IBM

Program Directory for

IBM WebSphere Developer for zSeries

RSE + ICU

V6.00.01

Program Number 5724-L44

FMID H001600

for Use with
z/OS Version 1 Release 4 or later

Document Date: November, 2005

GI10-3358-03

Contents

Figures

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 Developer for zSeries. This publication refers to WebSphere Developer for zSeries as WD4Z RSE+ICU.

The Program Directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic and optional program materials and documentation for WD4Z RSE+ICU.

- 3.0, "Program Support" on page 5 describes the IBM support available for WD4Z RSE+ICU.

- 4.0, "Program and Service Level Information" on page 6 lists the APARs (program level) and PTFs (service level) incorporated into WD4Z RSE+ICU.

- 5.0, "Installation Requirements and Considerations" on page 7 identifies the resources and considerations required for installing and using WD4Z RSE+ICU.

- 6.0, "Installation Instructions" on page 13 provides detailed installation instructions for WD4Z RSE+ICU. It also describes the procedures for activating the functions of WD4Z RSE+ICU, or refers to appropriate publications.

Before installing WD4Z RSE+ICU, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that were supplied with this program in softcopy form as well as this Program Directory and then keep them for future reference. Section 3.2, "Preventive Service Planning" on page 5 tells you how to find any updates to the information and procedures in this Program Directory.

WD4Z RSE+ICU is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The Program Directory is provided in softcopy form on the CBPDO tape which 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 WD4Z RSE+ICU are included on the CBPDO tape.

Do not use this Program Directory if you are installing WD4Z RSE+ICU with a SystemPac or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the Program Directory as required.

1.1 IBM WebSphere Developer for zSeries Description

With WebSphere Developer for zSeries, you can:

- Accelerate the development of

  - Dynamic Web applications including Java and J2EE

  - Traditional COBOL and PL/I applications

1

- – High-level Enterprise Generation Language (EGL) applications

- – Web services to integrate these applications together

- Deploy to multiple run times including WebSphere, CICS, IMS, Batch, and DB2 via Stored Procedures

- Leverage existing skills to write Web or COBOL applications (requires the optional EGL for COBOL Extension feature) by using the high-level Enterprise Generation Language

- Adapt and extend the development environment with a wide range of plug-ins, such as change management

- Create and test portlets in a visual environment

- Visualize and graphically edit J2EE code through the UML Visual Editor

- Detect performance issues early with performance profiling and trace tools for WebSphere applications

- Generate Enterprise COBOL XML adapters for CICS and IMS Web service-based applications

- Generate WSDL and Java beans used to test and deploy Web services

- Provide a Technology Preview of CICS Service Flow Modeler

- Provide a Technology Preview of a workstation-based application understanding and impact analysis tool

1.2 WD4Z RSE+ICU FMIDs

WD4Z RSE+ICU consists of the following FMIDs:

H001600

2.0 Program Materials

An IBM program is identified by a program number. The program number for WD4Z RSE+ICU is 5724-L44.

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 WD4Z RSE+ICU. 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 Compact Disks (CDs). It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 13 for more information about how to install the program.

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for WD4Z RSE+ICU.

2.3 Program Publications

The following sections identify the basic and optional publications for WD4Z RSE+ICU.

2.3.1 Basic Program Publications

Figure 1 identifies the basic unlicensed program publications for WD4Z RSE+ICU. One copy of each of these publications is included when you order the basic materials for WD4Z RSE+ICU. For additional copies, contact your IBM representative.

