

HCL Z Common Components  
Version 1.1.2

Program Number  
19OP1220

FMIDs:

AHFI110 English

BHFI111 Japanese

*Program Directory*

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**Note**

Before using this information and the product it supports, be sure to read the general information under Notices on page 15.

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## 1. 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 HCL Z Common Components. This publication also refers to HCL Z Common Components as ZCC.

The Program Directory contains the following sections:

- 2, Package Content on page 2 identifies the basic program materials and documentation for ZCC.
- 3, Program Support on page 3 describes the HCL support available for ZCC.
- 4, Installation Requirements and Considerations on page 4 identifies the resources and considerations that are required for installing and using ZCC.
- 5, Installation Instructions on page 8 provides detailed installation instructions for ZCC.

### 1.1 ZCC Description

HCL Z Common Components delivers common components used by other HCL Z products. These include:

- ZCC server
- Interactive Panel Viewer

ZCC is automatically included in your order when you obtain one of the following products:

- HCL Z Data Tools

### 1.2 ZCC FMID

ZCC consists of the following FMIDs:

AHFI110	English (Required)
BHFI111	Japanese feature (optional)

## 2. Package Content

ZCC is delivered as part of HCL Z Data Tools (ZDT).

### 2.1 Downloaded Materials

The distribution medium for this program is downloadable files. This program is in SMP/E RELFILE format and is installed by using SMP/E.

The downloaded materials for ZCC consist of these files:

AHFI110.pax.Z	Compressed SMP/E RELFILES and SMPMCS
AHFI110.readme.txt	Readme file with instructions and sample JCL
BHFI111.pax.Z	Optional component compressed SMP/E RELFILES and SMPMCS
BHFI111.readme.txt	Optional component Readme file with instructions and sample JCL

See 5, Installation Instructions on page 8 for more information about how to install the program.

### 2.2 Program Publications

This section identifies the publications for ZCC.

This publication can be obtained from <https://help.hcltechsw.com/zcc/welcome/index.html>

ZCC Publications	
Publication Title	Media Format
HCL Z Common Components Customization Guide and User Guide	PDF

### 3. Program Support

This section describes the HCL support available for ZCC.

Report any problems which you feel might be an error in the product materials to HCL Support.

HCL Software Customer Support is available at:

[https://support.hcltechsw.com/csm?id=csm\\_index](https://support.hcltechsw.com/csm?id=csm_index)

You might be asked to gather and submit additional diagnostics to assist HCL Support in their analysis.

Note that ZCC has the same Product ID (PID) as Z Data Tools (ZDT)

Product IDs			
FMID	PID	Component Name	Release
AHFI110	19OP1220	Z Common Components	110
BHFI111	19OP1220	Z Common Components Japanese	111

## 4. Installation Requirements and Considerations

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

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

### 4.1 Driving and Target System Requirements

#### 4.1.1 System Software Requirements

Requires a supported version of z/OS plus hardware sufficient to run z/OS.

System Software Requirements		
Program Number	Product Name	Minimum VRM
5650-ZOS	z/OS	V02.01.00 or higher

**Note:**

See the following link to view supported z/OS levels:

<https://www.ibm.com/support/pages/lifecycle/>

Refer to product documentation for any additional target system software requisites.

#### 4.1.2 DASD Storage Requirements

ZCC libraries can reside on all supported DASD types.

The figures in this section list the total space that is required for each type of library and describe the target and distribution libraries required to install ZCC.



Total DASD Space Required by ZCC		
Library Type	Total Space Required in 3390 Trks	Description
Target	750 Tracks	
Distribution	750 Tracks	
Extracted Relfiles and SMPMCS	180 Tracks (approximate)	These are temporary data sets that can be removed after the SMP/E install.

The storage allocation values for both Target and DLIB data sets can be found in sample HFIALLOC.

The storage requirements of ZCC must be added to the storage required by other programs that have data in the same library.

**Note:**

Use the data in these tables to determine which libraries can be merged into common data sets. Because some ALIAS names may not be unique, you must ensure that no naming conflicts will be introduced before merging libraries.

ZCC Target Libraries					
Library DDNAME	Member Type	Target Volume	ORG	RECFM	LRECL
SHFIMENU	Message	ANY	PDS	FB	80
SHFIMODA	LMOD	ANY	PDSE	U	0
SHFIMOD1	LMOD	ANY	PDSE	U	0
SHFIPENU	Panel	ANY	PDSE	FB	80
SHFISAM1	Sample	ANY	PDS	FB	80

SHFITENU	Tables	ANY	PDS	FB	80
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- SHFIMODA must be a PDSE.
- SHFIMOD1 must be a PDSE.
- SHFIMODA must be APF authorized.

