.
The processor determines the appropriate z/OS architecture mode.
- ___ Set up IPCS environment
- ___ Use the “*IBM Health Checker for z/OS*” to programmatically check migration actions. New with z/OS V1R10. See *z/OS Migration* book, Chapter 1 for a complete description.
Note: Not all Migration actions are checked – still need to use the z/OS Migration book for all others.

Verify the New System

- ___ IPL the system as the target system and log on.
Note:
 1. This system must be IPLed in z/Architecture mode on a zSeries server
 - Bimodal Migration Accommodation is not allowed nor supported
 2. This system is not customized beyond what was required to IPL the system and does not exploit any of the new function.
 3. Ensure all required service is installed if IPLing z/OS on a System z9, z990 or z890 server as documented in their respective PSP buckets.
- ___ Run the Installation Verification procedures
 - ◆ See *ServerPac: Installing Your Order for information* on how the jobs can be run

z/OS V1R10 Installation Planning Checklist

from the CustomPac Installation Dialogs.

- ◆ See Program Directory for z/OS and other program directories for information on how to run these jobs, if using CBPDO to install.

Customize the System

- ___ Redo customization (update and merge system control files).
- ___ Set up the security environment.
- ___ Reinstall user exits and usermods, if required.
- ___ Install any new required products and service (including ISV products).
- ___ Reconnect subsystems (DB2, CICS, IMS, etc.)

Verify the Customized New System

- ___ IPL the target system.
Note: This system is customized but does not exploit any of the new function.
- ___ Perform function and stress test.
Note: IBM's comprehensive system testing does not replace the need for this testing in your own environment.

Testing might include:

- Initializing the system.
- Initializing JES.
- Logging on to TSO/E.
- Running the installation verification programs (IVPs), if supplied with the element or feature. The IVP jobs are listed in *z/OS and z/OS.e Planning for Installation*.
- Submitting a job.
- Checking the job's output.
- Starting customizing z/OS.
- If CICS or IMS is installed, initializing a region and signing on to a terminal.
- Bringing your independent software vendor products (ISVs) into the test environment.
- Running critical production jobs.
- Supporting a representative interactive workload.
- Communicating with all networks.
- Testing critical functions in applications.
- Checking some of the paths not often taken.
- Checking for completeness of accounting records.
- Testing all non-IBM product functions.
- Bringing your applications into the test environment.
- Ensuring performance goals stated in service level agreements can be met.

Migrate to Production

z/OS V1R10 Installation Planning Checklist

- ___ Cut the first system image to Production.
- ___ Prepare to clone the system (unit and volser on DDDEFs).
- ___ Roll the IPL across remaining system images, if applicable.

Exploit New Function

- ___ Determine functions to exploit.
Refer to: *z/OS V1R10 Introduction and Release Guide*
z/OS V1R10 DFSMS Using the New Functions, SC26-7473
z/OS V1R10 Communications Server: New Function Summary, GC31-8771
- ___ Create a plan for exploiting new function.
- ___ Execute the plan.

Maintenance after Installation

- ___ Understand Recommended Service Update (RSU) - RSU redefined
Note: Review information at: <http://www.ibm.com/servers/eserver/zseries/zos/servicetst>
 - ___ Service information - S/390 Software Support
<http://www.ibm.com/servers/eserver/support/zseries/index.html>

Note: From this site you can submit problems, review problems, search APARS, pull PSP buckets and link to other sites to download fixes and enhanced holddata.
 - ___ ShopzSeries <https://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp>
An internet based software service tool to obtain products, preventive and corrective service. Products and service are now available for delivery over the internet.
Note: *The new Internet Service Retrieval function in SMP/E 3.4 can be used to retrieve service and HOLDDATA automatically.*
 - ___ Retrieve current holddata. May be obtained from internet. Enhanced HOLDDATA improves the content of HOLDDATA by providing ERROR ++HOLDS for PE APARs and for HIPER (High Impact and Pervasive) APARs. The ++HOLD includes the fixing PTF number, when available, and any HIPER reason flags such as:
 - ◆IPL
 - ◆data loss
 - ◆major function loss
 - ◆performance
 - ◆pervasive
- Enhanced HOLDDATA:** <http://service.boulder.ibm.com/s390holddata.html>

z/OS V1R10 Installation Planning Checklist

Elements in z/OS V1R10

Element information for previous z/OS releases is located in Chapter 1 of *the z/OS Planning for Installation* manual.

Changed Base Elements

- ___ BCP
- ___ CIM
- ___ Communications Server
- ___ Cryptographic Services
- ___ DFSMSdfp
- ___ Distributed File Service
- ___ HCD
- ___ HLASM
- ___ IBM Tivoli Directory Server (TDS)
- ___ Integrated Security Services
 - components are Enterprise Identity Mapping (EIM), DCE Security Server, Firewall Technologies, LDAP Server, Network Authentication Service, and OCEP
- ___ ISPF
- ___ JES2
- ___ Language Environment
- ___ Library Server
- ___ Metal C Runtime Library
- ___ Network File System
- ___ Run-Time Library Extensions
- ___ SMP/E
- ___ TSO/E
- ___ z/OS UNIX System Services

Changed Optional Elements

- ___ C/C++ without Debug Tool
- ___ Communications Server Security Level 3
- ___ DFSMSdss
- ___ DFSMShsm
- ___ DFSMStvs
- ___ DFSMSrmm
- ___ DFSORT
- ___ HCM
- ___ HLASM Toolkit
- ___ JES3
- ___ RMF
- ___ SDSF
- ___ Security Server
- ___ z/OS Security Level 3

New FMIDS

FMID JDZ1AJ0, Japanese support, is new in base element NFS.
FMID JJE775S, SDSF JES2 support, is new in optional feature SDSF.

Superseded FMIDs

z/OS V1R10 Installation Planning Checklist

In z/OS V1R9 DFSORT, the English FMID (JSM1H01) and Japanese FMID (JSM1H02) provided panels and messages. In z/OS V1R10, the English and Japanese FMIDs are not shipped; DFSORT panels and messages have been removed.

FMID JIP6199 – HFS code (see Merged FMIDS)
FMIDs JPG290A and JPG290B – CIM (see Merged FMIDS)

Merged FMIDs

In z/OS V1R9 Communications Server, HFS code is in a separate FMID, JIP6199.
In z/OS V1R10, HFS code is contained in base FMID HIP61A0 instead of in a separate HFS FMID.
In z/OS V1R9 CIM, two dependent FMIDs were provided: JPG290A (eServer™ OS Management CIM providers for z/OS) and JPG290B (CIM Client for Java).
In z/OS V1R10, CIM has one FMID: HPG7750. FMIDs JPG290A and JPG290B have been merged into base FMID HPG7750.

