Program Directory for

VisualAge Generator Server for VSE

Release 2, Modification Level 0

Program Number 5648-B02

for Use with
VSE/ESA

Document Date: July 1998

GI10-0813-01

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 July 1998, applies to VisualAge Generator Server Release 2, Modification Level 0 , Program Number 5648-B02 for the following:

COMPIDs	Feature Numbers	System Name
5648B020A,5648B0207	6661/6637/6638/6639	VSE/ESA
5648B020A,5648B020B	6630/6631/6632/5975	VSE/ESA
5648B020A,5648B0209	6621/6622/6623/5090	VSE/ESA
5648B020A,5648B0208	6648/6649/6650/6651	VSE/ESA
5648B020A,5648B0206	6644/6645/6646/6647	VSE/ESA
5648B020A,5648B0205	6636/6634/6635/5988	VSE/ESA
5648B020A,5648B0204	6624/6625/6626/5949	VSE/ESA
5648B020A,5648B0203	6640/6641/6642/6643	VSE/ESA
5648B020A,5648B0202	6627/6628/6629/5962	VSE/ESA

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GDDM	DB2

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 VisualAge Generator Server. 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 VisualAge Generator Server.
- 3.0, “Program Support” on page 9 describes the IBM support available for VisualAge Generator Server.
- 4.0, “Program and Service Level Information” on page 11 lists the APARs (program level) and PTFs (service level) incorporated into VisualAge Generator Server.
- 5.0, “Installation Requirements and Considerations” on page 15 identifies the resources and considerations for installing and using VisualAge Generator Server.
- 6.0, “Installation Instructions” on page 17 provides detailed installation instructions for VisualAge Generator Server.

Before installing VisualAge Generator Server, read 3.1, “Preventive Service Planning” on page 9. 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 VisualAge Generator Server is 5648-B02.

The program announcement material describes the features supported by VisualAge Generator Server. 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

2.1 Basic Machine-Readable Material

The distribution medium for this program is two 9-track magnetic tapes (written at 6250 BPI), two 3480 cartridges, two 1/4-inch tape cartridges or two 4mm cartridges. The tapes or cartridges contain all the programs and data needed for installation. VisualAge Generator Server is installed using MSHP. See 6.0, “Installation Instructions” on page 17 for more information about how to install the program. Figure 1 describes the tape or cartridge. Figure 2 on page 5 describes the file content of the program tape or cartridge.

Figure 1 (Page 1 of 3). Basic Material: Program Tape

Medium	Feature Number	Physical Volume	External Label Identification
4mm cart.	6638	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENU
	6629	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DES
	6626	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DEU
	6642	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ESP
	6623	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE JPN
	6646	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE KOR
	6650	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE PTB
	6632	1	VAGEN SVR VSE BASE

Figure 1 (Page 2 of 3). Basic Material: Program Tape

Medium	Feature Number	Physical Volume	External Label Identification
		1	VAGEN SVR VSE ENP
	6635	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE CHS
6250 Tape	6639	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENU
	5962	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DES
	5949	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DEU
	6643	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ESP
	5090	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE JPN
	6647	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE KOR
	6651	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE PTB
	5975	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENP
	5988	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE CHS
3480 cart.	6637	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENU
	6628	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DES
	6625	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DEU
	6641	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ESP
	6622	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE JPN
	6645	1	VAGEN SVR VSE BASE

Figure 1 (Page 3 of 3). Basic Material: Program Tape

Medium	Feature Number	Physical Volume	External Label Identification
		1	VAGEN SVR VSE KOR
	6649	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE PTB
	6631	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENP
	6634	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE CHS
1/4" cart.	6661	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENU
	6627	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DES
	6624	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE DEU
	6640	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ESP
	6621	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE JPN
	6644	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE KOR
	6648	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE PTB
	6630	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE ENP
	6636	1	VAGEN SVR VSE BASE
		1	VAGEN SVR VSE CHS

Figure 2 (Page 1 of 3). Program Tape: File Content

Volume Label ID	File	Name	Other information
Base	1	HDB021JI	MSHP header records
	2	B021JI	MSHP history file backup
	3	5648-B02 library	base library members

Figure 2 (Page 2 of 3). Program Tape: File Content

Volume Label ID	File	Name	Other information
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Mixed-case English	1	HDB021JF	MSHP header records
	2	B021JF	MSHP history file backup
	3	5648-B02 library	English library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Swiss German	1	HDB021JA	MSHP header records
	2	B021JA	MSHP history file backup
	3	5648-B02 library	Swiss German library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
German	1	HDB021JC	MSHP header records
	2	B021JC	MSHP history file backup
	3	5648-B02 library	German library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Spanish	1	HDB021JB	MSHP header records
	2	B021JB	MSHP history file backup
	3	5648-B02 library	Spanish library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Japanese	1	HDB021JH	MSHP header records
	2	B021JH	MSHP history file backup
	3	5648-B02 library	Japanese library members
	4	null file	(tapemark)
	5	EOB	End of Backup info

Figure 2 (Page 3 of 3). Program Tape: File Content

Volume Label ID	File	Name	Other information
	6	null file	(tapemark)
Korean	1	HDB021JE	MSHP header records
	2	B021JE	MSHP history file backup
	3	5648-B02 library	Korean library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Brazilian Portuguese	1	HDB021JG	MSHP header records
	2	B021JG	MSHP history file backup
	3	5648-B02 library	Portuguese Brazilian library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Uppercase English	1	HDB021JJ	MSHP header records
	2	B021JJ	MSHP history file backup
	3	5648-B02 library	Uppercase English library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)
Simplified Chinese	1	HDB021JD	MSHP header records
	2	B021JD	MSHP history file backup
	3	5648-B02 library	Simplified Chinese library members
	4	null file	(tapemark)
	5	EOB	End of Backup info
	6	null file	(tapemark)

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for VisualAge Generator Server.

2.3 Program Publications

The following sections identify the basic and optional publications for VisualAge Generator Server.

2.3.1 Basic Program Publications

Figure 3 identifies the basic program publications for VisualAge Generator Server. One copy of each of these publications is included when you order the basic materials for VisualAge Generator Server. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
Licensed Program Specification	GH23-0255
VisualAge Generator Server Guide for MVS, VM and VSE	SH23-0256

2.3.2 Optional Program Publications

There are no optional publications for VisualAge Generator Server.

2.4 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of VisualAge Generator Server. To order copies, contact your IBM representative.

Figure 4. Publications Useful During Installation

Publication Title	Form Number
IBM VSE/ESA System Control Statements	SC33-6613
IBM VSE/ESA System Upgrade and Service	SC33-6602
CICS/VSE Resource Definition Online	SC33-0708
CICS/VSE Resource Definition Macro	SC33-0709

3.0 Program Support

This section describes the IBM support available for VisualAge Generator Server.

3.1 Preventive Service Planning

Before installing VisualAge Generator Server, check with your IBM Support Center or use either 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 and SUBSET values:

Figure 5. PSP Upgrade and Subset ID

UPGRADE	SUBSET	RETAIN Release
VGHS120	B021JI	1JI

3.2 Statement of Support Procedures

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

Figure 6 identifies the component IDs (COMPID) for VisualAge Generator Server.