ZCC Target Libraries Japanese					
Library DDNAME	Member Type	Target Volume	ORG	RECFM	LRECL
SHFIMJPN	Message	ANY	PDS	FB	80
SHFIPJPN	Panel	ANY	PDS	FB	80
SHFITJPN	Tables	ANY	PDS	FB	80

ZCC Distribution Libraries			
Library DDNAME	ORG	RECFM	LRECL
AHFIMENU	PDS	FB	80
AHFIMODA	PDSE	U	0
AHFIMOD1	PDSE	U	0
AHFIPENU	PDS	FB	80
AHFISAM1	PDS	FB	80

AHFITENU	PDS	FB	80
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- AHFIMODA must be a PDSE.
- AHFIMOD1 must be a PDSE.

ZCC Distribution Libraries Japanese			
Library DDNAME	ORG	RECFM	LRECL
AHFIMJPN	PDS	FB	80
AHFIPJPN	PDS	FB	80
AHFITJPN	PDS	FB	80

## 5. Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of ZCC.

Note the following points:

- If you want to install ZCC 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.

### 5.1 Installing ZCC

#### 5.1.1 SMP/E Considerations for Installing ZCC

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

**Note:** Install ZCC in the same SMP/E Target/DLIB as HCL Z Data Tools (ZDT).

#### 5.1.2 SMP/E Options Subentry Values

The following table shows the recommended values for certain SMP/E CSI subentries.

**Attention:**

Using values lower than the recommended values can result in failures in the installation.

SMP/E Options Subentry Values		
Subentry	Value	Comment
DSSPACE	(1200,1200,1400)	Space allocation
PEMAX	SMP/E Default	HCL recommends using the SMP/E default for PEMAX.

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.

### **5.1.3 Overview of the installation steps**

Overview of steps required to install HCL Z Common Components.

1. Allocate file system to hold web download package
2. Upload the web download package to the host
3. Extract and expand the compressed SMPMCS and RELFILES
4. Extract the sample jobs
5. Perform SMP/E RECEIVE
6. Allocate SMP/E target and distribution libraries
7. Create DDDEF entries
8. Perform SMP/E APPLY
9. Perform SMP/E ACCEPT
10. Clean Up Obsolete Data Sets, Paths

### **5.1.4 Allocate file system to hold web download package**

The SMP/E input data sets to install HCL Z Common Components are provided as compressed files in archive AHFI110.pax.Z which must be uploaded to z/OS as a z/OS UNIX file. You can either create a new z/OS UNIX file system (zFS) or create a new directory in an existing file system to place the download package.

You can use the sample JCL in AHFI110.readme.txt file to create a new file system, and directory, for the download package.

### 5.1.5 Upload the web download package to the host

Upload the AHFI110.readme.txt file, and the AHFI110.pax.Z file from your workstation to the z/OS UNIX file system. See the following table for the file formats.

Package Files		
Required ZCC Files		
File Name	Format	Size (approximate)
AHFI110.pax.Z	Binary	2MB
AHFI110.readme.txt	ASCII	20K
Optional ZCC Files		
File Name	Format	Size (approximate)
BHFI111.pax.Z	Binary	2MB
BHFI111.readme.txt	ASCII	20K

### 5.1.6 Extract and expand the compressed SMPMCS and RELFILES

The AHFI110.readme.txt file uploaded in the previous step holds a sample JCL to expand the compressed SMPMCS and RELFILES from the uploaded AHFI110.pax.Z files into data sets for use by the SMP/E RECEIVE job.

The following figure lists extracted data sets that are not used by ZCC, but are required as input for SMP/E.

Required ZCC RelFiles and SMPMCS			
Data Set Name	ORG	RECFM	LRECL
hlq.HCL.AHFI110.F1	PDS	FB	80

hlq.HCL.AHFI110.F2	PDS	FB	80
hlq.HCL.AHFI110.F3	PDS	U	0
hlq.HCL.AHFI110.F4	PDS	FB	80
hlq.HCL.AHFI110.F5	PDS	FB	80
hlq.HCL.AHFI110.F6	PDS	FB	80
hlq.HCL.AHFI110.F7	PDSE	U	0
hlq.HCL.AHFI110.F8	PDSE	U	0
hlq.HCL.AHFI110.SMPMCS	SEQ	FB	80
<b>Optional ZCC RelFiles and SMPMCS</b>			
<b>Data Set Name</b>	<b>ORG</b>	<b>RECFM</b>	<b>LRECL</b>
hlq.HCL.BHFI111.F1	PDS	FB	80
hlq.HCL.BHFI111.F2	PDSE	U	0
hlq.HCL.BHFI111.F3	PDS	FB	80
hlq.HCL.BHFI111.F4	PDS	FB	80
hlq.HCL.BHFI111.F5	PDS	FB	80
hlq.HCL.BHFI111.F6	PDSE	U	0
hlq.HCL.BHFI111.SMPMCS	SEQ	FB	80

**Note:**

These are temporary data sets, which can be removed after the SMP/E install.

