

# Program Directory for WebSphere Extended Deployment V6.1.1 for z/OS or WebSphere Extended Deployment v6.1.1 for z/OS by Individual Components

Version 6 Release 1 Modification 1

Program Number 5655-P28 or 5655-S33

HEEX611, JEJC611, JEJD128, JEJO611, JEJE128, JEJE133

for Use with WebSphere Application Server for z/OS V6.1 or V7.0

Document Date: October 2009

N	<b>∩t</b> α	ı

Before using this information and the product it supports, be sure to read the general information under Appendix A, "Notices" on page 28.

A form for reader's comments is at the back of this publication. When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 2001, 2009. All rights reserved.

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

# Contents

<ul> <li>1.0 Introduction</li> <li>1.1 WebSphere Extended Deployment V6.1.1 for z/OS Description</li> <li>1.2 WebSphere Extended Deployment V6.1.1 for z/OS FMIDs</li> </ul>	 . 2
2.0 Program Materials     2.1 Basic Machine-Readable Material	 . 4
2.2 Optional Machine-Readable Material     2.3 Program Publications	 . 5
2.3.2 Optional Program Publications	 . 5 . 5
2.5 Publications Useful During Installation	
<ul><li>3.1 Program Services</li><li>3.2 Preventive Service Planning</li></ul>	 . 7 . 7
<ul><li>3.3 Statement of Support Procedures</li><li>4.0 Program and Service Level Information</li></ul>	 . 9
4.1 Program Level Information	
5.0 Installation Requirements and Considerations         5.1 Driving System Requirements         5.1.1 Machine Requirements         5.1.2 Programming Requirements	 . 10 . 10
5.2 Target System Requirements 5.2.1 Machine Requirements 5.2.2 Programming Requirements 5.2.2.1 Installation Requisites 5.2.2.2 Operational Requisites	 . 11 . 11 . 11 . 11
5.2.2.3 Toleration/Coexistence Requisites 5.2.2.4 Incompatibility (Negative) Requisites 5.2.3 DASD Storage Requirements 5.3 FMIDs Deleted	 . 12 . 12 . 13
5.4 Special Considerations	 . 16
6.0 Installation Instructions 6.1 Installing WebSphere Extended Deployment V6.1.1 for z/OS 6.1.1 SMP/E Considerations for Installing WebSphere Extended Deployment V6.1.1 for z/OS 6.1.2 Sample Jobs	 . 18 . 18

6 6 6 6 6 6 6 6.2 6	1.1.3 Allocate SMP/E CSI (Optional) 1.1.4 Define New SMP/E TARGET and DLIB Zones (Optional) 1.1.5 Perform SMP/E RECEIVE 1.1.6 Allocate SMP/E Target and Distribution Libraries 1.1.7 Allocate HFS Paths 1.1.8 Create DDDEF Entries 1.1.9 Add Target Zones for Cross-Zone Prerequisite Checking 1.1.10 Special Case - Updating The Registration FMID 1.1.11 Perform SMP/E APPLY 1.1.12 Perform SMP/E ACCEPT Activating WebSphere Extended Deployment V6.1.1 for z/OS 1.2.1 HFS Execution 1.2.2 Mount the HFS Data Set on the Target System	21 21 22 22 22 23 23 25 26 26
	pendix A. Notices	
A.1	Trademarks	29
Rea	der's Comments	30
Fig	Basic Material: Unlicensed Publications	5
2.	Basic Material: Other Unlicensed or Licensed Publications	
3.	Publications Useful During Installation	
4.	PSP Upgrade and Subset ID	
5.	Component IDs for WebSphere Extended Deployment for V6.1.1 for z/OS	
6.	Component IDs for WebSphere Extended Deployment for z/OS by Individual Components	
7.	Driving System Software Requirements	
8.	Mandatory Installation Requisites	
9.	Mandatory Operational Requisites	
10. 11.	Total DASD Space Required by WebSphere Extended Deployment V6.1.1 for z/OS Storage Requirements for SMP/E Work Data Sets	
12.	Storage Requirements for SMP/E Work Data Sets	
13.	Storage Requirements for WebSphere Extended Deployment V6.1.1 for z/OS Target Libraries	
14.	WebSphere Extended Deployment V6.1.1 for z/OS HFS Paths	
15.	Storage Requirements for WebSphere Extended Deployment V6.1.1 for z/OS Distribution Libraries	
16.	Sample Installation Jobs	

## 1.0 Introduction

This Program Directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of WebSphere Extended Deployment V6.1.1 for z/OS, or one of the individually ordered components offered separately by WebSphere Extended Deployment for z/OS by Individual Components. The content of a specific component is identical regardless of the way it was ordered. The difference is that the former of the two contains all available components. The name WebSphere Extended Deployment V6.1.1 for z/OS will be used in this program directory to refer to both offerings, except when differences in the two offerings are described.

The Program Directory contains the following sections:

- 2.0, "Program Materials" on page 4 identifies the basic and optional program materials and documentation for WebSphere Extended Deployment V6.1.1 for z/OS.
- 3.0, "Program Support" on page 7 describes the IBM support available for WebSphere Extended Deployment V6.1.1 for z/OS.
- 4.0, "Program and Service Level Information" on page 9 lists the PTF (service level) incorporated into WebSphere Extended Deployment V6.1.1 for z/OS.
- 5.0, "Installation Requirements and Considerations" on page 10 identifies the resources and considerations required for installing and using WebSphere Extended Deployment V6.1.1 for z/OS.
- 6.0, "Installation Instructions" on page 18 provides detailed installation instructions for WebSphere Extended Deployment V6.1.1 for z/OS. It also describes the procedures for activating the functions of WebSphere Extended Deployment V6.1.1 for z/OS, or refers to appropriate publications.

WebSphere Extended Deployment V6.1.1 for z/OS is an assembly of functions that when added to WebSphere Application Server for V6.1 for z/OS, plus the enabling service level, will extend its capabilities and manageability.

This product is shipped alone through CBPDO and as an additional feature to the WebSphere ServerPac. When shipped through CBPDO, it must be installed into an SMP/E environment that already contains WebSphere Application Server for V6.1 for z/OS.

Prerequisite WebSphere Application Server V6.1 for z/OS provides the entire runtime environment needed for WebSphere Extended Deployment V6.1.1 for z/OS. There are no additional CDs or products shipped with WebSphere Extended Deployment V6.1.1 for z/OS.

