



Program Directory for z/VSE Version 4

Version 4 Release 3.1

Program Number 5609-ZV4

Document Date: August 2011

GI11-2698-07

Note!

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

This program directory, dated August 2011, applies to z/VSE Version 4 Release 3.1 (z/VSE V4.3.1) , Program Number 5609-ZV4 for the following:

Feature Numbers	Content	System Name
4001/4002	z/VSE V4 English base on 3590/3592 cartridge	z/VSE V4
4003	z/VSE V4 English base on CD-ROM	z/VSE V4
4011/4012	z/VSE V4 Japanese base on 3590/3592 cartridge	z/VSE V4
4013	z/VSE V4 Japanese base on CD-ROM	z/VSE V4

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

© **Copyright International Business Machines Corporation 2006, 2011. All rights reserved.**

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

Contents

Notices	v
Trademarks and Service Marks	vi
Summary of changes with z/VSE	vii
1.0 Introduction	1
2.0 Program Materials	3
2.1 For Users who have not ordered all z/VSE BASE Products	4
2.1.1 General Description	4
2.1.2 Jobstreams included for deleting z/VSE BASE products	4
2.1.3 Special considerations when deleting CICS Transaction Server	4
2.2 z/VSE 4.3.1 - BASIC Machine Readable Material (MRM)	5
2.2.1 z/VSE BASE - MEDIA and VOLUMES	6
2.2.2 z/VSE BASE - PRODUCTS / COMPONENTS - on cartridge	7
2.2.3 z/VSE BASE - MRM FILE Contents - on cartridge	9
2.2.4 z/VSE Extended BASE - PRODUCTS / COMPONENTS	11
2.2.5 z/VSE on CD-ROM	12
2.2.6 z/VSE downloadable from the Internet	12
2.3 z/VSE BASE - OPTIONAL Machine-Readable Material	14
2.4 z/VSE BASE - Program Publications	15
2.4.1 z/VSE BASE - Basic Publications	16
2.5 z/VSE OPTIONAL PROGRAMS	17
2.5.1 Optional Programs - available with z/VSE V4.3.1	17
2.5.2 Optional Programs - List of Product Identifiers	18
2.5.3 Optional Programs - Delivery	19
2.5.4 Optional Programs - File Content	20
2.5.5 Optional Programs - Basic Publications	20
2.5.6 Optional Programs - Licensed Publications	26
3.0 Program Support	27
3.1 Preventive Service Planning	27
3.2 Recommended Service Level	27
3.3 Statement of Support Procedures	28
4.0 Program and Service Level Information	29
4.1 Program Level Information	29
4.2 Service Level Information	30
4.3 Cumulative Service Tape	30
5.0 Installation Requirements and Considerations	31
5.1 System Requirements	31

5.1.1	Operating System Requirements	31
5.1.2	z/VSE Processor Support	31
5.1.3	Processor Details	31
5.1.4	Minimum System Configuration	32
5.1.5	DASD Storage Requirements	32
6.0	Special Considerations	33
6.1	Hints and Tips for z/VSE BASE Programs	33
6.1.1	z/VSE Fast Service Upgrade (FSU)	33
6.1.1.1	Before starting the FSU	33
6.1.1.2	FSU	33
6.1.2	Using a Remote Tape Image on a Workstation to copy the Base tape to a Real Tape	35
6.1.3	OS/390 Library - API	36
6.1.4	Device Support Facilities (DSF 1.17)	36
6.1.5	HLASM Release 1.6.0	36
6.1.6	HLASM Support with ACF/SSP Version 4, Release 8	36
6.1.7	CICS TS	37
6.1.8	SVA Setup	37
6.1.9	ACF/VTAM V4.2 31-bit I/O Buffer support	37
6.1.10	Telnet Terminal Definition and Autoinstall	38
6.1.11	DITTO	38
6.1.12	IOCP	38
6.1.13	Language Environment for z/VSE	39
6.1.13.1	LE/VSE Run-time options:	39
6.1.13.2	PL/I and Multitasking	39
6.1.13.3	LE/VSE Attention Routine Interface and Commands	39
6.2	IPv6/VSE V1.1.0	40
6.3	IBM WebSphere MQ for z/VSE V3.0.0	40
6.4	DL/I VSE V1.12	40
6.5	Rational COBOL Runtime for z/VSE V7.5.0	41
6.6	DOS/VS RPG II Support for CICS TS	41
6.7	TCP/IP for VSE/ESA	42
6.8	Installation Hints and Tips	43
6.8.1	Installation of VSE Connector Workstation code	43
6.8.2	Installation of the Java-Based TCP/IP for VSE/ESA Configuration Dialog	43
6.8.3	CWS Client Authentication	43
6.9	Publication Updates	44
6.9.1	Accessing VSE Performance Documentation	44
6.10	Hints and Tips for VSE/ESA Optional Programs	45
7.0	Installation Instructions	47
7.1.1	ICKDSF Considerations when placing the VTOC on Large DASDs	47
8.0	z/VSE V4.3.1 Install Logic	49
9.0	Reader's Comments	51

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.

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 license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, Japan

Trademarks and Service Marks

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

AD/Cycle	ES/4381	Redbooks
Advanced Function Printing	ES/9000	RETAIN
AFP	ES/9370	RS/6000
BookManager	ESCON	S/390
BookMaster	FICON	S/390 Parallel Enterprise Server
C/370	FlashCopy	SAA
CICS	GDDM	SQL/DS
CICS/ESA	Hipersockets	System/390
CICS/VSE	IBM	VisualAge
COBOL/370	IBM(logo)	VisualGen
CUA	IBMLink	VM/ESA
Database 2	Language Environment	VSE/ESA
DataPropagator	MQSeries	VTAM
DB2	Multiprise	WebSphere
DFSORT	MVS	xSeries
ECKD	NetView	z/Architecture
e(logo)server	OS/2	z/OS
eServer	OS/390	z/VM
Enterprise Storage Server	Print Services Facility	z/VSE
e(logo)business	QMF	zSeries
ES/3090	RAMAC	System z

The following terms used in this document, are trademarks of other companies as follows:

Microsoft, Windows, Windows NT and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product names or service names may be trademarks or service marks of others.

Summary of changes with z/VSE

The following summarizes the changes with z/VSE 4.3.1

For an overview of functional enhancements of z/VSE V4.3.1, please see the

- z/VSE Home Page:
<http://www.ibm.com/systems/z/os/zvse>

Updated z/VSE BASE PROGRAMs

- none

Updated OPTIONAL PROGRAMs

- none

No longer available with z/VSE 4.3.1

- none

z/VSE ordering through ShopzSeries is now available in all countries (except embargoed countries). ShopzSeries allows you to select CD-ROM, cartridges or internet delivery.

z/VSE is provided on CD-ROM for customers from the following countries:

- **USA, CANADA and BRAZIL**
- **EUROPE:** Austria, Bulgaria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungaria, Ireland, Italy, Luxemburg, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom
- **AFRICA:**
Algeria, Benin, Burkina Faso, Cameroon, Central Africa Rep. Chad, Congo, Cote D'Ivoire, Egypt, Gabon, Gambia, Guinea, Mali, Mauritania, Morocco, Niger, Senegal, South Africa, Togo, Tunisia
- **Near/Middle EAST:**
Bahrein, Dubai/Abu Dhabi, Israel, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen
- **ASIA:** Pakistan, Japan, Australia, New Zealand, Indonesia, Malaysia, Philippines, Thailand, Singapore, Brunei, Sri Lanka, Vietnam, India, Korea, Hong Kong, Macao, China, Taiwan

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 z/VSE V4.3.1. You should read all of this program directory before installing the program and then keep it for future reference.

The program directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic and optional program materials and documentation for z/VSE V4.3.1.
- 3.0, “Program Support” on page 27 describes the IBM support available for z/VSE V4.3.1.
- 4.0, “Program and Service Level Information” on page 29 lists the APARs (program level) and PTFs
- 5.0, “Installation Requirements and Considerations” on page 31 identifies the resources and considerations for installing and using z/VSE V4.3.1.
- 7.0, “Installation Instructions” on page 47 provides detailed installation instructions for z/VSE V4.3.1.
- 8.0, “z/VSE V4.3.1 Install Logic” on page 49 provides the install logic for z/VSE V4.3.1.

Before installing z/VSE V4.3.1, read 3.1, “Preventive Service Planning” on page 27. This section tells you how to find any updates to the information and procedures in this program directory.

2.0 Program Materials

An IBM program is identified by a program number and a feature code. The program number for z/VSE V4.3.1 is 5609-ZV4.

The program announcement material describes the features supported by z/VSE V4.3.1. Ask your IBM marketing representative for this information if you have not already received a copy.

The following sections identify:

- The basic and optional program materials available with this program
- Program Source Materials

Customers with access to View Program Listings (VPL), such as through SoftwareXcel Extended, can access program listings formerly provided through microfiche.

Those customers without access to VPL can contact their IBM representative.

The VPL facility provides online viewing of program listings that are available to customers.

