



Program Directory for z/VSE Version 5

Version 5 Release 1.1 update

Program Number 5609-ZV5

Document Date: June 2013

GI11-9703-02

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 June 2013, applies to z/VSE Version 5 Release 1.1 update (z/VSE V5.1.1 update) , Program Number 5609-ZV5 for the following:

Feature Numbers	Content	System Name
6015	z/VSE V5 English base on 3590/3592 cartridge	z/VSE V5
6015	z/VSE V5 English base on DVD-ROM	z/VSE V5
6015	z/VSE V5 Japanese base on 3590/3592 cartridge	z/VSE V5
6015	z/VSE V5 Japanese base on DVD-ROM	z/VSE V5

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Summary of changes with z/VSE

The following summarizes the changes with z/VSE 5.1.1 update: Important notice

IBM changed the way products are fulfilled. This update to z/VSE V5 is named **z/VSE V5.1.1 update**, although it should be *z/VSE V5.1.2*, but this is not possible due to technical reasons. The VSE SIR command displays *z/VSE V5.1.2* and also the RSL PSP bucket for this release is published specifying *VSE512*. The upgrade value for preventive service planning for this release is *zVSE512*. However, the tape labels and the DVD-ROM labels show *z/VSE V5.1.1* for technical reasons.

For an overview of functional enhancements of z/VSE V5.1.1 update, please see

- z/VSE Release Guide, SC34-2636
- 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 5.1.1 update

- none

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

z/VSE is provided on DVD-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 V5.1.1 update. 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 2 identifies the basic and optional program materials and documentation for z/VSE V5.1.1 update.
- 3.0, “Program Support” on page 24 describes the IBM support available for z/VSE V5.1.1 update.
- 4.0, “Program and Service Level Information” on page 26 lists the APARs (program level) and PTFs
- 5.0, “Installation Requirements and Considerations” on page 28 identifies the resources and considerations for installing and using z/VSE V5.1.1 update.
- 7.0, “Installation Instructions” on page 44 provides detailed installation instructions for z/VSE V5.1.1 update.
- 8.0, “z/VSE V5.1.1 update Install Logic” on page 45 provides the install logic for z/VSE V5.1.1 update.

Before installing z/VSE V5.1.1 update, read 3.1, “Preventive Service Planning” on page 24. 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 V5.1.1 update is 5609-ZV5.

The program announcement material describes the features supported by z/VSE V5.1.1 update. 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 5.1 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 V5.1.1 update 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 are in 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 5.1.1 update - BASIC Machine Readable Material (MRM)

The **z/VSE 5.1.1 update** 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 DVD-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 5 describes **MEDIA and VOLUMES** of z/VSE 5.1.1 update. These volumes contain all the programs and data needed for installation. z/VSE V5.1.1 update is installed using the Maintain System History Program (MSHP).

Figure 2 on page 6 describes the **BASE PRODUCTS and COMPONENTS** of z/VSE 5.1.1 update - on z/VSE Base cartridge.

Figure 3 on page 8 describes the **FILES** on the z/VSE Base cartridge.

Figure 4 on page 10 describes the z/VSE V5.1.1 update **EXTENDED BASE PRODUCTS / COMPONENTS** - on z/VSE Extended Base cartridge

Figure 5 on page 11 describes **z/VSE V5.1.1 update on DVD-ROM** and the files provided through electronic delivery.

Please refer to the manuals *z/VSE Installation, SC34-2361* and *z/VSE System Upgrade and Service, SC34-2639*

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	6015	1	z/VSE5.1.1-xx
		2	z/VSE5.1.1XBASE
3592 cartridge	6015	1	z/VSE5.1.1-xx
		2	z/VSE5.1.1XBASE
DVD ROM	6015	1	z/VSE5.1.1-xx

Notes:

- xx** defines the LANGUAGE of the z/VSE base, in which the system was ordered:
 - xx = EN English
 - xx = KA Kanji (Japanese)
- 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 V5.1.1 update Base