New Base Element (z/OS 1.9)

- Alternate Library for REXX
- Metal C Runtime Library

New Base Element (z/OS 1.8)

- IBM Tivoli Directory Server for z/OS

Withdrawn Features and Functions

Functions Planned to be Withdrawn <i>in the Future</i> (no specific release has been specified)		Announcement Letter
BIND DNS 4.9.3 (from Communications Server)	Base Element - implement BIND 9.2.0 as a replacement (available since z/OS R4) <i>z/OS 1.10 last release to support this function</i>	203-266 Oct. 7, 2003 204-017 Feb. 10, 2004 208-042 Feb. 26, 2008
Support for VSAM data sets with IMBED , REPLICATE , or KEYRANGE attributes (from DFSMS)	Base Element - plan to redefine any affected VSAM data sets. Use tool to assist in identifying affected VSAM data sets. Statement of Direction modified for KEYRANGE (not withdrawn) see announcement letter for details.	204-180 Aug. 10, 2004 207-175 Aug. 7, 2007
Support for IPCS Problem management commands	z/OS V1.10 is planned to be the last release to include IPCS Problem Management Subcommands. If you currently use the IPCS problem management subcommands to report and track problems, consider using IBM Tivoli Information Management for z/OS V7 (5698-A08) or other similar products. IBM plans to continue to enhance the dump and trace analysis and display facilities of IPCS.	208-186 Aug. 5, 2008
Integrated Security Services LDAP Server	z/OS V1.10 is planned to be the last release of z/OS which will support the Integrated Security Services LDAP Server. A new optimized LDAP server, called IBM Tivoli Directory Server for z/OS (ITDS) as delivered for z/OS 1.8. Customers who are currently using the Integrated Security Services LDAP Server,	208-186 Aug. 5, 2008

z/OS V1R10 Installation Planning Checklist

	should investigate migrating to ITDS, which was designed to allow greater consolidation of LDAP directories on z/OS to help simplify enterprise management and disaster recovery	
zFS multi-file system aggregates (from Distributed File Service)	Base Element – zFS compatibility mode aggregates will still be supported	205-034 Feb. 15, 2005
Attaching zSeries File System (zFS) multi-file system aggregates	z/OS V1.10 is planned to be the last release to allow attaching zSeries File System (zFS) multi-file system aggregates to be shared across systems in a sysplex. IBM has previously recommended these multi-file system aggregates not be shared in a sysplex environment. Once this support has been removed, attempts to attach zFS aggregates will fail in a z/OS UNIX shared file system environment. Attaching zFS compatibility mode aggregates, which have a single file system per data set, will continue to be supported in all environments. Note: Mounting was removed in z/OS 1.8	208-186 Aug. 5, 2008
Optional setting for RFC4301 compliance (from Communications Server)	Base element. IBM intends to make RFC4301 compliance mandatory when using IPSec policies. This RFC includes restrictions on the routing of fragmented packets, which may require changes to existing z/OS IP filtering policy.	208-042 Feb. 26, 2008
Network Database (NDB) function will be removed from Communications Server	Customers who currently use or plan to use the NDB function should investigate the distributed data facility (DDF) provided by z/OS DB2, and the DB2 Run-Time Client. DDF allows client applications running in an environment that supports DRDA(R) to access data at DB2(R) servers. z/OS 1.10 last release to support this function	207-175 Aug. 7, 2007 208-042 Feb. 26, 2008
DHCP server function will be removed from the Communications Server component.	Customers who currently use or plan to use the z/OS DHCP server should investigate using a DHCP server on Linux for System z. z/OS 1.10 last release to support this function	207-175 Aug. 7, 2007 208-042 Feb. 26, 2008
Boot Information Negotiation Layer (BINL) function will be removed from the Communications Server component	Customers using this function should investigate the use of IBM Tivoli(R) Provisioning Manager for OS Deployment for network based operating system installation services. z/OS 1.10 last release to support this function	207-175 Aug. 7, 2007 208-042 Feb. 26, 2008
Discontinue delivery of software on 3480, 3480C and 3480E tape media	IBM recommends using Internet Delivery Service. Internet delivery is IBM's flagship delivery method; therefore future software delivery enhancements will be focused in this area.	208-186 Aug. 5, 2008
Functions Withdrawn <u>in</u> z/OS Release 10		Announcement Letter
RMF LDAP replacement (from RMF)	Priced Feature - RMF LDAP interface is planned to be replaced with a CIM Monitoring Interface that is part of z/OS R7	206-039 Feb. 28, 2006
Assignment of CPU affinity to a logical processor	The release following z/OS V1.9 is planned to be the last release to provide support for the assignment of CPU affinity to a logical processor. Future releases will ignore any attempt to assign CPU affinity.	207-175 Aug. 7, 2007

z/OS V1R10 Installation Planning Checklist

English and Japanese panels from DFSORT	Priced Feature - no replacement offered (z/OS Release 9 is the last release)	204-180 Aug. 10, 2004 207-018 Feb. 6, 2007
Support for the configuration of Traffic Regulation (TR) policy as part of the Quality of Service (QoS) discipline from Communications Server	<p>Base element - Implement the Intrusion Detection Services (IDS) policy configuration made available in z/OS V1.8</p> <ul style="list-style-type: none"> • z/OS V1.9 is planned to be the last release of z/OS Communications Server which will support the configuration of Traffic Regulation (TR) policy as part of the Quality of Service discipline. The TR configuration function remains supported, but IBM recommends that you implement it as part of the Intrusion Detection Services (IDS) policy configuration made available in z/OS V1.8. This change is only for the TR policy configuration. The TR policy functions themselves remain unaffected. For more information, refer to: <ul style="list-style-type: none"> ○ z/OS V1.8 Communications Server IP Configuration Guide, Chapter 16. Intrusion Detection Services (IDS) ○ z/OS V1.8 Communication Server IP Configuration Reference 	207-006 Feb. 6, 2007
Functions Withdrawn <u>in</u> z/OS Release 9		Announcement Letter
In-stack version of TN3270 Server (from Communications Server)	Base Element - use standalone TN3270 Server instead (introduced in z/OS R6)	206-039 Feb. 28, 2006 207-018 Feb. 6, 2007
Host Communication between HCM and HCD with APPC (from HCM)	Priced feature – Only TCP/IP for host communication between HCM and HCD will be allowed. (Currently both TCP/IP and APPC are supported.)	206-039 Feb. 28, 2006
Run-time support for C/C++ IBM Open Class (IOC) Dynamic Link Libraries (DLLs) (from C/C++ without Debug)	<p>Priced feature – Any application code using the IOC Library should migrate to use the standard C++ Library See WSC FLASH10588 for details.</p> <p>Applications may need to be recompiled.</p>	206-039 Feb. 28, 2006 206-190 Aug. 18, 2006 203-131 May 13, 2003 201-248 Sept. 11, 2001
APPC Application Suite in Communications Server	Set of common applications originally designed to enhance the value of SNA networks. More full-featured alternative applications exist in modern integrated SNA/IP networks – this Suite will no longer be supported.	206-191 Aug. 8, 2006
In-stack version of TN3270 Server (Communications)	Base element use standalone TN3270 Server (introduced in z/OS 1.6)	206-191 Aug. 8, 2006