Before installing WebSphere Extended Deployment V6.1.1 for z/OS, read the Memo to Users Extension that is supplied with this program in softcopy form as well as this Program Directory. Consider keeping them for future reference. Section 3.2, "Preventive Service Planning" on page 7 tells you how to find any updates to the information and procedures in this Program Directory.

When WebSphere Extended Deployment V6.1.1 for z/OS is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3), the Program Directory is provided in softcopy form on the CBPDO tape that is identical to the hardcopy form provided with your order. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for WebSphere Extended Deployment V6.1.1 for z/OS are included on the CBPDO tape.

#### 1.1 WebSphere Extended Deployment V6.1.1 for z/OS Description

WebSphere Extended Deployment V6.1.1 for z/OS offers enhanced quality of service focused exclusively on the Java 2 Enterprise Edition (J2EE) application layer by integrating with and extending the core functions of an existing WebSphere Application Server for z/OS installation. The qualities of service of your business-critical applications can be improved with the following new WebSphere Extended Deployment V6.1.1 for z/OS capabilities:

- Flexible support for mixed application types: Batch-type processing has been enhanced with many new features affecting job management, execution and programming model options. Job management improvements include integration with popular workload scheduling systems such as Tivoli Workload Scheduler and others to enable WebSphere Extended Deployment jobs to be part of the overall work schedule. Also, a new console has been added providing essential job management functions. A new job type has been added to transactional batch and compute intensive, which were previously supported. Referred to as Native Execution, it supports a more flexible programming style. Also, you can now use a simplified, non-EJB programming model for transactional batch jobs. When combined, these features provide you with more flexibility for executing a broad mix of application types under WebSphere Extended Deployment.
- Dynamic operations: For environments where z/OS is the centralized platform, providing management
  across multiple distributed platforms including z/Linux, WebSphere Extended Deployment V6.1 has
  added new workload management and health policy support for PHP servers and expanded support
  for other application servers. This new support can enable a more consistent approach to achieve
  service levels and health policies across a heterogeneous set of application servers.
- Extended manageability: To improve overall operations of complex systems a new centralized install manager has been added reducing installation and maintenance efforts. Also, customizable health monitoring policies are now available to allow you to determine which situations to monitor and the actions to take when a specific situation arises.
- Extreme Transaction Processing (XTP) capabilities: XTP capabilities ensure a smarter application infrastructure to support your most demanding business-critical applications. You can overcome traditional IT performance limitations to generate the levels of global scale, process efficiencies, and business intelligence needed for smarter outcomes and for sustainable competitive advantage for your business. Enhanced XTP capabilities include further simplification in building multi-tenant applications, improved memory density through the implementation of byte array maps, and query optimization and simplification of index usage with enhancements to the built-in HashIndex plug-in.

### 1.2 WebSphere Extended Deployment V6.1.1 for z/OS FMIDs

WebSphere Extended Deployment V6.1.1 for z/OS consists of the following FMIDs:

HEEX611 - WebSphere Extended Deployment for V6.1 for z/OS Base

JEJC611 - WebSphere Extended Deployment for z/OS Compute Grid

JEJ0611 - WebSphere Extended Deployment for z/OS Virtual Enterprise

JEJE128 - WebSphere Extended Deployment Registration FMID for 5655-P28

HEJD700 - WebSphere eXtreme Scale V7.0

JEJD128 - WebSphere eXtreme Scale Registration FMID for 5655-P28

WebSphere Extended Deployment for z/OS by Individual Components consists of:

HEEX611 - WebSphere Extended Deployment for V6.1 for z/OS Base

JEJE133 - Registration FMID for 5655-S33

and at least one of the following optional component FMIDs:

JEJC611 - WebSphere Extended Deployment for z/OS Compute Grid

JEJ0611 - WebSphere Extended Deployment for z/OS Virtual Enterprise

## 2.0 Program Materials

An IBM program is identified by a program number. WebSphere Extended Deployment V6.1 was offered under two different program numbers in order to provide customers with pricing options. One of the features which was offered in V6.1 has been expanded to a separate product, so that now there are three program numbers. The program number for WebSphere Extended Deployment for z/OS is 5655-P28. Under this number customers can achieve a cost benefit from purchasing the entire suite. This program number also allows existing customers to continue their subscription support. The program number for WebSphere Extended Deployment for z/OS by Individual Components is 5655-S33. Under this number customers can purchase a portion of the product without having to purchase the entire product. The new product, WebSphere eXtreme Scale V7.0 for z/OS, is available on its own via program number 5655-V66 but is also provided as part of program number 5655-P28.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature numbers, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature numbers, and are not required for the product to function.

The program announcement material describes the features supported by WebSphere Extended Deployment V6.1.1 for z/OS. Ask your IBM representative for this information if you have not already received a copy.

#### 2.1 Basic Machine-Readable Material

The distribution medium for this program is magnetic tape or downloadable files. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 18 for more information about how to install the program.

Information about the physical tape for the Basic Machine-Readable Materials for WebSphere Extended Deployment V6.1.1 for z/OS can be found in the *CBPDO Memo To Users Extension*.

## 2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for WebSphere Extended Deployment V6.1.1 for z/OS.

### 2.3 Program Publications

The following sections identify the basic and optional publications for WebSphere Extended Deployment V6.1.1 for z/OS. Note the main documentation distribution medium for WebSphere Extended Deployment V6.1.1 for z/OS is the Information Center, which can be accessed via the WebSphere Extended Deployment Library page at http://www.ibm.com/software/webservers/appserv/extend/library/

In addition to the Information Center, other WebSphere Extended Deployment V6.1.1 for z/OS articles are available in PDF format at the same URL.

#### 2.3.1 Basic Program Publications

Figure 1 identifies the basic unlicensed program publications for WebSphere Extended Deployment V6.1.1 for z/OS. Downloadable copies of these publications are available on the WebSphere Extended Library page. To access the documentation, see http://www.ibm.com/software/webservers/appserv/extend/library

Figure 1. Basic Material: Unlicensed Publications	
Publication Title	Form Number
Program Directory for WebSphere Extended Deployment V6.1.1 for z/OS	GI10-0792
License Information WebSphere Extended Deployment V6.1.1 for z/OS	GA76-0402-01

Figure 2 identifies the basic unlicensed or licensed publications that are not available in hardcopy form, but are available through the internet or other media for WebSphere Extended Deployment V6.1.1 for z/OS.

