Program Directory for

IBM Engineering Workflow Management

V07.00.00

Program Number 5724-V04

for Use with
z/OS

Document Date: March 2020

GI13-2890-08

Note

Before using this information and the product it supports, be sure to read the general information under 7.0, “Notices” on page 43.

Contents

Figures

1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM Engineering Workflow Management. This publication refers to IBM Engineering Workflow Management as Engineering Workflow Management.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic program materials and documentation for Engineering Workflow Management.
- 3.0, “Program Support” on page 9 describes the IBM support available for Engineering Workflow Management.
- 4.0, “Program and Service Level Information” on page 12 lists the APARs (program level) and PTFs (service level) that have been incorporated into Engineering Workflow Management.
- 5.0, “Installation Requirements and Considerations” on page 13 identifies the resources and considerations that are required for installing and using Engineering Workflow Management.
- 6.0, “Installation Instructions” on page 23 provides detailed installation instructions for Engineering Workflow Management. It also describes the procedures for activating the functions of Engineering Workflow Management, or refers to appropriate publications.

1.1 Engineering Workflow Management Description

With this release, IBM Rational Team Concert is renamed IBM Engineering Workflow Management.

IBM Engineering Workflow Management (EWM) is a team collaboration tool that integrates development tasks including iteration planning, process definition, change management, defect tracking, source control, build automation, and reporting.

Developers use EWM to track their work, share their changes, and collaborate with each other. Team leads and project managers use it to plan releases and monitor progress by viewing plans, dashboards, and reports.

EWM is the Change and Configuration Management (CCM) application in the IBM Engineering Lifecycle Management (ELM) Solution. These solutions integrate IBM products to provide a complete set of applications for software or systems development.

For further details refer to this web site:
https://www.ibm.com/support/knowledgecenter/en/SSYMRC_7.0.0/com.ibm.team.concert.doc/topics/c_product-overview.html

1.2 Engineering Workflow Management FMIDs

Engineering Workflow Management consists of the following FMIDs:

HRJS700 - Jazz Team Server
HRBT700 - Engineering Workflow Management - Build System Toolkit
HRDV700 - IBM Developer for z/OS Subset
HRBA700 - Engineering Workflow Management - Build Agent
HRCM700 - Engineering Workflow Management - Change and Configuration Management
HRQM700 - Engineering Test Management - Quality Management
HRRM700 - Engineering Requirements Management DOORS Next - Requirements Management
HRCC700 - Common Components
HRWL700 - Websphere Liberty Profile
HRRS700 - Jazz Reporting Services
HRGC700 - Global Configuration Management
HRRE700 - Engineering Lifecycle Optimization - Engineering Insights
HRLI700 - Link Index Provider

Note!

1. FMID HRCC700 (Common Components) is required by the other FMIDS. If you are installing IBM Engineering Workflow Management for the first time, you must install FMID HRCC700.
   If you have previously installed FMID HRCC700, there is no need to re-install it.

2.0 Program Materials

An IBM program is identified by a program number. The program number for Engineering Workflow Management is 5724-V04.

Basic Machine-Readable Materials are materials that are supplied under the base license and are required for the use of the product.

The program announcement material describes the features supported by Engineering Workflow Management. 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 DVD. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, “Installation Instructions” on page 23 for more information about how to install the program.

Figure 1 describes the program file content for Engineering Workflow Management.

Notes:

1. The data set attributes in this table must be used in the JCL of jobs that read the data sets. However, because the data sets are in IEBCOPY unloaded format, their actual attributes might be different.
2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

Figure 1. Program File Content for HRJS700 - Jazz Team Server

Name	ORG	RECFM	LRECL	BLKSIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRJS700.F1	PDS	FB	80	8800
IBM.HRJS700.F2	PDS	VB	255	27998

Figure 2. Program File Content for HRBT700 - Build System Toolkit

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRBT700.F1	PDS	FB	80	8800
IBM.HRBT700.F2	PDS	VB	255	27998
IBM.HRBT700.F3	PDS	FB	80	8800
IBM.HRBT700.F4	PDS	FB	80	8800
IBM.HRBT700.F5	PDS	FB	80	8800
IBM.HRBT700.F6	PDS	FB	80	8800
IBM.HRBT700.F7	PDS	FB	80	8800
IBM.HRBT700.F8	PDS	FB	80	8800
IBM.HRBT700.F9	PDS	FB	80	8800
IBM.HRBT700.F10	PDS	U	0	6144

Figure 3. Program File Content for HRDV700 - IBM Developer for z/OS Subset

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRDV700.F1	PDSE	U	0	6144
IBM.HRDV700.F2	PDS	FB	80	8800
IBM.HRDV700.F3	PDS	U	0	6144

Figure 4. Program File Content for HRBA700 - Build Agent

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRBA700.F1	PDS	FB	80	8800
IBM.HRBA700.F2	PDS	VB	255	27998

Figure 5. Program File Content for HRCM700 - Change and Configuration Management

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRCM700.F1	PDS	FB	80	8800
IBM.HRCM700.F2	PDS	VB	255	27998

Figure 6. Program File Content for HRQM700 - Quality Management

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRQM700.F1	PDS	FB	80	8800
IBM.HRQM700.F2	PDS	VB	255	27998

Figure 7. Program File Content for HRRM700 - Requirements Management

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRRM700.F1	PDS	FB	80	8800
IBM.HRRM700.F2	PDS	VB	255	27998

Figure 8. Program File Content for HRCC700 - Common Components

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRCC700.F1	PDS	FB	80	8800
IBM.HRCC700.F2	PDS	FB	80	8800
IBM.HRCC700.F3	PDS	VB	255	27998
IBM.HRCC700.F4	PDS	U	0	6144
IBM.HRCC700.F5	PDS	FB	80	8800
IBM.HRCC700.F6	PDS	FB	80	8800
IBM.HRCC700.F7	PDS	FB	80	8800
IBM.HRCC700.F8	PDS	FB	80	8800
IBM.HRCC700.F9	PDS	FB	80	8800
IBM.HRCC700.F10	PDS	FB	80	8800
IBM.HRCC700.F11	PDS	FB	80	8800
IBM.HRCC700.F12	PDS	FB	80	8800
IBM.HRCC700.F13	PDS	FB	80	8800
IBM.HRCC700.F14	PDS	FB	80	8800

Figure 9. Program File Content for HRWL700 - Websphere Liberty Profile

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRWL700.F1	PDS	FB	80	8800
IBM.HRWL700.F2	PDS	VB	255	27998

Figure 10. Program File Content for HRRS700 - Jazz Reporting Services

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRRS700.F1	PDS	FB	80	8800
IBM.HRRS700.F2	PDS	VB	255	27998

Figure 11. Program File Content for HRGC700 - Global Configuration Management

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRGC700.F1	PDS	FB	80	8800
IBM.HRGC700.F2	PDS	VB	255	27998

Figure 12. Program File Content for HRRE700 - Engineering Lifecycle Optimization - Engineering Insights

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRRE700.F1	PDS	FB	80	8800
IBM.HRRE700.F2	PDS	VB	255	27998

Figure 13. Program File Content for HRLI700 - Link Index Provider

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.HRLI700.F1	PDS	FB	80	8800
IBM.HRLI700.F2	PDS	VB	255	27998

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Engineering Workflow Management.