2.1 For Users who have not ordered all z/VSE BASE Products

Customers, who have not ordered all z/VSE Products are requested to delete those products, for which they are not licensed.

2.1.1 General Description

In order to ensure successful installation, all base products are delivered with the z/VSE Version 4.3 system. You are requested to delete the base products you did not order and for which you have no license.

2.1.2 Jobstreams included for deleting z/VSE BASE products

z/VSE V4.3.1 provides ready-to-run jobs to delete base products for which you have no license.

Following is a list of these jobs, stored in ICCF library 59:

- DELCICS to delete CICS TS V1.1.1
- DELDB275 to delete DB2 Server V7.5 or to delete DB2 Client Edition V7.5
- DELDIT to delete DITTO/ESA
- DELLECOB to delete the LE/VSE COBOL runtime *)
- DELLEPLI to delete the LE/VSE PL/I runtime *)
- DELTCPIP to delete TCP/IP for VSE/ESA 1.5.0
- DELVTM to delete ACF/VTAM 4.2
- DELHLASM to delete HLASM 1.6.0
- DELREXX to delete REXX/VSE 8.3.0

Note: *) The VSE C Run-Time support will remain in the PRD2.SCEEBASE library.

To delete one of these base products, access ICCF library 59 and submit the job named in above list.

Note: Since the z/VSE System Package is tested and delivered as a full-function, pre-packaged system, any modifications to the system become the user's responsibility. If you are deleting a base component, you should be aware of the consequences of the loss of product function.

1. Since the deletion of a component is treated as altered code, solving problems may cause additional billing, if the alteration is determined to be the cause of a problem.
2. You should be aware that maintenance procedures, including the application of PTFs, may be affected if one or more components are deleted.
3. Deleting parts of LE requires updates of the CICS CSD file. Please refer to skeleton SKLE370 in ICCF library 59 for more details.
4. Do not delete the VSE C Run-Time support - otherwise CICS TS will not come up.

2.1.3 Special considerations when deleting CICS Transaction Server

- ICCF cannot be used
- The Interactive User Interface cannot be used

2.2 z/VSE 4.3.1 - BASIC Machine Readable Material (MRM)

The **z/VSE 4.3.1** is delivered either

on **THREE volumes of either 3590 or 3592 cartridges**

- z/VSE Base
- z/VSE Extended Base
- DB2 Server for VM & VSE Help Text

or on **ONE CD-ROM** containing:

- ReadMe File
- z/VSE Base
- z/VSE Extended Base
- DB2 Server for VM & VSE Help Text

or **through internet delivery** (via ShopzSeries) to be downloaded

- ReadMe File
- z/VSE Base
- z/VSE Extended Base
- DB2 Server for VM & VSE Help Text

Figure 1 on page 6 describes **MEDIA and VOLUMES** of z/VSE 4.3.1. These volumes contain all the programs and data needed for installation. z/VSE V4.3.1 is installed using the Maintain System History Program (MSHP).

Figure 2 on page 7 describes the **BASE PRODUCTS and COMPONENTS** of z/VSE 4.3.1 - on z/VSE Base cartridge.

Figure 3 on page 9 describes the **FILES** on the z/VSE Base cartridge.

Figure 4 on page 11 describes the z/VSE V4.3.1 **EXTENDED BASE PRODUCTS / COMPONENTS** - on z/VSE Extended Base cartridge

Figure 5 on page 12 describes **z/VSE V4.3.1 on CD-ROM** and the files provided through electronic delivery.

For download and installing the files from CD-ROM or provided as e-delivery, please see the VSE Install Instructions on the z/VSE Home page:

<http://www.ibm.com/systems/z/os/zvse>

2.2.1 z/VSE BASE - MEDIA and VOLUMES

Figure 1. Basic Material - z/VSE - MEDIA and VOLUMES

Medium	Feature Numbers	Physical Volume	External Label Identification
3590 cartridge	4001 (EN) 4011 (KA)	1	z/VSE4.3.1-xx
		2	z/VSE4.3.1XBASE
3592 cartridge	4002 (EN) 4012 (KA)	1	z/VSE4.3.1-xx
		2	z/VSE4.3.1XBASE
CD-ROM	4003 (EN) 4013(KA)	1	z/VSE4.3.1-xx

Notes:

1. **xx** defines the LANGUAGE of the z/VSE base, in which the system was ordered:
 - xx = EN English
 - xx = KA Kanji (Japanese)
2. The **XBASE** (Extended Base) contains further z/VSE Base Products. **DO NOT IPL the extended base tape**

2.2.2 z/VSE BASE - PRODUCTS / COMPONENTS - on cartridge

Figure 2 describes the contents of the z/VSE V4.3.1 Base

Figure 2 (Page 1 of 2). z/VSE V4.3.1 - BASE Products

Product Description	Program Number	Component-Identifier	CLC
z/VSE V4.3.1 (Package)	5609-ZV4	n/a	n/a
VSE Central Functions 8.3.0	5686-CF8	n/a	n/a
VSE/SP UNIQUE CODE	5686-CF8	5686CF801	02C
VSE/UNIQUE CODE ENGLISH	5686-CF8	5686CF802	02D
KANJI	5686-CF8	5686CF802	02E
VSE/POWER	5686-CF8	5686CF803	02C
VSE/POWER Macros	5686-CF8	5686CF803	02G
VSE/VSAM	5686-CF8	5686CF805	02C
VSE/VSAM Macros	5686-CF8	5686CF805	02G
VSE/AF SVR & BAM & GDS	5686-CF8	5686CF806	02C
VSE/AF Macros	5686-CF8	5686CF806	02G
VSE/AF Generation Feature	5686-CF8	5686CF806	02J
VSE/AF MSHP	5686-CF8	5686CF807	02C
VSE/AF Info/Analysis	5686-CF8	5686CF808	02C
VSE/AF IOCP	5686-CF8	5686CF809	02C
VSE/ICCF	5686-CF8	5686CF810	02C
VSE/FastCopy	5686-CF8	5686CF811	02C
REXX/VSE Library	5686-CF8	5686CF812	02I
REXX/VSE Kernel & Interface	5686-CF8	5686CF816	02I
OSA/SF	5686-CF8	5686CF830	0G8
VSE Connector Server	5686-CF8	5686CF835	02N
LE Base ENU + JPN	5686-CF8	5686CF832	02K
LE C ENU + JPN	5686-CF8	5686CF833	02L
LE COBOL + JPN + CICS	5686-CF8	5686CF836	02W
LE PL/I + JPN	5686-CF8	5686CF837	02Z
CICS Transaction Server 1.1.1	5648-054	564805400	B0P
TCP/IP 1.5 for VSE/ESA 1) Application Pak NFS Feature GPS Feature	5686-A04	5686A0400	ATP

Figure 2 (Page 2 of 2). z/VSE V4.3.1 - BASE Products

Product Description	Program Number	Component-Identifier	CLC
ACF/VTAM 4.2.0 2) Client/Server MultiDomain InterEnterprise	5686-065	568606501	FE6
High Level Assembler 1.6.0	5696-234	569623400	689
EREP 3.5.0	5656-260	565626001	E00
ICKDSF 1.17.0	5747-DS2	565899201	1NM
DITTO/ESA for VSE	5648-099	564809901	36O

Notes:

1. TCP/IP for VSE/ESA consists of several functional features, which are pre-installed with the base product. Each feature is key-protected. They have to be activated by entering an activation key together with the customer number, which is provided when TCP/IP for VSE/ESA was ordered.
2. ACF/VTAM V4R2 for VSE/ESA consists of three functional levels which are shipped in the base product. They are activated by entering your customer number and valid password, which is added to your order according to the ordered feature.

2.2.3 z/VSE BASE - MRM FILE Contents - on cartridge

In case of an Fast Service Upgrade (FSU) release upgrade, the downlevel check should only be done **after** the prepare step.

Figure 3 describes the files of the z/VSE Base (labelled: z/VSE4.3.1-xx)

Figure 3 (Page 1 of 2). File Content: z/VSE 4.3 BASE

File	Name
1	Header and SA Supervisor
2	VSE Standalone Utilities
3	MSHP History File - SYSRES Products
4	SYSRES Library
5	Null File
6	End of Backup Record
7	DTSFILE Header
8	DTSFILE Non-NLS
9	EOF1 - DTSFILE Trailer
10	Header File
11	MSHP History File - PRD1.MACLIB Products
12	PRD1.MACLIB Sublibrary
13	Header File
14	MSHP History File - PRD2.SCEEBASE Products
15	PRD2.SCEEBASE Sublibrary
16	Header File
17	MSHP History File - NLS Products
18	NLS Library
19	Null File
20	End of Backup Record
21	DTSFILE Header
22	DTSFILE NLS
23	EOF1 - DTSFILE Trailer
24	Header File
25	MSHP History File - Generation Features
26	Generation Feature
27	Null File

Figure 3 (Page 2 of 2). File Content: z/VSE 4.3 BASE

File	Name
28	End of Tape Record (EOT)
29	Header File
30	MSHP History File - PRD1.BASE Products
31	PRD1.BASE Sublibrary
32	Null File
33	End of Backup Record
34	Online-Message-File
35	Null File
36	End of Tape Record

2.2.4 z/VSE Extended BASE - PRODUCTS / COMPONENTS

Figure 4 describes the z/VSE V4.3.1 EXTENDED BASE Products / Components.