Figure 6. Component IDs

COMP ID	Component Name	REL
5648B020A	VisualAge Generator Server VSE Base	1JI
5648B0207	VisualAge Generator Server VSE (ENU)	1JF
5648B020B	VisualAge Generator Server VSE (ENP)	1JJ
5648B0209	VisualAge Generator Server VSE (JPN)	1JH
5648B0208	VisualAge Generator Server VSE (PTB)	1JG
5648B0206	VisualAge Generator Server VSE (KOR)	1JE
5648B0205	VisualAge Generator Server VSE (CHS)	1JD
5648B0204	VisualAge Generator Server VSE (DEU)	1JC
5648B0203	VisualAge Generator Server VSE (ESP)	1JB
5648B0202	VisualAge Generator Server VSE (DES)	1JA

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of VisualAge Generator Server. 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 APAR fixes against previous releases of VisualAge Generator Server have been incorporated into this release:

PN61759	PN63293	PN72704	PN81484	PN86848	PQ09365
PN61760	PN64687	PN73677	PN81588	PN87636	PQ09698
PN61761	PN64765	PN74851	PN82268	PN88551	PQ10308
PN61762	PN65956	PN75410	PN82880	PN90797	PQ10309
PN61763	PN68066	PN75452	PN82970	PN91101	PQ10310
PN61764	PN69731	PN77673	PN83324	PN92482	PQ10311
PN61769	PN69850	PN78482	PN83387	PQ00667	PQ10312
PN61770	PN70807	PN79378	PN84772	PQ00992	PQ10313
PN61774	PN71227	PN79579	PN85007	PQ02387	PQ10314
PN61775	PN71752	PN80400	PN85021	PQ04188	PQ10315
PN61777	PN71891	PN80837	PN85979	PQ06174	PQ10316
PN62441	PN72181	PN81235	PN86611		

4.2 Service Level Information

The following PTFs contain the APAR fixes against this release of VisualAge Generator Server. They are listed by COMPID and have been incorporated into this release.

- COMPID 5648B020A

UN73804	UN87414	UN97718	UQ02400
UN73806	UN87417	UN97720	UQ11824
UN78613	UN87453	UN97868	UQ14026
UN78614	UN87455	UN97916	UQ14257
UN79201	UN87457	UN97974	UQ14278
UN79252	UN87459	UN97995	UQ14280
UN79274	UN87461	UN97998	UQ14282
UN79280	UN87509	UN98000	UQ14285
UN79414	UN96289	UN98002	UQ14288
UN79601	UN96293	UN99451	UQ14858

- COMPID 5648B0204

  UN87446
  UQ11827

- COMPID 5648B0202

  UN87493
  UQ11826

- COMPID 5648B0207

  UQ11825

- COMPID 5648B0203

  UQ11828

- COMPID 5648B0209

  UQ11829

- COMPID 5648B0206

  UQ11830

- COMPID 5648B0208

  UQ11831

- COMPID 5648B020B

  UQ11832

- COMPID 5648B0205

  UQ11833

4.3 Cumulative Service Tape

A cumulative service tape, containing PTFs not incorporated into this release, might be included with this program.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating VisualAge Generator Server.

5.1 Target System Requirements

The following sections describe the environment of the target system required to install and use VisualAge Generator Server.

5.1.1 Operating System Requirements

VisualAge Generator Server operates under the VSE/ESA operating system.

5.1.2 Machine Requirements

There are no special machine requirements for the target system.

5.1.3 Programming Requirements

VisualAge Generator Server requires the following software to operate in the VSE/ESA environment :

- VSE/ESA* Version 1 Release 3 Modification 2 (Program Number 5750-ACD) or later
- CICS/VSE* Version 2 Release 3 (Program Number 5686-026) or later

  Note: To utilize the full spool file function (including trace functions) on VSE CICS*, you must have the CICS/VSE Report Controller feature on your system.
- COBOL for VSE Version 1 Release 1 or later (Program Number 5686-068)
- Language Environment for VSE Version 1 Release 4 (Program Number 5686-094)

Optional Software

- If you plan to use hierarchical databases, DL/I DOS/VS Version 1 Release 10 or later (Program Number 5746-XX1) is required.
- If you plan to use relational databases, Structured Query Language/Data System (SQL/DS) Version 3 Release 5 (Program Number 5688-103) or Database 2 (DB2) Server for VSE & VM Version 5 Release 1 or later (Program Number 5648-158)
- If you plan to access the Interactive Chart Utility from a VisualAge Generator Server application, Graphical Data Display Manager/VSE (GDDM*/VSE) Version 3 Release 1 (Program Number 5686-057) at a level that is compatible with CICS/VSE Version 2 Release 3 or later.

5.1.4 DASD Storage Requirements

Approximately 6500 library blocks of DASD are needed for the VisualAge Generator Server library members for a single language. For each additional language you choose to install, allow another 570 library blocks.

6.0 Installation Instructions

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

6.1 Installing VisualAge Generator Server

Complete these steps to install VisualAge Generator Server:

1. Install VisualAge Generator Server on the VSE system
2. Install the cumulative service tape (optional)
3. Customize VisualAge Generator Server for your system.

6.1.1 Install VisualAge Generator Server on the VSE system

There are two ways to install VisualAge Generator Server on VSE systems:

- Using the VSE/ESA Interactive Interface installation dialogs
- Using your own MSHP Install job.

To install VisualAge Generator Server, perform the following steps:

1. Decide which library and sublibrary you are going to install into.
2. Make sure there is sufficient free space in the library/sublibrary.
3. Install the product in one of these ways:
   - Using the VSE/ESA Interactive Interface installation dialogs

     See *IBM VSE/ESA Installation*.

     If you ordered VisualAge Generator Server as an independent product and are installing the tapes containing only VisualAge Generator Server, use the **Install Programs - Non-Stacked V2 Format or V1 Format** dialog.

     If you ordered VisualAge Generator Server as part of the VSE/ESA package and are installing the tapes containing multiple products, use the **Install Programs - Stacked V2 Format** dialog.

     The dialogs provide a default library and sublibrary for product installation. You can override the named library/sublibrary with your own selection of another library and/or sublibrary.
   - Using your own MSHP job

     See *IBM VSE/ESA System Control Statements*.

     Create and run a job similar to the following sample. This example assumes that you will install the base and mixed-case English from tape drive 181 into a sublibrary named PRD2.DBASE.