Figure 2. Basic Material: Other Unlicensed or Licensed Publications		
Publication Title	Form Number	How Available
WebSphere Extended Deployment V6.1.1 for z/OS Customization Guide	GI10-0775-01	Library page

## 2.3.2 Optional Program Publications

No optional publications are provided for WebSphere Extended Deployment V6.1.1 for z/OS.

## 2.4 Program Source Materials

No program source materials or viewable program listings are provided for WebSphere Extended Deployment V6.1.1 for z/OS.

## 2.5 Publications Useful During Installation

The publications listed in Figure 3 on page 6 may be useful during the installation of WebSphere Extended Deployment V6.1.1 for z/OS. To order copies, contact your IBM representative or visit the IBM Publications Center on the World Wide Web at http://www.ibm.com/shop/publications/order.

You can also access these publications online at:

http://www-1.ibm.com/servers/eserver/zseries/zos/bkserv/

Figure 3. Publications Useful During Installation	
Publication Title	Form Number
IBM SMP/E for z/OS and OS/390 User's Guide	SA22-7773
IBM SMP/E for z/OS and OS/390 Commands	SA22-7771
IBM SMP/E for z/OS and OS/390 Reference	SA22-7772
IBM SMP/E for z/OS and OS/390 Messages, Codes, and Diagnosis	GA22-7770
z/OS MVS JCL Reference	SA22-7597
z/OS System Codes	SA22-7626

## 3.0 Program Support

This section describes the IBM support available for WebSphere Extended Deployment V6.1.1 for z/OS.

## 3.1 Program Services

Contact your IBM representative for specific information about available program services.

## 3.2 Preventive Service Planning

Before installing WebSphere Extended Deployment V6.1.1 for z/OS, you should review the current Preventive Service Planning (PSP) information. If you obtained WebSphere Extended Deployment V6.1.1 for z/OS as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO.

If the CBPDO for WebSphere Extended Deployment V6.1.1 for z/OS is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

For program support, access the Software Support at the following Web site:

http://www-3.ibm.com/software/support/

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for WebSphere Extended Deployment V6.1.1 for z/OS are:

Figure 4. PSP	Upgrade and Subset ID	
UPGRADE	SUBSET	Description
WASXD611	HEEX611	WebSphere Extended Deployment V6.1.1 for z/OS Base
WASXD611	JEJC611	WebSphere Compute Grid V6.1.1
WASXD611	JEJO611	WebSphere Virtual Enterprise V6.1.1
WASXD611	JEJE128	WebSphere Extended Deployment Registration FMID for 5655-P28
WASXD611	JEJD128	WebSphere eXtreme Scale Registration FMID for 5655-P28
WASXD611	JEJE133	Registration FMID for 5655-S33

### 3.3 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. For technical support assistance visit

http://www.ibm.com/support

and perform a search on the symptoms you are experiencing with this program. For additional assistance, contact your IBM software support center at 1-800-IBM-SERV (800-426-7378), selecting option #2 for software assistance.

If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 5 identifies the component IDs (COMPID) for WebSphere Extended Deployment V6.1.1 for z/OS.

Figure 5. Cor	Figure 5. Component IDs for WebSphere Extended Deployment for V6.1.1 for z/OS		
FMID	COMPID	Component Name	RETAIN Release
HEEX611	5655P2800	WebSphere Extended Deployment for V6.1 for z/OS Base	611
JEJC611	5655P2801	WebSphere Extended Deployment for z/OS Compute Grid	611
JEJ0611	5655P2803	WebSphere Extended Deployment for z/OS Virtual Enterprise	611
JEJE128	5655P2868	WebSphere Extended Deployment Registration FMID for 5655-P28	611
JEJD128	5655P2878	WebSphere eXtreme Scale Registration FMID for 5655-P28	611

Figure 6 identifies the component IDs (COMPID) for WebSphere Extended Deployment for z/OS by Individual Components V6.1.1

Figure 6. Cor	Figure 6. Component IDs for WebSphere Extended Deployment for z/OS by Individual Components		
FMID	COMPID	Component Name	RETAIN Release
HEEX611	5655P2800	WebSphere Extended Deployment for V6.1 for z/OS Base	611
JEJC611	5655P2801	WebSphere Extended Deployment for z/OS Compute Grid	611
JEJ0611	5655P2803	WebSphere Extended Deployment for z/OS Virtual Enterprise	611
JEJE133	5655P2833	Registration FMID for 5655-S33	611

# 4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of WebSphere Extended Deployment V6.1.1 for z/OS. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs incorporated into the program.

## 4.1 Program Level Information

This is the second release of WebSphere Extended Deployment for z/OS.

#### 4.2 Service Level Information

A PTF containing APAR fixes against this release of WebSphere Extended Deployment V6.1.1 for z/OS has been incorporated into this product tape. For a list of included PTFs, examine the ++VER statement in the product's SMPMCS.

## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating WebSphere Extended Deployment V6.1.1 for z/OS. The following terminology is used:

- Driving system: the system used to install the program.
- Target system: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old
  one. By installing onto a separate target system, you can test the new product while still keeping the
  old one in production.
- When installing a product that shares libraries or load modules with other products, the installation can
  disrupt the other products. Installing onto a test system or clone will allow you to assess these
  impacts without disrupting your production system.

## **5.1 Driving System Requirements**

This section describes the environment of the driving system required to install WebSphere Extended Deployment V6.1.1 for z/OS.

## 5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

## 5.1.2 Programming Requirements

Figure 7. Driving	Figure 7. Driving System Software Requirements	
Program Number	Product Name and Minimum VRM/Service Level	
5655-I56	Java 2 Technology Edition SDK 1.4 or later	
Any one of the following:		
5694-A01	z/OS V1.7 or later	

Note: WebSphere Extended Deployment V6.1.1 for z/OS installs in the z/OS (Z038) SREL.

- UNIX System Services must be up in full function mode on your driving system so that the utilities are available for the Shell Script support.
- Before installing WebSphere Extended Deployment V6.1.1 for z/OS, you must ensure that the target system's HFS is available (OMVS active and the target file systems mounted) for processing.
- An SMP/E utility entry for the binder is required. You can specify any of these program names in the UTILITY entry: IEWLINK, HEWL, LINKEDIT, or HEWLH096.