2.3 Program Publications

The following sections identify the basic publications for Engineering Workflow Management.

2.3.1 Optional Program Publications

No optional publications are provided for Engineering Workflow Management.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for Engineering Workflow Management.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 14 during the installation of Engineering Workflow Management.

Figure 14. Publications Useful During Installation

Publication Title	Form Number	Media Format
IBM SMP/E for z/OS User's Guide	SA23-2277	http://www.ibm.com/shop/publications/order/
IBM SMP/E for z/OS Commands	SA23-2275	http://www.ibm.com/shop/publications/order/
IBM SMP/E for z/OS Reference	SA23-2276	http://www.ibm.com/shop/publications/order/
IBM SMP/E for z/OS Messages, Codes, and Diagnosis	GA32-0883	http://www.ibm.com/shop/publications/order/

3.0 Program Support

This section describes the IBM support available for Engineering Workflow Management.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install Engineering Workflow Management, make sure that you have reviewed the current Preventive Service Planning (PSP) information. Review the PSP Bucket for General Information, Installation Documentation, and the Cross Product Dependencies sections. For the Recommended Service section, instead of reviewing the PSP Bucket, it is recommended you use the IBM.ProductInstall-RequiredService fix category in SMP/E to ensure you have all the recommended service installed. Use the **FIXCAT(IBM.ProductInstall-RequiredService)** operand on the **APPLY CHECK command**. See 6.1.17, “Perform SMP/E APPLY” on page 39 for a sample APPLY command.

Once you have received your installation DVD, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the latest PSP Bucket information. You can also obtain the latest PSP Bucket information by going to the following Web site:

http://www14.software.ibm.com/webapp/set2/psearch/search?domain=psp

You can also use S/390 SoftwareXcel or contact the IBM Support Center to obtain the latest PSP Bucket information.

For program support, access the Software Support Website at http://www-01.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 Engineering Workflow Management are included in Figure 15.

Figure 15 (Page 1 of 2). PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
5724V82	HRJS700	Jazz Team Server for z/OS
	HRBT700	Engineering Workflow Management - Build System Toolkit
	HRDV700	IBM Developer for z/OS Subset
	HRBA700	Engineering Workflow Management - Build Agent

Figure 15 (Page 2 of 2). PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
	HRCM700	Engineering Workflow Management - Change and Configuration Management
	HRQM700	Engineering Test Management - Quality Management
	HRRM700	Engineering Requirements Management DOORS Next - Requirements Management
	HRCC700	Common Components for z/OS
	HRWL700	Websphere Liberty Profile for z/OS
	HRRS700	Jazz Reporting Services for z/OS
	HRGC700	Global Configuration Management for z/OS
	HRRE700	Engineering Lifecycle Optimization - Engineering Insights for z/OS
	HRLI700	Link Index Provider for z/OS

3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 16 identifies the component IDs (COMPID) for Engineering Workflow Management.

Figure 16 (Page 1 of 2). Component IDs

FMID	COMPID	Component Name	RETAIN Release
HRJS700	5724V8210	Jazz Team Server for z/OS	700
HRBT700	5724V8220	Engineering Workflow Management - Build System Toolkit	700
HRDV700	5724V8230	IBM Developer for z/OS Subset	700
HRBA700	5724V8240	Engineering Workflow Management - Build Agent	700
HRCM700	5724V8260	Engineering Workflow Management - Change and Configuration Management	700
HRQM700	5724V8270	Engineering Test Management - Quality Management	700
HRRM700	5724V8280	Engineering Requirements Management DOORS Next - Requirements Management	700
HRCC700	5724V82CC	Common Components for z/OS	700
HRWL700	5724V82WL	Websphere Liberty Profile for z/OS	700

Figure 16 (Page 2 of 2). Component IDs

FMID	COMPID	Component Name	RETAIN Release
HRRS700	5724V82JR	Jazz Reporting Services for z/OS	700
HRGC700	5724V82GC	Global Configuration Management for z/OS	700
HRRE700	5724V82LM	Engineering Lifecycle Optimization - Engineering Insights for z/OS	700
HRLI700	5724V82LI	Link Index Provider for z/OS	700

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of Engineering Workflow Management. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

No APARs have been incorporated into Engineering Workflow Management.

4.2 Service Level Information

No PTFs against this release of Engineering Workflow Management have been incorporated into the product package.

Frequently check the Engineering Workflow Management PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the **FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE)** operand on your APPLY CHECK command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating Engineering Workflow Management. The following terminology is used:

- *Driving system*: the system on which SMP/E is executed to install the program.

  The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.

- *Target system*: the system on which the program is configured and run.

  The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must 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.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.
- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can 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 Engineering Workflow Management.

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 17. Driving System Software Requirements

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	V02.02.00 or higher	N/A	No

Note: SMP/E is a requirement for Installation and is an element of z/OS but can also be ordered as a separate product, 5655-G44, minimally V03.06.00.

Note: Installation might require migration to new z/OS releases to be service supported. See http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html.

5.2 Target System Requirements

This section describes the environment of the target system required to install and use Engineering Workflow Management.

Engineering Workflow Management installs in the z/OS (Z038) SREL.

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: Installation requisites identify products that are required and *must* be present on the system or products that are not required but *should* be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product.

Engineering Workflow Management has no mandatory installation requisites.

Conditional installation requisites identify products that are *not* required for successful installation of this product but can resolve such things as certain warning messages at installation time.

Engineering Workflow Management has no conditional installation requisites.

5.2.2.2 Operational Requisites:

Operational requisites are products that are required and *must* be present on the system or products that are not required but *should* be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions.

Engineering Workflow Management has no mandatory operational requisites.

Conditional operational requisites identify products that are *not* required for this product to operate its basic functions but are required at run time for this product to operate specific functions.

Engineering Workflow Management has no conditional operational requisites.

5.2.2.3 Toleration/Coexistence Requisites:

Toleration/coexistence requisites identify products that must be present on sharing systems. 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 environment at different time intervals.

Engineering Workflow Management has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites:

Negative requisites identify products that must *not* be installed on the same system as this product.

Engineering Workflow Management has no negative requisites.

5.2.3 DASD Storage Requirements

Engineering Workflow Management libraries can reside on all supported DASD types.

Figure 18 lists the total space that is required for each type of library.