If you are installing another language, use the appropriate history backup file ID and change the PAUSE comments to reflect the language you are installing. See Figure 9 on page 18 for a list of the available language file IDs.

```
// JOB VAGEN120
* Install VisualAge Generator Server from tape
// PAUSE MOUNT VisualAge Generator Server VSE Base tape
// ASSGN SYS006,181
// MTC REW,SYS006
// EXEC MSHP
 INSTALL PRODUCT FROMTAPE ID='VAGEN.BASE.1.2.0' -
         PROD INTO=PRD2.DBASE
// PAUSE MOUNT VisualAge Generator Server VSE Mixed-case English tape
// MTC REW,SYS006
// EXEC MSHP
 INSTALL PRODUCT FROMTAPE ID='VAGEN.ENU.1.2.0' -
         PROD INTO=PRD2.DBASE
/*
/&
```

Figure 8. Sample job to install VisualAge Generator Server from Distribution Medium

Figure 9 shows the one- and three-character codes for the VisualAge Generator Server languages.

Figure 9. Language Code Conversion Table

Language	1-Character Code	3-Character Code	History File ID
English	E	ENU	VAGEN.ENU.1.2.0
Uppercase English	U	ENP	VAGEN.ENP.1.2.0
Swiss German	W	DES	VAGEN.DES.1.2.0
German	G	DEU	VAGEN.DEU.1.2.0
Spanish	S	ESP	VAGEN.ESP.1.2.0
Japanese	J	JPN	VAGEN.JPN.1.2.0
Korean	K	KOR	VAGEN.KOR.1.2.0
Portuguese Brazilian	P	PTB	VAGEN.PTB.1.2.0
Simplified Chinese	C	CHS	VAGEN.CHS.1.2.0

4. If you did not install VisualAge Generator Server in a library that is part of your permanent LIBDEF search order, you must either add it permanently or add it to the LIBDEFs for both CICS and batch jobs using the program.

6.1.2 Install the Cumulative Service Tape (optional)

If you received a cumulative service tape with VisualAge Generator Server, see *IBM VSE/ESA Installation*. Use the interactive dialogs **IBM Service** and **PTF Handling** to install the service tape.

MSHP installation on the VSE host system is complete at this point.

6.1.3 Customize VisualAge Generator Server for your system

Customization of VisualAge Generator Server means tailoring the product for use in site-specific environments. This might include adding support for another product or changing values that are currently in effect.

This chapter contains the information you need to customize your installation of VisualAge Generator Server.

- Figure 10 lists all the possible customization tasks in the VSE host environment.
- The rest of the chapter consists of detailed descriptions of the customization procedures.

In addition to the procedures described in this chapter, Appendix A contains a table that outlines the steps you follow if you need to customize VisualAge Generator Server after it is installed.

6.1.3.1 Customization Tasks

The table in Figure 10 is divided by environment. The tasks described under **ALL** apply to both VSE CICS and VSE Batch. If you are not planning to use VSE CICS, the listed tasks for that environment can be ignored.

Figure 10. Customization Tasks for the Host Environment

Step #	Environment	Task Description	Job(s)
1	**ALL**	6.1.3.2.1, “Define PRD2.EZELIB” on page 21	ELAEZEDE.Z
2		6.1.3.2.2, “Run-Time Default Options” on page 21	ELAVCIOP.Z
3		6.1.3.2.3, “Language-Dependent Options” on page 22	ELAVNLOP.Z
5		6.1.3.2.5, “Modify LE Run-Time Options” on page 24	None
6		6.1.3.2.6, “VisualAge Generator Server Database Support” on page 25 • No SQL/DS or DL/I • SQL/DS and DL/I • DL/I only • SQL/DS only	 • None • ELAVCDSQ.Z • ELAVCDLI.Z • ELAVCSQL.Z
7		6.1.3.2.7, “Shared Virtual Area (SVA) Considerations” on page 25	None
8		6.1.3.2.8, “Prepare ANSI SQL Program” on page 26	None
9		6.1.3.2.9, “Customize VisualAge Generator Server Procedures” on page 26	None
10		6.1.3.2.10, “Run the Customization Verification Program (CVP)” on page 27	ELAVCVP1.Z
11	VSE CICS	6.1.3.3.1, “Add CICS Diagnostic Controller Utility Support” on page 28	ELACJDVF.Z
12		6.1.3.3.2, “Modify CICS Tables and Definitions” on page 33	None
13		6.1.3.3.3, “Modify CICS Startup JCL” on page 38	None
14		6.1.3.3.4, “Run the CVP for VSE CICS” on page 38	Transaction ELAC

6.1.3.2 ALL ENVIRONMENTS

All tasks described in this section are necessary for customization of VisualAge Generator Server regardless of the application target environment(s) used with VisualAge Generator Server.

6.1.3.2.1 Define PRD2.EZELIB: The job ELAEZEDE.Z in the VisualAge Generator Server sublibrary will define the PRD2.EZELIB sublibrary. This sublibrary is the default used by VisualAge Generator for generation output if the /VSELIB generation option is not specified. This sublibrary is also used in the // LIBDEF PROC, SEARCH= card in all preparation jobs if the /SYMPARM='PROCLIB,' is not given a value. The /SYMPARM='PROCLIB,' gives the developer the ability to point to any sublibrary for the PROC search. Submit this job to VSE/POWER. This job can also be used to define the developer's sublibraries.

6.1.3.2.2 Run-Time Default Options: If you want to change any default run-time options, job ELAVCIOP.Z should be customized by following the instructions in the job and submitted to VSE/POWER. If you do not want to change any of these default options, this step can be skipped. The table in Figure 11 explains the IBM-supplied default options.

Figure 11. Run-time Default Options

OPTION	Value(s)	Default	Description
Default language code	***LLL***	ENU	Specifies the language code representing the language currently being customized. See Figure 9 on page 18 for a list of three-character codes.
Bypass date edit on EOF	N,Y	N	If N, specifies that a valid date must be entered before allowing a user to exit a map. If Y, specifies that the user can bypass the edit checking of a date field by using the Erase EOF key on that field.
Fold special character fields	N,Y	Y	If Y, the special character fields EZEDEST, EZEDESTP, and EZECONVT will be folded from lowercase to uppercase and stripped of leading blanks. If N, EZEDEST, EZEDESTP, and EZECONVT will not be folded from lowercase to uppercase, but will be stripped of leading blanks.
IMS/ESA* installed	N,Y	N	Specifies whether IMS/ESA is installed. This should always be N for VSE.
Segmented CICS Critical Error Screens	N,Y	N	If Y, a transaction will be started instead of doing nonsegmented converses of the critical error screens. A data area specified in the commarea of the CICS START contains the error messages. If N, the critical error screens will be displayed with nonsegmented converses.
CICS Critical Error Screens Transaction ID	tttt	ELAE	The CICS transaction ID to be started if Segmented CICS Critical Error Screens is Yes.
VisualAge Generator Server trace buffer size	size in K	64	Specifies the buffer size in K for the VisualAge Generator Server trace facility.
CICS temporary storage control interval size	size in K	32	Specifies, in 1K increments, the CICS control interval size for the VSAM data sets allocated for CICS auxiliary temporary storage queues. The larger the size, the better the performance for pseudo-conversational applications.

6.1.3.2.3 Language-Dependent Options: If you want to change any default language-dependent options, job ELAVNLOP.Z should be customized by following the instructions in the job and submitted to VSE/POWER. If you do not want to change any of these default options, this step can be skipped.