Figure 2 (Page 1 of 2). z/VSE V5.1.1 update - BASE Products

Product Description	Program Number	Component-Identifier	CLC
z/VSE V5.1.1 update (Package)	5609-ZV5	n/a	n/a
VSE Central Functions 9.1.0	5686-CF9	n/a	n/a
VSE/SP UNIQUE CODE	5686-CF9	5686CF901	51C
VSE/UNIQUE CODE ENGLISH	5686-CF9	5686CF902	51D
KANJI	5686-CF9	5686CF902	51E
VSE/POWER	5686-CF9	5686CF903	51C
VSE/POWER Macros	5686-CF9	5686CF903	51G
VSE/VSAM	5686-CF9	5686CF905	51C
VSE/VSAM Macros	5686-CF9	5686CF905	51G
VSE/AF SVR & BAM & GDS	5686-CF9	5686CF906	51C
VSE/AF Macros	5686-CF9	5686CF906	51G
VSE/AF Generation Feature	5686-CF9	5686CF906	51J
VSE/AF MSHP	5686-CF9	5686CF907	51C
VSE/AF Info/Analysis	5686-CF9	5686CF908	51C
VSE/AF IOCP	5686-CF9	5686CF909	51C
VSE/ICCF	5686-CF9	5686CF910	51C
VSE/FastCopy	5686-CF9	5686CF911	51C
REXX/VSE Library	5686-CF9	5686CF912	51I
REXX/VSE Kernel & Interface	5686-CF9	5686CF916	51I
CRYPTO SERVICES	5686-CF9	5686CF917	51S
OSA/SF	5686-CF9	5686CF930	51O
VSE Connector Server	5686-CF9	5686CF935	51N
LE Base ENU + JPN	5686-CF9	5686CF932	51K
LE C ENU + JPN	5686-CF9	5686CF933	51L
LE COBOL + JPN + CICS	5686-CF9	5686CF936	51W
LE PL/I + JPN	5686-CF9	5686CF937	51Z
CICS Transaction Server 1.1.1	5648-054	564805400	B0P

Figure 2 (Page 2 of 2). z/VSE V5.1.1 update - BASE Products

Product Description	Program Number	Component-Identifier	CLC
TCP/IP 1.5 for VSE/ESA 1) Application Pak NFS Feature GPS Feature	5686-A04	5686A0400	BTP
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/VSE5.1.1-xx)

Figure 3 (Page 1 of 2). File Content: z/VSE 5.1 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 5.1 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 V5.1.1 update EXTENDED BASE Products / Components.

Figure 4. z/VSE V5.1.1 update - EXTENDED BASE Products

Product Description	Program Number	ComponentID	CLC
OS/390 APIs	5686-CF9	5686CF914	51V
LE DBCS Locales	5686-CF9	5686CF934	51M
DB2 V7.5 Server f.VSE 1)	5697-F42	5697F4201	5NN
DB2 V7.4 DPROP Q Capture	5697-F42	5697F4201	4NO
DB2 V7.5 Client Edition 1)	5697-F42	5697F4207	5NC
VSE Connector WS code 2)	5686-CF9	5686CF938	51P
IPV6/VSE	5686-BS1	5686BS100	B10

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 V5.1.1 update 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 DVD-ROM

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

Figure 5. z/VSE V5.1.1 update - z/VSE V5.1.1 update on DVD-ROM

File #	File Description	File Name
1	Readme File	ReadM511.txt
2	z/VSE Base	VSE51xyy.AWS
3	z/VSE Extended Base	VSE51xB.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 DVD-ROM in a file named: VSE511OP.AWS.

2.2.6 z/VSE downloadable from the Internet

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

Base Tape	VSE511yy.aws
Extended Base Tape	VSE511XB.aws
DB2 Help Tape	DB2HELP.aws
Opt.Product Tape	VSE511OP.aws

Note that after downloading the respective files from the Internet, you will have the z/VSE 5.1 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 DVD-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 VSE511OP.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 5.1 Installation SC34-2631 or z/VSE 5.1 System Upgrade and Service, SC34-2639.

2.3 z/VSE BASE - OPTIONAL Machine-Readable Material

There are no optional machine-readable materials for z/VSE V5.1.1 update.