### 5.2 Target System Requirements

This section describes the environment of the target system required to customize and use WebSphere Extended Deployment V6.1.1 for z/OS.

#### 5.2.1 Machine Requirements

The target system can run in any hardware environment that supports WebSphere Application Server for z/OS V6.1 plus service associated with PTF 6.0.1.8 for z/OS. Consider using binary floating point hardware, such as S/390 Parallel Enterprise Server Generation 5 systems, and later.

#### **5.2.2 Programming Requirements**

#### 5.2.2.1 Installation Requisites

An installation requisite is defined as a product that is required and must be present or one that is not required but should be present on the system for the successful installation of this product.

A mandatory installation requisite identifies products that are required, without exception, or this product will not install on your system. This includes products specified as PREs or REQs.

Figure 8. Mand	Figure 8. Mandatory Installation Requisites	
Program Number	Product Name and Minimum VRM/Service Level	
Any one of the f	Any <b>one</b> of the following:	
5655-N01	WebSphere Application Server for V6.1 for z/OS	
5655-N02	WebSphere Application Server for V7.0 for z/OS	

A conditional installation requisite identifies products that are not required for successful install but may resolve such things as certain warning messages at installation time. They include products that are specified as IF REQs.

WebSphere Extended Deployment V6.1.1 for z/OS has no conditional installation requisites.

#### 5.2.2.2 Operational Requisites

An operational requisite is defined as a product that is required and **must** be present or a product that is not required but **should** be present on the system in order for this product to operate all or some of its functions.

A mandatory operational requisite identifies products that are required, without exception, or this product **will not operate** its basic function unless the requisite is met. This includes products specified as PREs or REQs.

WebSphere Application Server V6.1 for z/OS is a requisite for WebSphere Extended Deployment V6.1.1 for z/OS

Figure 9. Mandate	Figure 9. Mandatory Operational Requisites	
Program Number	Product Name and Minimum VRM/Service Level	
Any one of the foll	owing:	
5694-A01	z/OS V1.7 or later	
5655-N01	WebSphere Application Server V6.1 for z/OS	
5655-N02	WebSphere Application Server V7.0 for z/OS	

A conditional operational requisite identifies products that are **not required** for the basic function but are needed at run time for this product to utilize specific functions. They may include products specified as IF REQs.

WebSphere Extended Deployment V6.1.1 for z/OS has no conditional operational requisites.

#### 5.2.2.3 Toleration/Coexistence Requisites

A toleration/coexistence requisite is defined as a product which must be present on a sharing system. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at different time intervals.

WebSphere Extended Deployment V6.1.1 for z/OS has no toleration/coexistence requisites.

#### 5.2.2.4 Incompatibility (Negative) Requisites

A negative requisite identifies products which must not be installed on the same system as this product.

WebSphere Extended Deployment V6.1.1 for z/OS has no negative requisites.

#### 5.2.3 DASD Storage Requirements

WebSphere Extended Deployment V6.1.1 for z/OS libraries can reside on all z/OS or z/OS.e supported DASD types.

Figure 10 on page 13 lists the total space required for each type of library.

Figure 10. Total DASD Space Required by WebSphere Extended Deployment V6.1.1 for z/OS						
Total Space Required Library Type (3390 Tracks) Component						
Target	20	WebSphere Extended Deployment V6.1.1 for z/OS				
Distribution	3880	WebSphere Extended Deployment V6.1.1 for z/OS				
HFS	4200	WebSphere Extended Deployment V6.1.1 for z/OS				

#### Notes:

- 1. IBM recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM recommends a block size of 32760, which is the most efficient from a performance and DASD utilization perspective.
- 2. Abbreviations used for the data set type are:
  - Unique data set, allocated by this product and used only by this product. To determine the correct storage needed for this data set, this table provides all required information; no other tables (or Program Directories) need to be referenced for the data set size.
  - Shared data set, allocated by this product and used by this product and others. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other Program Directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
  - Existing shared data set, used by this product and others. This data set is NOT allocated by this product. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This existing data set must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the names and sizes of the required data sets, refer to 6.1.6, "Allocate SMP/E Target and Distribution Libraries" on page 21.

- 3. Abbreviations used for the HFS Path type are:
  - **N** New path, created by this product.
  - **X** Path created by this product, but may already exist from a previous release.

- P Previously existing path, created by another product.
- 4. All target and distribution libraries listed have the following attributes:
  - The default name of the data set may be changed.
  - The default block size of the data set may be changed.
  - The data set may be a PDS or PDSE, unless PDSE is explicitly specified.
- 5. All target libraries listed have the following attributes:
  - The data set may be SMS-managed.
  - It is not required for the data set to be SMS-managed.
  - It is not required for the data set to reside on the IPL volume.
  - The values in the "Member Type" column are not necessarily the actual SMP/E element types identified in the SMPMCS.
- 6. Some target libraries must be APF-authorized; some target libraries or library members must be placed in the LPA or LINKLST. See the customization instructions for details.

Figure 11. Storage Requirements for SMP/E Work Data Sets							
Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR BIks	
SMPWRK1	Е	PDS	FB	80	120	10	
SMPWRK2	Е	PDS	FB	80	30	10	
SMPWRK3	E	PDS	FB	80	9500	150	
SMPWRK4	Е	PDS	FB	80	80	10	
SMPWRK6	Е	PDS	FB	80	4100	100	
SYSUT1	Е	SEQ			7500	0	
SYSUT2	Е	SEQ			30	0	
SYSUT3	Е	SEQ			30	0	
SYSUT4	Е	SEQ			30	0	

If the table indicates that the SMPLTS data set must be a PDSE, but your existing SMPLTS is a PDS, you will need to allocate a new PDSE and copy you existing SMPLTS into it and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

Figure 12. Storage Requirements t	for SMP/E Data Sets					
Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR BIks
SMPLTS	Е	PDSE	U	0	6535	-
SMPMTS	Е	PDS	FB	80	15	80
SMPPTS	Е	PDS	FB	80	8000	80
SMPSCDS	Е	PDS	FB	80	15	80
SMPSTS	E	PDS	FB	80	15	80

The following figures describe the target and distribution libraries and HFS paths required to install WebSphere Extended Deployment V6.1.1 for z/OS. The storage requirements of WebSphere Extended Deployment V6.1.1 for z/OS must be added to the storage required by other programs having data in the same library or path.