Figure 1 (Page 1 of 2). Basic Material: Unlicensed Publications	
Publication Title	**Form Number**
IBM WebSphere Developer for zSeries Prerequisites Document	SC31-6352-04
IBM WebSphere Developer for zSeries Installation Guide	SC31-6316-04
IBM WebSphere Developer for zSeries Host Planning Guide	SC31-6599-02
IBM WebSphere Developer for zSeriesHost Configuration Guide	SC31-6930-00

Figure 1 (Page 2 of 2). Basic Material: Unlicensed Publications	
Publication Title	**Form Number**
IBM WebSphere Developer for zSeries Getting Started Guide	SC31-6317-05
IBM WebSphere Developer for zSeries Readme	GI10-3248-05
IBM WebSphere Developer for zSeries Product Overview	SC31-6781-02
IBM Media Pack CD Guidance Letter (subset)	GI10-3346-02
IBM EGL Developer's Reference Guide	SC31-6834-00
IBM Enterprise Developer Server Guide for z/OS	SC31-6306-01

2.4 Program Source Materials

No program source materials or viewable program listings are provided for WD4Z RSE+ICU.

2.5 Publications Useful During Installation

The publications listed in Figure 2 may be useful during the installation of WD4Z RSE+ICU. 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

Figure 2. 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
IBM z/OS Communications Server IP Configuration Guide	GA31-8775
IBM z/OS Communications Server IP Configuration Reference	GA31-8776
Communications Server for z/OS V1R2 TCP/IP Implementation Guide UNIX Applications	SG24-5228

3.0 Program Support

This section describes the IBM support available for WD4Z RSE+ICU.

3.1 Program Services

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

3.2 Preventive Service Planning

Before installing WD4Z RSE+ICU, you should review the current Preventive Service Planning (PSP) information. If you obtained WD4Z RSE+ICU as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO.

If the CBPDO for WD4Z RSE+ICU is more than two weeks old when you install it, you should contact the IBM Support Center, use S/390 SoftwareXcel to obtain the current "PSP Bucket" or obtain the current PSP from the web at https://techsupport.services.ibm.com/server/390.psp390

For program support, access the Software Support web site at 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 WD4Z RSE+ICU are:

Figure 3. PSP Upgrade and Subset ID		
UPGRADE	**SUBSET**	**Description**
5724L44	H001600	WD4Z RSE+ICU

3.3 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 4 identifies the component IDs (COMPID) for WD4Z RSE+ICU.

Figure 4. Component IDs			
FMID	**COMPID**	**Component Name**	**RETAIN Release**
H001600	5724L4401	WD4Z RSE+ICU	600

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of WD4Z RSE+ICU. 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

No APARs have been incorporated into WD4Z RSE+ICU.

4.2 Service Level Information

No PTFs against this release of WD4Z RSE+ICU have been incorporated into the product tape.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating WD4Z RSE+ICU. 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 WD4Z RSE+ICU.

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 5. Driving System Software Requirements	
Program Number	**Product Name and Minimum VRM/Service Level**
Any **one** of the following:	
5694-A01	z/OS V1.4 or later
5655-G44	IBM SMP/E for z/OS and OS/390 V3.1.0 or later

5.2 Target System Requirements

This section describes the environment of the target system required to install and use WD4Z RSE+ICU.

5.2.1 Machine Requirements

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

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 6. Mandatory Installation Requisites	
Program Number	**Product Name and Minimum VRM/Service Level**
5694-A01	z/OS V1.4 or later

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.

WD4Z RSE+ICU 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.

WD4Z RSE+ICU has no mandatory operational requisites.

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.