2.4 z/VSE BASE - Program Publications

Except the z/VSE Program Directory and the z/VSE Memo to Licensees all other 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.ibm.com/e-business/linkweb/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.

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 V5.1.1 update 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 V5.1.1 update

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-CF9 Encryption Facility for z/VSE 1.2.0

2.5.2 Optional Programs - List of Product Identifiers

The following Optional Programs are available with z/VSE V5.1.1 update. 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.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	300Pel 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	180	068180	
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	5686CF940	51Y	CF902Y	

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 DVD-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 DVD-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 V5.1.1 update on z/VSE collection kit DVD SK3T-8348 which is part of your order. 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 V5.1.1 update OPT x OF y**

2.5.4 Optional Programs - File Content

Figure 6 describes the file content of the Optional Program Tape

Figure 6. Program Tape - 'z/VSE V5.1.1 update 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 basic publications of the z/VSE V5.1.1 update Optional Programs, that are available as softcopy. The VSE Softcopy Collection Kit, which is delivered with every z/VSE order, provides softcopy documentation to all z/VSE Optional Programs.

Figure 7. 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 8. DITTO/ESA f.VM 5648-099 1.3.0

Publication Title	Order/Form Number
Program Directory	GI10-0438

Figure 9. VisualAge Generator Server 5648-B02 1.2.0

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

Figure 10. 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 11. GDDM-IVU 5668-723 1.1.3

Publication Title	Order/Form Number
Program Directory	GI11-1586

Figure 12. GDDM-IMD 5668-801 2.1.3

Publication Title	Order/Form Number
Program Directory	GI11-1630

Figure 13. GDDM-PGF 5668-812 2.1.3

Publication Title	Order/Form Number
Program Directory	GI10-9657

Figure 14. 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 15. 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 16. 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 17. 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 18. 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 19. 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 20. BASIC Documentation of IBM C for VSE 5686-A01 1.1.0

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

Figure 21. 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 22. 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 23. 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 24. 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 25. 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 26. 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 27. 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 28. 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 29. 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 30. BASIC Documentation of VSE/ACLR 5746-XE7 1.2.1

Publication Title	Order/Form Number
Program Directory	GI11-0645

Figure 31. 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 32. 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 33. 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 34. 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 V5.1.1 update.

3.1 Preventive Service Planning

Before installing z/VSE V5.1.1 update, 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:

zVSE512

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 V5.1.1 update, 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 5.1.1 update is published via a special RSL PSP bucket VSERSL512 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 6 for component IDs (COMPID) for z/VSE V5.1.1 update

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of z/VSE V5.1. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated from previous product version(s) / release(s). 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 5.1.1 update (not visible in MSHP history file).

COMPONENT 5686CF901, ..02 (UNIQUE CODE)

PM27259 PM30110 PM31319 PM32840
PM33291 PM38872 PM43213 PM44072 PM46594

COMPONENT 5686CF903 (POWER)

DY47160 DY47172 DY47228 DY47238
DY47283 DY47312

COMPONENTs 5686CF906, ..07, ..08, ..09 (AF)

DY47159 DY47167 DY47170 DY47171 DY47173
DY47180 DY47187 DY47190 DY47193 DY47197
DY47201 DY47209 DY47215 DY47221 DY47222
DY47225 DY47226 DY47235 DY47240 DY47242
DY47243 DY47245 DY47248 DY47250 DY47251
DY47253 DY47257 DY47261 DY47282 DY47289
DY47307 DY47308

COMPONENT 5686CF905 (VSAM)

DY47223 DY47224 DY47227 DY47252
DY47271 DY47274 DY47277 DY47278

Component 5686CF909 (IOCP)

DY47246

LE/VSE 5686CF932 (LE Base)

PM26031 PM35681 PM38137

VSE Connectors 5686CF935 (Connectors)

PM25055 PM25056 PM25410 PM33311 PM41625

LE/VSE 5686CF936 (LE/VSE COBOL)

PM25751

LE/VSE 5686CF937 (LE/VSE PLI)

PM26532 PM37215

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

PM26142 PM28847 PM31318 PM33000 PM40359

4.2 Service Level Information

There is no information for z/VSE V5.1.1 update at this time.