z/OS V1R10 Installation Planning Checklist

Functions Withdrawn in z/OS Release 8		Announcement Letter
zFS multi-file system aggregate shared across a sysplex (from Distributed File Service)	Base Element - zFS compatibility mode aggregates (which have a single file system per data set) will continue to be supported in all environments.	205-034 Feb. 15, 2005
Firewall Technologies (from Integrated Security Services)	Base Element - Many Firewall Technologies functions have been stabilized and can be replaced with Communications Server functions. Some functions won't have replacements.	205-034 Feb. 15, 2005
Some Communications Server functions	Base Element - TCP/IP Configuration profile block definitions, PAGTSNMP subagent, EE TGs definition by specifying multiple SAP addr, and AnyNet	205-034 Feb. 15, 2005
Any remaining one-byte console ID support (from BCP)	Base Element - Use console names instead of one-byte console IDs	205-034 Feb. 15, 2005
Certain plug-ins for msys for Setup: TCP/IP Services, z/OS UNIX System Services, Language Environment, Parallel Sysplex, ISPF, and RMF	Base Element - TCP/IP plug-in available from web and will not require <i>msys for Setup</i> . Improvements for setup and configuration are planned in the future.	205-167 July 26, 2005
msys for Operations	Base Element - IBM plans to transition many of the current <i>msys for Operations</i> functions to a new user interface and infrastructure in a future release of z/OS.	205-167 July 26, 2005

Elements and Features with No Migration Actions

The following z/OS V1.10 elements and features have **no migration actions**.

- BDT
- BDT File-to-File
- BDT SNA NJE
- BookManager® BUILD
- BookManager READ
- Communications Security Server Level 3
- DCE Base Services
- EREP
- ESCON® Director Support
- GDDM
- GDDM-PGF
- GDDM-REXX
- HLASM
- HLASM Toolkit
- IBM HTTP Server
- Metal C Runtime Library
- MICR/OCR
- Run-Time Library Extensions
- TIOC
- z/OS Security Level 3
- 3270 PC File Transfer Program
- TSO/E
- XL C/C++

z/OS V1R10 Installation Planning Checklist

Element Migration Information

Review *z/OS Migration V1R10* for element migration actions. This is the primary migration document.

Notes:

1. Approximately 90 “new” migration actions resulting from new enhancements in V1R10
2. Includes migration actions from z/OS V1R8 and z/OS V1R9
3. Describes migration actions for everyone
4. Describe hardware migration actions
5. Describes sysplex migration actions
6. Describes specific migration actions for elements and features - may refer to specific element books for additional information.

Use the “*IBM Health Checker for z/OS*” to perform migration checking. << New for z/OS V1R10>>

Note: Beginning with this release the IBM Health Checker for z/OS infrastructure is being exploited for migration purposes. See the *z/OS V1R10 Migration* book, Chapter 1, for complete description on usage. The previous migration checker “as is” web download is not updated for z/OS V1R10.

Elements requiring Migration Actions for z/OS V1R10

- | | | |
|--|---|--|
| <input type="checkbox"/> BCP | <input type="checkbox"/> ICKDSF | <input type="checkbox"/> Security Server |
| <input type="checkbox"/> CIM | <input type="checkbox"/> Integrated Security Services | <input type="checkbox"/> SMP/E |
| <input type="checkbox"/> Communications Server | <input type="checkbox"/> ISPF | <input type="checkbox"/> z/OS UNIX System Services |
| <input type="checkbox"/> Cryptographic Services | <input type="checkbox"/> JES2 | |
| <input type="checkbox"/> Distributed File Services | <input type="checkbox"/> JES3 | |
| <input type="checkbox"/> DFSMS | <input type="checkbox"/> Language Environment | |
| <input type="checkbox"/> DFSORT | <input type="checkbox"/> Network File System (NFS) | |
| <input type="checkbox"/> HCD | <input type="checkbox"/> RMF | |
| <input type="checkbox"/> IBM Tivoli Directory Server | <input type="checkbox"/> SDSF | |

Elements requiring Migration Actions for z/OS V1R9

- | | | |
|--|---|--|
| <input type="checkbox"/> BCP | <input type="checkbox"/> Integrated Security Services | <input type="checkbox"/> XL C/C++ |
| <input type="checkbox"/> CIM | <input type="checkbox"/> ISPF | <input type="checkbox"/> z/OS UNIX System Services |
| <input type="checkbox"/> Communications Server | <input type="checkbox"/> JES2 | <input type="checkbox"/> TSO/E |
| <input type="checkbox"/> Cryptographic Services | <input type="checkbox"/> JES3 | |
| <input type="checkbox"/> DFSMS | <input type="checkbox"/> Language Environment | |
| <input type="checkbox"/> Distributed File Services | <input type="checkbox"/> RMF | |
| <input type="checkbox"/> HCM | <input type="checkbox"/> SDSF | |
| <input type="checkbox"/> Infoprint Server | <input type="checkbox"/> Security Server | |

Elements requiring Migration Actions for z/OS V1R8

z/OS V1R10 Installation Planning Checklist

- | | | |
|--|---|--|
| <input type="checkbox"/> BCP | <input type="checkbox"/> Integrated Security Services | <input type="checkbox"/> Security Server |
| <input type="checkbox"/> CIM | <input type="checkbox"/> ISPF | <input type="checkbox"/> XL C/C++ |
| <input type="checkbox"/> Communications Server | <input type="checkbox"/> JES2 | <input type="checkbox"/> z/OS UNIX System Services |
| <input type="checkbox"/> Cryptographic Services | <input type="checkbox"/> JES3 | |
| <input type="checkbox"/> DFSMS | <input type="checkbox"/> Language Environment | |
| <input type="checkbox"/> Distributed File Services | <input type="checkbox"/> RMF | |
| <input type="checkbox"/> HCM | <input type="checkbox"/> SDSF | |
| <input type="checkbox"/> Infoprint Server | | |

zIIP Support (Available on z9 and z10)

The IBM System z Integrated Information Processor (IBM zIIP), is now available on the System z9 Enterprise Class (EC) and System z9 Business Class (BC) and z10 servers. Software support is integrated into z/OS 1.8 base and higher. Support is rolled back to z/OS 1.6 and z/OS 1.7 via a web download. There is specific PTF service required whether the zIIP web download is installed or not. Review WSC FLASH10477 for details and the zIIP web site (<http://www.ibm.com/systems/z/ziip>).