Figure 7. Conditional Operational Requisites		
Program Number	**Product Name and Minimum VRM/Service Level**	**Function**
5655-I56	IBM SDK for z/OS Java 2 Technology Edition, Version 1.4, or later	Java
5655-B01	IMS/ESA V7.1	IMS DB/DC
5695-014	REXX/370 Library, or Alternate Library V1.4	REXX
5724-L44	IBM WebSphere Developer, JES Job Moitor, Version 6.0.0	Program Development
5724-B67	WebSphere Studio Enterprise Developer Options for z/OS, Version 5.0.0	Program Development
Any **one** of the following:		
5648-A25	IBM COBOL for OS/390 and VM V2.1	COBOL Complier
5655-G53	IBM Enterprise COBOL for z/OS V3.2, or later	COBOL Complier
Any **one** of the following:		
5688-235	IBM PL/I for MVS and VM V1.1	PL/I Complier
5655-B22	IBM VISUALAGE PL/I for OS/390 V2.2	PL/I Complier
5655-H31	IBM Enterprise PL/I for z/OS V3.2, or later	PL/I Complier
Any **one** of the following:		
5655-H32	IBM Debug Tool for z/OS and OS/390 V3.1	Debugging
5655-L24	IBM Debug Tool for z/OS V4.1	Debugging
5655-M18	IBM Debug Tool for z/OS V5.1, or later	Debugging
Any **one** of the following:		
5655-I47	IBM CICS Transaction Server V1.3	CICS
5697-E93	IBM CICS Transaction Server V2.2, or later	CICS
Any **one** of the following:		
5645-DB2	DB2 UDB V6.1, or later	DB2
5645-DB2	DB2 UDB V7.1, or later	DB2

5.2.3 DASD Storage Requirements

WD4Z RSE+ICU libraries can reside on all supported DASD types.

Figure 8 lists the total space required for each type of library.

Figure 8. Total DASD Space Required by WD4Z RSE+ICU	
Library Type	**Total Space Required**
Target	10 Tracks (3390)
Distribution	2000 Tracks (3390)
HFS	91284K bytes
Non-SMP/E	2061 Tracks (3390)

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:

   U   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.

   S   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.

   E   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, please refer to 6.1.12, "Allocate SMP/E Target and Distribution Libraries" on page 18.

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 merged with another data set that has equivalent characteristics.
- The data set may be either a PDS or a PDSE.

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. All target libraries listed which contain load modules have the following attributes:

- The data set may be in the LPA.
- It is not required for the data set to be in the LPA.
- The data set may be in the LNKLST.
- It is not required for the data set to be APF-authorized.

The following figures describe the target and distribution libraries and HFS paths required to install WD4Z RSE+ICU. The storage requirements of WD4Z RSE+ICU 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 9. Storage Requirements for WD4Z RSE+ICU 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
SFEKJCL	INSTALL JCL	ANY	U	PDS	FB	80	3	2
SFEKSAMP	SAMPLE	ANY	U	PDS	FB	80	4	5

Figure 10. WD4Z RSE+ICU HFS Paths		
DDNAME	T Y P E	Path Name
SFEKRES	N	/usr/lpp/wd4z/rse/lib/rseterm/IBM/
SFEKHFS	N	/usr/lpp/wd4z/icuc/lib/IBM/
SFEKLIB	N	/usr/lpp/wd4z/rse/lib/IBM/

Figure 11. Storage Requirements for WD4Z RSE+ICU Distribution Libraries						
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 Blks
AFEKHFS	U	PDS/E	VB	8796	1907	n/a
AFEKJCL	U	PDS	FB	80	3	2
AFEKSAMP	U	PDS	FB	80	4	5

The following figures list data sets that are not used by SMP/E, but are required for WD4Z RSE+ICU to execute.

Figure 12. Storage Requirements for WD4Z RSE+ICU Non-SMP/E Data Sets						
Data Set Name	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
hlq.IBM.H001600.F1.BIN	U	SEQ	FB	80	7	0
hlq.IBM.H001600.F2.BIN	U	SEQ	FB	80	34	0
hlq.IBM.H001600.F3.BIN	U	SEQ	FB	80	2012	0
hlq.IBM.H001600.SAMPLE.JCL.BIN	U	SEQ	FB	80	4	0
hlq.IBM.H001600.SMPMCS	U	SEQ	FB	80	1	0

5.3 FMIDs Deleted

Installing WD4Z RSE+ICU 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 wish to delete these FMIDs at this time, you must install WD4Z RSE+ICU 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

WD4Z RSE+ICU has no special considerations for the target system.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of WD4Z RSE+ICU.

Please note the following:

- If you want to install WD4Z RSE+ICU 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. A sample job FEKSMPE is provided that you may use to create a new SMP/E environment if you decide to install into a new SMP/E environment.