The following table lists the language-dependent options for language code ENU (U.S. English). When this job is complete, the result should be a phase with the name ELARI***LLL***, where ***LLL*** is the language code. Run this job for each language you have installed.

Figure 12. Language-dependent Options

OPTION	Value(s)	Default	Description
Language code	***LLL***	ENU	Specifies the language code representing the language currently being customized. (This is used in generation of the phase name.)
Long Gregorian date format	mask	MM/DD/YYYY	Specifies the default long Gregorian date edit mask. The long Gregorian date edit mask consists of 'DD', 'MM', and 'YYYY', in any order, separated by any valid separator character. Any non-numeric single-byte character, except 'D', 'M', and 'Y', is valid as a separator character.
Short Gregorian date format	mask	MM/DD/YY	Specifies the default short Gregorian date edit mask. The short Gregorian date edit mask consists of 'DD', 'MM', and 'YY', in any order, separated by any valid separator character. Any non-numeric single-byte character, except 'D', 'M', and 'Y', is valid as a separator character.
Long Julian date format	mask	YYYY-DDD	Specifies the default long Julian date. The long Julian date edit mask consists of 'DDD' and 'YYYY', in any order, separated by any valid separator character. Any non-numeric single-byte character, except 'D', 'M', and 'Y', is valid as a separator character.
Short Julian date format	mask	YY-DDD	Specifies the default short Julian date. The short Julian date edit mask consists of 'DDD' and 'YY', in any order, separated by any valid separator character. Any non-numeric single-byte character, except 'D', 'M', and 'Y', is valid as a separator character.
Conversion table name	xxxxxxxx	ELACN***LLL***	Specifies the default 1- to 8-character conversion table name, where ***LLL*** is what was specified for the language code in the job ELAVCIOP.Z.
Positive response character string	yyy	YES	Specifies the 1- to 3-character string used by VisualAge Generator Server to denote a positive response.
Negative response character string	nnn	NO	Specifies the 1- to 3-character string used by VisualAge Generator Server to denote a negative response.
Decimal point character	x	.	Specifies the character used by VisualAge Generator Server to denote a decimal point. The character specified must be a '.' or a ',' and must be distinct from the characters assigned for numeric separator and currency symbol.
Numeric separator character	x	,	Specifies the character used by VisualAge Generator Server to denote a numeric separator. The character specified must be a ',' or a '.' and must be distinct from the characters assigned for decimal point and currency symbol.
Currency symbol	x	$	Specifies the character used by VisualAge Generator Server to denote a currency symbol. The character specified must be distinct from the characters assigned for decimal point and numeric separator. The character specified must also be a valid COBOL currency symbol.
SQL host variable indicator	x	:	Specifies the character used by VisualAge Generator Server as the SQL host variable indicator. The character assigned must be distinct from the character assigned for the SQL host column indicator.
SQL host column indicator	x	!	Specifies the character used by VisualAge Generator Server as the SQL host column indicator. The character assigned must be distinct from the character assigned for the SQL host variable indicator.

6.1.3.2.4 Default Code Page Conversion Tables: A default code page conversion table is provided for each language. If a program requests a conversion table for cooperative processing support, the default conversion table for the run-time language will be used. The language conversion tables support the following code pages:

Figure 13. Default Code Page Conversion for SBCS Languages

Language	Conversion Table	ASCII Code Page	EBCDIC Code Page
English	ELACNENU	437	037
UpperCase English	ELACNENP	437	037
German	ELACNDEU	850	500
Swiss German	ELACNDES	850	500
Spanish	ELACNESP	850	284
Brazilian Portuguese	ELACNPTB	850	037

Figure 14. Default Code Page Conversion for DBCS Languages

Language	Conversion Table	ASCII SBCS Code Page	ASCII DBCS Code Page	EBCDIC SBCS Code Page	EBCDIC DBCS Code Page
Simplified Chinese	ELACNCHS	1042	928	836	837
Japanese	ELACNJPN	1041	301	290	300
Japanese (Latin)	ELACNJPL	1041	301	1027	300
Korean	ELACNKOR	1040	926	833	834

Note: Two Japanese tables are provided. ELACNJPN is the default table associated with the JPN language code. You can change the default table to ELACNJPL. ELACNJPN and ELACNJPL are shipped with the Japanese language for VisualAge Generator Server.

6.1.3.2.5 Modify LE Run-Time Options: Generated VisualAge Generator programs for non-CICS environments rely on the COBOL working storage being initialized to binary zeroes to determine whether VisualAge Generator Server has been initialized. With LE you have the following options:

1. Assemble the global default module, CEEDOPT, specifying STORAGE=00 for the first subparameter (heap-allocation-value) of the storage parameter. This affects all COBOL modules running in each non-CICS environment.
2. Assemble the application defaults module, CEEUOPT, specifying STORAGE=00, and link CEEUOPT with each generated program. This technique allows you to link the CEEUOPT module with generated programs without affecting non-VisualAge Generator programs.

   If you use this technique, modify the VisualAge Generator preparation templates to include CEEUOPT in each link-edit step for non-CICS environments. Refer to the *VisualAge Generator Generation Guide* for details about tailoring the preparation templates.

6.1.3.2.6 VisualAge Generator Server Database Support: VisualAge Generator Server is shipped without support for DL/I and SQL/DS. Customization jobs are supplied to provide this support. If you do not use SQL/DS or DL/I in your installation, you can skip this step because the required phases are already supplied.

Otherwise, submit **one** of the following jobs to link the VisualAge Generator Server modules:

- If your installation has SQL/DS and DL/I, submit member **ELAVCDSQ**.Z in the VisualAge Generator Server sublibrary to link the run-time modules to include ASMTDLI, IGZEBST, DLZLI000, and ARIPRDID.
- If your installation has DL/I installed but not SQL/DS, submit member **ELAVCDLI**.Z in the VisualAge Generator Server sublibrary to link the run-time modules to include ASMTDLI, DLZLI000 and IGZEBST.
- If your installation has SQL/DS installed but not DL/I, submit member **ELAVCSQL**.Z in the VisualAge Generator Server sublibrary to link the the run-time modules to include ARIPRDID and IGZEBST.

These jobs can be run again later if you need to install DL/I or SQL/DS support.

6.1.3.2.7 Shared Virtual Area (SVA) Considerations: The following phases are eligible to be loaded into the SVA:

VisualAge Generator Server SVA-Eligible Phases

ELAASCNV	ELARPDLI	ELARPVRT	ELASSTBC
ELAESABD	ELARPRTC	ELARSCNT	ELATSRST
ELAFSLPL	ELARPRTV	ELARSNLC	FZETPRT
ELAFSSPL	ELARPRTX	ELARSNLS	ELACNxxx
ELARPDLB			

VisualAge Generator Server Language-Dependent SVA-Eligible Phases

ELACxxx
ELAxxxFM
ELARIxxx

'xxx' in the examples above represents the 3-character abbreviation for a selected national language. See Figure 9 on page 18 for the list of abbreviations.

