



**Program Directory for
IBM WebSphere Screen Customizer
Version 2 for OS/390
at maintenance level V2.0.3 for OS/390**

Version 2 Release 0, Modification Level 3

Program Number 5648-D76

FMID HCUS200

for Use with
OS/390 V2R5 or higher

Document Date: March 2001

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Note!

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

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APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the IBM Customer Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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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 WebSphere Screen Customizer V2. This publication refers to IBM WebSphere Screen Customizer V2 as Screen Customizer. 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 Screen Customizer.
- 3.0, "Program Support" on page 7 describes the IBM support available for Screen Customizer.
- 4.0, "Program and Service Level Information" on page 9 lists the APARs (program level) and PTFs (service level) incorporated into Screen Customizer.
- 5.0, "Installation Requirements and Considerations" on page 13 identifies the resources and considerations for installing and using Screen Customizer.
- 6.0, "Installation Instructions" on page 19 provides detailed installation instructions for Screen Customizer. It also describes the procedures for activating the functions of Screen Customizer, or refers to appropriate publications.
- Appendix A, "Screen Customizer Install Logic" on page 27 provides the install logic for Screen Customizer.

Before installing Screen Customizer, read 3.2, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

This program directory is now being maintained as a 'living document' that contains up-to-date program and service level information. Please always reference the latest level of the Program Directory at the following web site:

<http://www.ibm.com/software/network/screencustomizer/library/>

1.1 Screen Customizer Description

IBM WebSphere Screen Customizer V2 provides a graphical user interface for IBM WebSphere Host On-Demand sessions. Extensive customization capability is possible that does not require programming or modification of host applications. Screen Customizer is based on innovative screen recognition technology, requiring no access to source code.

The Client is integrated with a Host On-Demand session and runs as a Java applet in a browser.

There is service that is available to bring Screen Customizer up to the current maintenance level. If this is a **new installation** of Screen Customizer, you will have received a Screen Customizer V2 base tape along with a tape that contains the latest maintenance (PTF). If this is not a new installation, please order the latest service update (PTF) that will bring your Screen Customizer product up to the latest maintenance level via your normal service process. Please see section 4.0, "Program and Service Level Information" on page 9, for more information on the latest service level.

Note: The Administrator and Customization Studio components are not provided with Screen Customizer. The Administrator component lets you capture host screens and save them as maps that can be modified in the Customization Studio. The Administrator can also be used to set global defaults for font, colors, button styles, and attributes, and to save the defaults in a profile. The Customization Studio lets you create customized versions of host screens captured by the Administrator. Both the Administrator and Customization Studio can run only on a Windows 95, 98, or NT workstation. If you need Administrator or Customization capabilities, you must also separately order the IBM WebSphere Screen Customizer for Host Integration Administrator and Customization Studio components. Please contact your IBM Representative for more information.

1.2 Screen Customizer FMIDs

Screen Customizer consists of the following FMID:

HCUS200

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for Screen Customizer is 5648-D76.

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

The program announcement material describes the features supported by Screen Customizer. 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 9-track magnetic tape (written at 6250 BPI), 3480 cartridge, or 4mm cartridge. The tape or cartridge contains all the programs and data needed for installation. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 19 for more information about how to install the program.

Figure 1 describes the tape or cartridge. Figure 2 on page 4 describes the file content of the program tape or cartridge.

Notes:

1. The data set attributes in these tables should be used in the JCL of jobs accessing the tape, but since the data sets on the tape are in IEBCOPY unloaded format, their actual attributes may be different.
2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

Medium	Feature Number	Physical Volume	External Label Identification	VOLSER
6250 Tape	CU73MNA	1	IBM WebSphere Screen Customizer V2 (5648-D76)	CUS200
3480 cart	CU77VNA	1	IBM WebSphere Screen Customizer V2 (5648-D76)	CUS200
4mm cart	CU7BLNA	1	IBM WebSphere Screen Customizer V2 (5648-D76)	CUS200

Figure 2. Program Tape: File Content

VOLSER	F i l e	Name	Dist Library	O R G	R E C F M	L R E C L	BLK SIZE
CUS200	1	SMPMCS	n/a	SEQ	FB	80	6400
	2	IBM.HCUS200.F1	n/a	SEQ	FB	80	8800
	3	IBM.HCUS200.F2	n/a	SEQ	VB	32600	32604

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Screen Customizer.