Figure 18. Total DASD Space Required by Engineering Workflow Management

Library Type	Total Space Required in 3390 Trks
Compressed Binaries	99998 Tracks
Expanded Installation Files	104826 Tracks
Target	469 Tracks
Distribution	123469 Tracks
File System(s)	
HFS or zFS *	175400 Tracks

*** Note regarding HFS/zFS space allocation**

For the HFS/zFS allocation the total number of tracks of 175400 is specified. However, if only certain FMIDs are going to be applied your HFS/zFS space allocation can be reduced. The following lists the HFS/zFS allocation per FMID to enable you to size your HFS/zFS accordingly.

- HRJS700 - 16000 Tracks
- HRBT700 - 23600 Tracks
- HRBA700 - 100 Tracks
- HRCM700 - 22000 Tracks
- HRQM700 - 25500 Tracks
- HRRM700 - 23500 Tracks
- HRCC700 - 2750 Tracks
- HRWL700 - 13750 Tracks
- HRRS700 - 20000 Tracks
- HRGC700 - 14000 Tracks
- HRRE700 - 14000 Tracks
- HRLI700 - 2600 Tracks

Notes:

1. For non-RECFM U data sets, IBM recommends using system-determined block sizes for efficient DASD utilization. For RECFM U data sets, IBM recommends using a block size of 32760, which is most efficient from the performance and DASD utilization perspective.
2. Abbreviations used for data set types are shown as follows.

   U Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.

   S Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in 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 other products. This data set is *not* allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in 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.

   If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old release and reclaim the space that was used by the old release and any service that had been installed. You can determine whether 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 about the names and sizes of the required data sets, see 6.1.13, “Allocate SMP/E Target and Distribution Libraries” on page 37.

3. Abbreviations used for the file system path type are as follows.

   N New path, created by this product.
   X Path created by this product, but might 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 can be changed.
   - The default block size of the data set can be changed.
   - The data set can be merged with another data set that has equivalent characteristics.
   - The data set can be either a PDS or a PDSE, except SBLZAUTH, ABLZAUTH and ABLZHFS which must be PDSEs.

5. All target libraries listed have the following attributes:

   - These data sets can be SMS-managed, but they are not required to be SMS-managed.
   - These data sets are not required to reside on the IPL volume.
   - The values in the "Member Type" column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.

6. All target libraries that are listed and contain load modules have the following attributes:

   - These data sets can be in the LPA, but they are not required to be in the LPA.
   - These data sets can be in the LNKLST.
   - These data sets are not required to be APF-authorized, except for SBLZAUTH.
   - Engineering Workflow Management requires that the SMPLTS data set must be a PDSE. If your existing SMPLTS is a PDS, you will need to allocate a new PDSE and copy your existing SMPLTS into it and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

The following figures describe the target and distribution libraries and file system paths required to install Engineering Workflow Management. The storage requirements of Engineering Workflow Management must be added to the storage required by other programs that have data in the same library or path.

Note: Use the data in these tables to determine 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 19 (Page 1 of 2). Storage Requirements for Engineering Workflow Management Target Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SBLZAUTH	APF Modules	ANY	U	PDSE	U	0	35	n/a
SBLZDBRM	DBRM	ANY	U	PDS	FB	80	2	2
SBLZEXEC	EXEC	ANY	U	PDS	FB	80	25	5
SBLZJCL	Install JCL	ANY	U	PDS	FB	80	10	5

Figure 19 (Page 2 of 2). Storage Requirements for Engineering Workflow Management Target Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SBLZLOAD	Modules	ANY	U	PDS	U	0	80	20
SBLZMENP	Messages	ANY	U	PDS	FB	80	10	10
SBLZMENU	Messages	ANY	U	PDS	FB	80	10	10
SBLZMJPN	Messages	ANY	U	PDS	FB	80	10	10
SBLZPENP	Panels	ANY	U	PDS	FB	80	65	30
SBLZPENU	Panels	ANY	U	PDS	FB	80	65	30
SBLZPJPN	Panels	ANY	U	PDS	FB	80	65	30
SBLZSAMP	Samples	ANY	U	PDS	FB	80	60	15
SBLZSLIB	Skeletons	ANY	U	PDS	FB	80	30	15
SBLZTLIB	Table	ANY	U	PDS	FB	80	2	5

Figure 20 (Page 1 of 2). Engineering Workflow Management File System Paths

DDNAME	TYPE	Path Name
SBLZA001	N	/usr/lpp/jazz/v7.0.0/IBM/
SBLZA002	N	/usr/lpp/jazz/v7.0.0/server/conf/jts/provision_profiles/IBM/
SBLZA003	N	/usr/lpp/jazz/v7.0.0/server/conf/ccm/provision_profiles/IBM/
SBLZA004	N	/usr/lpp/jazz/v7.0.0/server/conf/qm/provision_profiles/IBM/
SBLZA005	N	/usr/lpp/jazz/v7.0.0/server/conf/rm/provision_profiles/IBM/
SBLZA006	N	/usr/lpp/jazz/v7.0.0/server/conf/dcc/provision_profiles/IBM/
SBLZA007	N	/usr/lpp/jazz/v7.0.0/server/conf/gc/provision_profiles/IBM/
SBLZA008	N	/usr/lpp/jazz/v7.0.0/server/conf/relm/provision_profiles/IBM/
SBLZAD02	N	/usr/lpp/jazz/v7.0.0/server/conf/jts/provision_profiles/IBM/
SBLZAD03	N	/usr/lpp/jazz/v7.0.0/server/conf/ccm/provision_profiles/IBM/
SBLZAD04	N	/usr/lpp/jazz/v7.0.0/server/conf/qm/provision_profiles/IBM/
SBLZAD05	N	/usr/lpp/jazz/v7.0.0/server/conf/rm/provision_profiles/IBM/
SBLZAD06	N	/usr/lpp/jazz/v7.0.0/server/conf/dcc/provision_profiles/IBM/
SBLZAD07	N	/usr/lpp/jazz/v7.0.0/server/conf/gc/provision_profiles/IBM/

Figure 20 (Page 2 of 2). Engineering Workflow Management File System Paths

DDNAME	TYPE	Path Name
SBLZAD08	N	/usr/lpp/jazz/v7.0.0/server/conf/relm/provision_profiles/IBM/
SBLZE001	N	/usr/lpp/jazz/v7.0.0/buildagent/IBM/

Figure 21. Storage Requirements for Engineering Workflow Management Distribution Libraries

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
ABLZAUTH	U	PDSE	U	0	35	n/a
ABLZDBRM	U	PDS	FB	80	2	2
ABLZEXEC	U	PDS	FB	80	25	5
ABLZHFS *	U	PDSE	VB	8796	123000	n/a
ABLZJCL	U	PDS	FB	80	10	5
ABLZLOAD	U	PDS	U	0	80	20
ABLZMENP	U	PDS	FB	80	10	10
ABLZMENU	U	PDS	FB	80	10	10
ABLZMJPN	U	PDS	FB	80	10	10
ABLZPENP	U	PDS	FB	80	65	30
ABLZPENU	U	PDS	FB	80	65	30
ABLZPJPN	U	PDS	FB	80	65	30
ABLZSAMP	U	PDS	FB	80	60	15
ABLZSLIB	U	PDS	FB	80	30	15
ABLZTLIB	U	PDS	FB	80	2	5

Note: * See 6.1.13, “Allocate SMP/E Target and Distribution Libraries” for more information of the size allocation of the ABLZHFS data set.