6.1.3.2.8 Prepare ANSI SQL Program: If a non-IBM ANSI SQL data-base manager is to be used with this product instead of SQL/DS, take the following steps:

1. Prepare COBOL source module ELARPANS in the VisualAge Generator Server sublibrary for execution as directed in the module prologue.
2. Customize the preparation procedures that invoke SQL preprocessing/bind to use the non-IBM data-base manager instead of SQL/DS. The preparation and execution JCL templates might need to be tailored when installing VisualAge Generator The templates that might need to be tailored are: EFK0VPBD.TPL, EFK0VPBC.TPL, EFK0VEBD.TPL, and EFK0VLCD.TPL.
3. Specify ANSISQL(YES) as a COBOL option for generation of all SQL programs.

6.1.3.2.9 Customize VisualAge Generator Server Procedures: Figure 15 shows the catalogued JCL procedures shipped with VisualAge Generator Server. These procedures are shipped in the VisualAge Generator Server sublibrary. The templates shipped with VisualAge Generator are the skeletons that the generation function uses to build the preparation JCL for generated applications. These templates invoke the preparation procedures shipped with VisualAge Generator Server. Changes you make to the templates when you install VisualAge Generator might require corresponding changes to the preparation procedures. Therefore, it is easier to do the tailoring for both the procedures and the templates when you install VisualAge Generator Server.

Figure 15. VisualAge Generator Server JCL Procedures

Procedure	Purpose
ELACUSTP	to set the default library names for LE, SQL/DS, DB/2, CICS/VSE, DL/I and VisualAge Generator Server
ELASQLDB	default procedure used for SQL/DS single user mode DLBLS.

These procedures ***MUST*** be copied to the sublibrary specified in the VisualAge Generator /SYMPARM='PROCLIB,' or in the default PROCLIB sublibrary PRD2.EZELIB defined in step 1 of the customization.

The procedure ELACUSTP contains some SETPARM statements for the sublibrary names for other products like COBOL, SQL/DS, etc. If some of these dependent products reside in the same sublibrary the following message will appear on the console and job output for VisualAge Generator preparation jobs:

```
1D86I DUPLICATE FILE NAME FOR SEARCH CHAIN IGNORED
```

This message is just informational. However, if you wish to avoid receiving this message you must change the preparation templates that are shipped with VisualAge Generator In the templates , you should change the **// LIBDEF PROC,SEARCH=** statement to remove the duplicate symbolic parameter names.

If SQL/DS or DB/2 is not installed, you can either remove the SETPARM and modify the following templates to remove the SQLLIB SETPARMs,

```
EFK0VPBD EFK0VPBC EFK0VEBD EFK0VPCB
```

or you can give the SETPARM, in the procedure, the name of an existing sublibrary to avoid Job control errors. This will only work if you do not attempt to prepare any SQL programs.

If DL/I is not installed, you can either remove the SETPARM and modify the following templates to remove the DLILIB SETPARMs,

```
EFK0VPBB EFK0VPBC
```

or you can give the SETPARM, in the procedure, the name of an existing sublibrary to avoid Job control errors. This will only work if you do not attempt to prepare any DL/I programs.

ELASQLDB is used for single user mode when a developer sets the SQL startup mode in a SYMPARM to SINGLEUSER mode in the preparation jobs. This procedure can also be used by execution jobs.

6.1.3.2.10 Run the Customization Verification Program (CVP): If you are using a system default module to clear working storage, it must be made available in the SVA or in the LIBDEF of each batch job executing VisualAge Generator Server.

The batch customization verification program, ELACVP1, is a VisualAge Generator program that was generated as a COBOL program. It allows you to verify that VisualAge Generator Server has been properly installed. To run this verification, submit member **ELAVCVP1.Z** in the VisualAge Generator Server sublibrary. This job contains a step to run the program. The output listing from EZEPRIN should appear similar to the panel shown in Figure 16. The date appears in the upper-left corner and the time in the upper-right corner. The date is in the format MM/DD/YY.

```
05/01/98                                                19:30:36




                    VISUALAGE GENERATOR SERVER
```

Figure 16. Customization Verification Panel

6.1.3.3 CICS ENVIRONMENT

The tasks described in this section are necessary for customization of VisualAge Generator Server only if the CICS environment is a target environment for this product. If VisualAge Generator generated programs will not be run in the CICS environment, this section can be skipped.

6.1.3.3.1 Add CICS Diagnostic Controller Utility Support: VisualAge Generator Server includes CICS menus that allow you to specify diagnostic options for CICS transactions. These options are maintained in a VSAM diagnostic controller file. You need a unique controller file for each active CICS partition. To define and initialize the controller file, submit job **ELACJDVF.Z** in the VisualAge Generator Server sublibrary. Following the definition and initialization of the file, the options should only be changed by entering CICS diagnostic controller transaction **ELAC**, which displays the diagnostic controller menu Change/View Diagnostic Options for a Transaction.

The file is initialized with the following values:

- Transaction ID = blanks
- Transaction ABENDS = 3 (Task dump)
- Runtime Error dump option = 3 (Task dump)
- Error Destination Queue Name = ELAD
- Journal number = spaces
- Journal Record Identification = EZ
- Disable on Run Unit Failure = N

The diagnostic controller utility lets you direct error messages to a transient data queue, a journal, or both. The default transient data file queue name is ELAD. The transient data files used by the diagnostic controller utility can be INTRAPARTITION, EXTRAPARTITION, INDIRECT or REMOTE. ELADCT2.A in the VisualAge Generator Server sublibrary contains a DCT entry for an intrapartition transient data queue using the default destination identification of ELAD. Include the entry for ELAD in your DCT CICS table if you want to use an intrapartition transient data queue. An extrapartition transient data queue can also be used. This type of queue might be useful for viewing the data set outside of the CICS partition.

6.1.3.3.1.1 Intrapartition Transient Data Queue: Figure 17 is an example of the intrapartition transient data queue using the default queue name of ELAD from the ELADCT2.

```
DFHDCT TYPE=INTRA,      1                          X
       DESTID=ELAD,     2                          X
       DESTFAC=FILE,    3                          X
       DESTRCV=NO,      4                          X
       REUSE=NO         5
```

1 Intrapartition destination
2 Destination identification
3 Transient destination queue type file
4 Not recoverable
5 Non-reusable intrapartition control intervals without a transient

Figure 17. CICS Intrapartition Data Queue Example

6.1.3.3.1.2 Extrapartition Transient Data Queue: If an extrapartition transient data file will be used, add the appropriate JCL to the CICS execution JCL to assign the file name. The JCL used in the extrapartition destination data queue sample requires the following JCL:

```
// DLBL ELAXPRN,'USER.ELAD.OUTPUT',0,SD
// EXTENT SYSxxx,volser,1,0,100,100
// ASSGN SYSxxx,ANYDISK,VOL=volser,SHR
```

