Before using this information and the product it supports, be sure to read the general information under 7.0, “Notices” on page 20.
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© Copyright IBM Corp. 2004, 2007
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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 IBM Software Configuration and Library Manager (SCLM) Developer Toolkit. This publication refers to IBM Software Configuration and Library Manager (SCLM) Developer Toolkit as IBM SCLM Developer Toolkit.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic and optional program materials and documentation for IBM SCLM Developer Toolkit.
- 3.0, “Program Support” on page 5 describes the IBM support available for IBM SCLM Developer Toolkit.
- 4.0, “Program and Service Level Information” on page 6 lists the APARs (program level) and PTFs (service level) incorporated into IBM SCLM Developer Toolkit.
- 5.0, “Installation Requirements and Considerations” on page 7 identifies the resources and considerations required for installing and using IBM SCLM Developer Toolkit.
- 6.0, “Installation Instructions” on page 14 provides detailed installation instructions for IBM SCLM Developer Toolkit. It also describes the procedures for activating the functions of IBM SCLM Developer Toolkit, or refers to appropriate publications.

Before installing IBM SCLM Developer Toolkit, read the CBPDO Memo To Users and the CBPDO Memo To Users Extension that were supplied with this program in softcopy form as well as this Program Directory and then keep them for future reference. Section 3.2, “Preventive Service Planning” on page 5 tells you how to find any updates to the information and procedures in this Program Directory.

IBM SCLM Developer Toolkit is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The Program Directory is provided in softcopy form on the CBPDO tape which is identical to the hardcopy form provided with your order. All service and HOLDDATA for IBM SCLM Developer Toolkit are included on the CBPDO tape.

Do not use this Program Directory if you are installing IBM SCLM Developer Toolkit with a SystemPac or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the Program Directory as required.
1.1 IBM SCLM Developer Toolkit Description

IBM SCLM Developer Toolkit combines Eclipse-based plug-ins and SCLM functions to provide software configuration management (SCM) services for Eclipse-based development environments. IBM SCLM Developer Toolkit will install as a plug-in into any suitable Eclipse 3.2 or later product, such as Rational Application Developer for WebSphere Software (formerly known as WebSphere Studio Application Developer) or Rational Developer for System z (formerly known as WebSphere Developer for System z). IBM SCLM Developer Toolkit can also be installed as a stand-alone product with its own IBM Eclipse workbench.

IBM SCLM Developer Toolkit provides a functionally rich workstation-based portal to SCLM. With IBM SCLM Developer Toolkit, Eclipse-based developers can develop, store, build and deploy Java and J2EE applications using SCLM on z/OS. In addition, IBM SCLM Developer Toolkit provides access to traditional SCLM projects and members and SCLM functions and services from the IBM Eclipse environment. IBM SCLM Developer Toolkit provides an SCLM-based solution for developing new Java and J2EE applications, modernizing traditional z/OS applications using a mix of traditional and J2EE components, and maintaining existing mainframe applications, all from the powerful IBM Eclipse development environment.

1.2 IBM SCLM Developer Toolkit FMID

IBM SCLM Developer Toolkit consists of the following FMID:

HSD3310
2.0 Program Materials

An IBM program is identified by a program number. The program number for IBM SCLM Developer Toolkit is 5655-S72.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature numbers, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature numbers, and are not required for the product to function.

The program announcement material describes the features supported by IBM SCLM Developer Toolkit. Ask your IBM representative for this information if you have not already received a copy.

2.1 Basic Machine-Readable Material

The distribution medium for this program is magnetic tape or downloadable files. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, “Installation Instructions” on page 14 for more information about how to install the program.

Information about the physical tape for the Basic Machine-Readable Materials for IBM SCLM Developer Toolkit can be found in the CBPDO Memo To Users Extension.

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for IBM SCLM Developer Toolkit.

2.3 Program Publications

The following sections identify the basic and optional publications for IBM SCLM Developer Toolkit.

2.3.1 Basic Program Publications

Figure 1 identifies the basic unlicensed program publications for IBM SCLM Developer Toolkit. One copy of each of these publications is included when you order the basic materials for IBM SCLM Developer Toolkit. For additional copies, contact your IBM representative.