Note: The data in these tables should be used when determining which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

Figure 13. Storage Requirements for WebSphere Extended Deployment V6.1.1 for z/OS Target Libraries								
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SEEXEXEC	EXEC	TVOL1	U	PDS	VB	255	10	5
SEEXJCL	Sample	TVOL2	U	PDS	FB	80	10	5

Figure 14. WebSphere Extended Deployment V6.1.1 for z/OS HFS Paths					
	Т				
	Y				
DDNAME	E	Path Name			
SEEXEBCD	N	/usr/lpp/zWebSphereXD/V6R1M1/IBM			
SEEXANT	N	/usr/lpp/zWebSphereXD/V6R1M1/IBM			

Figure 15. Storage Requirements for WebSphere Extended Deployment V6.1.1 for z/OS Distribution Libraries							
Library DDNAME	T Y P E	O R G	R E C F	L R E C L	No. of 3390 Trks	No. of DIR BIks	
AEEXEXEC	U	PDS	VB	255	10	5	
AEEXANT	U	PDS	VB	255	3340	350	
AEEXEBCD	U	PDS	VB	31000	520	15	
AEEXJCL	U	PDS	FB	80	10	5	

#### Notes:

- 1. WebSphere Extended Deployment V6.1.1 for z/OS will require several thousand additional tracks (3390) for run-time data sets; the amount of space depends on the application server structure to be used, the applications to be run and the amount of data storage the applications will require.
- 2. WebSphere Extended Deployment V6.1.1 for z/OS requires significantly larger amounts of HFS storage for downloadable Application Server Client code. See 6.1.6, "Allocate SMP/E Target and Distribution Libraries" on page 21 for more information.

#### 5.3 FMIDs Deleted

Installing WebSphere Extended Deployment V6.1.1 for z/OS may result in the deletion of other FMIDs. To see what FMIDs will be deleted, examine the ++VER statement in the product's SMPMCS.

If you do not want to delete these FMIDs at this time, you must install WebSphere Extended Deployment V6.1.1 for z/OS into separate SMP/E target and distribution zones.

**Note:** These FMIDs will not automatically be deleted from the Global Zone. Consult the SMP/E manuals for instructions on how to do this.

## 5.4 Special Considerations

Install WebSphere Extended Deployment V6.1.1 for z/OS into a new set of SMP/E zones, including SMPCSI, target, distribution, and HFS data sets, to allow independent maintenance of WebSphere, z/OS, and other subsystems. This Program Directory provides sample jobs and instructions to create such an SMP/E environment. FMID JEJD128 must be installed into the SMP/E zones containing FMID HEJD700. HEJD700 install is covered in its own program directory.

During installation of WebSphere Extended Deployment V6.1.1 for z/OS on the driving system, the target filesystem must be mounted at the following mountpoint:

-PathPrefix-/usr/lpp/zWebSphereXD/V6R1M1

where -PathPrefix- is a filesystem path prefix such as /SERVICE or /WXD61. Use of a filesystem path prefix allows maintenance to be applied to a copy of the WebSphere filesystem data sets without disturbing the production filesystem. For more information on the use of an filesystem path prefix during product maintenance, see the Unix System Services Planning book for your release of z/OS.

Care must be taken that maintenance is applied to the proper filesystem. Be sure to verify that the correct filesystem is mounted at your service mountpoint(s) whenever maintenance is applied.

## **5.4.1 Target System Mountpoint**

During customization and operation of WebSphere Extended Deployment V6.1.1 for z/OS on the target system, the target filesystem must be mounted at the following mountpoint:

 A WebSphere Extended Deployment for V6.1.1 for z/OS mountpoint, normally usr/lpp/zWebSphereXD/V6R1M1

## 6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and activate the functions of WebSphere Extended Deployment for z/OS V6.1, or specific features if you ordered WebSphere Extended Deployment for z/OS v6.1.1 by Individual Components.

Please note the following:

- If you received WebSphere Extended Deployment V6.1.1 for z/OS. through CBPDO or ServerPac, follow the instructions in the Program Directory for that package.
- If you want to install WebSphere Extended Deployment V6.1.1 for z/OS. into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation tasks.

For brevity, these instructions will refer only to WebSphere Extended Deployment for z/OS V6.1.1 unless an explanation is necessary to desribe a specific difference in the installation instructions for WebSphere Extended Deployment for z/OS V6.1.1 Individual Components.

**Note:** WebSphere Extended Deployment V6.1.1 for z/OS can be installed into new or existing SMP/E zones.

## 6.1 Installing WebSphere Extended Deployment V6.1.1 for z/OS

Run all installation steps from a user ID that is defined to Unix Systems Services, and has the following attributes:

- UID(0) or READ access or higher to the BPX.SUPERUSER facility class.
- READ access or higher to the BPX.FILEATTR.PROGCTL and BPX.FILEATTR.APF and BPX.FILEATTR.SHARELIB facility classes.

# 6.1.1 SMP/E Considerations for Installing WebSphere Extended Deployment V6.1.1 for z/OS

This release of WebSphere Extended Deployment V6.1.1 for z/OS is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E install tasks. This program directory provides sample jobs and instructions to create such an SMP/E environment.

We recommend that you install WebSphere Extended Deployment V6.1.1 for z/OS into a new set of SMP/E zones, including target, distribution, and HFS data sets. This allows separate maintenance of z/OS and WebSphere software. You can customize sample jobs EEXCSICR and EEXZNCRT for your system and use these to create a new CSI and SMP/E TARGET and DLIB zones. You can find these jobs in the product relfile IBM.HEEX611.F3 which is loaded during SMP/E processing; see Figure 16 for a list of sample jobs.

**Note:** If you choose to install WebSphere Extended Deployment V6.1.1 for z/OS into existing SMP/E target and distribution zones, be sure to remove any previous versions of WebSphere Extended Deployment from the zones and remove the previous version's DDDEFs **before** installing the new version. See 5.4, "Special Considerations" on page 16 for more information.