- 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 steps.

6.1 Installing WD4Z RSE+ICU

6.1.1 SMP/E Considerations for Installing WD4Z RSE+ICU

This release of WD4Z RSE+ICU is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

6.1.2 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 13. Use of values lower than these may result in failures in the installation process. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. Refer to the SMP/E manuals for instructions on updating the global zone.

SUB-ENTRY	Value	Comment
DSSPACE	(600,200,100)	Space allocation for temporary data sets
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

Figure 13. SMP/E Options Subentry Values

6.1.3 Overview of the installation steps

Overview of steps required to install WebSphere Developer for zSeries.

1. Upload sample JCL from the CD-ROM

2. Expand the sample JCL file by using the TSO Receive command

3. Sample JCL

4. Run the job to allocate sequential data sets to FTP into

5. Upload the compressed RELFILES and SMPMCS from the CD-ROM

6. Expand the RELFILEs by using the TSO Receive command

7. (optional) Allocate and initialize the SMP/E data sets.

8. SMP/E Calllibs Processing

9. Perform SMP/E RECEIVE

10. Allocate SMP/E target and distribution libraries

11. Allocate HFS paths

12. Create DDDEF entries

13. Perform SMP/E APPLY

14. Perform SMP/E ACCEPT

6.1.4 Upload the Sample JCL from the CD-ROM

On the CD-ROM, there is a file containing sample installation JCL. This sample JCL contains a member that will allocate the sequential data sets on z/OS for the compressed RELFILEs and SMPMCS contained on the CD-ROM and other members to perform the SMP/E processing. Perform the following steps to upload it from the CD-ROM to z/OS:

1. Allocate a data set on z/OS to use as the target of the upload. You can do this by submitting the job below or by creating a data set with these characteristics. Add a job card and modify the parameters to meet your site's requirements before submitting. **hlq** will be the high level qualifier you choose to use for this data set.

```
//ALLOC1    EXEC   PGM=IEFBR14
//*
//FTPALLO  DD  DSN=hlq.IBM.H001600.SAMPLE.JCL.BIN,
//         DISP=(NEW,CATLG,DELETE),
//         DSORG=PS,
//         RECFM=FB,
//         LRECL=80,
//         BLKSIZE=6160,
//         SPACE=(TRK,(4,1)),
//*        VOL=SER=&TVOL1,
//         UNIT=SYSALLDA
```

2. Upload the sample jcl file in binary format from the CD-ROM to z/OS data set. If the CD-ROM is attached to a Windows NT system, you can use FTP from a command prompt to upload the file. In the sample dialog shown below, commands or other information entered by the user are in bold, and the following values are assumed:

Figure 14. User Entered Values	
User enters:	**Values**
mvsaddr	TCP/IP address or hostname of the z/OS system
tsouid	Your TSO user ID
tsopw	Your TSO password
d:	Your CD-ROM drive
hlq	High-level qualifier you used for the data set you allocated in the job above

```
C:\>ftp mvsaddr
Connected to mvsaddr.
220-FTPD1 IBM FTP CS V1R2 at mvsaddr, 07:18:16 on 2005-04-19.
220 Connection will close if idle for more than 60 minutes.

User (mvsaddr:(none)): tsouid

331 Send password please.
Password: tsopw
230 tsouid is logged on.  Working directory is "tsouid.".

ftp> cd ..
250 " "is the working directory name prefix.

ftp> cd hlq
250 "hlq." is the working directory name prefix.

ftp> binary
200 Representation type is Image

ftp> put d:\h001600\ibm.h001600.sample.jcl.bin
200 Port request OK.
125 Storing data set hlq.H001600.SAMPLE.JCL.BIN
250 Transfer completed successfully.
121600 bytes sent in 0.26 seconds

ftp> quit
221 Quit command received. Goodbye.
```

6.1.5 Expand the sample jcl file by using the TSO Receive command:

```
receive inda('hlq.ibm.h001600.sample.jcl.bin')
```

This will create a data set named **hlq**.H001600.SAMPLE.JCL.