2.3 Program Publications

The following sections identify the basic and optional publications for Screen Customizer.

2.3.1 Basic Program Publications

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

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
n/a	

Figure 4 on page 5 identifies the basic licensed program publications for Screen Customizer. The main publication for Screen Customizer is *Getting Started* which covers installation (non OS/390), configuration, and administration of the Screen Customizer product. The *README* covers late breaking information about Screen Customizer. The publications are included in soft copy form (HTML) with the product and are viewable from your browser using the URL format listed below:

- *Getting Started*:
 - <http://<server name>/<webserver alias>/<language>/doc/custom/install/installation.html>
- *README*:
 - <http://<server name>/<webserver alias>/<language>/doc/custom/readme/readme.html>

where **<server name>** refers to your OS/390 server's TCP/IP host name, **<webserver alias>** refers to your web server's Pass Rule alias (look in your `/etc/httpd.conf` file in the Pass Rule section - default is **hod**), and **<language>** refers to your installed language prefix (ie., **en** for English, **de** for German, etc.). A table of all the supported languages, publication availability and their associated prefix is found after the table of basic publications. An example of a URL to point to the English language Screen Customizer *Getting Started* is:

<http://mvs048/hod/en/doc/custom/install/installation.html>

The publications are also available from the Screen Customizer product Web page at the following URL:

<http://www.ibm.com/software/network/screencustomizer/library>

<i>Figure 4. Basic Material: Licensed Publications</i>		
Publication Title	Form Number	Feature Number
<i>IBM WebSphere Screen Customizer Getting Started</i>	n/a	n/a
README	n/a	n/a

Figure 5 identifies the supported languages and the associated language prefix that you use in the URLs above to access the publications. If the table lists a 'Y', the document is provided in that language. If a 'N' is indicated, an English language document will be displayed instead of a translated version.

<i>Figure 5 (Page 1 of 2). Screen Customizer Supported Language Publication Availability with Prefix</i>			
Language	Language Prefix	README	Getting Started
Chinese	zh	Y	Y
Czech	cs	Y	Y
Danish	da	Y	Y
Dutch	nl	Y	Y
English	en	Y	Y
Finnish	fi	Y	Y
French	fr	Y	Y
German	de	Y	Y
Hungarian	hu	Y	Y
Italian	it	Y	Y
Japanese	ja	Y	Y
Korean	ko	Y	Y
Norwegian	no	Y	Y

Figure 5 (Page 2 of 2). Screen Customizer Supported Language Publication Availability with Prefix

Language	Language Prefix	README	Getting Started
Polish	pl	Y	Y
Portugese	pt_PT	Y	Y
Portugese-Brazilian	pt	Y	Y
Russian	ru	Y	Y
Slovenian	sl	N	Y
Spanish	es	Y	Y
Swedish	sv	Y	N
Taiwanese	zh_tw	Y	Y
Turkish	tr	Y	Y

2.3.2 Optional Program Publications

2.4 Program Source Materials

No program source materials or viewable program listings are provided for Screen Customizer.

2.5 Publications Useful During Installation

The publications listed in Figure 6 may be useful during the installation of Screen Customizer. To order copies, contact your IBM representative.