The following figures list additional data sets that are required for the installation of Engineering Workflow Management.

Figure 22 (Page 1 of 2). Storage Requirements for Engineering Workflow Management - Additional Installation Data Sets

Data Set Name	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
hlq.HRJS700.F1.BIN	U	PS	FB	80	10	n/a
hlq.HRJS700.F2.BIN	U	PS	FB	80	12000	n/a
hlq.HRBT700.F1.BIN	U	PS	FB	80	15	n/a
hlq.HRBT700.F2.BIN	U	PS	FB	80	13000	n/a
hlq.HRBT700.F3.BIN	U	PS	FB	80	5	n/a
hlq.HRBT700.F4.BIN	U	PS	FB	80	5	n/a
hlq.HRBT700.F5.BIN	U	PS	FB	80	30	n/a
hlq.HRBT700.F6.BIN	U	PS	FB	80	5	n/a
hlq.HRBT700.F7.BIN	U	PS	FB	80	30	n/a
hlq.HRBT700.F8.BIN	U	PS	FB	80	5	n/a
hlq.HRBT700.F9.BIN	U	PS	FB	80	30	n/a
hlq.HRBT700.F10.BIN	U	PS	FB	80	30	n/a
hlq.HRDV700.F1.BIN	U	PS	FB	80	35	n/a
hlq.HRDV700.F2.BIN	U	PS	FB	80	2	n/a
hlq.HRDV700.F3.BIN	U	PS	FB	80	45	n/a
hlq.HRBA700.F1.BIN	U	PS	FB	80	2	n/a
hlq.HRBA700.F2.BIN	U	PS	FB	80	170	n/a
hlq.HRCM700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRCM700.F2.BIN	U	PS	FB	80	16000	n/a
hlq.HRQM700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRQM700.F2.BIN	U	PS	FB	80	16000	n/a
hlq.HRRM700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRRM700.F2.BIN	U	PS	FB	80	16000	n/a
hlq.HRCC700.F1.BIN	U	PS	FB	80	10	n/a
hlq.HRCC700.F2.BIN	U	PS	FB	80	10	n/a
hlq.HRCC700.F3.BIN	U	PS	FB	80	650	n/a
hlq.HRCC700.F4.BIN	U	PS	FB	80	13	n/a
hlq.HRCC700.F5.BIN	U	PS	FB	80	4	n/a
hlq.HRCC700.F6.BIN	U	PS	FB	80	20	n/a

Figure 22 (Page 2 of 2). Storage Requirements for Engineering Workflow Management - Additional Installation Data Sets

Data Set Name	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
hlq.HRCC700.F7.BIN	U	PS	FB	80	4	n/a
hlq.HRCC700.F8.BIN	U	PS	FB	80	10	n/a
hlq.HRCC700.F9.BIN	U	PS	FB	80	4	n/a
hlq.HRCC700.F10.BIN	U	PS	FB	80	10	n/a
hlq.HRCC700.F11.BIN	U	PS	FB	80	4	n/a
hlq.HRCC700.F12.BIN	U	PS	FB	80	15	n/a
hlq.HRCC700.F13.BIN	U	PS	FB	80	20	n/a
hlq.HRCC700.F14.BIN	U	PS	FB	80	2	n/a
hlq.HRWL700.F1.BIN	U	PS	FB	80	3	n/a
hlq.HRWL700.F2.BIN	U	PS	FB	80	6200	n/a
hlq.HRRS700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRRS700.F2.BIN	U	PS	FB	80	14500	n/a
hlq.HRGC700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRGC700.F2.BIN	U	PS	FB	80	9500	n/a
hlq.HRRE700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRRE700.F2.BIN	U	PS	FB	80	9500	n/a
hlq.HRLI700.F1.BIN	U	PS	FB	80	5	n/a
hlq.HRLI700.F2.BIN	U	PS	FB	80	2000	n/a

5.3 FMIDs Deleted

Installing Engineering Workflow Management into same SMP/E target and distribution libraries that contain a previous version of Engineering Workflow Management might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the ++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install Engineering Workflow Management into separate SMP/E target and distribution zones.

If you want to delete these FMIDS it is recommended that you use a dummy function SYSMOD to delete the previous releases of Engineering Workflow Management product from the existing target and distribution libraries, before proceeding with the installation of the new release.

Note: These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands book for details.

5.4 Special Considerations

Security Considerations:

In Engineering Workflow Management V07.00.00, there are changes to the PassTicket support for the ISPF client. The necessary changes remove a redundant RACF profile and add a new RACF profile to increase the security in generating PassTickets. If you installed the ISPF client with a previous release, the following tasks should be performed:

1. Remove the IRRPTAUTH.BLZAPPL.* profile, where BLZAPPL is the application ID used for the ISPF client. If you used a different application ID, the profile is named with the application ID you included in the profile name.
2. Add the new profile BLZ.CONNECT.BLZAPPL. If you are using a different application ID, change BLZAPPL to your application ID. ISPF client users must have READ access to this profile to generate PassTickets and login to the RTC repository. Follow the instructions in the sample member BLZRACFT in SBLZSAMP, or if you are using the configuration utility, in the generated PassTicket command. Optionally, you can set the profile to BLZ.CONNECT.*, which enables all ISPF client application IDs to use the profile.

PDSE Considerations:

Engineering Workflow Management uses the "partitioned data set extended" or PDSE format for the SBLZAUTH target library. There are some operational differences between PDS and PDSE data sets. The PDS format may be shared by more than one z/OS system and no special precautions are necessary. However the PDSE format may only be shared by z/OS systems which are part of a sysplex or which are connected using Global Resource Serialization (are in a GRS complex). If z/OS systems share use of a PDSE data set outside of a sysplex or GRS environment, you may experience severe problems when the data set is updated. This is due to the fact that PDSE directory information is cached in storage, and when the data set is updated from one system the other system(s) have no knowledge of the update, and their cached directory information will be incorrect.

You must take care not to share the SBLZAUTH data set between z/OS systems unless they are in a sysplex or are connected in a GRS complex. If you need to share the content of the SBLZAUTH data set, a separate copy must be created for each z/OS 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 Engineering Workflow Management.

Please note the following points:

- If you want to install Engineering Workflow Management 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.
- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.
- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing Engineering Workflow Management

6.1.1 SMP/E Considerations for Installing Engineering Workflow Management

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of Engineering Workflow Management.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 23. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

Figure 23. SMP/E Options Subentry Values

Subentry	Value	Comment
DSSPACE	(1500,1500,1500)	3390 DASD tracks
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

6.1.3 Overview of the installation steps

Overview of steps required to install IBM Engineering Workflow Management.