Figure 4. z/VSE V4.3.1 - EXTENDED BASE Products

Product Description	Program Number	ComponentID	CLC
OS/390 APIs	5686-CF8	5686CF814	02V
LE DBCS Locales	5686-CF8	5686CF834	02M
DB2 V7.5 Server f.VSE 1)	5697-F42	5697F4201	5NN
DB2 V7.4 DPRQP Q Capture	5697-F42	5697F4201	4NO
DB2 V7.5 Client Edition 1)	5697-F42	5697F4207	5NC
VSE Connector WS code 2)	5686-CF8	5686CF838	02P

Notes:

1. For an improved installability of DB2 Server for VSE Version 7.5 (5697-F42), this product is partially packaged and delivered as a key-enabled component of the z/VSE V4.3.1 base. First time DB2 users can take advantage of a free-of-charge 90-day trial period to evaluate the product. An activation key, provided with the DB2 Server for VSE V7 license, is required to use the product beyond the 90-day trial period. Packaging info: The DB2 V7 components, that are packaged onto and always distributed with the z/VSE extended base tape are DB2 Server for VSE, DB2 server for VSE client edition and Data Propagator Q Capture for VSE. If the media type is cartridge, the DB2 Help Text is distributed on a separate volume. The DB2 optional features are packaged as optional products and distributed on the z/VSE optional product 'stacked tape' if they were ordered.
2. VSE Connector Workstation code has been separated from VSE Connector Server. The VSE Connector Server is part of the z/VSE base tape, the VSE Connector Workstation code is part of the z/VSE extended base tape.

2.2.5 z/VSE on CD-ROM

The following files are available on the CD-ROM in the sequence shown below:

Figure 5. z/VSE V4.3.1 - z/VSE V4.3.1 on CD-ROM

File #	File Description	File Name
1	Readme File	ReadM431.txt
2	z/VSE Base	VSE43xyy.AWS
3	z/VSE Extended Base	VSE43xB.AWS
4	DB2 Help Text	DB2HELP.AWS

where

x is the current modification level
yy is the VSE base - language identifier
where: yy = EN English (US)
yy = KA Kanji (Japanese)

For details on the contents of the z/VSE base and the z/VSE extended base, please see Figures 2, 3 and 4. Note that the optional products are delivered on a 2nd CD-ROM in a file named: VSE431OP.AWS.

2.2.6 z/VSE downloadable from the Internet

The following files are available when downloading from Internet through ShopzSeries:

Base Tape	VSE431yy.aws
Extended Base Tape	VSE431XB.aws
DB2 Help Tape	DB2HELP.aws
Opt.Product Tape	VSE431OP.aws

Note that after downloading the respective files from the Internet, you will have the z/VSE 4.3 operating system and/or optional products available on your PC in ZIPped format. After unzipping these files you will have the files available as shown in chapter **z/VSE on CD-ROM** above.

The z/VSE operating system consists of 3 files (z/VSE base, z/VSE extended base, DB2 Help Text), for the optional products you will have only one file available: named VSE431OP.AWS. In case of multiple optional products ordered, you will find all these optional products in this one file in VSE stacked format.

The description of the next steps for processing these files can be found at the z/VSE Home Page at

<http://www.ibm.com/systems/z/os/zvse>

or in the manuals z/VSE 4.3 Installation SC33-8302 or z/VSE 4.3 System Upgrade and Service, SC33-8303, both available from the IBM Publications Center at
<http://www.elink.ibm.com/publications/servlet/pbi.wss>

2.3 z/VSE BASE - OPTIONAL Machine-Readable Material

There are no optional machine-readable materials for z/VSE V4.3.1.

2.4 z/VSE BASE - Program Publications

The following sections lists the documentation material, which is distributed with the z/VSE V4.3.1 base and optional products.

Except Program Directories, Memo to Licensees and various Programming License Specifications, z/VSE manuals are available as softcopy only. This includes VSE/POWER manuals, CICS Transaction Server for VSE/ESA manuals, and so on. You can obtain softcopy z/VSE manuals from either the:

- VSE Softcopy Collection on DVD, SK3T-8348 (delivered with z/VSE)
- IBM Publications Center, which has this internet URL:
<http://www.elink.ibm.link.ibm.com/publications/servlet/pbi.wss>

From the IBM Publications Center, you can download most z/VSE online publications free-of-charge in PDF or BOOK format.

Please note that the Licensed Program Specifications (LPS) for the following VSE products are also available and shipped in softcopy version (PDF) only. They can be found on the Softcopy Collection Kit.

z/VSE
TCP/IP for VSE/ESA
DL/I 1.12.0
DOS/VS RPG II
OS/VS RPG II
VSE/ACLR
IPv6/VSE

Those hardcopy publications, which have been added or updated with z/VSE V4.3.1 are either marked with **(N)** for NEW publications, or **(U)** for updated documentation. Your shipment contains ONE copy of all those publications, which were updated since your last order.

2.4.1 z/VSE BASE - Basic Publications

Figure 6. z/VSE Basic Publications

Publication Title	Form Number
z/VSE Release Guide	SC33-8300
VSE Softcopy Collection Kit on DVD	SK3T-8348
DB2 Server CD Doc Kit	SK3T-5257
DB2 Server Overview	GC09-2995
QMF Window Try/Buy Kit	LCD4-3781
Program Directory DB2 Server 7.5 VSE	GI10-4999
Program Directory DProp Q Capture VSE	GI10-5001
Memo to Licensees DB2 Server 7.5 VSE	GI10-5008
Memo to Licensees DProp Q Capture VSE	GI10-5010

Figure 7 identifies the basic program publications as hardcopies for further z/VSE V4.3.1 base products.

Figure 7. Publications of z/VSE 4.3 base programs

Publication Title	Form Number
CICS TS Program Directory	GI10-2508
CICS TS Licensed Programming Specs	GC34-5464
DITTO/ESA Licensed Programming Specs	GH19-8223
DITTO/ESA Program Directory	GI10-0436
ACF/VTAM Program Directory	GI10-8112
ACF/VTAM Licensed Programming Specs	GC31-6490

2.5 z/VSE OPTIONAL PROGRAMS

Optional Programs are independent products which run under the operating system z/VSE. They can be ordered together with z/VSE or additionally later on.

The distribution medium for Optional Programs is the same as used for the z/VSE base. The medium contains all the programs and data needed for installation with the Maintain System History Program (MSHP). They are in stacked format and can be installed by using the z/VSE dialogs.

If z/VSE V4.3.1 was ordered to be delivered through the Internet (e-delivery), Optional Programs have to be downloaded as described in the VSE Install Instructions on the z/VSE Home Page:

<http://www.ibm.com/systems/z/os/zvse>

2.5.1 Optional Programs - available with z/VSE V4.3.1

Prod.No.	Product Name	V.R.M	remarks
-----	-----	-----	-----
5648-063	ACF/NCP	7.8.1	3746-900 incl. NCP
5648-099	DITTO/ESA for VM feature	1.3.0	VM format
5648-F66	Rational COBOL RT for z/VSE	7.5.0	
5648-B33	AFP Font Collection	2.1.1	VSE fonts / NLS
5668-723	GDDM-IVU	1.1.3	
5668-801	GDDM-IMD	2.1.3	
5668-812	GDDM-PGF	2.1.3	
5686-011	CICSVR/VSE	1.2.0	
5686-040	PSF/VSE	2.2.1	Base and Fonts
5686-057	GDDM/VSE	3.2.0	NLS available
5686-064	ACF/SSP for VSE	4.8.1	
5686-065	ACF/VTAM for VM feature ACF/VTAM APPC Feature	4.2.0	VM format
5686-068	COBOL for VSE/ESA	1.1.0	Full/Altern.Function
5686-069	PL/I for VSE/ESA	1.1.0	Full/Altern.Function
5686-A01	C for VSE/ESA	1.1.0	Full/Altern.Function
5655-U97	WebSphere MQ for z/VSE	3.0.0	
5686-A07	CCCA for VSE/ESA	2.1.0	
5688-035	X.25 NPSI	3.9.0	
5688-190	PPFA/370	1.1.0	
5688-191	OGL/370	1.1.0	incl. NLS
5696-234	HLASM Toolkit	1.6.0	WS feature
5697-F42	DB2 Server for VSE	7.5.0	NLV JPN, DEU, FRA
	DB2 Client Edition for VSE	7.5.0	NLV JPN, DEU, FRA
	Control Center		
	Data Restore		
	QMF for VSE		Base and NLV
	QMF for Windows		Base and NLV
5735-XXB	EP	1.14.0	
5746-RG1	DOS/VS RPG II	1.3.0	
5746-SM3	DFSORT/VSE	3.4.0	
5746-XE7	VSE/ACLR	1.2.1	
5746-XXT	SDF II VSE	1.6.0	

5746-XX1	DL/I VSE	1.12.0
5686-CF8	Encryption Facility for z/VSE	1.2.0
5686-BS1	IPv6/VSE	1.1.0

2.5.2 Optional Programs - List of Product Identifiers

The following Optional Programs are available with z/VSE V4.3.1. The shown product identifiers (PRODID) are identical to those used on the Optional Program tape.