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM SCLM Developer Toolkit License information</td>
<td>GC31-6873</td>
</tr>
</tbody>
</table>
Figure 2 on page 4 identifies the basic unlicensed or licensed publications that are not available in hardcopy form, but are available through the internet or other media for IBM SCLM Developer Toolkit.

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>How Available</th>
</tr>
</thead>
</table>

2.3.2 Optional Program Publications

No optional publications are provided for IBM SCLM Developer Toolkit.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for IBM SCLM Developer Toolkit.

2.5 Publications Useful During Installation

The publications listed in Figure 3 may be useful during the installation of IBM SCLM Developer Toolkit. To order copies, contact your IBM representative or visit the IBM Publications Center on the World Wide Web at:

http://www.ibm.com/shop/publications/order

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM SMP/E for z/OS User's Guide</td>
<td>SA22-7773</td>
</tr>
<tr>
<td>IBM SMP/E for z/OS Commands</td>
<td>SA22-7771</td>
</tr>
<tr>
<td>IBM SMP/E for z/OS Reference</td>
<td>SA22-7772</td>
</tr>
<tr>
<td>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</td>
<td>GA22-7770</td>
</tr>
</tbody>
</table>
3.0 Program Support

This section describes the IBM support available for IBM SCLM Developer Toolkit. The service number for IBM SCLM Developer Toolkit is 0500331.

3.1 Program Services

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

3.2 Preventive Service Planning

Before installing IBM SCLM Developer Toolkit, it is VERY IMPORTANT that you review the current Preventive Service Planning (PSP) information. The PSP buckets maintain current lists (which have been identified since the package was created) of any recommended or required service for this package's installation. This includes software PSP information that contains HIPER, and/or required PTFs against the base release.

For program support, access the Software Support Web site at http://www-3.ibm.com/software/support/

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMID for a product level. The UPGRADE and SUBSET values for IBM SCLM Developer Toolkit are:

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCLMDEVTK</td>
<td>HSD3310</td>
<td>SCLM Developer Toolkit</td>
</tr>
</tbody>
</table>

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 advise how you should submit any needed information or documentation.

Figure 5 identifies the component IDs (COMPID) for IBM SCLM Developer Toolkit.

<table>
<thead>
<tr>
<th>FMID</th>
<th>COMPID</th>
<th>Component Name</th>
<th>RETAIN Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSD3310</td>
<td>5655S7200</td>
<td>SCLM Developer Toolkit</td>
<td>310</td>
</tr>
</tbody>
</table>
4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of IBM SCLM Developer Toolkit. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs incorporated into the program.

4.1 Program Level Information

No APARs have been incorporated into IBM SCLM Developer Toolkit.

4.2 Service Level Information

No PTFs against this release of IBM SCLM Developer Toolkit have been incorporated into the product tape.

Over time it is HIGHLY recommended that you frequently check the IBM SCLM Developer Toolkit PSP bucket for HIPER and SPECIAL Attention PTFs against all FMID(s) which should be installed.
5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating IBM SCLM Developer Toolkit. The following terminology is used:

- **Driving system**: the system used to install the program.
  
  The program may have specific operating system or product level requirements for utilizing processes such as binder or assembly utilities during the install.

- **Target system**: the system on which the program is intended to run.
  
  The program may have specific product level requirements such as needing access to another product's library for link-edits that may directly affect the elements during the install or for its basic or enhanced operation. These requirements may be mandatory or optional.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old one. By installing onto a separate target system, you can test the new product while still keeping the old one in production.

- When installing a product that shares libraries or load modules with other products, the installation can disrupt the other products. Installing onto a test system or clone will allow you to assess these impacts without disrupting your production system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install IBM SCLM Developer Toolkit.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements
5.2 Target System Requirements

This section describes the environment of the target system required to install and use IBM SCLM Developer Toolkit.

IBM SCLM Developer Toolkit installs in the z/OS (Z038) SREL.

5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

5.2.2 Programming Requirements

5.2.2.1 Installation Requisites

An installation requisite is defined as a product that is required and must be present or one that is not required but should be present on the system for the successful installation of this product.

A mandatory installation requisite identifies products that are required, without exception, or this product will not install on your system. This includes products specified as PREs or REQs.