- Identify and install all zIIP PTF service (Use the Enhanced PSP tool to obtain a complete list across multiple PSP buckets.)

- Download zIIP web deliverable, if applicable (required for Hiperdispatch on a z10)
<http://www.ibm.com/servers/eserver/zseries/zos/downloads>

- Informational APAR II14219 describes DB2 V8 PTF service required for zIIP

- Contact ISVs regarding zIIP

Cryptographic Support

ICSF support has changed for the System z9, z990 and z890 servers. The following services/functions are not available with a PCI X Cryptographic Coprocessor. This list is not complete.

- DSA Signatures and key generation
 - ANSI x9.17 services (offset and notarization) and associated key types
 - German Bank Pool – PIN offset
 - Ciphertext Translate
 - User Derived Key
 - CDMF 40-bit encryption
- Understand the **PCI X Cryptographic Coprocessor** cryptographic functions which are no longer supported or provided.
- Review the Appendices in the following publications:
 - ICSF Overview, SA22-7519
 - ICSF System Programmer's Guide, SA22-7520

z/OS V1R10 Installation Planning Checklist

__ ICSF Application Programmer's Guide, SA22-7522

- Notify and forward *ICSF Application Programmer's Guide* to Crypto Application Development programmers
- Review cryptographic requirements and determine the appropriate ICSF level for installation.

Operating System	Level Shipped in Base Product	Level Required for Clear Key Support	Level Required for Secure Key Support	Level Required for Enhanced Secure Key Support	Level Required for 64-bit addressing caller support
z/OS 1.4 or z/OS.e 1.4	HCR7706 or HCR7708 ⁴	HCR7708 ⁴	HCR770A ¹	HCR770B ²	N/A
z/OS 1.5 or z/OS.e 1.5	HCR7708	HCR7708	HCR770A ¹	HCR770B ²	N/A
z/OS 1.6 or z/OS.e 1.6	HCR770A	HCR770A	HCR770A	HCR770B ²	HCR7720 ³
z/OS 1.7 or z/OS.e 1.7	HCR7720	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level
z/OS 1.8 or z/OS.e 1.8	HCR7731 ⁵	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level
z/OS 1.9	HCR7731	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level
z/OS 1.10	HCR7750	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level	Integrated in z/OS base level

Notes:

1. HCR770A is shipped in the z990 Cryptographic Support web deliverable.
2. HCR770B is shipped in the z990 and z890 Enhancements to Cryptographic Support web deliverable.
3. HCR7720 is shipped in the ICSF 64-bit Virtual Support for z/OS V1R6 and z/OS.e V1R6 Web deliverable (**Replaced by *Cryptographic Support for z/OS V1R6/R7 and z/OS.e V1R6/R7 - FMID HCR7730***).
4. HCR7708 is shipped in the z/OS 1.4 with z/OS1.4 Compatibility Support feature (no longer orderable) or *z/OS V1R4 z990 Exploitation Support Feature*. After February 24, 2004 this feature became mandatory for all new z/OS V1R4 orders. HCR7708 is also shipped in *z/OS.e 1.4 with Coexistence Update* feature. After February 24, 2004 this feature became mandatory for all new z/OS.e V1R4 orders.
5. **HCR7731 is shipped in web deliverable *Enhancements to Cryptographic Support for z/OS and z/OS.e V1R6/R7*.**

- Install, if applicable, the appropriate software crypto support. Web downloads at <http://www.ibm.com/eserver/zseries/zos/downloads/>.
- Ensure ICSF Toleration APAR OA09157 is installed.
Applicable to ICSF users running on System z10, z9, z990 or z890 machines with ICSF FMIDs HCR770A and/or HCR770B with the Crypto Express2 Coprocessor (CEX2C). ICSF will abend with an ABEND18F reason code 10F without this APAR.

z/OS V1R10 Installation Planning Checklist

IBM Healthchecker

The IBM Health Checker for z/OS is a z/OS component used to gather information about your system environment and system parameters to help identify potential configuration problems before they impact availability or cause outages. Individual products, z/OS components, or ISV software can provide checks which take advantage of the IBM Health Checker for z/OS framework. For additional information about checks and about IBM Health Checker for z/OS, see *IBM Health Checker for z/OS: User's Guide*. SDSF also provides functions to simplify the management of checks. See *z/OS SDSF Operation and Customization* for additional information.

- ___ Ensure the z/OS Healthchecker is initialized.
- ___ Review new checks provided in z/OS 1.10 and update
- ___ Install and run XISOLATE

XISOLATE can be downloaded from: <ftp://ftp.software.ibm.com/s390/mvs/tools/>

Note: The XISOLATE tool, offered at no charge by IBM, assists users with the management of data sets whose recommended allocation for availability or performance reasons need to be on separate DASD subsystems. Many software systems use, create, and manage multiple copies of control data sets (ie, software duplexing, parallel sysplex data sets, etc.), to allow the functions to continue to operate when a DASD subsystem fails and one of the copies becomes unavailable. Other data sets could experience performance degradation if allocated on the same subsystem as other highly accessed data sets. XISOLATE is a set of programs that reports whether these data sets are currently on separate DASD subsystems and will continue to be on separate DASD subsystems following data moves in a migration.