Figure 18 on page 30 is an example of an extrapartition transient data queue using the default queue name of ELAD. If you decide to use an extrapartition transient data queue, you must remove the intrapartition transient data queue definition from your DCT. You cannot have an extrapartition transient data queue and an intrapartition data queue with the same name. This can be included when generating a destination control table:

```
DFHDCT TYPE=SDSCI,          1                    X
       DSCNAME=ELAXPRN,     2                    X
       RECFORM=VARBLK,      3                    X
       BLKSIZE=658,         4                    X
       TYPEFLE=OUTPUT,      5                    X
       DEVADDR=SYSxxx       6


DFHDCT TYPE=EXTRA,          7                    X
       DESTID=ELAD,         8                    X
       DSCNAME=ELAXPRN,     9                    X
       OPEN=INITIAL         10
```

1 Entry contains data set control information
2 Data set control name
3 Record format of the data set
4 Block size of the data set
5 Output data set
6 Logical unit address of data set
7 Extrapartition destination
8 Destination identification
9 Data set control name
10 Open data set at system initialization

Figure 18. CICS Extrapartition Data Queue Example

6.1.3.3.1.3 Journals: The Diagnostic Controller Utility can write to journal(s) indicated by the diagnostic controller file. Journal identifications of 01 through 99 are acceptable for use by the utility. Spaces indicate that there should be no journaling for the transaction. If new journal control table entries are defined for use by the diagnostic controller utility, the journals should be allocated and initialized.

For information about defining and initializing journals, refer to the CICS operations manual for your release of CICS.

Figure 19 on page 31 is an example of an entry for a journal using a journal identification of 02. This can be included when generating a journal control table if journaling is desired:

```
         DFHJCT TYPE=ENTRY,                                        X
               JFILEID=02,     1                                   X
               BUFSIZE=4096,   2                                   X
               JOUROPT=INPUT,  3                                   X
               JTYPE=DISK1,    4                                   X
               DEVADDR=SYSxxx  5
```

1 Journal identification
2 Buffer size for journal I/O operations
3 Journal option to accept input operations
4 Journal type of disk
5 Journal data set logical unit address

Figure 19. CICS Journal Entry Example

For information about defining DCT and JCT entries, refer to the CICS resource definition manual for your release of CICS.

Figure 20 is an example of job ELACJDVF.

```
* $$ JOB JNM=ELACJDVF,CLASS=A,DISP=D
* $$ LST CLASS=A
* ****************************************************************
*                                                                *
* DOC:     ELACJDVF - DEFINE AND INITIALIZE THE CICS DIAGNOSTIC  *
*          CONTROLLER FILE FOR VISUALAGE GENERATOR SERVER (VSE)  *
*                                                                *
* LICENSED MATERIALS - PROPERTY OF IBM                           *
* 5648-B02 (C) COPYRIGHT IBM CORP. 1994, 1998                    *
* SEE COPYRIGHT INSTRUCTIONS                                     *
*                                                                *
*                                                                *
* STATUS:  VERSION 1, RELEASE 2, LEVEL 0                         *
*                                                                *
* TAILORING:                                                     *
* 1. CHANGE THE JOB CARD TO YOUR STANDARDS                       *
* 2. CHANGE XXXXXXX TO YOUR FILE HIGH LEVEL QUALIFIER IE. ELA120 *
* 3. CHANGE YYYYYYY TO USERID OF FILE OWNER                      *
* 4. CHANGE CCCCCCC TO CATALOG DLBL NAME                         *
* 5. CHANGE FFFFFFF TO CATALOG FILE NAME                         *
* 6. CHANGE VVVVVVV TO VOLSER                                    *
*                                                                *
* ****************************************************************
```

Figure 20 (Part 1 of 2). Sample ELACJDVF Job

```
* THIS JOB WILL DELETE THE VISUALAGE GENERATOR FILE XXXX.ELACFILE
// JOB  DELCFIL
ON $ABEND GOTO $EOJ
// EXEC IDCAMS,SIZE=AUTO
 DELETE XXXXXXX.ELACFIL PURGE CAT (FFFFFFF)
 SET LASTCC = 0
 SET MAXCC  = 0
/*
/&
// JOB  DEFCFIL
// ASSGN SYSIPT,SYSRDR
ON $ABEND GOTO $EOJ
// EXEC IDCAMS,SIZE=AUTO
 DEFINE CLUSTER(NAME(XXXXXXX.ELACFIL) -
   OWNER (YYYYYYY) -
   INDEXED        -
   FREESPACE(20 20) -
   VOL( VVVVVVV ) -
   RECORDS(50 1) -
   KEYS(4 0) -
   SPEED IMBED REPLICATE REUSE-
   RECORDSIZE(40 40)) -
      CATALOG (CCCCCCC) -
 DATA  (NAME(XXXXXXX.ELACFIL.DATA)    -
 CONTROLINTERVALSIZE (4096))           -
 INDEX (NAME(XXXXXXX.ELACFIL.INDX))
/*
// UPSI 1
// DLBL CCCCCCC,'FFFFFFF',,VSAM
// DLBL ELACFIL,'XXXXXXX.ELACFIL',,VSAM,CAT=CCCCCCC
// DLBL TEMPFIO,'XXXXXXX.LOAD.FILE',0,VSAM,CAT=CCCCCCC,              C
               RECSIZE=40,DISP=(NEW,KEEP),RECORDS=(10,10)
// DLBL TEMPFII,'XXXXXXX.LOAD.FILE',0,VSAM,CAT=CCCCCCC,              C
               RECSIZE=40,DISP=(OLD,DELETE),RECORDS=(10,10)
*  INITILIZE/LOAD  FILE
* 19,'    33ELAD    00EZN',,8
// EXEC DITTO
$$DITTO CSQ FILEOUT=TEMPFIO,CISIZE=2048
    33ELAD    00EZN
/*
$$DITTO SVS FILEOUT=ELACFIL,FILEIN=TEMPFII,RECSIZE=40,NLRECS=1
$$DITTO EOJ
/*
/&
* $$ EOJ
```

Figure 20 (Part 2 of 2). Sample ELACJDVF Job

6.1.3.3.2 Modify CICS Tables and Definitions: Include the VisualAge Generator Server table entries from members ELADCT1, ELADCT2 and ELAFCT in the VisualAge Generator Server sublibrary into your present CICS tables. The transactions and programs can be defined with macros or by running the CICS system definition utility program (DFHCSDUP). The macro definitions are in ELAPCT, ELAPPT and ELAP***LLL*** (where ***LLL*** is a three-character language code) to be included into your present CICS tables. The utility statements are in members ELAGRP and ELAG***LLL*** (where ***LLL*** is a three-character language code). If you do the definitions through DFHCSDUP add group ELAGRP to the list of groups loaded during CICS initialization.

If you previously installed CSP/AE and plan to run CSP/AE and VisualAge Generator Server in the same CICS partition, you need to make modifications to your CICS tables and JCL.

- Remove from your CSP/AE DCT source the definitions for the extrapartition queue with DESTID=ETLP, the indirect queues with DESTID=EZEP, and DESTID=EZET, and the SDSCI entry with DSCNAME=ASAPR.
- Change the TRANSID parameters for any DCT INTRA queues with TRANSID=XSPP to TRANSID=EZEP and TRANSID=XSPZ to TRANSID=EZEZ. The VisualAge Generator Server transactions EZEP and EZEZ are compatible with the CSP/AE XSPP and XSPZ transactions and they should be used instead.
- Remove from your CICS start-up JCL the ASAPR DLBL statement.