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5694-A01</td>
<td>z/OS V1.07.0 or later</td>
</tr>
<tr>
<td>5655-G44</td>
<td>IBM SMP/E for z/OS V3.04.0 or later</td>
</tr>
</tbody>
</table>

A conditional installation requisite identifies products that are not required for successful install but may resolve such things as certain warning messages at installation time. They include products that are specified as IF REQs.

IBM SCLM Developer Toolkit has no conditional installation requisites.
5.2.2.2 Operational Requisites

An operational requisite is defined as a product that is required and must be present or a product that is not required but should be present on the system in order for this product to operate all or some of its functions.

A mandatory operational requisite identifies products that are required, without exception, or this product will not operate its basic function unless the requisite is met. This includes products specified as PREs or REQs.

**Figure 8. Mandatory Operational Requisites**

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5694-A01</td>
<td>z/OS V01.07.00 or later</td>
</tr>
<tr>
<td></td>
<td>With HTTP server</td>
</tr>
<tr>
<td></td>
<td>With ISPF/SCLM (+ PTFs see Note 2)</td>
</tr>
<tr>
<td></td>
<td>With UNIX SYSTEM SERVICES</td>
</tr>
<tr>
<td>Any one of the following:</td>
<td></td>
</tr>
<tr>
<td>5655-I56</td>
<td>Java V01.04.00 or later.</td>
</tr>
<tr>
<td>5655-N98</td>
<td>Java V5 (31bit) or later.</td>
</tr>
<tr>
<td>5655-N99</td>
<td>Java V5 (64bit) or later.</td>
</tr>
<tr>
<td>Any one of the following:</td>
<td></td>
</tr>
<tr>
<td>5695-014</td>
<td>REXX Library V1.4 or later</td>
</tr>
<tr>
<td>5695-014</td>
<td>REXX Alternate Library V1.4 or later</td>
</tr>
</tbody>
</table>

Notes:

1. ISPF Service
   - (Required)
     - a. PTF for APAR OA20345 to enable correct log output messaging
     - b. PTF for APAR OA16924 enhances the SCLMINFO service
     - c. PTF for APAR OA21104 with SCLMINFO enhancements and build mode information for syntax checking
   - (Optional)
     - a. PTF for APAR OA16804 to enable secure build, promote and deploy
     - b. PTF for APAR OA11426 provides support for long/short and mixed case file names in SCLM. (not required on z/OS V1.8)

2. REXX
IBM SCLM Developer Toolkit requires the REXX library or the REXX Alternate library in the execution environment. See 6.1.5, “When to Install The REXX Alternate Library” on page 15 for information about when you need to install the REXX Alternate Library.

A conditional operational requisite identifies products that are not required for the basic function but are needed at run time for this product to utilize specific functions. They may include products specified as IF REqs.

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>APACHE ANT V01.06.00 or later available from <a href="http://ant.apache.org/">http://ant.apache.org/</a></td>
<td></td>
</tr>
</tbody>
</table>

5.2.2.3 Toleration/Coexistence Requisites

A toleration/coexistence requisite is defined as a product that must be present on a sharing system. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at different time intervals.

IBM SCLM Developer Toolkit has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites

A negative requisite identifies products that must not be installed on the same system as this product.

IBM SCLM Developer Toolkit has no negative requisites.

5.2.3 DASD Storage Requirements

IBM SCLM Developer Toolkit libraries can reside on all supported DASD types.

Figure 10 lists the total space required for each type of library.

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Total Space Required in 3390 Trks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>60 tracks</td>
</tr>
<tr>
<td>Distribution</td>
<td>60 tracks</td>
</tr>
<tr>
<td>HFS</td>
<td>3 track</td>
</tr>
</tbody>
</table>

Figure 10. Total DASD Space Required by IBM SCLM Developer Toolkit
Notes:

1. IBM recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM recommends a block size of 32760, which is the most efficient from a performance and DASD utilization perspective.

2. Abbreviations used for the data set type are:

   U  Unique data set, allocated by this product and used only by this product. To determine the correct storage needed for this data set, this table provides all required information; no other tables (or Program Directories) need to be referenced for the data set size.
   S  Shared data set, allocated by this product and used by this product and others. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other Program Directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
   E  Existing shared data set, used by this product and others. This data set is NOT allocated by this product. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This existing data set must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the names and sizes of the required data sets, please refer to 6.1.8, “Allocate SMP/E Target and Distribution Libraries” on page 16.