1. Upload sample JCL from the client
2. Expand the sample jcl file by using the TSO Receive command
3. Sample Jobs
4. Run the job to allocate sequential data sets that the FTP step will use
5. Upload the compressed RELFILES and SMPMCS from the client
6. Expand the RELFILEs by running the sample job, BLZEXPND
7. Delete previous release of IBM Engineering Workflow Management (optional)
8. Create SMP/E Environment (optional)
9. Perform SMP/E RECEIVE
10. Allocate SMP/E target and distribution libraries
11. Create ZFS file system (optional)
12. Allocate file system paths
13. Create DDDEF entries
14. Perform SMP/E APPLY
15. Perform SMP/E ACCEPT

6.1.4 Upload Sample JCL from the client

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

1. Allocate a data set on z/OS to use as the target of the upload. You can do this by creating a data set with the characteristics from the job below or by submitting the job below. if you choose to submit the following job you need to make the following updates:
   a. Add a job card and modify the parameters to meet your site's requirements before submitting.
   b. **hlq** will be the high level qualifier you choose to use for this data set.
   c. (Optionally) Replace vvvvvv with the volser you choose to use for this data set.

```
//ALLOC    EXEC PGM=IEFBR14
//*
//JCLBIN   DD DSN=hlq.IBM.HRCC700.SMPEJOBS.BIN,
//            DISP=(NEW,CATLG,DELETE),
//            DSORG=PS,
//            RECFM=FB,
//            LRECL=80,
//            BLKSIZE=6160,
//*            VOL=SER=vvvvvv,
//            UNIT=SYSALLDA,
//            SPACE=(TRK,(15,1))
```

2. Upload the sample jcl file in binary format from the client to this z/OS data set. If the client is attached to a Windows 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 24. 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 client drive
hlq	High-level qualifier you used for the data set you allocated in the job above

```
C:\>ftp mvsaddr
Connected to mvsaddr.
220-FTP Server (user 'email_address')
220
User (mvsaddr:(none)): tsouid

331-Password:
331
Password: tsopw

230-220-FTPD1 IBM FTP CS V2R1 at mvsaddr, 01:18:20 on 2018-05-22.
230-tsouid is logged on.  Working directory is "tsouid.".
230

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:\HRCC700\IBM.HRCC700.F1.BIN 'hlq.IBM.HRCC700.SMPEJOBS.BIN'
200 Port request OK.
125 Storing data set hlq.IBM.HRCC700.SMPEJOBS.BIN
250 Transfer completed successfully.
ftp: 266720 bytes sent in 0.07 Seconds 4112.50 Kbytes/sec.

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.HRCC700.SMPEJOBS.BIN')
```

When prompted on the TSO receive command, use the appropriate DSNAME as listed below:

```
DS('hlq.IBM.HRCC700.SMPEJOBS')
```

6.1.6 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install Engineering Workflow Management. 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.HRCC700.SMPEJOBS that was uploaded.

Figure 25 (Page 1 of 2). Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
BLZSEQAL	SMP/E	Sample job to allocate sequential data sets for FTPing the product data sets into	hlq.IBM.HRCC700.F1
BLZEXPND	SMP/E	Sample job to expand the RELFILEs	hlq.IBM.HRCC700.F1
BLZDEL	SMP/E	Sample job to remove previous version(s) of IBM Engineering Workflow Management from an existing SMP/E target and distribution libraries (optional)	hlq.IBM.HRCC700.F1
BLZSMPE	SMP/E	Sample job to create an SMP/E environment (optional)	hlq.IBM.HRCC700.F1
BLZRECV1	RECEIVE	Sample SMP/E RECEIVE job for Common Components	hlq.IBM.HRCC700.F1
BLZRECV2	RECEIVE	Sample SMP/E RECEIVE job for Jazz Team Server	hlq.IBM.HRCC700.F1
BLZRECV3	RECEIVE	Sample SMP/E RECEIVE job for Change and Configuration Management	hlq.IBM.HRCC700.F1

Figure 25 (Page 2 of 2). Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
BLZRECV4	RECEIVE	Sample SMP/E RECEIVE job for Quality Management	hlq.IBM.HRCC700.F1
BLZRECV5	RECEIVE	Sample SMP/E RECEIVE job for Requirements Management	hlq.IBM.HRCC700.F1
BLZRECV7	RECEIVE	Sample SMP/E RECEIVE job for Build System Toolkit	hlq.IBM.HRCC700.F1
BLZRECV8	RECEIVE	Sample SMP/E RECEIVE job for IBM Developer for z/OS Subset	hlq.IBM.HRCC700.F1
BLZRECV9	RECEIVE	Sample SMP/E RECEIVE job for Build Agent	hlq.IBM.HRCC700.F1
BLZRECVA	RECEIVE	Sample SMP/E RECEIVE job for Websphere Liberty Profile	hlq.IBM.HRCC700.F1
BLZRECVB	RECEIVE	Sample SMP/E RECEIVE job for Jazz Reporting Services	hlq.IBM.HRCC700.F1
BLZRECVC	RECEIVE	Sample SMP/E RECEIVE job for Global Configuration Management	hlq.IBM.HRCC700.F1
BLZRECVD	RECEIVE	Sample SMP/E RECEIVE job for Engineering Lifecycle Optimization - Engineering Insights	hlq.IBM.HRCC700.F1
BLZRECVE	RECEIVE	Sample SMP/E RECEIVE job for Link Index Provider	hlq.IBM.HRCC700.F1
BLZALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	hlq.IBM.HRCC700.F1
BLZZFS	ALLOMZF	Sample job to create, format, and mount the data set for the ZFS file system (optional)	hlq.IBM.HRCC700.F1
BLZISMKD	MKDIR	Sample job to invoke the supplied BLZMKDIR EXEC to allocate file system paths	hlq.IBM.HRCC700.F1
BLZDDDEF	DDDEF	Sample job to define SMP/E DDDEFs	hlq.IBM.HRCC700.F1
BLZAPPLY	APPLY	Sample SMP/E APPLY job	hlq.IBM.HRCC700.F1
BLZACCPT	ACCEPT	Sample SMP/E ACCEPT job	hlq.IBM.HRCC700.F1

6.1.7 Run the job to allocate sequential data sets that the FTP step will use

Edit and submit sample job **BLZSEQAL** in the **hlq**.IBM.HRCC700.SMPEJOBS 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 client

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

```
C:\>ftp mvsaddr
Connected to mvsaddr.
220-FTP Server (user 'email_address')
220
User (mvsaddr:(none)): tsouid

331-Password:
331
Password: tsopw

230-220-FTPD1 IBM FTP CS V2R3 at mvsaddr, 05:36:25 on 2020-02-24.
230-tsouid is logged on.  Working directory is "tsouid.".
230

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 .
```