Be sure the appropriate CICS tables have been updated to add support for LE.

Figure 21 (Page 1 of 4). CICS Table Entries for VisualAge Generator Server.

Member	Entry Types	Name/ID	Description
ELADCT1	DCT	EZEPRIN	DSCNAME for printer output
ELADCT2	DCT	ETLP	Extra-partition DESTID for printer output
	DCT	EZEP	Indirect DESTID for printer output
	DCT	EZET	Indirect DESTID for trace output
	DCT	ELAD	Diagnostic controller output
ELAFCT	FCT	ELACFIL	Diagnostic controller VSAM file
ELAPCT	PCT	ELAN	New copy transaction
		ELAC	Diagnostic controller transaction
		ELAU	Diagnostic print transaction
		ELAM	Utility menu transaction
		ELAP	The parameter group utility
		EZEP	Terminal print for non-DBCS printers
		EZEZ	Terminal print for DBCS printers
		ELAZ	Trace facility
ELAPPT	PPT	ELACPTZ	Trace facility program
		ELAESABD	Abend program
		ELARK24A	DL/I 24 bit work areas
		ELARK24B	DL/I 24 bit work areas
		ELARK240	24 bit addressing
		ELARPDLB	Assembler to DLI interface program / 24 bit
		ELARPDLI	Assembler to DLI interface program / 31 bit
		ELARPIOP	Installation options module
		ELARPRTC	Main module
		ELARPRTX	Stub program for mode switching
		ELARSCNT	Configuration control table
		ELARSNLC	National language code identifier
		ELASSTBC	Table handler
		ELATSRST	Pseudo-conversational support
		ELAUDCT	Diagnostic controller program
		ELAUDPR	Diagnostic print program
		ELAUMAI	Main utility program
		ELAUMEN	Utility menu program
		ELAUNEW	New copy program
		ELAYYNF	Table module used by the Diagnostic Controller program
		ELAZSTI	Repository trace control record Module

Figure 21 (Page 2 of 4). CICS Table Entries for VisualAge Generator Server.

Member	Entry Types	Name/ID	Description
		ELABNEW	Batch new copy program
		EZESBLKT	String function
		EZESCCWS	String function
		EZESCMPR	String function
		EZESCNCT	String function
		EZESCOPY	String function
		EZESFIND	String function
		EZESNULT	String function
		EZESSET	String function
		EZESTLEN	String function
		EZESTOKN	String function
		EZEFLSET	Math function
		EZEFLADD	Math function
		EZEFLSUB	Math function
		EZEFLMUL	Math function
		EZEFLDIV	Math function
		EZEFLMOD	Math function
		EZEPRCSN	Math function
		EZENCMPR	Math function
		EZEMIN	Math function
		EZEMAX	Math function
		EZEROUND	Math function
		EZESIN	Math function
		EZECOS	Math function
		EZETAN	Math function
		EZEASIN	Math function
		EZEACOS	Math function
		EZEATAN	Math function
		EZEATAN2	Math function
		EZESINH	Math function

Figure 21 (Page 3 of 4). CICS Table Entries for VisualAge Generator Server.

Member	Entry Types	Name/ID	Description
		EZECOSH	Math function
		EZETANH	Math function
		EZEEXP	Math function
		EZELOG	Math function
		EZELOG10	Math function
		EZEPOW	Math function
		EZESQRT	Math function
		EZECEIL	Math function
		EZEFLOOR	Math function
		EZEABS	Math function
		EZELDEXP	Math function
		EZEFREXP	Math function
		EZEMODF	Math function
		EZEBYTES	Math function
		CSOCLOCK	Math function
		CSOTICKS	Math function
		FZETPRT	Terminal print program
		FZECHRT	GDDM interface module
		DZGPRMU	Parameter group utility module
		DZGPEDA	Table module used by parameter group utility
ELAP***LLL***		ELACN***LLL***	Language-dependent conversion tables (one for each language installed, where ***LLL*** is the language code)
		ELANC***LLL***	Language-dependent constants tables (one for each language installed, where ***LLL*** is the language code)
		ELARI***LLL***	Language-dependent installation options module (one for each language installed, where ***LLL*** is the language code)
		ELA***LLL***FM	Critical error maps - map group format module (one for each language installed, where ***LLL*** is the language code)
		ELAC***LLL***	Error messages (one for each language installed, where ***LLL*** is the language code)
		ELACU***L***FM	Utility maps - map group format module (one for each language installed, where ***L*** is the language code)
		ELAYYN***L***	Yes/No table for utilities and trace (one for each language installed, where ***L*** is the language code)
		ELAYT***L***FM	Map group format module for trace (one for each language installed, where ***L*** is the language code)

Figure 21 (Page 4 of 4). CICS Table Entries for VisualAge Generator Server.

Member	Entry Types	Name/ID	Description
		DZGPR***L***FM	Map group format module for parameter group utility (one for each language installed, where ***L*** is the language code)
		DZGPS***L***FM	Help map group format module for parameter group utility (one for each language installed, where ***L*** is the language code)
		DZGPTB***L***	Manage table program for parameter group utility messages (one for each language installed, where ***L*** is the language code)

Note:

1. The transaction codes described above can be changed if they cause conflicts within your CICS system.
2. The FCT entries are set up to use the dynamic allocation facility. This avoids having to modify the CICS system JCL.

Terminals must have their alternate screen size either specified correctly or omitted so the default of the primary screen size will be used. An alternate screen size specification of (0,0) is not valid.

Any terminal used in an application that is the target of an XFER must have a terminal status (TRMSTAT) of TRANSCEIVE specified.

Any terminal defined as FEATURE=UCTRAN and used for running pseudo–conversational processing might give different results from a terminal that is not defined as UCTRAN.

Also, make sure INQUIRESET is available.

For CICS/VSE installations, the SIT requires EXEC=YES and SPOOL=YES if your programs access the POWER spool.

6.1.3.3.3 Modify CICS Startup JCL: The **// LIBDEF PHASE,SEARCH=** statement in the CICS startup JCL should include the VisualAge Generator Server sublibrary.

Add the JCL in member ELAVCICS.A of VisualAge Generator Server sublibrary to your CICS start-up JCL for the DCT entries.

Recycle CICS to activate the table and JCL changes.

6.1.3.3.4 Run the CVP for VSE CICS: The VisualAge Generator Server Diagnostic Controller utility was written as a VisualAge Generator program and generated as a COBOL program. By running the utility, you can verify that VisualAge Generator Server was properly installed. To run the utility, do the following:

- Log on to the modified CICS partition.
- Run transaction ELAC by entering: ELAC
- The IBM copyright notice as shown in Figure 22 on page 39 should appear.

```
          VisualAge Generator Server Version 1 Release 2


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  Press ENTER to continue
```

Figure 22. IBM Copyright Panel

- Press enter
- The Diagnostic Controller Menu as shown in Figure 23 should appear.

```
ELAC01               VisualAge Generator Server
                     Diagnostic Control Options


Type choice, press Enter.

Action..............  1
  1. Change/View Diagnostic Options for a Transaction
  2. Change/View Default Diagnostic Options




ENTER  F1=HELP  F3=EXIT
```

Figure 23. Diagnostic Controller Menu Panel

- Press F3 to exit
- Clear the screen and enter CSSF LOGOFF or F3 to exit CICS.