3. Abbreviations used for the HFS or zFS Path type are:

   N  New path, created by this product.
   X  Path created by this product, but may already exist from a previous release.
   P  Previously existing path, created by another product.

4. All target and distribution libraries listed have the following attributes:

   • The default name of the data set may be changed.
   • The default block size of the data set may be changed.
   • The data set may be merged with another data set that has equivalent characteristics.
   • The data set may be either a PDS or a PDSE.

5. All target libraries listed have the following attributes:

   • The data set may be SMS-managed.
   • It is not required for the data set to be SMS-managed.
   • It is not required for the data set to reside on the IPL volume.
   • The values in the "Member Type" column are not necessarily the actual SMP/E element types identified in the SMPMCS.

6. All target libraries listed which contain load modules have the following attributes:
• The data set may be in the LPA.
• It is not required for the data set to be in the LPA.
• The data set may be in the LNKLST.
• It is not required for the data set to be APF-authorized.

The following figures describe the target and distribution libraries and HFS or zFS paths required to install IBM SCLM Developer Toolkit. The storage requirements of IBM SCLM Developer Toolkit must be added to the storage required by other programs having data in the same library or path.

Note: The data in these tables should be used when determining which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>T Y P E</th>
<th>R E O C</th>
<th>L R E C</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBWBHFS</td>
<td>SAMP</td>
<td>Any U   PDSE FB 80 5 n/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 11. Storage Requirements for IBM SCLM Developer Toolkit Target Libraries**

**Figure 12. IBM SCLM Developer Toolkit HFS or zFS Paths**

Note: The path shown in this table will be prefixed by a user defined path prefix.

For example:

/user-defined-pathprefix/usr/lpp/SCLMDT/bin/IBM/

<table>
<thead>
<tr>
<th>DDNAME</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBWBHFS</td>
<td>/usr/lpp/SCLMDT/bin/IBM/</td>
</tr>
</tbody>
</table>

**Figure 13 (Page 1 of 2). Storage Requirements for IBM SCLM Developer Toolkit Distribution Libraries**

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>T Y P E</th>
<th>R E O C</th>
<th>L R E C</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABWBHFS</td>
<td>U PDSE  FB 80 5 n/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>T Y P E</th>
<th>R E O C</th>
<th>L R E C</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABWBHMOD</td>
<td>U PDSE  U 0 45 n/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.3 FMIDs Deleted

Installing IBM SCLM Developer Toolkit may result in the deletion of other FMIDs. To see what FMIDs will be deleted, examine the ++VER statement in the product's SMPMCS.

If you do not wish to delete these FMIDs at this time, you must install IBM SCLM Developer Toolkit into separate SMP/E target and distribution zones.

**Note:** These FMIDs will not automatically be deleted from the Global Zone. Consult the SMP/E manuals for instructions on how to do this.

5.4 Special Considerations

The Host system must also have the following software activated:

- UNIX System Services
- z/OS V1.7 or later
- ISPF PTF for APAR OA11426 provides support for long/short and mixed case file names in SCLM. (not required on z/OS V1.8)
- ISPF PTF for APAR OA16924 provides enhancements to the SCLMINFO service
- ISPF PTF for APAR OA16804 provides secure build, promote and deploy using surrogate userids
- One of the following releases of Java for z/OS
  - 5655-I56 Java V01.04.00 or later.
  - 5655-M30 Java V01.04.02 or later.
  - 5655-N98 Java V5 (31bit) or later.
  - 5655-N99 Java V5 (64bit) or later.
- ANT runtime installed in Unix System services, if performing Java/J2EE builds. Open source download available from http://ant.apache.org/
6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of IBM SCLM Developer Toolkit.

Please note the following:

- If you want to install IBM SCLM Developer Toolkit into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets. A sample job, BWB1SMPE is provided that you may use to create a new SMP/E environment.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing IBM SCLM Developer Toolkit

6.1.1 SMP/E Considerations for Installing IBM SCLM Developer Toolkit

This release of IBM SCLM Developer Toolkit is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

6.1.2 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 14. Use of values lower than these may result in failures in the installation process. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. Refer to the SMP/E manuals for instructions on updating the global zone.