If you are installing Jazz Team Server - HRJS700:

```
ftp> mput d:\HRJS700\IBM.HRJS700.F*
200 Port request OK.
125 Storing data set IBM.HRJS700.F1.BIN
250 Transfer completed successfully.
ftp: 104960 bytes sent in 0.03 Seconds 4227.20 Kbytes/sec.
200 Port request OK.
```

```
125 Storing data set IBM.HRJS700.F2.BIN
250 Transfer completed successfully.
ftp: 456464000 bytes sent in 30.73 Seconds 11419.05 Kbytes/sec.

ftp> put d:\HRJS700\IBM.HRJS700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRJS700.SMPMCS
250 Transfer completed successfully.
ftp: 4560 bytes sent in 0.01 Seconds 733.33 Kbytes/sec.
```

If you are installing Build System Toolkit - HRBT700:

```
ftp> mput d:\HRBT700\IBM.HRBT700.F*
200 Port request OK.
125 Storing data set IBM.HRBT700.F1.BIN
250 Transfer completed successfully.
ftp: 695520 bytes sent in 0.07 Seconds 8808.89 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F10.BIN
250 Transfer completed successfully.
ftp: 766720 bytes sent in 0.32 Seconds 3737.28 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F2.BIN
250 Transfer completed successfully.
ftp: 554833120 bytes sent in 36.78 Seconds 11329.86 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F3.BIN
250 Transfer completed successfully.
ftp: 59520 bytes sent in 0.01 Seconds 1651.43 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F4.BIN
250 Transfer completed successfully.
ftp: 95440 bytes sent in 0.03 Seconds 3897.93 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F5.BIN
250 Transfer completed successfully.
ftp: 884640 bytes sent in 0.10 Seconds 9599.18 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F6.BIN
250 Transfer completed successfully.
ftp: 95440 bytes sent in 0.03 Seconds 4186.67 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F7.BIN
250 Transfer completed successfully.
ftp: 884640 bytes sent in 0.10 Seconds 9698.14 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBT700.F8.BIN
250 Transfer completed successfully.
ftp: 97600 bytes sent in 0.03 Seconds 4266.67 Kbytes/sec.
```

```
200 Port request OK.
125 Storing data set IBM.HRBT700.F9.BIN
250 Transfer completed successfully.
ftp: 904880 bytes sent in 0.10 Seconds 9703.43 Kbytes/sec.

ftp> put d:\HRBT700\IBM.HRBT700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRBT700.SMPMCS
250 Transfer completed successfully.
ftp: 74960 bytes sent in 0.02 Seconds 3374.55 Kbytes/sec.
```

If you are installing IBM Developer for z/OS Subset - HRDV700:

```
ftp> mput d:\HRDV700\IBM.HRDV700.F*
200 Port request OK.
125 Storing data set IBM.HRDV700.F1.BIN
250 Transfer completed successfully.
ftp: 1211520 bytes sent in 0.12 Seconds 9815.93 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRDV700.F2.BIN
250 Transfer completed successfully.
ftp: 22640 bytes sent in 0.01 Seconds 2160.00 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRDV700.F3.BIN
250 Transfer completed successfully.
ftp: 303760 bytes sent in 0.07 Seconds 8268.24 Kbytes/sec.

ftp> put d:\HRDV700\IBM.HRDV700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRDV700.SMPMCS
250 Transfer completed successfully.
ftp: 3040 bytes sent in 0.2 Seconds 511.66 Kbytes/sec.
```

If you are installing Build Agent - HRBA700:

```
ftp> mput d:\HRBA700\IBM.HRBA700.F*
200 Port request OK.
125 Storing data set IBM.HRBA700.F1.BIN
250 Transfer completed successfully.
ftp: 31920 bytes sent in 0.01 Seconds 2308.57 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRBA700.F2.BIN
250 Transfer completed successfully.
ftp: 1439600 bytes sent in 0.15 Seconds 9420.53 Kbytes/sec.

ftp> put d:\HRBA700\IBM.HRBA700.SMPMCS
200 Port request OK.
```

125 Storing data set IBM.HRBA700.SMPMCS
250 Transfer completed successfully.
ftp: 2240 bytes sent in 0.00 Seconds 1080.00 Kbytes/sec.

If you are installing Change and Configuration Management - HRCM700

ftp> **mput d:\HRCM700\IBM.HRCM700.F***
200 Port request OK.
125 Storing data set IBM.HRCM700.F1.BIN
250 Transfer completed successfully.
ftp: 73920 bytes sent in 0.02 Seconds 3381.82 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCM700.F2.BIN
250 Transfer completed successfully.
ftp: 580288320 bytes sent in 39.28 Seconds 11266.47 Kbytes/sec.

ftp> **put d:\HRCM700\IBM.HRCM700.SMPMCS**
200 Port request OK.
125 Storing data set IBM.HRCM700.SMPMCS
250 Transfer completed successfully.
ftp: 5840 bytes sent in 0.01 Seconds 822.86 Kbytes/sec.
If you are installing Quality Management - HRQM700

ftp> **mput d:\HRQM700\IBM.HRQM700.F***
200 Port request OK.
125 Storing data set IBM.HRQM700.F1.BIN
250 Transfer completed successfully.
ftp: 69440 bytes sent in 0.02 Seconds 3295.24 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRQM700.F2.BIN
250 Transfer completed successfully.
ftp: 657624400 bytes sent in 51.40 Seconds 11157.74 Kbytes/sec.

ftp> **put d:\HRQM700\IBM.HRQM700.SMPMCS**
200 Port request OK.
125 Storing data set IBM.HRQM700.SMPMCS
250 Transfer completed successfully.
ftp: 5920 bytes sent in 0.01 Seconds 1152.00 Kbytes/sec.
If you are installing Requirements Management - HRRM700

ftp> **mput d:\HRRM700\IBM.HRRM700.F***
200 Port request OK.
125 Storing data set IBM.HRRM700.F1.BIN
250 Transfer completed successfully.
ftp: 73200 bytes sent in 0.02 Seconds 3345.45 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRRM700.F2.BIN
250 Transfer completed successfully.
ftp: 663247200 bytes sent in 42.57 Seconds 11363.55 Kbytes/sec.

```
ftp> put d:\HRRM700\IBM.HRRM700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRRM700.SMPMCS
250 Transfer completed successfully.
ftp: 7200 bytes sent in 0.01 Seconds 1017.14 Kbytes/sec.
```