Figure 6. Publications Useful During Installation

Publication Title	Form Number
<i>OS/390 UNIX System Services Assembler Callable Services</i>	SC28-1899-07
<i>OS/390 UNIX System Services User's Guide</i>	SC28-1891-07
<i>OS/390 UNIX System Services Command Reference</i>	SC28-1892-08
<i>OS/390 UNIX System Services Planning</i>	SC28-1890-08
<i>OS/390 UNIX System Services Messages & Codes</i>	SC28-1908-07
<i>SMP/E R8.1 Messages and Codes</i>	SC28-1108-13
<i>SMP/E R8.1 Reference</i>	SC28-1107-14
<i>SMP/E R8.1 User's Guide</i>	SC28-1302-15

3.0 Program Support

This section describes the IBM support available for Screen Customizer.

3.1 Program Services

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

3.2 Preventive Service Planning

Before installing Screen Customizer, you should also review the current support, product information, and Hints and Tips on the following Web sites:

- Support site: <http://www.ibm.com/software/network/screencustomizer/support/>
- Product information site: <http://www.ibm.com/software/network/screencustomizer/>
- Program Directory softcopy: <http://www.ibm.com/software/network/screencustomizer/library>
- Hints and Tips site: <http://www.ibm.com/support/>

3.3 Statement of Support Procedures

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

Figure 7 identifies the component IDs (COMPID) for Screen Customizer.

<i>Figure 7. Component IDs</i>			
FMID	COMPID	Component Name	RETAIN Release
HCUS200	5648D0101	Screen Customizer V2	200

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of Screen Customizer. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated.

If this is a **new installation** of Screen Customizer (FMID HCUS200) you received a Screen Customizer V2.0 base tape to install via SMP/E. You also received a Screen Customizer PTF (UW77685) tape that when applied via SMP/E will bring Screen Customizer to the most current maintenance level of V2.0.3. The 'PTF' tape id formatted as a standard PTF tape (ie., NL, LRECL=80, BLKSIZE=7200). The PTF is found in F1(file one) on the tape. RECEIVE the PTF and then APPLY the PTF following the instructions below. Sample RECEIVE and APPLY JCL is found after the listing of the PTFs below.

If this **is not a new installation** of Screen Customizer V5.0, it is recommended that you order through your normal service process the V2.0.3 PTF (UW77685). Please apply the PTF to your base V2.0 Screen Customizer product to bring your Screen Customizer V2 product to the V2.0.3 level.

4.1 Program Level Information

APAR fixes against previous releases of this product have been incorporated into the following FMIDs and are detailed below. Always apply the latest PTF available for your product.

- FMID HCUS200

4.1.1 MVS Service Level V2.0.1 Information (Available November, 2000)

A PTF to bring Screen Customizer to the V2.0.1 maintenance level was available in November, 2000 and has been **superseded** by the V2.0.1b PTF. The APARs included in Service Level V2.0.1 are listed below:

IC28309 To fix flickering
IC27771 ADD OF VALID VALUE LIST NOT POSSIBLE
IC28424 CustomInterface not in habbeans, habbeansblv, scbeans, scbeanslv
IC28435 Radio buttons do not reflect host data
IC28483 Fix DBCS mistakes
IC28533 Hotspots and menubuttons not the correct default
IC28448 Templates don't treat font properly
IC28534 Frames not drawing correctly
IC28536 When using sed 1.0 maps on 2.0 in text field getting Exception
IC28351 Problem with applet and choice boxes in Netscape
IC28566 Edit Valid Value text is not picking screen font at run time
IC28567 Textfield -> Label problem. From ver 1 maps
IC28469 New Function: Use Enter Key for Button Function, Reverse Video Support, & Multiple Tag Support

IC28576 File transfer for 5250 on PCOM not working
IC28593 When Host Mode off and first input field is hidden
IC28592 Problem with hotspots resizing (too big)
IC28591 Screen Customizer print screen is not working on win'95
IC28760 File does not exist after installation of Sedona V2
IC28726 HOD 3270 SESSION CONFIGURED FOR THE DEFAULT GUI AND SSL
IC28813 Printscreen w/ Win95 & 98 is taking over 5 minutes to print
IC28832 Labels truncating some characters on some fonts