#### 6.1.2 Sample Jobs

Sample jobs to allocate the target and distribution libraries, set up HFS directories, and create DDDEF entries for the WebSphere Extended Deployment V6.1.1 for z/OS elements have been provided.

Figure 16 lists the sample jobs for WebSphere Extended Deployment V6.1.1 for z/OS.

Figure 16. Sample Installation Jobs						
Job Name	Job Type	Description	RELFILE			
EEXCSICR	Setup	Creates an SMP/E global zone	IBM.HEEX611.F3			
EEXZNCRT	Setup	Creates SMP/E target and distribution zones	IBM.HEEX611.F3			
EEXXZDEF	Setup	Add additional target zone definitions for cross-zone prerequisite checking	IBM.HEEX611.F3			
EEXALLOC	ALLOCATE	Allocates target and distribution libraries for WebSphere Extended Deployment.	IBM.HEEX611.F3			
EEXISMKD	MKDIR	Invokes the supplied EEXMKDIR EXEC to create HFS paths for WebSphere Extended Deployment.	IBM.HEEX611.F3			
EEXDDDEF	DDDEF	Defines SMP/E DDDEFs for WebSphere Extended Deployment.	IBM.HEEX611.F3			
EEXAPPLY	APPLY	Applies ordered FMIDs and maintenance	IBM.HEEX611.F3			
EEXACCEP	ACCEPT	Accepts ordered FMIDs and maintenance	IBM.HEEX611.F3			
EEXRECEV	RECEIVE	Receives ordered FMIDs and maintenance	IBM.HEEX611.F3			
EEXREREG	DELETE	Cleans up 5655-S33 REG FMID	IBM.HEEX611.F3			
EEXXSACC	ACCEPT	ACCEPT for WebSphere eXtreme Scale v7.0	IBM.HEEX611.F3			
EEXXSAPP	APPLY	APPLY for WebSphere eXtreme Scale v7.0	IBM.HEEX611.F3			
EEXREGRR	RECEIVE	RECEIVE Registration FMIDs	IBM.HEEX611.F3			
EEXXSREG	DELETE	Cleans up 5655-V66 REG FMID	IBM.HEEX611.F3			

**Note:** The jobs beginning with EEXXS are intended for use with WebSphere eXtreme Scale V7.0 for z/OS when purchased as a part of program number 5655-P28. See the program directory for WebSphere eXtreme Scale V7.0 for information on installing that product. If you have previously installed that product refer to section 6.1.10 for information on switching to the registration FMID which allows you to take advantage of the special pricing available with the purchase of program 5655-P28.

You can access the sample installation jobs by performing an SMP/E RECEIVE and then copying the jobs from the relfiles to a work data set for editing and submission. See Figure 16 on page 19 to find the appropriate relfile data set.

Each sample job contains comments with specific instructions for customization.

You may also choose to copy the jobs from the tape or product files by submitting the job below. Use either the //TAPEIN or the //FILEIN DD statement, depending on your distribution medium, and comment out or delete the other statement. Add a job card and change the lowercase parameters to uppercase values to meet your site's requirements before submitting.

```
EXEC PGM=IEBCOPY
//STEP1
//SYSPRINT DD SYSOUT=*
//TAPEIN DD DSN=IBM.HEEX611.F3,UNIT=tunit,
          VOL=SER=volser,LABEL=(x,SL),
//
//
          DISP=(OLD, KEEP)
//FILEIN DD DSN=IBM.HEEX611.F3,UNIT=SYSALLDA,DISP=SHR,
          VOL=SER=filevol
//
//OUT
          DD DSNAME=jcl-library-name,
//
          DISP=(NEW, CATLG, DELETE),
          VOL=SER=dasdvol,UNIT=SYSALLDA,
//
//
          SPACE=(TRK, (30, 20, 5))
//SYSUT3 DD UNIT=SYSALLDA, SPACE=(CYL, (1,1))
//SYSIN
          DD *
   COPY INDD=xxxxIN,OUTDD=OUT
```

In the previous sample, update the statements as noted in the following description:

```
If using TAPEIN:
```

tunit is the unit value matching the product tape.

volser is the volume serial matching the product tape.

 ${\bf x}$  is the tape file number where the data set name is on the tape.

Refer to the documentation provided by CBPDO to see where IBM.HEEX610.F3 is on the tape. If using FILEIN

filevol is the volume serial of the DASD device where the downloaded files reside.

#### OUT

jcl-library-name is the name of the output data set where the sample jobs will be stored.

dasdvol is the volume serial of the DASD device where the output data set will reside.

#### **SYSIN**

**xxxxIN** is either TAPEIN or FILEIN depending on your input DD statement.

#### 6.1.3 Allocate SMP/E CSI (Optional)

If you are using an existing CSI, do not execute this job.

If you are allocating a new SMP/E CSI data set for this install, edit and submit sample job EEXCSICR to allocate the SMP/E CSI data set for WebSphere Extended Deployment V6.1.1 for z/OS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

#### 6.1.4 Define New SMP/E TARGET and DLIB Zones (Optional)

Edit and submit sample job EEXZNCRT to define new SMP/E Target and Distribution zones. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

#### 6.1.5 Perform SMP/E RECEIVE

Receive function SYSMODs and service for the WebSphere Extended Deployment V6.1.1 for z/OS elements by running the RCVPDO job. For more information, refer to *MVS CBPDO Memo to User Extension* included with the CBPDO.

The CBPDO contains all non-integrated PTFs for every WebSphere Extended Deployment V6.1.1 for z/OS FMID. (Cumulative service is included in CBPDO orders, so there is no separate cumulative service tape.) Depending on the options selected when you ordered the CBPDO, your order may contain service for other products in your profile.

To receive service for WebSphere Extended Deployment V6.1.1 for z/OS select the FMIDs for the components you purchased based on the list in section 1.2.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

## 6.1.6 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job EEXALLOC to allocate the SMP/E target and distribution libraries for WebSphere Extended Deployment V6.1.1 for z/OS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

#### 6.1.7 Allocate HFS Paths

Edit and submit sample job EEXISMKD to allocate the HFS paths for WebSphere Extended Deployment V6.1.1 for z/OS. Consult the instructions in the sample job for more information.