If you are installing Common Components - HRCC700

```
ftp> mput d:\HRCC700\IBM.HRCC700.F*
200 Port request OK.
125 Storing data set IBM.HRCC700.F1.BIN
250 Transfer completed successfully.
ftp: 266720 bytes sent in 0.04 Seconds 6561.90 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F10.BIN
250 Transfer completed successfully.
ftp: 455520 bytes sent in 0.07 Seconds 7546.67 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F11.BIN
250 Transfer completed successfully.
ftp: 29360 bytes sent in 0.12 Seconds 440.00 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F12.BIN
250 Transfer completed successfully.
ftp: 457920 bytes sent in 0.05 Seconds 7981.75 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F13.BIN
250 Transfer completed successfully.
ftp: 868320 bytes sent in 0.38 Seconds 2164.04 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F14.BIN
250 Transfer completed successfully.
ftp: 4320 bytes sent in 0.38 Seconds 1017.14 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F2.BIN
250 Transfer completed successfully.
ftp: 412160 bytes sent in 0.05 Seconds 7425.31 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F3.BIN
250 Transfer completed successfully.
ftp: 29304880 bytes sent in 2.54 Seconds 11588.90 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F4.BIN
250 Transfer completed successfully.
ftp: 356080 bytes sent in 0.07 Seconds 8444.44 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F5.BIN
250 Transfer completed successfully.
```

```
ftp: 6720 bytes sent in 0.01 Seconds 1240.00 Kbytes/sec.
125 Storing data set IBM.HRCC700.F6.BIN
250 Transfer completed successfully.
ftp: 923040 bytes sent in 0.03 Seconds 7007.65 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F7.BIN
250 Transfer completed successfully.
ftp: 28800 bytes sent in 0.01 Seconds 2245.33 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F8.BIN
250 Transfer completed successfully.
ftp: 455520 bytes sent in 0.05 Seconds 8385.19 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRCC700.F9.BIN
250 Transfer completed successfully.
ftp: 28800 bytes sent in 0.01 Seconds 2245.33 Kbytes/sec.

ftp> put d:\HRCC700\IBM.HRCC700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRCC700.SMPMCS
250 Transfer completed successfully.
ftp: 39520 bytes sent in 0.01 Seconds 2416.00 Kbytes/sec.
```

If you are installing Websphere Liberty Profile - HRWL700

```
ftp> mput d:\HRWL700\IBM.HRWL700.F*
200 Port request OK.
125 Storing data set IBM.HRWL700.F1.BIN
250 Transfer completed successfully.
ftp: 74960 bytes sent in 0.02Seconds 3607.62 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRWL700.F2.BIN
250 Transfer completed successfully.
ftp: 287663680 bytes sent in 21.78 Seconds 11649.77 Kbytes/sec.

ftp> put d:\HRWL700\IBM.HRWL700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRWL700.SMPMCS
250 Transfer completed successfully.
ftp: 2640 bytes sent in 0.00 Seconds 1160.00 Kbytes/sec.
```

If you are installing Jazz Reporting Services - HRRS700

```
ftp> mput d:\HRRS700\IBM.HRRS700.F*
200 Port request OK.
125 Storing data set IBM.HRRS700.F1.BIN
250 Transfer completed successfully.
ftp: 170240 bytes sent in 0.03 Seconds 5183.03 Kbytes/sec.
200 Port request OK.
```

```
125 Storing data set IBM.HRRS700.F2.BIN
250 Transfer completed successfully.
ftp: 581082000 bytes sent in 33.34 Seconds 11679.21 Kbytes/sec.

ftp> put d:\HRRS700\IBM.HRRS700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRRS700.SMPMCS
250 Transfer completed successfully.
ftp: 5600 bytes sent in 0.01 Seconds 880.00 Kbytes/sec.
```

If you are installing Global Configuration Management - HRGC700

```
ftp> mput d:\HRGC700\IBM.HRGC700.F*
200 Port request OK.
125 Storing data set IBM.HRGC700.F1.BIN
250 Transfer completed successfully.
ftp: 73360 bytes sent in 0.02 Seconds 3073.33 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRGC700.F2.BIN
250 Transfer completed successfully.
ftp: 380614720 bytes sent in 26.04 Seconds 11468.70 Kbytes/sec.

ftp> put d:\HRGC700\IBM.HRGC700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRGC700.SMPMCS
250 Transfer completed successfully.
ftp: 4480 bytes sent in 0.01 Seconds 832.00 Kbytes/sec.
```

If you are installing Engineering Lifecycle Optimization - Engineering Insights - HRRE700

```
ftp> mput d:\HRRE700\IBM.HRRE700.F*
200 Port request OK.
125 Storing data set IBM.HRRE700.F1.BIN
250 Transfer completed successfully.
ftp: 77040 bytes sent in 0.03 Seconds 3078.40 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRRE700.F2.BIN
250 Transfer completed successfully.
ftp: 389410000 bytes sent in 26.19 Seconds 11635.27 Kbytes/sec.

ftp> put d:\HRRE700\IBM.HRRE700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRRE700.SMPMCS
250 Transfer completed successfully.
ftp: 4800 bytes sent in 0.01 Seconds 896.00 Kbytes/sec.
```