4.1.2 MVS Service Level V2.0.1b Information (Available January, 2001)

A PTF to bring Screen Customizer to the V2.0.1b maintenance level was available in January, 2001 and has been **superseded** by the V2.0.2 PTF. The APARs included in Service Level V2.0.1b are listed below:

IC29219 Customized Colors and Fonts are removed when adding Tags
IC28823 Label Caption is not High intensified
IC28761 MESSAGE WINDOWS DELAYED BEFORE SHOWING UP IN SCREEN CUSTOMIZER
IC28830 HOTSPOTS DON'T DISPLAY CORRECTLY
IC29090 Templates should not access psd files
IC29027 Up Down Keys when HMT is off need to be in HMT on position
IC29093 When using Global template on IE, Scroll bar is displaying 1st
OW47124 INVALID SYNTAX IN JCL JOB HOMDDDEF, STEP DEFPATH
IC29145 Reverse video is failing in SC with as/400
IC29158 Accented characters not in Tag Field display
IC29154 Using global variables with the global template fails
IC29156 Tab order window will not stretch horizontally

4.1.3 MVS Service Level V2.0.2 Information (Available February, 2001)

A PTF to bring Screen Customizer to the V2.0.2 maintenance level was available in February, 2001 and has been **superseded** by the V2.0.3 PTF. The APARs included in Service Level V2.0.2 are listed below:

IC29219 Customized Colors and Fonts are removed when adding Tags
IC29241 Host area moves over 1 pixel on global templates when saved
IC29360 Default GUI incorrectly displays some screens
IC29382 Changing font size of many objects at one time works incorrectly
IC29242 The <ATTN> fails when using it in a macro file for SC v2
IC29437 Text fields blend in with a white background
IC29478 Fields are shifted on Customization Studio with RTL customization
IC29476 Vertical coordinates of "Frame" custom element are wrong

4.1.4 MVS Service Level V2.0.3 Information (Available March, 2001)

A PTF is now available for Screen Customizer to bring the maintenance level to V2.0.3. PTF UW77685 is available in March, 2001. The APAR fixed for Service Level V2.0.3 is listed below:

IC28970 SC session with client authentication doesn't prompt for cert path

4.2 Service Level Information

A PTF containing APAR fixes against this release of Screen Customizer is available. For a **new installation** you will have received a PTF tape containing the latest service updates (PTF UW77685). If this is not a new installation, please order the PTF via your normal service process. For further information and a list of included PTFs, examine the ++VER statement in the product's SMPMCS. See Appendix A, "Screen Customizer Install Logic" on page 27 for more information on how to do this.

4.2.1 Sample PTF RECEIVE and APPLY JCL

The following sample JCL to RECEIVE the PTF from your PTF tape. Change parameters as necessary or use your own JCL.

```
//SMPPTFIN DD DISP=OLD,DCB=(RECFM=FB,LRECL=80,BLKSIZE=7200),
//          DSN=PTF,VOL=SER=PTFTPE,LABEL=(1,NL),UNIT=TAPE
//SMPCNTL DD *
           SET BDY (GLOBAL).           /* Set to Global Zone           */
           RECEIVE SOURCEID(xxxxxx)    /* Receive sysmods and         */
           SYSMODS                      /* holddata; assign a         */
           HOLDDATA.                   /* sourceid.                  */
```

The following is sample JCL to APPLY the PTF. Change parameters as necessary or use your own JCL.

```
//SMPCNTL DD *
           SET BODY(tzone).            /* Set to Target Zone          */
           APPLY SOURCEID(xxxxxx)     /* Specify id used in RECEIVE  */
           GROUP.                     /* APPLY the Corrective Service */
                                       /* and all applicable reqs.     */
```

4.2.2 PTF Installation Directions and Notes

Run the **mvsccli.sh** shell script found in the default `/usr/lpp/customizer` directory when installed via SMP/E to complete the PTF installation. If you did not install into the default directory, you will find the install script in your user defined directory.