If you plan to create a new HFS for this product, you should consider updating the BPXPRMxxx PARMLIB member to mount the new HFS at IPL time. This may be helpful if an IPL occurs before the installation is complete.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

#### Important!

• The EEXISMKD and EEXDDDEF jobs use -PathPrefix- to represent a service directory on your driving system. It is assumed that you will be mounting WebSphere Extended Deployment V6.1.1 for z/OS HFS data sets under a service directory that already contains the /usr and /usr/lpp directories. If you specify a -PathPrefix- directory which does not contain /usr and usr/lpp subdirectories, you must manually create these subdirectories before running the EEXISMKD job. If -PathPrefix-/usr/lpp is not a read/write HFS, you will need to manually create some additional subdirectories as well. See the comments in the EEXISMKD job for further information.

Check the job output to verify that all directories have been created.

Verify that the product filesystem is mounted at

-PathPrefix-/usr/lpp/zWebSphereXD/V6R1M1

#### 6.1.8 Create DDDEF Entries

Edit and submit sample job EEXDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for WebSphere Extended Deployment V6.1.1 for z/OS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

## 6.1.9 Add Target Zones for Cross-Zone Prerequisite Checking

Because the WebSphere Extended Deployment component has a number of maintenance requirements for the target z/OS systems, we recommend that you add the appropriate SMP/E target zones (z/OS, DB2, CICS, and IMS for z/OS) to the WebSphere Extended Deployment SMP/E global zone. This will allow SMP/E to check each zone for maintenance required by WebSphere Extended Deployment V6.1.1 for z/OS.

Customize and run the EEXXZDEF job to add target zones to the global zone which will be used for the SMP/E APPLY and ACCEPT steps in the following section.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

#### 6.1.10 Special Case - Updating The Registration FMID

If this is your first install of all of the products in this suite at this release you should skip this section.

If you previously purchased the stand alone offering of any of the software included in this suite then you will have installed a registration FMID with that product. If you do not wish to do a full install of the product you will need to replace the installed registration FMID with one which reflects that you now own the suite. This does not impact operation of the products and does not require reconfiguration.

Edit and submit one or both of the following sample jobs as needed.

EEXREREG - If you previously installed either:

WebSphere Virtual Enterprise

WebSphere Compute Grid

EEXXSREG - If you previously installed WebSphere eXtreme Scale

**Expected Return Codes and Messages from these jobs:** You may receive a return code of 4 if this job runs correctly because you may not have any HOLDDATA to REJECT.

Once you have removed the old registration FMID you may use the install samples included in this package to install **only the new registration FMID.** Use job EEXREGRR to RECEIVE the new FMID or FMIDs and the APPLY and ACCEPT samples listed for the product or products that you are updating.

#### 6.1.11 Perform SMP/E APPLY

Edit and submit sample job EEXAPPLY to perform an SMP/E APPLY CHECK for WebSphere Extended Deployment V6.1.1 for z/OS. Consult the instructions in the sample job for more information.

SMP/E apply processing for WebSphere Extended Deployment V6.1.1 for z/OS uses the Java SDK JAR command to extract certain HFS files. In order for the JAR command to run correctly, SMP/E must be running with a fix for APAR IR54653. If either SMP/E APAR IO04924 or IO05943 is installed, then SMP/E will NOT run /etc/profile or \$HOME/.profile and the PATH environment variable will not be set. A new DDDEF entry named SMPJHOME in the target zone is required. For example: //SMPJHOME DD PATH=//usr/lpp/java/J5.0'

Test the availability of the JAR command by logging into the OMVS Shell with the user ID that will be used to run the EEXAPPLY job and entering the following command: /usr/lpp/java/J5.0/jar

The JAR command should print its usage information.

If neither SMP/E APAR IO04924 nor IO05943 is installed, then SMP/E will run /etc/profile or \$HOME/.profile and the PATH environment variable will be set. The DDDEF entry named SMPJHOME in the target zone (set in samples job EEXZNCRT) is not required and can be removed if you choose. The

user ID used to run the EEXAPPLY job must have the SDK bin directory in its Unix System Services PATH. This can be accomplished in one of two ways:

1. Add an SDK bin directory containing the JAR command (such as /usr/lpp/java/IBM/J1.3/bin) to the PATH variable in /etc/profile before running the EEXAPPLY job. For example:

PATH=/usr/lpp/java/IBM/J1.3/bin:<rest of PATH>

2. Add an SDK bin directory to the PATH variable in a file named .profile in the HOME directory for the user ID used in running the EEXAPPLY job.

Test the availability of the JAR command by logging in to the OMVS shell with the user ID that will be used to run the EEXAPPLY job and entering the command "jar"; the JAR command should print its usage information. See the z/OS Unix System Services User's Guide for information about using /etc/profile and &HOME/.profile scripts.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Enhanced HOLDDATA introduced ERROR HOLDs against FMIDs for HIPER APARS. Prior to installing, you should ensure you have the latest enhanced HOLDDATA (available at url http://service.software.ibm.com/holdata/390holddata.html). The FMID(s) should be installed regardless of the status of unresolved HIPERS, however, the software should not be deployed until the unresolved HIPERs have been analyzed to determine applicability.

There are two methods to complete an FMID installation where ++HOLDS for HIPERs exist for the FMID(s) being installed:

1. To ensure that all recommended and critical service is installed with the FMID(s), add the SOURCEIDs of PRP, HIPER, and RSU\* to the APPLY command. There may be PE or HIPER APARs that do not have resolving PTFs available yet. You need to analyze the symptom flags to determine if you want to BYPASS the specific ERROR HOLDs and continue the FMID installation.

APPLY S(fmid,fmid,...)
FORFMID(fmid,fmid,...)
SOURCEID(PRP,HIPER,RSU\*,...)
GROUPEXTEND .

This method requires more initial research, but will provide resolution for all HIPERs that have fixes available and are not in a PE chain. There may still be unresolved PEs or HIPERs which will require the use of BYPASS.

2. To install the FMID(s) as it would have been installed prior to Enhanced HOLDDATA, you can add a BYPASS(HOLDCLASS(HIPER)) operand to the APPLY command. This will allow the FMID to be installed even though there are HIPER ERROR HOLDs against it. Note that not all ERROR HOLDs were bypassed, only the HIPER ERROR HOLDs. After the FMID(s) are installed, the SMP/E REPORT ERRSYSMODS command should be run to identify any missing HIPER maintenance.