<table>
<thead>
<tr>
<th>SUB-ENTRY</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSSPACE</td>
<td>(200,200,500)</td>
<td>3390 DASD tracks</td>
</tr>
<tr>
<td>PEMAX</td>
<td>SMP/E Default</td>
<td>IBM recommends using the SMP/E default for PEMAX.</td>
</tr>
</tbody>
</table>

6.1.3 Sample JCL

The following sample installation jobs are provided as part of the product to help you install IBM SCLM Developer Toolkit. The RELFILEs will be prefixed with the high level qualifier ("hlq" in table below) used when the files are "received".
You can also obtain a copy of the sample installation jobs by performing an SMP/E RECEIVE and then copying the jobs from the SMPTLIB (RELFILE) to a work data set for editing and submission. See Figure 15 on page 14 to find the appropriate SMPTLIB (RELFILE) data set.

### 6.1.4 SMP/E CALLLIBS Processing

IBM SCLM Developer Toolkit uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When IBM SCLM Developer Toolkit is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB

**Note:** The DDDEFs above are used only to resolve the link-edit for IBM SCLM Developer Toolkit using CALLLIBS. These data sets are not updated during the installation of IBM SCLM Developer Toolkit.

### 6.1.5 When to Install The REXX Alternate Library

IBM SCLM Developer Toolkit requires either the REXX Library or the REXX Alternate Library in the execution environment. You may have previously installed the REXX Library in conjunction with the REXX Compiler and Library or you may have previously installed the REXX Alternate Library as part of the installation of another product. The program number for REXX is 5695-014, which includes FMID HWJ9140 (REXX Library) and FMID HWJ9143 (REXX Alternate Library).

If you do not have either the REXX Library or the REXX Alternate Library installed you may install the REXX Alternate Library to fulfill the REXX Library requirement. REXX Alternate Library is available as a free download from: http://www-1.ibm.com/support/docview.wss?rs=960&uid=swg24006107
6.1.6 Create SMP/E Environment (optional)

If you are using an existing CSI, do not run the sample job BWB1SMPE.

If you choose to create a new SMP/E environment for this install a sample job is provided or you may choose to use your own JCL. If you choose to use the sample job provided, edit and submit BWB1SMPE. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

6.1.7 Perform SMP/E RECEIVE

Edit and submit sample job BWB2RCVE to perform the SMP/E RECEIVE for IBM SCLM Developer Toolkit. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

6.1.8 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job BWB3ALOC to allocate the SMP/E target and distribution libraries for IBM SCLM Developer Toolkit. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: RC=0

6.1.9 Allocate HFS or zFS Paths

The target system HFS or zFS data set must be mounted on the driving system when running the sample BWB4MKD job since the job will create paths in the HFS or zFS.

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

If you plan to install IBM SCLM Developer Toolkit into a new HFS or zFS file system, you must create the mountpoint and mount the new file system to the driving system. For IBM SCLM Developer Toolkit, the recommended mountpoint is: /user-defined-pathprefix/usr/lpp/SCLMDT

Edit and submit sample job BWB4MKD to allocate the HFS or zFS paths for IBM SCLM Developer Toolkit. Consult the instructions in the sample job for more information.

If you create a new HFS or zFS for this product, you should consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This may be helpful if an IPL occurs before the installation is complete.
6.1.10 Create DDDEF Entries

Edit and submit sample job BWB5DDEF to create DDDEF entries for the SMP/E target and distribution libraries for IBM SCLM Developer Toolkit. Consult the instructions in the sample job for more information.

6.1.11 Perform SMP/E APPLY

1. Ensure you have the latest Enhanced HOLDDATA, then edit and submit sample job BWB6APLY to perform an SMP/E APPLY CHECK for IBM SCLM Developer Toolkit. Consult the instructions in the sample job for more information.