SYS1.PARMLIB Changes

Review *z/OS Summary of Messages and Interface Changes, SA22-7505* chapter 3 for a complete description of change.

z/OS SYS1.PARMLIB Member Changes		
AXR00	z/OS 1.9	New member
BPXPRMxx	z/OS 1.9 z/OS 1.8	Release update and new parameters Release update
CBROAMxx	z/OS 1.10	Updated
CEAPRMxx	z/OS 1.10	New member
CEEPRMxx	z/OS 1.10 z/OS 1.9	New parameters Release update
CLOCKxx	z/OS 1.9	Changed member
CNIDTRxx	z/OS 1.10	Updated statements
CONSOLxx	z/OS 1.10	New parameters
CTINFO00	z/OS 1.8	New member
CTINSS00	z/OS 1.9	New
DIAGxx	z/OS 1.10 z/OS 1.9	New statements Changed member
EZASMF77	z/OS 1.10	Updated statement
GRSCNFxx	z/OS 1.9	Release Update

z/OS V1R10 Installation Planning Checklist

z/OS SYS1.PARMLIB Member Changes		
IEAOPTxx	z/OS 1.10 z/OS 1.9	Changed member Changed member
IEADMP00	z/OS 1.9	Release update
IEADMR00	z/OS 1.9	Release update
IEASYSxx	z/OS 1.10 z/OS 1.9	Changed statements Changed member
IECIOSxx	z/OS 1.10	New parameters
IEFSSNxx	z/OS 1.8	Release update
IGDSMSxx	z/OS 1.10 z/OS 1.9 z/OS 1.8	New parameters Changed member New parameters
IKJTSOxx	z/OS 1.10	New statement
ISFPRMxx	z/OS 1.10 z/OS 1.9	Changed member New statements
ISFPRMxx or ISFPARMS	z/OS 1.10 z/OS 1.9 z/OS 1.8	Changed member Release update New and changed columns
IVTPRM00	z/OS 1.10	Changed member
LOADxx	z/OS 1.10 z/OS 1.9	New parameters Changed member
MSGFLDxx	z/OS 1.10	New member
PROGxx	z/OS 1.9	Release update
SMFPRMxx	z/OS 1.9	Release update

System Command Changes

Review *z/OS Summary of Messages and Interface Changes, SA22-7505* chapter 6, for a complete description of changes to z/OS commands and refer to the *z/OS MVS Commands* manual for specific details.

z/OS System Command Changes		
CMDS	z/OS 1.10	New option
DEVSERV	z/OS 1.9	New information
DISPLAY	z/OS 1.10 z/OS 1.9 z/OS 1.8	New options New options New options
MODE	z/OS 1.9	New option
MODIFY	z/OS 1.10 z/OS 1.9 z/OS 1.8	New option New options New options
SEND	z/OS 1.9	New options
SETCON	z/OS 1.10	New command
SETGRS	z/OS 1.8	New parameters
SETHS	z/OS 1.9	New

z/OS V1R10 Installation Planning Checklist

z/OS System Command Changes		
SETIOS	z/OS 1.9 z/OS 1.8	New command New parameters
SETLOGR	z/OS 1.9	New option
SETPROG	z/OS 1.9	New command
SETRRS	z/OS 1.10 z/OS 1.8	New command SETRRS ARCHIVELOGGING New command SHUTDOWN
SETSMF	z/OS 1.9	New options
SETOMVS	z/OS 1.9 z/OS 1.8	New options New options
SETSMS	z/OS 1.9 z/OS 1.8	Deleted parameters New parameter
SETXCF	z/OS 1.9 z/OS 1.8	New options New Option (Allows START and STOP)
SLIP SET	z/OS 1.9	New options
START	z/OS 1.9	New address space
SWITCH SMF	z/OS 1.9	Changed
TRACE	z/OS 1.9	New options
VARY	z/OS 1.10 z/OS 1.9	New option New option

SYS1.PROCLIB Changes

CFZIM	z/OS 1.7	Started task to run CIMServer Runtime Environment.
AXRPSTRT	z/OS 1.9	SYSREXX is restarted using this procedure

SMF Record Changes

Review *z/OS MVS System Management Facilities*, for a complete description of change.

z/OS 1.10

- Type 14
- Type 18
- Type 19
- Type 30
- Type 42
- Type 89
- Type 99
- Type 140

z/OS 1.9

- Type 6
- Type 7
- Type 14
- Type 18
- Type 30
- Type 71
- Type 72
- Type 74
- Type 79
- Type 82
- Type 92
- Type 99

z/OS V1R10 Installation Planning Checklist

z/OS 1.8

- Type 00
- Type 6
- Type 14
- Type 30
- Type 31
- Type 32
- Type 33
- Type 70
- Type 71
- Type 72
- Type 73
- Type 74
- Type 76
- Type 77
- Type 79
- Type 80
- Type 81
- Type 82
- Type 83
- Type 85
- Type 88
- Type 89
- Type 99
- Type 108

New Address Spaces – z/OS 1.10

There are no new address spaces for z/OS 1.10.

New Address Spaces – z/OS 1.9

The following address spaces are new:

- *CEA*: The common event adapter (CEA) provides the ability to deliver z/OS events to C-language clients, such as the z/OS CIM server. The CEA address space is started automatically during z/OS initialization and does not terminate.
- *ARCnXXXX*: One of these DFSMSdss address spaces is started automatically by DFSMSShsm whenever a dump, restore, migration, backup, recover, or CDS backup function is invoked. These DFSMSdss address spaces can reduce the storage used in the DFSMSShsm address space, enabling more tasks to be started within the DFSMSShsm address space.

When DFSMSShsm invokes DFSMSdss through the DFSMSdss cross-memory application interface, DFSMSShsm requests that DFSMSdss use a unique address space identifier for each unique DFSMSShsm function and host ID. The address space identifier for each function is in the form *ARCnXXXX*, where *n* is a unique DFSMSShsm host ID and *XXXX* is an abbreviation of a DFSMSShsm function. The abbreviations and corresponding functions are:

- DUMP for dump
- REST for restore
- MIGR for migration
- BKUP for backup
- RCVR for recover
- CDSB for CDS backup

New Address Spaces – z/OS 1.8

The following address space is new:

- DSSFRDSR (DFSMSShsm invokes DFSMSdss to recover up to 64 data sets concurrently)

Exits

New and changed exits. Detailed information is located in *z/OS MVS Installation Exits*, *DFSMS Installation Exits* and *JES2 Exits* manuals.