APPLY S(fmid,fmid,...)
FORFMID(fmid,fmid,...)
SOURCEID(RSU\*)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER)) .
other parameters documented in the program directory...

This method is the quicker of the two, but requires subsequent review of the REPORT ERRSYSMODS to investigate any HIPERs.

If you bypass any HOLDs during the installation of the FMID(s) because fixing PTFs were not yet available you can use the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink to be notified when the fixing PTF is available.

Once you have taken any actions indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

**Expected Return Codes and Messages from APPLY CHECK:** You will receive a return code of 0 if this job runs correctly.

**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

#### - Note!

Using GROUPEXTEND in APPLY with maintenance with HOLDDATA may cause a return code other than 0.

#### 6.1.12 Perform SMP/E ACCEPT

Edit and submit sample job EEXACCEP to perform an SMP/E ACCEPT CHECK for WebSphere Extended Deployment V6.1.1 for z/OS. Consult the instructions in the sample job for more information.

Perform an SMP/E ACCEPT CHECK for WebSphere Extended Deployment V6.1.1 for z/OS.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

Once you have taken any actions indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

**Note:** The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages from ACCEPT CHECK:** You will receive a return code of 0 if this job runs correctly.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will link-edit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

**Note:** The GROUPEXTEND operand indicates that SMP/E should ACCEPT all requisite SYSMODS. The requisite SYSMODS may be part of other products; review the ACCEPT CHECK output carefully before proceeding.

**Expected Return Codes and Messages from ACCEPT:** You will receive a return code of 0 if this job runs correctly.

## 6.2 Activating WebSphere Extended Deployment V6.1.1 for z/OS

WebSphere Extended Deployment V6.1.1 for z/OS must be configured after SMP/E installation is complete. See the WebSphere Extended Deployment V6.1.1 for z/OS Customization Guide for more information at: http://www.ibm.com/software/webservers/appserv/extend/library

## 6.2.1 HFS Execution

If you choose to have the HFS in which you have installed WebSphere Extended Deployment V6.1.1 for z/OS mounted in read-only mode during execution, see the following section.

## 6.2.2 Mount the HFS Data Set on the Target System

Before proceeding with activation, unmount WebSphere Extended Deployment V6.1.1 for z/OS datasets on the driving system and mount them on the target system at the target system mount points. See 5.4.1, "Target System Mountpoint" on page 17, for assistance in selecting the mountpoint.

If you have selected the default mountpoints, you can use the following TSO command on your target system to mount the HFS data set:

MOUNT FILESYSTEM('hlq.SEEXHFS')
MOUNTPOINT('/usr/lpp/zWebSphereXD/V6R1M1') TYPE(HFS) MODE(READ)

You will probably want to add these mounts to your BPXPRMxx members in parmlib to ensure that these data sets are always mounted. When, at a later date, you need to perform service on the WebSphere Extended Deployment V6.1.1 for z/OS product:

- Temporarily unmount the HFS data sets.
- Mount HFS data sets to be serviced at the service (-PathPrefix-) mountpoint you created for installation.
- Apply the service.
- Unmount the HFS data sets from the service mountpoint.
- Remount at the production mountpoint.

## Appendix A. Notices

References in this document to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe on any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, is the user's responsibility.

APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the IBM Customer Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, New York 10504-1785 USA

For online versions of this book, we authorize you to:

- Copy, modify, and print the documentation contained on the media, for use within your enterprise, provided you reproduce the copyright notice, all warning statements, and other required statements on each copy or partial copy.
- Transfer the original unaltered copy of the documentation when you transfer the related IBM product (which may be either machines you own, or programs, if the program's license terms permit a transfer). You must, at the same time, destroy all other copies of the documentation.

You are responsible for payment of any taxes, including personal property taxes, resulting from this authorization.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Your failure to comply with the terms above terminates this authorization. Upon termination, you must destroy your machine readable documentation.

### A.1 Trademarks

The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

CBPDO	OS/390	VTAM
DB2	RACF	WebSphere
IBM	RETAIN	z/OS
IBMLink	S/390	z/VM
Language Environment	SP	z/Architecture
MQSeries	SystemPac	zSeries
MVS/ESA		

The following terms are trademarks of other companies as follows:

JAVA	Java and all Java-based trademarks and logos are trademarks or registered trademarks
	of Sun Microsystems, Inc. in the United States and/or other countries.
UNIX	UNIX is a registered trademark of The Open Group in the United States and other

UNIX is a registered trademark of The Open Group in the United States and other countries.

## **Reader's Comments**

#### Program Directory for WebSphere Extended Deployment V6.1.1 for z/OS, October 2009

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below, indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, circle N.

#### 

			Satis	sfactio	n	
Ease of product installation	1	2	3	4	5	N
Contents of Program Directory	1	2	3	4	5	Ν
Installation Verification Programs	1	2	3	4	5	Ν
Time to install the product	1	2	3	4	5	Ν
Readability and organization of Program Directory tasks	1	2	3	4	5	Ν
Necessity of all installation tasks	1	2	3	4	5	Ν
Accuracy of the definition of the installation tasks	1	2	3	4	5	Ν
Technical level of the installation tasks	1	2	3	4	5	Ν
Ease of getting the system into production after installation	1	2	3	4	5	N

How did you order this product?

\_\_\_\_ CBPDO
\_\_\_\_ CustomPac
\_\_\_ ServerPac
\_\_\_\_ Independent
\_\_\_ Other

Is this the first time your organization has installed this product?
\_\_\_\_ Yes
\_\_\_ No

Were the people who did the installation experienced with the installation of z/OS products?

Yes

No	
If yes, how many years?	
If you have any comments to make about your ratings above, or any other aspetelow:	ect of the product installation, list them
Provide the following contact information:	
Name and Job Title	
Organization	
Address	
Telephone	

Thank you for your participation.

Send the completed form to (or give to your IBM representative who will forward it to the WebSphere Extended Deployment V6.1.1 for z/OS Development group):

International Business Machines Corporation Department 55JA, Mail Station P384 2455 South Road Poughkeepsie, NY 12601-5400 United States of America

FAX Number: (United States & Canada) 1+845+432+9405

FAX Number: (Other Countries):

Your International Access Code +1+845+432+9405

Internet e-mail: wasdoc@us.ibm.com

# IBM

Printed in U.S.A.

GI10-0792-01