If you are installing Link Index Provider - HRLI700

```
ftp> mput d:\HRLI700\IBM.HRLI700.F*
200 Port request OK.
125 Storing data set IBM.HRLI700.F1.BIN
250 Transfer completed successfully.
ftp: 48000 bytes sent in 0.02 Seconds 2684.44 Kbytes/sec.
200 Port request OK.
125 Storing data set IBM.HRLI700.F2.BIN
250 Transfer completed successfully.
ftp: 85810480 bytes sent in 4.00 Seconds 11241.59 Kbytes/sec.

ftp> put d:\HRLI700\IBM.HRLI700.SMPMCS
200 Port request OK.
125 Storing data set IBM.HRLI700.SMPMCS
250 Transfer completed successfully.
ftp: 2240 bytes sent in 0.00 Seconds 640.00 Kbytes/sec.

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

6.1.9 Expand the RELFILEs by running the sample job, BLZEXPND:

Edit and submit sample job BLZEXPND to expand the RELFILEs. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

6.1.10 Delete previous release of Engineering Workflow Management (Optional)

If you wish to install Engineering Workflow Management into an existing set of SMP/E target and distribution libraries that contain a previous release of IBM Engineering Workflow Management then you should run this job to delete the previous release. If you are installing Engineering Workflow Management into a new set of SMP/E target and distribution libraries then you do not need to run this job.

Before running this job you will need to create a dummy function SYSMOD, that can be used to delete the previous release. Edit the sample function sysmod supplied in BLZDELF and specify all the FMIDS that are to be deleted from existing SMP/E target and distribution libraries in the DELETE operand of the ++VER MCS statement.

Edit and submit sample job BLZDEL to delete the previous release of the Engineering Workflow Management. 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.

6.1.11 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 data set for this install, edit and submit sample job BLZSMPE to allocate the SMP/E data sets for

Engineering Workflow Management. 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.

6.1.12 Perform SMP/E RECEIVE

If you are installing HRCC700, Common Components, edit and submit sample job BLZRECV1 to perform the SMP/E RECEIVE. 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.

If you are installing HRJS700, Jazz Team Server, edit and submit sample job BLZRECV2 to perform the SMP/E RECEIVE. 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.

If you are installing HRCM700, Change and Configuration Management, edit and submit sample job BLZRECV3 to perform the SMP/E RECEIVE. 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.

If you are installing HRQM700, Quality Management, edit and submit sample job BLZRECV4 to perform the SMP/E RECEIVE. 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.

If you are installing HRRM700, Requirements Management, edit and submit sample job BLZRECV5 to perform the SMP/E RECEIVE. 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.

If you are installing HRBT700, Build System Toolkit, edit and submit sample job BLZRECV7 to perform the SMP/E RECEIVE. 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.

If you are installing HRDV700, IBM Developer for z/OS Subset, edit and submit sample job BLZRECV8 to perform the SMP/E RECEIVE. 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.

If you are installing HRBA700, Build Agent, edit and submit sample job BLZRECV9 to perform the SMP/E RECEIVE. 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.

If you are installing HRWL700, Websphere Liberty Profile, edit and submit sample job BLZRECVA to perform the SMP/E RECEIVE. 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.

If you are installing HRRS700, Jazz Reporting Services, edit and submit sample job BLZRECVB to perform the SMP/E RECEIVE. 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.

If you are installing HRGC700, Global Configuration Management, edit and submit sample job BLZRECVC to perform the SMP/E RECEIVE. 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.

If you are installing HRRE700, Engineering Lifecycle Optimization - Engineering Insights, edit and submit sample job BLZRECVD to perform the SMP/E RECEIVE. 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.

If you are installing HRLI700, Link Index Provider, edit and submit sample job BLZRECVE to perform the SMP/E RECEIVE. 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.

6.1.13 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job BLZALLOC to allocate the SMP/E target and distribution libraries for Engineering Workflow Management. 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.

Note: Regarding ABLZHFS space allocation

The ABLZHFS data set, allocated in the BLZALLOC job specifies a primary space allocation of 7200 Cylinders (108000 Tracks). This figure is based on the assumption that all FMIDs for IBM Engineering Workflow Management will be applied and accepted. If you are only applying and accepting certain FMIDs then this space allocation can be adjusted to the amount of space required for those FMIDs. The following list specifies the space allocation utilized by each FMID in the ABLZHFS data set during the ACCEPT phase of the SMP/E installation.

- HRJS700 - 15500 Tracks
- HRBT700 - 21900 Tracks
- HRBA700 - 100 Tracks
- HRCM700 - 20700 Tracks
- HRQM700 - 25000 Tracks
- HRRM700 - 21400 Tracks
- HRCC700 - 2300 Tracks
- HRWL700 - 11300 Tracks
- HRRS700 - 13500 Tracks
- HRGC700 - 12700 Tracks
- HRRE700 - 13000 Tracks
- HRLI700 - 1950 Tracks

6.1.14 Allocate, create and mount ZFS File System (Optional)

Edit and submit sample job BLZZFS to allocate, create a mountpoint, and mount a ZFS data set.

Expected Return Codes and Messages: You will receive a return code of 0 if these jobs run correctly.

6.1.15 Allocate File System Paths

The target system HFS or zFS data set must be mounted on the driving system when running the sample BLZISMKD job since the job will create paths in the HFS or zFS.

Before running the sample job to create the paths in the file system, you must ensure that OMVS is active on the driving system and that the target system's HFS or zFS file system is mounted to the driving system. zFS must be active on the driving system if you are installing Engineering Workflow Management into a file system that is zFS.

If you plan to install Engineering Workflow Management into a new HFS or zFS file system, you must create the mountpoint and mount the new file system to the driving system for Engineering Workflow Management.

The recommended mountpoint is */usr/lpp/jazz/v7.0.0*.

Edit and submit sample job BLZISMKD to allocate the HFS or zFS paths for Engineering Workflow Management. Consult the instructions in the sample job for more information.

If you create a new file system for this product, consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This action can be helpful if an IPL occurs before the installation is completed.

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

6.1.16 Create DDDEF Entries

Edit and submit sample job BLZDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for Engineering Workflow Management. 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.

Note: If you have previously installed any of the FMIDs, HRJS700, HRBT700, HRDV700, HRBA700, HRCM700, HRQM700, HRRM700, HRCC700, HRWL700, HRRS700, HRGC700, HRRE700, or HRLI700, it is not neccessary to rerun the BLZDDDEF job. It should only be run once!

6.1.17 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job BLZAPPLY to perform an SMP/E APPLY CHECK for Engineering Workflow Management. Consult the instructions in the sample job for more information.

   The latest HOLDDATA is available through several different portals, including http://service.software.ibm.com/holdata/390holddata.html. The latest HOLDDATA may identify HIPER and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

   You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

   To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the APPLY CHECK. The SMP/E root cause analysis identifies the cause only of *errors* and not of *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings, instead of errors).

   Here are sample APPLY commands:

   a. To ensure that all recommended and critical service is installed with the FMIDs, receive the latest HOLDDATA and use the APPLY CHECK command as follows

```
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND .
```

Some HIPER APARs might not have fixing PTFs available yet. You should analyze the symptom flags for the unresolved HIPER APARs to determine if the reported problem is applicable to your environment and if you should bypass the specific ERROR HOLDs in order to continue the installation of the FMIDs.

This method requires more initial research, but can provide resolution for all HIPERs that have fixing PTFs available and are not in a PE chain. Unresolved PEs or HIPERs might still exist and require the use of BYPASS.

b. To install the FMIDs without regard for unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are installed, use the SMP/E REPORT ERRSYSMODS command to identify unresolved HIPER APARs and any fixing PTFs.

```
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER),HOLDFIXCAT) .
 ..any other parameters documented in the program directory
```

This method is the quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRSYSMODS command to investigate any unresolved HIPERs. If you have received the latest HOLDDATA, you can also choose to use the REPORT MISSINGFIX command and specify Fix Category IBM.ProductInstall-RequiredService to investigate missing recommended service.

If you bypass HOLDs during the installation of the FMIDs because fixing PTFs are not yet available, you can be notified when the fixing PTFs are available by using the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink.

2. After you take actions that are 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 applies all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

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.

6.1.18 Perform SMP/E ACCEPT

Edit and submit sample job BLZACCPT to perform an SMP/E ACCEPT CHECK for Engineering Workflow Management. 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 PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of only *errors* but not *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E Commands book for details.

After you take actions that are 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 accepts 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 that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

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

6.1.19 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command identifies requisites for products that are installed in separate zones. This command also creates APPLY and ACCEPT commands in the SMPPUNCH data set. You can use the APPLY and ACCEPT commands to install those cross-zone requisites that the SMP/E REPORT CROSSZONE command identifies.

After you install Engineering Workflow Management, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries that describe all the target and distribution libraries to be reported on.

For more information about REPORT CROSSZONE, see the SMP/E manuals.

6.2 Activating Engineering Workflow Management

6.2.1 Product Customization

Refer to Engineering Workflow Management Knowledge Center to complete the configuration tasks.

http://www.ibm.com/support/knowledgecenter/SSCP65_7.0.0

7.0 Notices

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