6.1.3.4 Tailor VisualAge Generator Server Messages

If you want to use your own text for VisualAge Generator Server messages, and you have VisualAge Generator developer installed, you can customize the run-time messages issued by VisualAge Generator Server by using the VisualAge Generator definition and generation facilities to create a new message table.

Take the following steps:

1. To make the message information available in an application, download and import the external source format file containing the messages you want to customize. The external source format file is in member ELAC***LLL***.P (where ***LLL*** is the language code; see Figure 9) of the VisualAge Generator Server sublibrary.
2. Edit the messages using the table editor in VisualAge Generator developer. You can change the TYPE of the MSGTEXT field, but the BYTES for the MSGTEXT field must be 140. For the MSGNUMBER field, TYPE must be NUM and BYTES must be 4.

   The inserts are indicated by "%nntll," where **nn** is the insert number, **t** is the insert type, and **ll** is the insert length. You can change the order in which the inserts appear in the message, but must not change the number of inserts or their type or length.

   Refer to the online help facility provided with VisualAge Generator developer for information about modifying tables.
3. Generate the message table using VisualAge Generator. You should generate the table as shared. If enough storage is available, you might want to generate the table as resident. Refer to the online *VisualAge Generator Generating Applications* manual for information about table generation.

   Note: You only need to generate the table for one target environment; the same table program can be used for all target environments.
4. Compile and link edit the table into your sublibrary.

   Make sure your sublibrary precedes the VisualAge Generator Server sublibrary in the concatenation sequence for the environments that have tailored messages.
5. For the VSE CICS environment, use the VisualAge Generator Server new copy utility to cause a fresh copy of the messages to be used the next time a load request is issued for the table. Refer to the online *VisualAge Generator Server Guide for MVS, VM and VSE* manual for more information on the VisualAge Generator Server utilities.

Appendix A. Post-installation Customization Procedures

The table in this appendix outlines the steps you follow to customize VisualAge Generator Server after it has been installed—to add a new language feature or upgrade a related product, for example, or to do some further tailoring of VisualAge Generator Server defaults.

Figure 24 (Page 1 of 3). VisualAge Generator Server Post-installation Customization Procedures

Procedure	***Explanation***
VisualAge Generator Server Default Installation Options You can change one or more of the following installation options: • Default language code • Bypass date edit on erase to EOF • Fold special character fields • IMS/ESA installed • Segmented CICS Critical Error Screens • CICS Critical Error Screens Transaction ID • VisualAge Generator Server trace buffer size • CICS temporary storage control interval size.	To customize installed default values.
1. See 6.1.3.2.2, “Run-Time Default Options” on page 21.	To use the customization job ELAVCIOP.Z. Make the changes in the VisualAge Generator Server Run-time Default Options job.
2. See 6.1.3.2.2, “Run-Time Default Options” on page 21.	To create a new version of the installation options module.
3. If you put the module ELARPIOP into the SVA, move the new version into the SVA.	To make the new module available.
4. If the environment is CICS, use the CICS NEWCOPY command for module ELARPIOP.	To make the new module available.
5. See 6.1.3.3.4, “Run the CVP for VSE CICS” on page 38.	To verify that the changes were made correctly.

Figure 24 (Page 2 of 3). VisualAge Generator Server Post-installation Customization Procedures

Procedure	***Explanation***
VisualAge Generator Server Default Language-dependent Options You can change one or more of the following language-dependent options: • Gregorian or Julian date formats • Conversion table name • Character strings for positive and negative responses • Decimal point character • Numeric separator character • Currency symbol • SQL host variable indicator • SQL host column indicator.	To customize the language-dependent options.
1. See 6.1.3.2.3, “Language-Dependent Options” on page 22.	To use the customization job ELAVNLOP.Z to change the option. Make the changes in the VisualAge Generator Server Language Dependent Options job.
2. See 6.1.3.2.3, “Language-Dependent Options” on page 22.	To create a new version of the language-dependent options module.
3. If you put the module ELARI***LLL*** (where ***LLL*** is the language code) into the SVA, move the new version of the module into the SVA.	To make the new module available.
4. If the environment is CICS, use the CICS NEWCOPY command for module ELARI***LLL*** (where ***LLL*** is the language code).	To make the new module available.
5. See 6.1.3.3.4, “Run the CVP for VSE CICS” on page 38.	To verify that the changes were made correctly.
New Language Support	To add support for a new Language.
1. See 6.1.3.2.2, “Run-Time Default Options” on page 21.	To change the default language value in ELARPIOP.
2. See 6.1.3.2.3, “Language-Dependent Options” on page 22.	To create the appropriate module ELARI***LLL*** for the new language.
3. See 6.1.3.3.2, “Modify CICS Tables and Definitions” on page 33	To update the CSD or the CICS table with the new definitions.

Figure 24 (Page 3 of 3). VisualAge Generator Server Post-installation Customization Procedures

Procedure	***Explanation***
DL/I Database Support	To add support for DL/I databases.
1. See 6.1.3.2.6, “VisualAge Generator Server Database Support” on page 25.	To replace the stubs for the DL/I modules and, optionally, the SQL/DS modules in the VisualAge Generator Server modules.
2. See 6.1.3.2.9, “Customize VisualAge Generator Server Procedures” on page 26.	To modify procedures that include a SETPARM for the DL/I sublibrary name.
3. See 6.1.3.2.10, “Run the Customization Verification Program (CVP)” on page 27.	To verify that the changes were made correctly.
SQL/DS Support	To add support for SQL/DS.
1. See 6.1.3.2.6, “VisualAge Generator Server Database Support” on page 25.	To replace the stubs for the SQL/DS modules in the VisualAge Generator Server modules.
2. See 6.1.3.2.9, “Customize VisualAge Generator Server Procedures” on page 26.	To modify procedures that include a SET PARM for the SQL/DS sublibrary name.
ANSI SQL database Support	To add support for an ANSI SQL database.
See 6.1.3.2.8, “Prepare ANSI SQL Program” on page 26.	To prepare the VisualAge Generator Server ANSI SQL commit and rollback program for use with the ANSI database manager, and to tailor preparation procedures for use with the ANSI database manager.
VisualAge Generator Server Messages	To customize the messages issued by VisualAge Generator Server.
1. See 6.1.3.4, “Tailor VisualAge Generator Server Messages” on page 40	To use your own text for VisualAge Generator Server messages, if you have VisualAge Generator.

Reader's Comments

Program Directory for VisualAge Generator Server Release 2, Modification Level 0

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```
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satisfied  <====================>  dissatisfied  applicable
   1        2        3        4         5            N
```

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Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
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