6.1.6 Sample JCL

The following sample installation jobs are provided as part of the product to help you install WD4Z
RSE+ICU. The RELFILEs will be prefixed with the high level qualifier ("hlq" in table below) used when the
files are "received". The jobs are contained in the sample JCL data set **hlq**.IBM.H001600.SAMPLE.JCL
that was uploaded.

Figure 15. Sample Installation Jobs			
Job Name	**Job Type**	**Description**	**RELFILE**
FEKACEPT	ACCEPT	Sample ACCEPT job	hlq.IBM.H001600.F1
FEKALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	hlq.IBM.H001600.F1
FEKAPPLY	APPLY	Sample APPLY job	hlq.IBM.H001600.F1
FEKDDDEF	DDDEF	Sample job to define SMP/E DDDEFs	hlq.IBM.H001600.F1
FEKISMKD	MKDIR	Sample job to invoke the supplied FEKMKDIR EXEC to allocate HFS paths	hlq.IBM.H001600.F1
FEKMKDIR	REXX Exec	REXX Exec to Allocate HFS paths required for installation	hlq.IBM.H001600.F1
FEKRECEV	RECEIVE	Sample RECEIVE job	hlq.IBM.H001600.F1
FEKSMPE	SMP/E	Sample job to create an SMP/E environment (optional)	hlq.IBM.H001600.F1
FEKSEQAL	SMP/E	Sample job to allocate sequential data sets for FTPing the product data sets into	hlq.IBM.H001600.F1

You can also obtain a copy of the sample installation jobs by performing an SMP/E RECEIVE and then
copying the jobs from the SMPTLIB (RELFILE) to a work data set for editing and submission. See
Figure 15 to find the appropriate SMPTLIB (RELFILE) data set.

6.1.7 Run the job to allocate sequential data sets to FTP into

Edit and submit sample job **FEKSEQAL** in the **hlq**.H001600.SAMPLE.JCL data set to allocate data sets
on z/OS to be used during the upload process. Use the instructions in the sample job for information on
changes required.

Expected Return Codes and Messages: RC=0

6.1.8 Upload the compressed RELFILES and SMPMCS from the CD-ROM

1. Upload the files in binary format from the CD-ROM to the z/OS data set. If the CD-ROM is attached to a Windows NT system, you can use FTP from a command prompt to upload the files:

```
C:\>ftp mvsaddr
Connected to mvsaddr.
220-FTPD1 IBM FTP CS V1R2 at mvsaddr, 07:18:16 on 2005-04-19.
220 Connection will close if idle for more than 60 minutes.

User (mvsaddr:(none)): tsouid

331 Send password please.
Password: tsopw
230 tsouid is logged on.  Working directory is "tsouid.".

ftp> cd ..
250 " " is the working directory name prefix.

ftp> cd hlq
250 "hlq." is the working directory name prefix.

ftp> binary
200 Representation type is Image

ftp> prompt
Interactive mode Off.

ftp> mput d:\h001600\ibm.h001600.f*
200 Port request OK.
125 Storing data set hlq.IBM.H001600.F1.BIN
250 Transfer completed successfully.
121600 bytes sent in 0.19 seconds
200 Port request OK.
125 Storing data set hlq.IBM.H001600.F2.BIN
250 Transfer completed successfully.
179520 bytes sent in 0.27 seconds
200 Port request OK.
125 Storing data set hlq.IBM.H001600.F3.BIN
250 Transfer completed successfully.
94314240 bytes sent in 24.95 seconds

ftp> put d:\h001600\ibm.h001600.smpmcs
200 Port request OK.
125 Storing data set hlq.IBM.H001600.SMPMCS
250 Transfer completed successfully.
25520 bytes sent in 0.12 seconds
```

```
ftp> quit
221 Quit command received. Goodbye.
```