BACKUPID	COMPID	CLC	PRODID	
-----	-----	---	-----	
PSF/ACIF...2.2.1	564806201	FW0	062FW0	
PSF/API....2.2.1	564806202	FW1	062FW1	
NCP/V7.....7.8.1	564806300	78G	06378G	
DITTO.JPN..1.3.0	564809902	370	099370	
QMF/VSE...7.2.0	566872101	2NR	F422NR	Base / US English
QMF/VSE.U..7.2.0	564806102	2NS	F422NS	Upper Case English
QMF/VSE.C..7.2.0	564806103	20L	F4220L	Canadian French
QMF/VSE.R..7.2.0	564806104	2NT	F422NT	Simpl.Chinese
QMF/VSE.F..7.2.0	564806107	2NU	F422NU	French
QMF/VSE.D..7.2.0	564806108	2NV	F422NV	German
QMF/VSE.I..7.2.0	564806109	2NW	F422NW	Italian
QMF/VSE.K..7.2.0	564806110	2NX	F422NX	Japanese
QMF/VSE.H..7.2.0	564806111	2NY	F422NY	Korean
QMF/VSE.P..7.2.0	564806112	2NZ	F422NZ	Brazil.Port
QMF/VSE.S..7.2.0	564806113	200	F42200	Spanish
QMF/VSE.Y..7.2.0	564806115	201	F42201	Swiss French
QMF/VSE.Z..7.2.0	564806116	202	F42202	Swiss German
PSF/COMPAT.B300	564811310	1BM	1131BM	300Pe1 Fonts
RBCOBOLRT.7.5.0	5648F6600	750	F66750	
AFP_FONT...2.1.1	5648B3300	n/a	n/a	1)
GDDM-IVU...1.1.3	566872301	1FF	7231FF	
GDDM-IMD...2.1.3	566880101	1FG	8011FG	
GDDM-PGF...2.1.3	566881201	1F5	8121F5	
CICSVR/VSE.1.2.0	568601101	1NL	0111NL	
PSF/VSE...2.2.1	568604001	DC0	040DC0	
PSF/CODEPG.B240	568604015	FR9	040FR9	
AFP/CODEPG.B300	568604021	FS0	040FS0	
PSF/COMPAT.B240	568604055	DH1	040DH1	
PSF/COMPAT.U240	568604054	DH0	040DH0	
GDDM/VSE...3.2.0	568605701	1EA	0571EA	
GDDM/VSE.A.3.2.0	568605702	1EP	0571EP	
GDDM/VSE.B.3.2.0	568605702	1EO	0571EO	Brazilian
GDDM/VSE.C.3.2.0	568605702	1EN	0571EN	Simp.Chin.
GDDM/VSE.D.3.2.0	568605702	1EM	0571EM	Danish
GDDM/VSE.S.3.2.0	568605702	1EL	0571EL	Spanish
GDDM/VSE.T.3.2.0	568605702	1EK	0571EK	Trad.Chin
GDDM/VSE.V.3.2.0	568605702	1EJ	0571EJ	Swedish
GDDM/VSE.F.3.2.0	568605702	1EI	0571EI	French
GDDM/VSE.G.3.2.0	568605702	1EH	0571EH	German
GDDM/VSE.I.3.2.0	568605702	1EE	0571EE	Italian
GDDM/VSE.K.3.2.0	568605702	1ED	0571ED	Kanji
GDDM/VSE.N.3.2.0	568605702	1EC	0571EC	Norwegian
GDDM/VSE.Q.3.2.0	568605702	1EQ	0571EQ	Can.French

ACF/SSP....4.8.1	568606400	48G	06448G	
COB.BASE...1.1.0	568606800	18M	06818M	
COB.ENU....1.1.0	568606801	18N	06818N	
COB.JPN....1.1.0	568606802	18O	06818O	
PLI.VSE....1.1.0	568606900	18P	06918P	
C/VSE.BASE.1.1.0	5686A0100	1FY	A011FY	
C/VSE.JPN..1.1.0	5686A0101	1G4	A011G4	
DTVSE.BASE.1.1.1	5686A0200	6G8	A026G8	2)
DTVSE.JPN..1.1.1	5686A0201	6G9	A026G9	2)
WMQZVSE....3.0.0	5655U9700	300	U97300	
CCCA.VSE...2.1.0	5686A0700	1JS	A071JS	
X_25/NPSI..3.9.0	568803501	9E0	0359E0	
PPFA/370...1.1.0	568819001	A03	190A03	
OGL/370....1.1.0	568819101	A05	191A05	
OGL/370....1.1.0	568819102	AA0	191AA0	
OGL/370....1.1.0	568819103	AA1	191AA1	
OGL/370....1.1.0	568819104	AA2	191AA2	
HLASM.TLKT.1.6.0	569623401	6IM	2346IM	
DB2/NLV....7.5.0	5697F4201	5NN	F425NN	
DB2/NLV.CE.7.5.0	5697F4207	5NC	F425NC	
ASN/VSE....7.4.0	5697F4201	4NO	F424NO	
DB2CC.....7.3.0	5697F4206	3NQ	F423NQ	
DB2VSE.RCV.7.3.0	5697F4205	3NP	F423NP	
RPGII.....1.3.0	5746RG100	042	RG1042	
DFSORT/VSE.3.4.0	5746SM310	34A	SM334A	
VSE/ACLR...1.2.1	5746XE700	H06	XE7H06	
SDF.II.VSE.1.6.0	5746XXT01	228	XXT228	
SDF.II.GER.1.6.0	5746XXT03	1J7	XXT1J7	
SDF.II.DES.1.6.0	5746XXT04	1J8	XXT1J8	
SDF.II.ESP.1.6.0	5746XXT05	1J9	XXT1J9	
SDF.II.JPN.1.6.0	5746XXT02	229	XXT229	
DL/I-BASE..1.C.0	5746XX100	2I0	XX12I0	
EP_R14....1.14.0	5748EP115	4E1	EP14E1	
ZVSE.EF....1.2.0	5686CF840	02Y	CF802Y	
IPV6/VSE...1.1.0	5686BS100	B10	BS1B10	

Notes:

1. The AFP Fonts will NOT be stacked. You will get them on separate cartridges. Please note, that the AFP fonts are not distributed on CD-ROM or via e-delivery.
2. These components define the debugging functions (Debug Tool for VSE/ESA), which are part of the Full Function orders of C for VSE, PL/I for VSE and COBOL for VSE (the Debug Tool is the same for every language and can be installed only once).

2.5.3 Optional Programs - Delivery

All ordered Optional Programs will be delivered in stacked format, either on tape cartridge or in a file on CD-ROM or in a file downloaded from the Internet. There will be multiple volumes, if the ordered products will physically not fit onto one tape cartridge.

You will get Program Directories of the individual Optional Programs ordered with z/VSE V4.3.1 for

additional information on the particular programs. Please ignore the **ordering information** in these directories, as this part does not apply to these products when ordered within the z/VSE package.

The external label of the volume(s) is: **z/VSE V4.3.1 OPT x OF y**

2.5.4 Optional Programs - File Content

Figure 8 describes the file content of the Optional Program Tape

Figure 8. Program Tape - 'z/VSE V4.3.1 OPT x OF y' File Content

File	Name
1	Null File
2	Start of Stacked Tape Indicator
3	Null File
4	Header File (Copyright)
5 to 8	1st Optional Program ordered
9 to 12	2nd Optional Program ordered
x to x+3	nth Optional Program ordered
x+4	Null File
x+5	Null File
x+6	End of Stacked Tape Indicator
x+7	Null File
x+8	Null File

Refer to the individual program directories on specific information to the ordered product.

2.5.5 Optional Programs - Basic Publications

The following tables identify the **b a s i c** publications of the z/VSE V4.3.1 Optional Programs, that are available as hardcopies. The VSE Softcopy Collection Kits, which are delivered with every z/VSE order, provide further documentation to all z/VSE Optional Programs.