Note: This PTF is a total replacement for your current product. If you separately have a Screen Customizer Administrator's workstation, make sure that you have all current copies of any maps downloaded to your administrator's workstation before you start installing this PTF. Once you have

completed the installation, both the SMP/E installation steps and shell script step, you can upload your customized maps back to your host if applicable.

5.0 Installation Requirements and Considerations

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

- *Driving system*: the system used to install the program.
- *Target system*: the system on which the program is installed.

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 Screen Customizer.

5.1.1 Machine Requirements

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

5.1.2 Programming Requirements

Figure 8. Driving System Software Requirements

Program Number	Product Name and Minimum VRM/Service Level
5647-A01	OS/390 SMP/E Version 2 Release 5 or higher with PTF UR51068

5.2 Target System Requirements

This section describes the environment of the target system required to install and use Screen Customizer.

Screen Customizer installs in the MVS (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 Mandatory Requisites: A mandatory requisite is defined as a product that is required without exception; this product either **will not install** or **will not function** unless this requisite is met. This includes products that are specified as REQs or PREs.

Screen Customizer requires that IBM WebSphere Host On-Demand Version 5 be installed prior to installing Screen Customizer. Screen Customizer will not complete a successful installation if Host On-Demand is not present. SMP/E processing will complete with no errors without the Host On-Demand product, but a post-SMP/E installation step will fail. This step includes running a shell script which will perform symbolic linking to Host On-Demand. If Host On-Demand is not present, symbolic linking will not occur. The HODLink-UNIX-errors file will indicate errors as well as errors written to your USS screen.

Figure 9 identifies the mandatory requisites for Screen Customizer.

<i>Figure 9. Mandatory Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
5647-A01	OS/390, Version 2 Release 5 or higher
5648-D70	IBM WebSphere Host On-Demand V5.0.3 (at the V5.0.3 maintenance level)

5.2.2.2 Functional Requisites: A functional requisite is defined as a product that is **not** required for the successful installation of this product or for the basic function of the product, but **is** needed at run time for a specific function of this product to work. This includes products that are specified as IF REQs.

<i>Figure 10 (Page 1 of 2). Functional Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Function
Any one of the following:		

<i>Figure 10 (Page 2 of 2). Functional Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Function
n/a	Netscape Navigator 4.6 or 4.7.x (Windows 95, 98, 2000, NT, UNIX)	Browser Function
n/a	Netscape Navigator 4.61 (OS/2)	Browser Function
n/a	Microsoft Internet Explorer 4.01 with SP1, 5.0, 5.1 (Windows 95, 98, 2000, NT). JVM level must be 3165 or higher.	Browser Function

5.2.2.3 Toleration/Coexistence Requisites: A toleration/coexistence requisite is defined as a product which 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.

Screen Customizer has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites: A negative requisite identifies products which must *not* be installed on the same system as this product.

Screen Customizer has no negative requisites.

5.2.3 DASD Storage Requirements

Screen Customizer libraries can reside on 3390 DASD.

Figure 11 lists the total space required for each type of library.

<i>Figure 11. Total DASD Space Required by Screen Customizer</i>	
Library Type	Total Space Required
Target	0.2MB
Distribution	36.0MB
HFS	150.0MB

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. In order 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. In order 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. In order 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 6.1.6, "Allocate SMP/E Target and Distribution Libraries and Paths (CUSALLOC)" on page 21.

Figure 12. Storage Requirements for SMP/E Work Data Sets

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SMPWRK1	S	PDS	FB	80	13	216
SMPWRK2	S	PDS	FB	80	13	216
SMPWRK3	S	PDS	FB	80	13	216
SMPWRK4	S	PDS	FB	80	13	216
SMPWRK6	S	PDS	FB	80	13	216
SYSUT1	U	SEQ	--	--	30	0
SYSUT2	U	SEQ	--	--	20	0
SYSUT3	U	SEQ	--	--	20	0
SYSUT4	U	SEQ	--	--	20	0

The following table provides an estimate of the storage needed in the SMP/E data sets for Screen Customizer. The estimates must be added to those of any other programs and service being installed to determine the total additional storage requirements.