Installation Exit	Description	Release
CBRUXVNL_EXIT	3592 GEN Support	z/OS 1.8
CNZ_MSGTOSYSLOG	Use to view messages being sent to SYSLOG	z/OS 1.8
CNZ_WTOMDBEXIT	Use to view messages sent by WTO and WTOR	z/OS 1.8

z/OS V1R10 Installation Planning Checklist

DSME	Directory Services Management Exit (Comm Server)	z/OS 1.8
ISGENDOFLQCB	ISV Support	z/OS 1.10 z/OS 1.9
ISGNQXITBATCH		z/OS 1.10
ISGNQXITBATCHCN		z/OS 1.10
ISGNQXITQUEUEU1	ISV Support	z/OS 1.10 z/OS 1.9
ICHDEX01	RACF Pass phrase support	z/OS 1.8
ICHPWX11	New RACF exit – Pass phrase support	z/OS 1.8
ICHRIX01	RACF SAF identity support	z/OS 1.8
JES2 Exit 2	JOB JCL Statement Scan	z/OS 1.8
JES2 Exit 3	JOB statement accounting field scan	z/OS 1.8
JES2 Exit 4	JCL and JES2 control statement scan	z/OS 1.8
JES2 Exit 11	SPOOL Partitioning allocation (\$TRACK)	z/OS 1.10
JES2 Exit 12	SPOOL Partitioning allocation (\$STRAK)	z/OS 1.10
JES2 Exit 14	JOB Queue work select	z/OS 1.9
JES2 Exit 18	SNA RJE LOGON/LOGOFF	z/OS 1.10
JES2 Exit 20	End of Input	z/OS 1.10
JES 2 Exit 40	Modifying SYSOUT	z/OS 1.10
JES 2 Exit 43	APPC/MVS TP	z/OS 1.10
JES 2 Exit 45	PRE-SJF service request	z/OS 1.10
JES 2 Exit 46	Modifying an NJE data set prior to its transmission	z/OS 1.10
JES2 Exit 50	End of Input	z/OS 1.8
JES2 Exit 52	JOB JCL Statement Scan	z/OS 1.10 z/OS 1.8
JES2 Exit 53	JOB statement accounting field scan	z/OS 1.8
JES2 Exit 54	JCL and JES2 control statement scan	z/OS 1.8
JES2 Exit 55	NJE SYSOUT	z/OS 1.10
JES2 Exit 56	Modify NJE data area before transmission	z/OS 1.10 z/OS 1.8
Volume Mount Exit	Tape Authorization	z/OS 1.8
SDSF Initialization Exit		z/OS 1.9
IEFU29L	SMP Log Stream Dump Exit (new)	z/OS 1.9
File End on Volume Exit (DFSMSdfp)	New parameters are added for key encrypting keys - 3592 Model E05 Support	z/OS 1.9
ICHPWX11	RACF - Password phrase support	z/OS 1.9

Reminders

- ◆ Exploiting functions in some areas may require an implementation plan of their own.
- ◆ The following information is not considered a complete list of migration actions for the components listed. **Refer to the *z/OS V1R10 Migration* book for a complete list of migration actions for all elements.** Softcopy (pdfs) are available for specific migration paths at this URL http://www-1.ibm.com/servers/eserver/zseries/zos/bkserv/zos_migration_manuals.html
 - z/OS V1R9 to z/OS V1R10
 - z/OS V1R8 to z/OS V1R10
 - All migration paths

BCP

z/OS V1R10 Installation Planning Checklist

BCP (z/OS 1.10)

- Ensure consoles have unique names within a GRS ring complex
- Update automation and exits for modified MCS logon command format. Operands must appear in a defined order and location
- Discontinue the use of LOGON and LOGOFF for console names
- Review and accommodate VARY command changes
- Modify applications using unsupported subsystem console functions
- Review automation procedures for:
 - usage of DISPLAY CONSOLES,HCONLY and remove
 - Update to accommodate new responses (message ids) to DISPLAY CONSOLES command
- Remove PPT entries for GRS monitor
- Review GRS exit ISGNQXITQUEUED1 for parameter list changes and contact ISV's if they own the exit
- Message IEE174I content changed – review automation procedures for usage and change accordingly
- Review volume parameters on allocations with DISP=UNCATLG and understand how processing has changed
- Update callers of CNZMXURF macro
- Modify applications receiving IOS ENF signals for PPRC devices
- Reallocate WLM couple data set

BCP (z/OS 1.9)

The BCP includes two new FMIDs: System REXX for z/OS Base and one for future use.

- Check for bind jobs that override output record format
- Modify programs using the program management binder fast data access service
- Ensure IPL text is on correct volume
- Reassemble Standalone Dump program
- Ensure Global Resource Serialization ISV-oriented exit routines run in a cross-memory environment
- Discontinue use of the DIAGxx ISGERQA parameter

BCP (z/OS 1.8)

- Review and Update Operator and automation procedures for changed MVS Commands
- Migrate from prelinker to program management binder

z/OS V1R10 Installation Planning Checklist

- Review use of IXGWRITE in unauthorized programs (reason code X'0867')
- Review standalone dump requirements
- Removal of 1-byte console ID is complete
- Accommodate the removal of master console
- Accommodate removal of console switching
- MSGRT command can no longer be issued
- Accommodate hardcopy medium – hardcopy switching is no longer supported
- Review GRS changes
- Review changes for zIIP and zAAP processing
- Modify programs to properly handle the new ASCBIOSC maximum value
- Modify installation exits to ignore new or unknown C/I text units
- Check for reserved console names INTERNAL and INSTREAM
- Put a blank character in column 19 of NLS skeleton lines
- Limit the number of browse sessions initiated by IXGBRWSE in unauthorized programs
- Use the changed defaults for HOTIO in IECIOSxx
- Review use of serialized coupling facility structures per address space

SMP/E V3R5

Note: SMP/E 3.3 is minimum SMP/E level for Internet delivery of ServerPac and SystemPac.

- Change severity of APPLY and ACCEPT processing messages to warning
- Accommodate changes to BYPASS HOLD reason report

CIM (z/OS 1.10)

- Update CIM environment file

CIM (z/OS 1.9)

- Migrate to CIM schema version 2.11

XL C/C++ (z/OS 1.9)

- Remove dependency on the C/C++ IBM Open Class Library

XL C/C++ (z/OS 1.8)

- Increase MEMLIMIT to avoid ABENDS

Communications Server

Communications Server (z/OS 1.10)

- Update IP filter policy to filter IP fragments correctly. Rule restrictions established by RFC 4301 are followed.
- Migrate FTP servers sharing FTP.DATA with FTP clients. To keep current behavior action must be taken.

z/OS V1R10 Installation Planning Checklist

- Update network management applications for SNMP support of the RFC versions of networking MIB modules
- Specify at least one valid ZIIP subparameter on GLOBALCONFIG ZIIP statements
- Ensure compatible levels of VTAM for HPR sessions
- Update applications and user exits that use the VTAM version and release level in algebraic expressions
- Update network management applications for SNMP interface data changes
- Adjust for a new client error code for the FTP client
- Update automation that handles FTP job informational messages for MVS data set transfers
- Make changes for Netstat enhancements
- Update /etc configuration files
- Increase region size for Telnet
- Disable path MTU discovery for IPv4 and IPv6 Enterprise Extender connections
- Use ETHERNET instead of TOKENRING with IPCS CTRACE
- Modify FTPOSTPR exit routines to handle a new parameter