Figure 9. ACF/NCP 5648-063 7.8.1

Publication Title	Order/Form Number
NCP Licensed Programming Specs	GC31-6226
Program Directory	GI10-6623
Memo to Licensees	GI10-6628

Figure 10. DITTO/ESA f.VM 5648-099 1.3.0

Publication Title	Order/Form Number
Program Directory	GI10-0438

Figure 11. VisualAge Generator Server 5648-B02 1.2.0

Publication Title	Order/Form Number
Rational Cobol RT LPS	GC19-2723
Program Directory	GI10-8803

Figure 12. AFP Font Collection 5648-B33 2.1.1

Publication Title	Order/Form Number
AFP Font Collection LPS	G544-5634
Program Directory VSE Fonts	GI10-0223
PGDIR Japanese Fonts VSE	GI10-0241
PGDIR Korean Fonts VSE	GI10-0242
PGDIR S-Chinese Fonts VSE	GI10-0243
PGDIR T-Chinese Fonts VSE	GI10-0244

Figure 13. GDDM-IVU 5668-723 1.1.3

Publication Title	Order/Form Number
Program Directory	GI11-1586

Figure 14. GDDM-IMD 5668-801 2.1.3

Publication Title	Order/Form Number
Program Directory	GI11-1630

Figure 15. GDDM-PGF 5668-812 2.1.3

Publication Title	Order/Form Number
Program Directory	GI10-9657

Figure 16. CICSVR/VSE 5686-011 1.2.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC26-7323
Program Directory	GI10-4528
Memo to Licensees	GI10-4534

Figure 17. BASIC Documentation of PSF/VSE 5686-040 2.2.1

Publication Title	Order/Form Number
Licensed Programming Specifications	G544-3667
Program Directory for 2.2.1	GI10-0203
Program Directory for PSF Compat Fonts	GI10-0254

Figure 18. BASIC Documentation of GDDM/VSE 5686-057 3.2.0

Publication Title	Order/Form Number
Series Licensed Programming Specs	GC33-0876
Program Directory	GI11-1528

Figure 19. BASIC Documentation of ACF/SSP for VSE 5686-064 4.8.1

Publication Title	Order/Form Number
Licensed Programming Specifications	GC31-6230
Program Directory	GI10-6620
Memo to Licensees	GI10-6628

Figure 20. BASIC Documentation of IBM COBOL for VSE 5686-068 1.1.0

Publication Title	Order/Form Number
COBOL/VSE Licensed Programming Specs	GC26-8069
Memo to Licensees Full Function	GI10-9890
Memo to Licensees Alternate Function	GI11-1706
Memo to current Lics of the Debugger	GI10-8484
Memo to new Lics of the Debugger	GI10-8476

Figure 21. BASIC Documentation of IBM PL/I for VSE 5686-069 1.1.0

Publication Title	Order/Form Number
PL/I VSE Licensed Programming Specs	GC26-8055
Memo to Licensees Full Function	GI11-1707
Memo to Licensees Alternate Function	GI11-1708

Figure 22. BASIC Documentation of IBM C for VSE 5686-A01 1.1.0

Publication Title	Order/Form Number
C/VSE LPS	GC09-2421

Figure 23. BASIC Documentation of WebSphere MQ for z/VSE 5655-U97 3.0.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC34-6983
Memo to Users	GI13-0533
System Management Guide	GC34-6981

Figure 24. BASIC Documentation of CCCA for VSE 5686-A07 2.1.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC26-9408
Program Directory	GI10-5079

Figure 25. BASIC Documentation of X.25 NPSI 5688-035 3.9.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC30-9605
X.25 NCP PSI V3 Host Programming	SC30-3502
Program Directory	GI10-6558
General Information manual	GC20-3469

Figure 26. BASIC Documentation of PPFA/370 5688-190 1.1.0.

Publication Title	Order/Form Number
Licensed Programming Specifications	G544-3696
Quick Reference	G544-3701
Diagnosis Guide + Reference	LH40-0207
Program Directory	GI10-9679

Figure 27. BASIC Documentation of OGL/370 5688-191 1.1.0

Publication Title	Order/Form Number
Licensed Programming Specifications	G544-3697
OGL/370 Quick Reference	SX35-5032
Program Directory	GI10-8132

Figure 28. BASIC Documentation of DB2 Server for VSE 5697-F42 7.5.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC09-2982
DB2 Server Diagnosis GD + Reference	LC09-2907
DB2 Server Universal Developers Edition	LK3T-5242
Control Center Program Directory	GI10-5003
Control Center Memo to Users	GI10-5012
Data Restore Program Directory	GI10-5005
Data Restore Memo to Users	GI10-5014
QMF for VSE Program Directory	GI10-8330
QMF for VSE NLV Program Directory	GI10-8332

Figure 29. BASIC Documentation of EP 5735-XXB 1.14.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC31-6201
Program Directory	GI10-0996
Memo to Current Licensees	GI11-1517

Figure 30. BASIC Documentation of RPG II 5746-RG1 1.3.0

Publication Title	Order/Form Number
Language Reference	SC33-6031
Installation Reference	SC33-6032
Messages	SC33-6033
Auto Report	SC33-6034
User's Guide	SC33-6074
Program Directory	GI10-9770
Memo to Current Licensees	GI11-1517

Figure 31. BASIC Documentation of DFSORT/VSE 5746-SM3 3.4.0

Publication Title	Order/Form Number
Licensed Programming Specifications	GC26-7038
Reference Summary	SX26-6008
Program Directory	GI10-4513

Figure 32. BASIC Documentation of VSE/ACLR 5746-XE7 1.2.1

Publication Title	Order/Form Number
Program Directory	GI11-0645

Figure 33. BASIC Documentation of SDF II VSE 5746-XXT 1.6.0

Publication Title	Order/Form Number
SDF II Introducing Release 6	GH12-6314
SDF II Licensed Specification	GH12-6318
Program Directory	GI10-0424

Figure 34. BASIC Documentation of DL/I VSE 5746-XX1 1.12.0

Publication Title	Order/Form Number
General Information Manual	GH20-1246
Guide for New Users	SH24-5001
Library Guide + Master Index	GH24-5008
Diagnostic Guide	SH24-5002
Low Lev Code Cont. Check	SH20-9046
Ref Summary: CALL Prog. Interface	SX24-5103
Ref Summary: HLPI Interface	SX24-5120
Program Directory	GI10-0484

Figure 35. BASIC Documentation of Rational COBOL RunTime 5724-V59 7.5.0

Publication Title	Order/Form Number
Program Directory	GI10-8803
Licensed Programming Specifications	GC19-2723

Figure 36. BASIC Documentation of IPv6/VSE 5686-BS1 1.1.0

Publication Title	Order/Form Number
Program Directory	GI11-9702
Licensed Programming Specifications	GC33-8347

2.5.6 Optional Programs - Licensed Publications

Optionally available publications are orderable under the individual Optional Program product numbers. Please see the Program Directories of these products for available publications.

3.0 Program Support

This section describes the IBM support available for z/VSE V4.3.1.

3.1 Preventive Service Planning

Before installing z/VSE V4.3.1, check with your IBM Support Center or use either the Internet, Information/Access or SoftwareXcel Extended to see whether there is additional Preventive Service Planning (PSP) information that you should know. To obtain this information, specify the following UPGRADE value:

zVSE431

With this upgrade value you will see lists of subset values, one sorted by z/VSE base programs, and one sorted by z/VSE optional programs. The subset identifiers are derived from the product names, to where the subset identifiers belong.

In addition, there are the following subset values:

BASESERVICE and OPTPSERVICE

Using these values, you find a list of APARs and related PTFs for each BASE program (BASESERVICE) and OPTIONAL Program (OPTPSERVICE). These lists are identified by the products component identifier, which you may find in Chapter 'Optional Programs - List of Product Identifiers.

Before installing z/VSE V4.3.1, you should check with your IBM Support Center or use either Information/Access or SoftwareXcel Extended to see if there is additional PSP information.

3.2 Recommended Service Level

In addition to the PSP information, z/VSE offers the Recommended Service Level (RSL) to install z/VSE service preventively. The RSL consists of a list of **all** APAR/PTF numbers, which are available at specific cutoff dates. The RSL is updated bi-monthly and contains **all** available service, not only HIPER service.

The RSL for z/VSE 4.3.1 is published via a special RSL PSP bucket RSLVSE431 and on the Internet via the VSE home page

<http://www.ibm.com/systems/z/os/zvse/support/preventive.html#rs1>

The RSL PSP is ordered on tape like a HIPER PSP and the Internet RSL can be ordered electronically.

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. Please refer to Figure 2 on page 7 for component IDs (COMPID) for z/VSE V4.3.1

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of z/VSE V4.3. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

4.1 Program Level Information

The following is a list of APARs fixed and incorporated into z/VSE 4.3.1 (not visible in MSHP history file).