**5.1.7 Sample jobs**

The following sample installation jobs are provided as part of the product to help you install ZCC. It is recommended that sample HFICOPY is used to extract the other samples from the SMP/E RELFILES.

If you want to install the ZCC Japanese components, it is recommended that sample job HFICOPYJ is used to extract the other samples from the SMP/E RELFILES.

<b>Sample Installation Jobs</b>			
<b>Job Name</b>	<b>Job Type</b>	<b>Description</b>	<b>RELFILE</b>
HFICOPY	COPY	Sample to copy other sample members	hlq.HCL.AHFI110.F2
HFIRECEV	RECEIVE	Sample SMP/E RECEIVE job	hlq.HCL.AHFI110.F2
HFIALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	hlq.HCL.AHFI110.F2
HFIDDEF	DDDEF	Sample job to define SMP/E DDDEFs	hlq.HCL.AHFI110.F2
HFIAPPLY	APPLY	Sample SMP/E APPLY job	hlq.HCL.AHFI110.F2
HFIACCEP	ACCEPT	Sample SMP/E ACCEPT job	hlq.HCL.AHFI110.F2
<b>Sample Installation Jobs Japanese Components</b>			
<b>Job Name</b>	<b>Job Type</b>	<b>Description</b>	<b>RELFILE</b>
HFICOPYJ	COPY	Sample to copy other sample members	hlq.HCL.AHFI110.F2



HFIRECVJ	RECEIVE	Sample SMP/E RECEIVE job	hlq.HCL.AHFI110.F2
HFIALLOJ	ALLOCATE	Sample job to allocate target and distribution libraries	hlq.HCL.AHFI110.F2
HFIDDDFJ	DDDEF	Sample job to define SMP/E DDDEFs	hlq.HCL.AHFI110.F2
HFIAPLYJ	APPLY	Sample SMP/E APPLY job	hlq.HCL.AHFI110.F2
HFIACPTJ	ACCEPT	Sample SMP/E ACCEPT job	hlq.HCL.AHFI110.F2

### **Expected Return Codes and Messages:**

Return code of 0 is expected for all steps if each job runs correctly.

#### **5.1.8 Perform SMP/E RECEIVE**

Edit and submit sample job HFIRECEV to perform the SMP/E RECEIVE for ZCC. Consult the instructions in the sample job for more information.

If you want to receive the ZCC Japanese component, edit and submit the sample job HFIRECVJ to perform the SMP/E RECEIVE for these components

#### **5.1.9 Allocate SMP/E Target and Distribution Libraries**

Edit and submit sample job HFIALLOC to allocate the SMP/E target and distribution libraries for ZCC. Consult the instructions in the sample job for more information.

If you have received any ZCC Japanese component, edit and submit the sample job HFIALLOJ to allocate SMP/E target and distribution libraries for this component.

#### **5.1.10 Create DDDEF Entries**

Edit and submit sample job HFIDDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for ZCC. Consult the instructions in the sample job for more information.

If you have received any ZCC Japanese component, edit and submit the sample job HFIDDDFJ to create DDDEF entries for the SMP/E target and distribution libraries for this component.

#### **5.1.11 Perform SMP/E APPLY**

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job HFIAPPLY to perform an SMP/E APPLY CHECK for ZCC. Consult the instructions in the sample job for more information.
2. If you have received any ZCC Japanese component, edit and submit the sample job HFIAPLYJ to perform an SMP/E APPLY CHECK for this component.
3. After you take actions that are indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

#### **5.1.12 Perform SMP/E ACCEPT**

1. Edit and submit sample job HFIACCEP to perform an SMP/E ACCEPT CHECK for ZCC. Consult the instructions in the sample job for more information.
2. If you have applied ZCC Japanese component, edit and submit the sample job HFIACPTJ to perform an SMP/E ACCEPT CHECK for this component.
3. After you take actions that are indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

#### **5.1.13 Clean Up Obsolete Data Sets, Paths**

The web download data sets listed in section 5.1.6 “Extract and expand the compressed SMPMCS and RELFILEs” are temporary data sets. You can delete these data sets after you complete the SMP/E install.

## **5.2 Product Customization**

The publication *HCL Z Common Components V1R1 Customization Guide and User Guide* contains the necessary information to customize and use ZCC.

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