Communications Server (z/OS 1.9)

- IP Services: Delete duplicate named inline statements in Policy Agent configuration files
- IP Services: Use the new OSAENTA trace default
- Migrate from LDAP protocol version 2 to LDAP protocol version 3 for QoS and IDS policies in Policy Agent
- Migrate to the TN3270E Telnet server that runs in its own address space
- Update automation for changed OMPROUTE messages
- Review changes regarding disable dropping of idle connections associated with noncurrent profiles
- Update applications to handle scope information on Getnameinfo calls
- Review changes in how AT-TLS policies are deleted from the stack
- Make changes for Netstat enhancements
- Update /etc configuration files
- SNA Services: Define generic resource resolution preferences using a generic resource preference table
- SNA Services: Override MPC group activation suspension if manual reactivation of MPC groups is desired
- SNA Services: Update automation that handles message IST2139I
- Ensure IP security messages are logged by syslogd as needed
- IP Services: Update the timestamp of a user-customized FTP message or reply catalog
- IP Services: Allow the IP CICS Socket Listener to remain active when its stack is not available

Communications Server (z/OS 1.8)

- Firewall Technologies removed – use Integrated IPSec/VPN
- Last release to support LDAP protocol version 2
- Review Automated Domain Name Registration application (EZBADNR) configuration file
- Review Policy Agent configuration files
- Review changes to non-PROFILE.TCPIP configuration files
- Review changes to IP FTP server and CLIENT configuration statements
- Review TELNET parms configuration files
- Review “ALL” commands
- Review APIs

z/OS V1R10 Installation Planning Checklist

- Review changes to SMF 119 record
- Review SNA start options
- Review Exits

UNIX System Services

z/OS UNIX V1R10

- Update z/OS UNIX configuration files changed by IBM. See table 16, Chapter 31 in the z/OS Migration book.
- Use the Shell and Utilities version of the *SUBMIT* command. Support for *SUBMIT* command is in z/OS 1.10 and is different than the version in "Tools and Toys."
- Update *cksum* and *sum* invocations relying on the utility exiting when automatic conversions occur.
- Update *In* invocations to accommodate changes made in the *In* shell command.
- Update scripts to accommodate changes made to the *locale* shell command
- Update automation handling message BPXF034I

z/OS UNIX V1R9

- Change the default to 10 for the automount delay keyword
- Update z/OS UNIX configuration files changed by IBM for /samples/magic (supplied in SAMPLIB) /etc/magic (target file system)
- Ensure `_UNIX03` is not set in system profiles
- Update automation and operational procedures for file systems in a shared file system configuration
- Increase dump space to accommodate dumps of the zFS address space
- Update *awk* invocations to accommodate changes made to the *awk* utility

z/OS UNIX V1R8

- Review and change to new COMPAT defaults when binding with c89
- Review shell commands
- Review TSO/E commands
- Update BPXBATCH jobs specifying MVS data sets

Language Environment

Language Environment (z/OS V1R10)

- Determine impact of added and changed run-time options
- Use CEEPRMxx CEEROPT instead of making copies of LE initialization modules

Language Environment (z/OS V1R8)

- Determine impact of DYNDUMP run-time option

DFSMS

DFSMS (z/OS 1.10)

z/OS V1R10 Installation Planning Checklist

- Use the new default for the EDGHSKP XREPTTEXT DD statement
- Provide a 140-byte work area when using OBTAIN
- Accommodate new defaults for z/OS Global Mirror (XRC) parameter values
- Update programs processing SMF record type 19
- Accommodate changes to DAEVSERV command output
- Update programs using DCOLLECT
- Accommodate changes in CA sizes assigned to new allocated VSAM data sets
- SORTREC line operator is no longer available. Use DFSORT instead.
- Update automation for changed messages for DFSMSDfp, DFSMSDss and DFSMSHsm
- Define default partitioning support for DFSMSrmm
- Update volume replacement policies for DFSMSrmm
- Use DELETE disposition support for tape dataset with DFSMSrmm
- Review keys used for DFSMSrmm CIM classes. They have changed.
- Replace CIM providers and CIM classes for DFSMSrmm
- Review new messages which were suppressed in previous releases. Examine hardcopy and job logs for important RENAME/DELETE and storage constraint.
- Update programs or procedures depending on output in reports from the LISTDATA PINNED command
- Use new version of DEFRAG command provided in DFSMSDss
- Define facility class names to protect (H)BACKDS NEWNAME commands in DFSMSHsm
- Use generic rather than esoteric unit name for duplex generated tape copies in DFSMSHsm

DFSMS (z/OS 1.9)

- Specify a DFSMSrmm control data set ID
- Create or update VRSEs for DFSMSrmm data set names with lowercase or mixed case letters
- Increase dump space in a sysplex for VSAM RLS abends
- Replace DFSMSrmm CIM providers and CIM classes
- Replace DFSMSrmm CIM providers and CIM classes

DFSMS (z/OS 1.8)

- Review PARMLIB member EDGRMxx (VRSEL=OLD will be removed)
- Review changed commands
- Binary large object support will allow the user to store objects larger than 32K up to a maximum OAM object size of 256 MB in a single row using DB2's large object (LOB) support.
- Review RACF Facility Class profiles for DFSMSHsm
- Review ISPF Panel changes
- Review changes to DFSMSrmm Utilities

z/OS V1R10 Installation Planning Checklist

- Convert existing copy pools to z/OS V1R8 format
- Rename existing copy pools
- Toleration **removed** for STARTNUMBER and LOCATION(BOTH) options in vital record specifications
- Review changes to vital record specifications for JOBNAME(OPEN) and JOBNAME(ABEND)
- Turn off patch to bypass duplex alternate tape SYNCDEV operations

DFSORT

- Update automation for changed DFSORT messages Use ICEPRMxx members to specify changes to DFSORT installation options

Integrated Security Services (z/OS 1.8)

- Migrate from Firewall Technologies (planned to be removed in a future release)
- Review your copy of IRRADUTB and IRRADULD - Enterprise Identity Mapping (EIM) samples in SMF DB2 renamed.

ISPF (z/OS 1.10)

- Accommodate removal of DFSORT option from the z/OS user application menu

Security Server (z/OS 1.10)

- Modify exit routine ICHPWX11 for parameter change
- Modify RACROUTE REQUEST=VERIFY/X applications due to changed keyword behavior

Security Server (z/OS 1.9)

- Ensure acceptable minimum password phrase length
- Use more-specific profile names to control LDAP change logging of RACF updates
- Review programs and processes using the RACF TSO/E help files
- Delete obsolete groups VSAMDSET and SYSCTLG

Cryptographic Services (z/OS 1.10)

- Stop using RSA private keys on PCICC or PCICC/CEX2C cryptographic card
- Increase size of PKDS.