COMPONENT 5686CF801, ..02 (UNIQUE CODE)

PK71654 PK73367 PK75318 PK78886 PK81238 PK85690
PK86720 PK87299 PK92846 PK93687 PM05296 PM06381
PM13810

COMPONENT 5686CF803 (POWER)

DY46901 DY46922 DY46965 DY47008 DY47049 DY47093
DY47116 DY47124 DY47143 DY47168 DY47127

COMPONENTs 5686CF806, ..07, ..08, ..09 (AF)

DY46062 DY46892 DY46897 DY46914 DY46916 DY46924
DY46927 DY46928 DY46930 DY46938 DY46939 DY46940
DY46948 DY46950 DY46951 DY46953 DY46957 DY46966
DY46969 DY46970 DY46971 DY46974 DY46981 DY46984
DY46986 DY46987 DY46990 DY46992 DY46994 DY47002
DY47003 DY47007 DY47009 DY47026 DY47028 DY47035
DY47037 DY47041 DY47046 DY47053 DY47054 DY47057
DY47065 DY47066 DY47069 DY47070 DY47075 DY47077
DY47078 DY47079 DY47080 DY47088 DY47089 DY47091
DY47101 DY47105 DY47102 DY47113 DY47140 DY47144
DY47152 DY47153 DY47162 DY47165 DY47174 DY47179
DY47181 DY47111 DY47130 DY47132 DY47137 DY47198

COMPONENT 5686CF805 (VSAM)

DY46910 DY46919 DY46937 DY46946 DY46954 DY46956
DY46972 DY46979 DY46983 DY46985 DY46995 DY46996
DY47012 DY47068 DY47083 DY47084 DY47085 DY47086
DY47104 DY47114 DY47135 DY47175

COMPONENTs 5686CF812, ..16 (REXX/VSE)

PK92978 PK95610 PM16045

COMPONENT 5686CF830 (OSA/SF)

PK74701 PK86472

LE/VSE 5686CF832 (LE Base)

PK71186 PK96905 PQ66639

LE/VSE 5686CF833 (LE C)

PK74672 PM05199 PM06694

VSE Connectors 5686CF835 (Connectors)

PK71658 PK71659 PK76554 PK82701 PK82623 PK87271
PK90430 PK93908 PK98790 PM00522 PM00641 PM06028
PM06131 PM09719 PM19632 PM20512 PM20764 PM20790

LE/VSE 5686CF836 (LE COBOL)

PM00829 PM05257

LE/VSE 5686CF837 (LE PLI)

PK81297 PK98714 PM02293

TCP/IP 1.5 5686A0400 (TCP/IP 1.5)

PK71366 PK73631 PK74055 PK77248 PK82194 PK85862
PM06470 PM13088 PM18076 PM18149

Note: For APARs integrated into 5696-234 High Level Assembler 1.6.0, please see the 5696-234 Program Directory.

4.2 Service Level Information

There is no information for z/VSE V4.3.1 at this time.

4.3 Cumulative Service Tape

There is no cumulative service tape for z/VSE V4.3.1.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating z/VSE V4.3.1.

5.1 System Requirements

5.1.1 Operating System Requirements

z/VSE V4.3.1 is an operating system itself and does not require another operating system to run under. However, z/VSE V4.3.1 can run as a guest system under z/VM Version 5.4 (or later). Please note, that z/VSE V4 runs in z/Architecture mode only.

Additional information is available in

- *z/VM Version 5, Release 4, Running Guest Operating Systems*, SC24-6115
- *z/VSE Installation*, SC33-8302.

5.1.2 z/VSE Processor Support

These are the System z processors that can be used with z/VSE V4.3.1

IBM zEnterprise 114
IBM zEnterprise 196
IBM System z10 Enterprise Class
IBM System z10 Business Class
IBM System z9 Enterprise Class
IBM System z9 Business Class
IBM eServer zSeries 990
IBM eServer zSeries 890
IBM eServer zSeries 900
IBM eServer zSeries 800

5.1.3 Processor Details

Please refer to the *z/VSE Planning SC33-8301* manual.

5.1.4 Minimum System Configuration

z/VSE V4.3.1 requires the following minimum system configuration:

- 32MB of processor (real) storage.

Since the processor storage available is usually much higher, this value is mainly of interest if z/VSE is running under z/VM.

- About 916MB (environment A) or about 1030MB (environment B) or 2814 MB (environment C) of disk device space on two volumes, DOSRES and SYSWK1, as outlined in *z/VSE Planning*, SC33-8301.
- A 3590 or 3592 tape drive
- A system printer. This may be a channel-attached or adapter-attached printer controlled by VSE/POWER or a local terminal printer controlled by CICS. A terminal printer should have a minimum speed of 300 lines per minute.
- A display station. This can be a terminal or programmable workstation of any supported type.
- The system console. This can be an integrated console or any display station supported as system console.

5.1.5 DASD Storage Requirements

Please see: *z/VSE Planning*, SC33-8301 for storage requirements.

6.0 Special Considerations

Information on z/VSE Base and Optional Programs

6.1 Hints and Tips for z/VSE BASE Programs

6.1.1 z/VSE Fast Service Upgrade (FSU)

6.1.1.1 Before starting the FSU

1. z/VSE V4.3 supports a maximum of 100 SCSI disks during IPL using the IPL DEF SCSI command. The actual number might be less, depending upon your system configuration.

The recommendation is, that you define only SCSI system disks (DOSRES, SYSWK1, PAGEDATASET and lock file) with the IPL DEF SCSI command and all other SCSI disks with the AR/JCL SYSDEF SCSI statement.

Prior to performing an FSU, please adapt your IPL procedure accordingly.

6.1.1.2 FSU

FSU from releases prior to z/VSE 4.1.0 is not possible. If you choose FSU, always run the preparation step first and afterwards run the installation step. **Do not run a downlevel check** in case of a release upgrade. For preparation tasks and additional space requirements, refer to the *System Upgrade and Service* and the *Planning* manual.

FSU from z/VSE 4.1.x or z/VSE 4.2.x

- An upgrade from z/VSE 4.1.x or z/VSE V4.2.x will migrate the VSE/POWER files to the new VSE/POWER release. After the VSE/POWER files have been migrated, it is not possible to start the old system from DOSRES. Therefore, it is recommended to save the VSE/POWER files at the end of Stage 1 of FSU.

The following message is issued during Stage 2 of FSU:

```
1Q0HD  IF SPOOL FILE MIGRATION TO V8R3 IS INTENDED REPLY 'YES',  
        ELSE 'NO'
```

Please enter 'YES' to have the VSE/POWER files migrated.

If you did not save the VSE/POWER files, you may enter 'NO' and restart from DOSRES in order to perform the POFFLOAD BACKUP.

When entering 'YES', FSU will continue. In case of any errors which require a restart from DOSRES, a VSE/POWER cold start has to be performed and the VSE/POWER files have to be reloaded from backup copy.

In case your system is started usually with security set on, the following message is shown:

1QFFD VSE/POWER WARMSTART AND VSE ACCESS CONTROL NOT ACTIVATED
(SEC=NO). DO YOU WISH TO CONTINUE? (YES/NO)

Please enter 'YES' to continue. If you enter 'NO', the system will stop.

If you have chosen internet delivery (via ShopzSeries), you can use the virtual tape support of z/VSE to perform an FSU. For more information, see the z/VSE Home Page:

<http://www.ibm.com/systems/z/os/zvse>

and also the *System Upgrade and Service* manual.

There are new applications and selection panels. After the FSU, upgrade the application profiles and selection panels as described in the *System Upgrade and Service* manual.

6.1.2 Using a Remote Tape Image on a Workstation to copy the Base tape to a Real Tape

Perform the following steps to copy the tape image. Run the VSE job, as shown below, to copy the base tape image in virtual tape format residing on a workstation to a real tape (at least 3590 - only one cartridge). The job uses a virtual tape at address *cuu1* and performs a DITTO tape-to-tape copy to a real tape at *cuu2*. See the example below for the parameters you must specify. Make sure that the VSE Virtual Tape Server is started on your workstation.

```
* $$ JOB JNM=VTAP2TAP,CLASS=0,DISP=D
// JOB VTAP2TAP - COPY VIRTUAL TAPE TO REAL TAPE
// UPSI 1
// PAUSE - PLEASE MOUNT A TAPE ON <cuu2>
// VTAPE START,UNIT=<cuu1>,LOC=<ip-address>,      X
           FILE=<tape file image>,READ
// ASSGN SYS010,<cuu1>      * INUT MEDIA  VTAPE
// ASSGN SYS011,<cuu2>,08   * OUTPUT MEDIA REAL TAPE,3590
// EXEC DITTO
$$DITTO REW OUTPUT=SYS010
$$DITTO REW OUTPUT=SYS011
$$DITTO TT INPUT=SYS010,OUTPUT=SYS011,NFILES=<36>
/*
// VTAPE STOP,UNIT=<cuu1>
/&
* $$ EOJ
/*
```

Before submitting the job, you must enter the following parameters:

<cuu1>	Device address of the input tape (virtual)
<cuu2>	Device address of the output tape (real)
<ip-address>	IP address of the workstation where the VSE Virtual Tape Server is running (in the format 10.3.4.56)
<tape image file>	File name and path of the remote virtual tape image containing the z/VSE base tape. (For example, C:\DownloadDirector\VSEBA431.AWS)

Notes:

1. NFILES=<36> is only valid for the base tape. In case of the extended base tape, the value is 61.
2. FSU can also be done by using a real tape.