Enhanced HOLDDATA introduces ERROR HOLDs against FMID for HIPER APARs. Prior to installing, you should ensure you have the latest Enhanced HOLDDATA (available at url http://service.software.ibm.com/holdata/390holddata.html). The FMID(s) should be installed regardless of the status of unresolved HIPERs, however, the software should not be deployed until the unresolved HIPERs have been analyzed to determine applicability.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

There are two methods to complete an FMID installation where ++HOLDs for HIPERs exist for the FMID(s) being installed:

a. To ensure that all recommended and critical service is installed with the FMID(s), add the SOURCEIDs of PRP, HIPER, and RSU* to the APPLY command. There may be PE or HIPER APARs that do not have resolving PTFs available yet. You need to analyze the symptom flags to determine if you want to BYPASS the specific ERROR HOLDs and continue the FMID installation.

```
APPLY S(fmids,...)
FORFMID(fmids,...)
SOURCEID(PRP,HIPER,RSU*,...)
GROUPEXTEND .
```

This method requires more initial research, but will provide resolution for all HIPERs that have fixes available and are not in a PE chain. There may still be unresolved PEs or HIPERs that will require the use of BYPASS.

b. To install the FMID(s) as it would have been installed prior to Enhanced HOLDDATA, you can add a BYPASS(HOLDCLASS(HIPER)) operand to the APPLY command. This will allow the FMID to be installed even though there are HIPER ERROR HOLDs against it. Note that not all ERROR HOLDs were bypassed, only the HIPER ERROR HOLDs. After the FMID(s) are installed, the SMP/E REPORT ERRSYSMODS command should be run to identify any missing HIPER maintenance.
APPLY S(fm1,fmd,...)
FORFMID(fm1,fmd,...)
SOURCEID(RSU+)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER)) .
..any other parameters documented in the program directory

This method is the quicker of the two, but requires subsequent review of the REPORT ERRSYSMODS to investigate any HIPERs.

If you bypass any HOLDs during the installation of the FMID(s) because fixing PTFs were not yet available you can use the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink to be notified when the fixing PTF is available.

2. After you have taken any actions indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

Note: The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

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

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

### 6.1.12 Perform SMP/E ACCEPT

Edit and submit sample job BWB7ACPT to perform an SMP/E ACCEPT CHECK for IBM SCLM Developer Toolkit. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

Once you have taken any actions indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

Note: The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

Expected Return Codes and Messages from ACCEPT CHECK: RC=0
If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will link-edit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

**Expected Return Codes and Messages from ACCEPT:** RC=0

### 6.1.13 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command will identify requisites defined for products that have been installed in separate zones. This command will also create APPLY and ACCEPT commands in the SMPPUNCH data set that you can use to install those cross-zone requisites it identifies.

After you have installed IBM SCLM Developer Toolkit, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries describing all the target and distribution libraries to be reported on.

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

### 6.2 Activating IBM SCLM Developer Toolkit

The publication *IBM SCLM Developer Toolkit Installation and Customization Guide, SC23-8504*, contains information about customization that should be performed to activate the functions of SCLM Developer Toolkit.

#### 6.2.1 HFS or zFS Execution

If you choose to have the HFS or zFS in which you have installed IBM SCLM Developer Toolkit mounted in read-only mode during execution, then no further tasks are required to accomplish this.
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Program Directory for IBM Software Configuration and Library Manager (SCLM) Developer Toolkit, September 2007

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For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

<table>
<thead>
<tr>
<th>RATING SCALE</th>
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<tbody>
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<td>very satisfied</td>
</tr>
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Satisfaction

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<th>4</th>
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<td>Installation Verification Programs</td>
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<td>2</td>
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<tr>
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<tr>
<td>Accuracy of the definition of the installation tasks</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>N</td>
</tr>
<tr>
<td>Technical level of the installation tasks</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N</td>
</tr>
<tr>
<td>Ease of getting the system into production after installation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N</td>
</tr>
</tbody>
</table>

How did you order this product?

— CBPDO
— CustomPac
— ServerPac
— Independent
— Other

Is this the first time your organization has installed this product?

— Yes
— No

Were the people who did the installation experienced with the installation of z/OS products?
__  Yes
__  No

If yes, how many years? __

If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

________________________________________________________________________
________________________________________________________________________
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________________________________________________________________________
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Please provide the following contact information:

Name and Job Title

Organization

Address

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