Cryptographic Services (z/OS 1.9)

- Migrate to JSSE for secure socket support
 - System SSL Java class support is removed
- Add new services to CICS wait list
- Migrate OCSF directory structures
- Add VSAM alternate indexes for PKI services

z/OS V1R10 Installation Planning Checklist

- Initialize the PKDS for ICSF

Infoprint Server (z/OS V1R8)

- Set environment variable for Infoprint Central
- Upgrade XML libraries for Infoprint Central

JES2

JES2 (z/OS V1R10)

- ___ Accommodate dynamic exit functions
- ___ Update automation handling the \$D NODE, \$D EXIT, \$D LOADmod command responses

JES2 (z/OS V1R9)

- ___ Update JES2 exit routines that examine the \$JCT
- ___ Update JES2 exit routines (8, 31, 42, 45)

JES2 (z/OS V1R8)

- ___ Adjust accounting practices for changed duplicate jobname
- ___ Review automation for handling of messages: \$HASP607, \$HASP003
- ___ Review changes to JES2 exits

JES3 (z/OS V1R10)

- ___ Update JES3 exit IATUX63
- ___ Check extended status applications for the need to test STSTHTCP and STSTHBDT
- ___ Delete the EDIT keyword from the CONSTD statement. It is no longer supported.

JES3 (z/OS V1R9)

- ___ Modify exit routines and user modifications to support four-byte OSE sequence numbers
- ___ Add EXTOSENUM=NO to the OUTSERV initialization statement

JES3 (z/OS V1R8)

- ___ Review use of IATXNTS macro
- ___ Update procedures for handling DSP abends

SDSF (z/OS 1.10)

SDSF can now be used with JES3. SDSF can help you monitor, manage, and control your z/OS system. Previously, only JES2 users could use SDSF. Because of this enhancement:

- The rule about matching release levels is the same for JES3 as for JES2, that is, your SDSF release level must match your JES3 release level (not your BCP release level).

z/OS V1R10

Installation Planning Checklist

- There is a new FMID for SDSF, JJE775S. It contains JES2 support. Thus, if using SDSF with JES2 only, install SDSF FMIDs HQX7750 and JJE775S. If using SDSF with JES3 only, install SDSF FMID HQX7750. Using SDSF with both JES2 and JES3, install SDSF FMIDs HQX7750 and JJE775S. (In all cases install FMID JQX775J for Japanese support.)
- There is a new SMP/E zone for SDSF. Previously, JES2 and SDSF were combined in the same zone. The JES2 and JES3 zones continue to exist but with different content. As always, you can merge and delete zones as needed during installation.

Some SDSF installation files are not installed in the z/OS UNIX file system (HFS or zFS). Previously they were installed into MVS data sets.

Use new default for column options in REXX execs (includes columns from both primary and alternate field lists)

SDSF (z/OS 1.9)

The SDSF level must now match JES2 level, not BCP level: You can still stage (postpone) your JES2 migration by running an earlier, supported release of JES2 with the latest release of the BCP (and the rest of z/OS). But now, if you use SDSF, your SDSF release level must match your JES2 release level. Previously, your SDSF release level had to match your BCP release level. The new policy eliminates the need to replace the prior SDSF level, which was a manual process involving use of the BUILDMCS command to copy the new SDSF from the JES2 zone (as distributed in ServerPac and SystemPac). See [Table 11](#) for specific release levels supported by the new policy.

- Assess user modifications
- Review batch jobs or procedures that use the O command with the @ parameter
- Customize SDSF if you do not want zAAP and zIIP columns on the DA panel to always be shown

HCD (Hardware Configuration Definition)

Set up IBM TDS LDAP server for calling the HCD LDAP backend. The HCD LDAP backend must be defined as a plug-in to the TDS LDAP server.

IBM Tivoli Directory Server (z/OS 1.10)

- Reconfigure the TDS for ICTX extended operations. The IBM TDS and ICTX Java API is now an IBM TDS plug-in.
- Accommodate changed native authentication bind behavior. SDBM operations are accepted now using LDBM or TDBM
- Update programs using SMF record type 83

Distributed File Service (z/OS V1R10)

- Fix syntax errors now reported during SMB startup. Syntax of the environment variables is now validated at startup
- Stop using "zfsadm setquota" on compatibility mode aggregates

Distributed File Service (z/OS V1R9)

z/OS V1R10 Installation Planning Checklist

- Accommodate the removal of the allow_duplicate_filesystems option from IOEFSPRM
- Adhere to the restriction on exporting read-write sysplex-aware zFS file systems when using the SMB server
- Manage sysplex-aware zFS file systems

NFS (Network File System - z/OS 1.10)

- Remove mixcase and upcase site attributes – no longer supported.

NFS (Network File System - z/OS 1.8)

- Use default value for NFS client's delim attribute
- Review new UNIX command to stop NFS client gracefully
- Merge NFS checklist to the NFS export file
- Authorize the NFS client for component trace

RMF (z/OS 1.10)

- Use CIM monitoring instead of RMF LDAP backend (LDAP backend is removed in z/OS 1.10)

RMF (z/OS 1.8)

- Replace SORT exit EBPPSRT

TSO/E (z/OS 1.9)

- Modify exit routines depending on the INMSIZE or INMTYPE text unit

Internet sites

http://www.ibm.com/servers/eserver/zseries/zos	IBM z/OS home page
http://www.ibm.com/servers/eserver/zseries/zos/integtst/	z/OS Integration Test web page
Http://www.can.ibm.com/custompac_or http://www.ibm.com/ca/custompac	CustomPac (including SystemPac) web page
http://www.ibm.com/servers/eserver/zseries/zos/bkserv/	z/OS Library
http://www.ibm.com/s390/os390/plug1.html	Architectural Enhancements
http://www.ibm.com/servers/eserver/zseries/swprice/	zSeries Software pricing
https://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp	ShopzSeries
http://www.ibm.com/support/techdocs	IBM Systems Center Flashes
http://www.ibm.com/s390/support/	RMF home web page
http://www.ibm.com.servers/eserver/zseries/rmf	IBM Download Zone
http://www.ibm.com/servers/eserver/zseries/zos/downloads/	PSP Buckets
http://www.ibm.com/s390/support/	Enhanced PSP Tool
http://www14.software.ibm.com/webapp/set2/psp/srchBroker	