6.1.3 OS/390 Library - API

This library contains members for the OS/390 emulation environment. The members contained in this library are not intended for general use by VSE customers but may be required by vendor products. Vendors who have a need for these interfaces should contact VSE development by sending a note to VSE@de.ibm.com. If the system was upgraded by an FSU release upgrade, OS/390 library API should be reinstalled (first delete old library using skeleton DELOS390).

6.1.4 Device Support Facilities (DSF 1.17)

For details on this release, please see the Program Directory of Device Support Facilities Release 17, GI11-1238, and the DSF User's Guide and Reference Release 17, GC35-0033, available on the VSE Softcopy Collection DVD SK3T-8348.

Both publications are also available from the z/VSE Home Page at

<http://www.ibm.com/systems/z/os/zvse/>

6.1.5 HLASM Release 1.6.0

The HLASM Release 1.6.0 allows to use either workfiles or partition storage for assemblies. In z/VSE 4.3 the High Level Assembler will be shipped with the WORKFILE option as default (Phase ASMADOPT). Sample skeleton SKASMOPT in ICCF library 59 shows the default Options used. If you have the options customized with your own values, you might consider adjusting the WORKFILE option accordingly, use the sample skeleton SKASMOPT for customization.

It is recommended to specify the following SIZE parameter which allows to allocate space above 16MB:

```
// EXEC ASMA90,PARM='SIZE(MAX,ABOVE)'
```

or in case of the EDECK exit is used:

```
// EXEC ASMA90,PARM='EXIT(LIBEXIT(EDECKXIT)),SIZE(MAX-200K,ABOVE)'
```

6.1.6 HLASM Support with ACF/SSP Version 4, Release 8

With ACF/SSP 4.7 and later, ACF uses the High Level Assembler for NCP and EP compiles. There are a couple of macros with the same name as for VSE Central Functions causing assembly errors. It is recommended to change the search chain for source members and put PRD1.MACLIB ahead of PRD2.COMM, the target library for ACF/SSP.

6.1.7 CICS TS

IMPORTANT: Do not specify SEC=NO in the SIT, SEC=NO means no security checking in CICS TS at all, that is no signon security and also no transaction security. SEC=YES by default will use the basic security manager (BSM) as external security manager.

CICS TS SIT setting SVA=NO changed to SVA=YES. To allow CICS coexistence, exclude list IESVAEXC may be used.

To activate this change in case of an FSU Release upgrade, the SIT has to be compiled and the CICS startup job has to be changed to reflect the exclude list.

When using the EZA application program interfaces (EZASMI and EZASOKET) with CICS transactions, the EZA "task-related-user-exit" (TRUE) has to be activated before these transactions can be run. This applies also to the IBM-provided CICS Listener (EZAL). For detail on how to activate this TRUE, please refer to chapter "CICS Considerations for the EZA Interfaces in book *z/VSE TCP/IP Support, SC34-2604*

6.1.8 SVA Setup

Starting with z/VSE V4.1 LE base and C-Runtime routines are loaded into the SVA. For details see *z/VSE Planning SC33-8301*. In order to make sure the related programs can also be used in CICS TS, the default setting of SVA in the SIT was changed from NO to YES.

6.1.9 ACF/VTAM V4.2 31-bit I/O Buffer support

With the VTAM 31-bit I/O Buffer support, I/O Buffer and I/O CTC buffers can be allocated in the 31-bit System Getvis area through the VTAM startup option IOBUF31=YES. If initial installation is performed, the VTAM 31-bit I/O Buffer support is enabled. If performing an FSU from a previous release, it is recommended to enable the support to provide 24-bit System GETVIS storage relief.

For Local non-SNA terminals, like terminals used under VM, moving I/O buffers in 31-bit storage requires about 4 copy blocks for each terminal. Depending on the numbers of local non-SNA terminals the default number of copy blocks, which is 1500, might not be sufficient. It can be changed using the IPL SYS BUFSIZE command.

Before changing to IOBUF31=YES, make sure you have enough copy blocks defined, otherwise VTAM startup might fail. The SIR command shows the actual usage of the copy blocks.

6.1.10 Telnet Terminal Definition and Autoinstall

The default terminal logmodes used by TCP/IP Telnet do not have the extended data stream flag set. Without this flag set, file transfer using IND\$file transaction will not work. It is recommended to use the logmodes with the query facility instead of the default modes. An example would be:

```
DEFINE TEL, ID=MYTEL, TAR=DBDCCICS, TERM=D1000, CO=20, LOGMODE=SP3272QN, -  
      LOGMODE3=SP3272QN, LOGMODE4=SP3272QN, LOGMODE5=SP3272QN
```

If only extended data stream is wished, without the query facility, following definition for the Telnet daemon is appropriate:

```
DEFINE TEL, ID=MYTEL, TAR=DBDCCICS, TERM=D1000, CO=20, LOGMODE=SP3272EN, -  
      LOGMODE3=SP3273EN, LOGMODE4=NSX32704, LOGMODE5=NSX32705
```

In any case, non SNA logmodes have to be specified. With the logmodes above, the logtab IESINCLM has to be specified in the VTAM application definition:

```
D100001 APPL AUTH=(ACQ), MODETAB=IESINCLM
```

In the above samples, logmodes for terminal models 3, 4 and 5 are also added. In case of the query facility modes, the logmode can also be specified with the MENU definition, in this case only one LOGMODE parameter is required: LOGMODE=SP3272QN.

6.1.11 DITTO

For customers upgrading from z/VSE V4.1.x.

Class Y is increased to 5MB in case of an initial installation.

6.1.12 IOCP

IOCP requires a partition of up to 130 MB of storage based on the type of IOCD processing.

6.1.13 Language Environment for z/VSE

6.1.13.1 LE/VSE Run-time options:

From z/VSE 3.1 onwards, LE/VSE checks if an invalid (older) run-time option module is loaded. In this case ABEND U4093 RSN42 is issued (for batch), respectively LE/VSE return code 11060 (at CICS initialization time).

In particular, it is recommended to save customized versions of LE/VSE batch and CICS run-time option sources - *prior to performing an FSU* - if stored in LE/VSE product library PRD2.SCEEBASE. To re-establish option changes of this kind, please use current job skeletons CEEWDOPT (batch) or CEEWCOPT (CICS) as supplied in ICCF library 62.

There is no need to perform above actions, if default LE/VSE or CICS run-option modules are used (as supplied with subject z/VSE release).

6.1.13.2 PL/I and Multitasking

PL/I application programmers that wish to utilise the new PL/I multi-tasking capability should refer to the PL/I multi-tasking chapter in the *LE for z/VSE Programming Guide, SC33-6684*.

The PTF for APAR PM17894 for PL/I VSE/ESA compiler needs to be applied prior to using the multi-tasking runtime support. Compiler documentation updates are included in APAR PM17894.

6.1.13.3 LE/VSE Attention Routine Interface and Commands

The attention routine interface is pre-customized and activated in subject z/VSE release. It is recommended to keep this interface enabled since it suits to display LE/VSE run-time option, exit and status reports.

In the above context please ensure system ASI procedure USERBG is current and contains the following VSE POWER statement:

```
// PWR PRELEASE RDR,CEEWARC          LE - AR INTERFACE
```

This particularly applies if there is an equivalent or previously tailored version of this procedure in place. For system supplied USERBG.PROC version, please refer to skeleton SKUSERBG in ICCF library 59.

Finally make sure job CEEWARC is preloaded in VSE POWER RDR queue. In case of doubt or need to activate please refer to skeleton CEEWARC in ICCF library 62.

From z/VSE V4.2 onwards, this AR interface provides commands to manage LE/VSE batch run-time override options and is a prerequisite for the "AS-IS" CEETRACE feature (during related initial installation).

For details and reference on the attention routine interface and CEETRACE please see the *LE/VSE debugging and Run-Time Messages, SC33-6681, section "Summary of Changes"*.

6.2 IPv6/VSE V1.1.0

IPv6/VSE V1.1.0 is an optional product of z/VSE V4.3. It delivers an IPv6 solution, thus bringing the benefits of IPv6 functionality to z/VSE clients. IPv6/VSE provides an IPv6 TCP/IP stack, IPv6 application programming interfaces (APIs) and IPv6 enabled applications.

The IPv6/VSE product also includes a full-function IPv4 TCP/IP stack, IPv4 application programming interfaces and IPv4 applications. The IPv4 TCP/IP stack does not require the IPv6 TCP/IP stack to be active.

IPv6/VSE requires a unique user access key. IPv6/VSE can be used for 30 days after activation without a key.

Please refer to the IPv6/VSE V1 program directory *G111-9702* for installation instructions.

IPv6/VSE is a trademark of Barnard Software Inc.

6.3 IBM WebSphere MQ for z/VSE V3.0.0

IBM WebSphere MQ for z/VSE V3.0.0 is a new member of the WebSphere MQ family of messaging products. It is a replacement for MQSeries for VSE/ESA V2.1.2

The WebSphere MQ for z/VSE System Management Guide GC34-6981 describes:

- the installation procedure to install the product
- the migration procedure to migrate from MQSeries for VSE/ESA V2.1 to WebSphere MQ for z/VSE V3.0

6.4 DL/I VSE V1.12

DL/I VSE V1.12 is an optional product of z/VSE V4.3. It replaces DL/I VSE V1.11 and DL/I DOS/VS V1.10. DL/I VSE V1.12 is the only DL/I VSE version that can be used with z/VSE V4.3. Please refer to DL/I VSE 1.12 Program Directory *G110-0484* for installation instructions.