6.1.9 Expand the RELFILEs by using the TSO Receive command

You can expand the RELFILEs by using the TSO receive command:

```
receive inda('hlq.ibm.h001600.f1.bin')
receive inda('hlq.ibm.h001600.f2.bin')
receive inda('hlq.ibm.h001600.f3.bin')
```

When prompted on the TSO receive commands, use the appropriate DSNAME from the list below:

```
DS('hlq.IBM.h001600.F1')
DS('hlq.IBM.h001600.F2')
DS('hlq.IBM.h001600.F3')
```

6.1.10 (optional) Allocate and initialize the SMP/E data sets.

A Sample job, FEKSMPE, to allocate and prime an SMP/E CSI and work data sets is provided if you choose to install WD4Z RSE+ICU in it's own CSI.

1. FEKSMPE

Expected Return Codes and Messages: RC=0

6.1.11 Perform SMP/E RECEIVE

Edit and submit sample job FEKRECEV to perform the SMP/E RECEIVE for WD4Z RSE+ICU. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

If you obtained WD4Z RSE+ICU as part of a CBPDO, use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the WD4Z RSE+ICU FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

6.1.12 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job FEKALLOC to allocate the SMP/E target and distribution libraries for WD4Z RSE+ICU. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

6.1.13 Allocate HFS Paths

Edit and submit sample job FEKISMKD to allocate the HFS paths for WD4Z RSE+ICU. 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 BPXPRMxx 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: RC=0

6.1.14 Create DDDEF Entries

Edit and submit sample job FEKDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for WD4Z RSE+ICU. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

6.1.15 Perform SMP/E APPLY

Edit and submit sample job FEKAPPLY to perform an SMP/E APPLY CHECK for WD4Z RSE+ICU. Consult the instructions in the sample job for more information.

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 critical service is installed with the FMID(s), add the SOURCEIDs of PRP, and HIPER 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,...)
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,...)
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.

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

Expected Return Codes and Messages from APPLY CHECK: RC=0

Expected Return Codes and Messages from APPLY: RC=0

6.1.16 Perform SMP/E ACCEPT

Edit and submit sample job FEKACCEPT to perform an SMP/E ACCEPT CHECK for WD4Z RSE+ICU. Consult the instructions in the sample job for more information.

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: RC=0

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/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.

Expected Return Codes and Messages from ACCEPT: RC=0

6.2 Activating WD4Z RSE+ICU

The publication *IBM WebSphere Developer for zSeries Host Configuration Guide - SC31-6930-00* contains the step-by-step procedures to activate the functions of WD4Z RSE+ICU.

7.0 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 the

> 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.

7.1 Trademarks

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

CBPDO	IMS/ESA®
CICS®	IMS
DB2®	MVS®
IBM®	

OS/390®	zSeries®
Rational®	z/OS®
VisualAge®	DB2 UDB®
WebSphere®	

The following terms are trademarks of other companies as follows:

Java	Sun Microsystems, Inc.
Windows NT®	Microsoft Corporation

Reader's Comments

Program Directory for WebSphere Developer for zSeries, November, 2005

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 please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

```
┌─ RATING SCALE ──────────────────────────────────────────
│   very                          very        not
│ satisfied  <====================>  dissatisfied  applicable
│     1       2      3      4        5            N
└─────────────────────────────────────────────────────────
```

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of Program Directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of Program Directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
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 aspect of the product installation, please list them below:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Please provide the following contact information:

_____
Name and Job Title

_____
Organization

_____

_____
Address

_____
Telephone

Thank you for your participation.

Please send the completed form to (or give to your IBM representative who will forward it to the WebSphere Developer for zSeries Development group):

Janice Rogers
IBM Corporation
Building 500/F208
4205 S. Miami Blvd.
Durham, North Carolina 27703

FAX Number: (919) 254-0206

E-Mail: janicer@us.ibm.com

IBM

Printed in U.S.A.