4.3 Cumulative Service Tape

There is no cumulative service tape for z/VSE V5.1.1 update.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating z/VSE V5.1.1 update.

5.1 System Requirements

5.1.1 Operating System Requirements

z/VSE V5.1.1 update can run in LPAR mode or as a z/VM guest in any support z/VM release. z/VSE V5 executes in z/Architecture mode only.

5.1.2 z/VSE Processor Support

These are the System z processors that can be used with z/VSE V5.1.1 update

- IBM zEnterprise EC12
- IBM zEnterprise 196
- IBM zEnterprise 114
- IBM System z10 Enterprise Class
- IBM System z10 Business Class
- IBM System z9 Enterprise Class
- IBM System z9 Business Class

5.1.3 Processor Details

Please refer to the *z/VSE Planning SC34-2635* manual.

5.1.4 Minimum System Configuration

z/VSE V5.1.1 update 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 1510MB (environment B) or 2814 MB (environment C) of disk device space on two volumes, DOSRES and SYSWK1, as outlined in *z/VSE Planning*, SC34-2635
- 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*, SC34-2635 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 V5.1.1 update supports a maximum of 100 SCSI disks defined 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 to z/VSE V5.1.1 update is possible from z/VSE 4.2.x, 4.3.x and 5.1.x. 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**

- An upgrade from z/VSE 4.2.x or 4.3.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 V9R1 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\VSEBA511.AWS)

Notes:

1. NFILES=<36> is only valid for the base tape. In case of the extended base tape, the value is 52.
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. Starting with 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.

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, SC34-2640*

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 SC34-2635*. 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

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 IOCDs 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 please see the *LE/VSE debugging and Run-Time Messages, SC33-6681, section "Using Attention Routine Interface Commands"* For CEETRACE information please visit the z/VSE website at <http://www-03.ibm.com/systems/z/os/zvse/downloads/tools.html#ceetrace>

6.1.13.4 More specifics with LE/VSE 1.4.8: The following major changes are listed below.

- New CEEPUSR callable service and options processing changes (PL/1 multi-tasking).

When running a PL/I multitasking application, the new callable service CEEPUSR allows you to retrieve the address of a pre-allocated storage area that can be used for inter-task communication. For details, see *LE/VSE Callable Services* in the *LE/VSE Programming Reference*, *SC33-6685*.

- New DATA=YES support for LE/C librarian members.

You can now use the `fopen()` function to create VSE librarian members with the DATA=YES parameter. For details, see *Library Functions* in the *LE/VSE C Run-Time Library Reference*, *SC33-6689*.

- Documentation improvements for System Programmer C environment.

A major update has been made of the information describing the SPC (System Programming C) environment, including new and replacement samples. For details, see *Using the System Programming C Facilities* in the *LE/VSE C Run-Time Programming Guide*, *SC33-6688*.

6.2 IPv6/VSE V1.1.0

IPv6/VSE V1.1.0 is a base product of z/VSE V5.1 distributed on the extended base tape. It can be installed optionally and 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 *GI11-9702* available on z/VSE collection kit DVD SK3T-8348 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 WebShere 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 V5.1. 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 V5.1. Please refer to DL/I VSE 1.12 Program Directory *GI10-0484* 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, SC34-2636*

6.7 TCP/IP for VSE/ESA

z/VSE 5.1.1 update 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 5.1 and TCP/IP 1.5F behave the same way as with previous VSE releases and TCP/IP 1.5F, the z/VSE 5.1 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 5.1 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 5.1 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 V5.1.1 update 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, SC34-2640*

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, SC34-2629*

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>

6.10 Hints and Tips for VSE/ESA Optional Programs

There is no further information for z/VSE V5.1.1 update

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 V5.1.1 update Install Logic

There is no further information for z/VSE V5.1.1 update

9.0 Reader's Comments

Program Directory for z/VSE Version 5 Release 1.1 update

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Accuracy of the definition of the installation tasks	1	2	3	4	5	N
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