6.5 Rational COBOL Runtime for z/VSE V7.5.0

IBM Rational COBOL Runtime for z/VSE V7.5 is designed to execute applications developed with the EGL (Enterprise Generation Language) capability of Rational Business Developer.

EGL, IBM's newest business language, frees developers to focus on the business problem rather than on the details of the target execution platforms and associated middleware. EGL is ideal for business-oriented development teams who value ease of learning and high productivity, and need to quickly deliver modern applications and services.

Rational COBOL Runtime for z/VSE provides the libraries to enable EGL code, generated as COBOL, to run on the z/VSE platform.

Using the new extension to Rational Business Developer, COBOL code can be generated and deployed in z/VSE as:

- Traditional 3270 CICS applications
- Traditional batch applications
- Application programs capable of being invoked from an EGL Web or Web 2.0 front-end, or from an EGL service on a distributed application server

Rational COBOL Runtime for z/VSE 7.5 is the replacement for VisualAge Generator Server V1.2

Please refer to the Rational COBOL Runtime for z/VSE V7.5.0 Program Directory - GC10-8803 for installation instructions.

For overview and details how to integrate Rational COBOL Runtime for z/VSE V7.5 in an IT infrastructure please refer to "Multi-Platform Development and VSE" in the "Solutions" section of the z/VSE Home Page: <http://www.ibm.com/systems/z/os/zvse/solutions/egl.html>

6.6 DOS/VS RPG II Support for CICS TS

DOS/VS RPG II support for the CICS Transaction Server for VSE/ESA (CICS TS) allows RPG programs that were implemented for CICS/VSE V2.3 to run with the CICS TS.

For further details see the *z/VSE Release Guide, SC33-8300*

6.7 TCP/IP for VSE/ESA

z/VSE 4.3.1 includes TCP/IP for VSE/ESA 1.5 Service Pack F (TCP/IP 1.5F) with its most current service level. Please refer to the MSHP History File for the latest APAR/PTF applied.

For users of the IBM provided security exit BSSTISX there is one important point to notice:

New security request types are now passed to BSSTISX, like

- X'1A' SXYCWDL 26 - Change directory from root
- X'1D' SXYFCMD 29 - Send commands to FTP daemon

These new security request types pertain to FTP processing. To let FTP processing with z/VSE 4.3 and TCP/IP 1.5F behave the same way as with previous VSE releases and TCP/IP 1.5F, the z/VSE 4.3 IBM-provided BSSTISX exception list BSSTIXE has been extended with the above two request types. With this change, these request types are now accepted in BSSTISX and subject to userid and password checking. This is the same as with pre z/VSE 4.3 releases and TCP/IP 1.5F. Customer who do not want this behaviour can use skeleton SKEXCLST in ICCF list 59 to modify BSSTIXE exception list.

Customers who have migrated from previous releases to z/VSE 4.3 and continue to use their old BSSTIXE exception list, will now fail with their FTP processing. These customers have to add above two request types to the BSSTIXE exception list. This can also be done using member SKEXCLST in ICCF lib 59.

The documentation for TCP/IP for VSE/ESA 1.5 is available on the z/VSE V4.3.1 Softcopy Collection DVD SK3T-8348.

On the Softcopy Collection Kit you will find 6 books with the original program description from Connectivity Systems Incorporated, the provider of the TCP/IP for VSE/ESA 1.5 program, plus one manual describing the setup of the TCP/IP for VSE/ESA program IBM is providing. The books are as follows:

- z/VSE TCP/IP Support
- TCP/IP for VSE/ESA 1.5 Installation Guide
- TCP/IP for VSE/ESA 1.5 User's Guide
- TCP/IP for VSE/ESA 1.5 Commands Reference
- TCP/IP for VSE/ESA 1.5 Programmer's Guide
- TCP/IP for VSE/ESA 1.5 Messages
- TCP/IP for VSE/ESA 1.5 Optional Features

The documentation on the Softcopy Collection Kits is available in PDF format only. You can use the Adobe Acrobat Reader to view and print the documentation. If you do not already have an Acrobat Reader installed, or if you need information on installing and using an Acrobat Reader, see the Adobe Web site at

<http://www.adobe.com>

You will find the documentation for TCP/IP for VSE/ESA 1.5 also on the z/VSE Home Page at

<http://www.ibm.com/systems/z/os/zvse/>

For a detailed description of

- How to install TCP/IP Keys
- The TCP/IP demo mode
- Dependencies when you are using a license from Connectivity Systems.

please see the manual *z/VSE TCP/IP Support, SC34-2604*

6.8 Installation Hints and Tips

6.8.1 Installation of VSE Connector Workstation code

For installation details, please refer to the following Internet page:

<http://www.ibm.com/systems/z/os/zvse/products/connectors.html>

6.8.2 Installation of the Java-Based TCP/IP for VSE/ESA Configuration Dialog

For installation details, please refer to the following internet page:

<http://www.ibm.com/systems/z/os/zvse/products/connectors.html>

6.8.3 CWS Client Authentication

The CICS Web Support (CWS) supports SSL Client Authentication. The Interactive Interface includes a dialog and various service functions that can be used with CWS to implement client authentication and manage client certificates.

For more information, check the following books:

- *CICS Transaction Server for VSE/ESA V1R1 Enhancements Guide, GC34-5763.*
- *z/VSE e-business Connectors User's Guide, SC33-8231*

and the VSE Internet page at

<http://www.ibm.com/systems/z/os/zvse>

6.9 Publication Updates

6.9.1 Accessing VSE Performance Documentation

You can receive up-to-date performance information for VSE from the Internet or from the VSE Softcopy Collection DVD SK3T-8348.

From the internet, access and get these documents via the z/VSE Home Page

<http://www.ibm.com/systems/z/os/zvse/documentation/performance.html>

On the CD-ROM Collection, all the performance documents are on disc 3.

The following files or documents are available, all of them are in PDF format (ADOBE Acrobat Reader):

FILE	DOCUMENT TITLE
VE13PERF.PDF	IBM VSE/ESA 1.3/1.4 Performance Considerations
VEVMPERF.PDF	IBM VSE/ESA VM Guest Performance Considerations
VE21PERF.PDF	IBM VSE/ESA V2 Performance Considerations
VE21TDP.PDF	IBM VSE/ESA Turbo Dispatcher Performance
VEIOPERF.PDF	IBM VSE/ESA I/O Subsystem Performance Considerations
VEPERACT.PDF	IBM VSE/ESA Hints for Performance Activities
VETCPPER.PDF	VSE/ESA TCP/IP Performance Considerations
VESORTP.PDF	IBM DFSORT/VSE Performance Considerations
VECICSTS.PDF	IBM VSE/ESA CICS Transaction Server Performance Considerations
VE25PERF.PDF	IBM VSE/ESA 2.5 Performance Considerations
VE26PE00.PDF	IBM VSE/ESA 2.6 and 2.7 Performance Considerations
VETP1400.PDF	IBM VSE/ESA TCP/IP 1.4 and 1.5 Performance Considerations
VE31PE01.PDF	IBM z/VSE 3.1 and SCSI Performance Considerations
VE41PE01.PDF	IBM z/VSE 4.1 and 4.2 Performance Considerationss

6.10 Hints and Tips for VSE/ESA Optional Programs

There is no further information for z/VSE V4.3.1

7.0 Installation Instructions

7.1.1 ICKDSF Considerations when placing the VTOC on Large DASDs

For ECKD devices containing more than 64K tracks, there are special considerations for VTOC placement. The highest address that can be referenced as a VTOC track must be 64K-1. Because of this, the entire VTOC must reside within the first 64K tracks, that is, the VTOC must end before cylinder 4369 (X'1111') head 1. This is especially important when using the DOSVTOC(END) parameter. Its usage can result in error message **ICK21002I INVALID VTOC ORIGIN SPECIFICATION**

For further details please see the ICKDSF R17 User's Guide and Reference, GC35-0033.

8.0 z/VSE V4.3.1 Install Logic

There is no further information for z/VSE V4.3.1

9.0 Reader's Comments

Program Directory for z/VSE Version 4 Release 3.1

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 satisfied	<=====>				very dissatisfied	not 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

Did you order this product as an independent product or as part of a package?

- Independent
- Package

If this product was ordered as part of a package, what type of package was ordered?

- CustomPac
 - FunctionPac
 - SystemPac
- System Delivery Offering (SDO)
- Other - Please specify type:

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 these products?

- Yes
- No

If yes, how many years? ___



Program Number: 5609-ZV4 4001/4002
4003
4011/4012
4013

Printed in U.S.A.

G111-2698-07