If the table indicates that the SMPLTS data set must be a PDSE, but your existing SMPLTS is a PDS, you will need to allocate a new PDSE and copy your existing SMPLTS into it, and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

Figure 13. Storage Requirements for SMP/E Data Sets

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SMPLTS	S	PDS	U	0	15	20
SMPMTS	S	PDS	FB	80	75	5
SMPPTS	S	PDS	FB	80	2250	2
SMPSCDS	S	PDS	FB	80	15	20
SMPSTS	S	PDS	FB	80	75	5

The following figures describe the target and distribution libraries and HFS paths required to install Screen Customizer. The storage requirements of Screen Customizer 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.

Figure 14. Storage Requirements for Screen Customizer Target Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SCUSINST	Sample, EXEC	TGTVOL	U	PDS	FB	80	3	2

Figure 15. Screen Customizer HFS Paths

DDNAME	Path Name
SCUS0001	/usr/lpp/customizer/IBM

Figure 16. Storage Requirements for Screen Customizer Distribution Libraries

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
ACUSHFS1	U	PDS	VB	32600	800	5
ACUSINST	U	PDS	FB	80	3	2

5.3 FMIDs Deleted

Installing Screen Customizer may result in the deletion of other FMIDs. To see what FMIDs will be deleted, examine the ++VER statement in the product's SMPMCS. See Appendix A, "Screen Customizer Install Logic" on page 27 for more information on how to do this.

If you do not wish to delete these FMIDs at this time, you must install Screen Customizer 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 distribution libraries are assumed to be contained in a single HFS data set whose mount point is */usr/lpp/customizer*. Screen Customizer can be installed into an existing HFS, but if you wish to create your own HFS, the sample job CUSHFS can be used to allocate the HFS. It is recommended that you create your own HFS for Screen Customizer for serviceability. The CUSISMKD JCL sample is used to create the directory structure for your HFS.

After you finish with the SMP/E portion of your installation including running CUSAPPLY and CUSACCP, you will have to run the shell script **mvsvcli.sh** to complete the installation. Refer to **6.2 Activating Screen Customizer** for more details.

6.0 Installation Instructions

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

Please note the following:

- If you want to install Screen Customizer into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMP/CSI and the SMP/E control data sets.
- 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 Screen Customizer

6.1.1 SMP/E Considerations for Installing Screen Customizer

This release of Screen Customizer 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 17. 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.

SUB-ENTRY	Value	Comment
DSSPACE	(1000,500,350)	
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

6.1.3 SMP/E CALLLIBS Processing

No Link Edits are performed during the Screen Customizer SMP/E installation. No CALLLIBS are needed.

6.1.4 Unload the Sample JCL from the Product Tape

The following sample installation jobs are provided on the distribution tape to help you install Screen Customizer:

Figure 18. Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
CUSRECVE	RECEIVE	Sample RECEIVE job	IBM.HCUS200.F1
CUSALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HCUS200.F1
CUSDDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HCUS200.F1
CUSHFS	HFS	Sample job to define Screen Customizer HFS data set (Optional)	IBM.HCUS200.F1
CUSISMKD	MKDIR	Sample job to invoke the supplied CUSMKDIR EXEC to allocate HFS paths	IBM.HCUS200.F1
CUSAPPLY	APPLY	Sample APPLY job	IBM.HCUS200.F1
CUSACCP	ACCEPT	Sample ACCEPT job	IBM.HCUS200.F1

You may copy the jobs from the tape by submitting the job below. Add a job card and modify the parameters in boldface to uppercase values to meet your site's requirements before submitting.

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN DD DSN=IBM.HCUS200.F1,UNIT=tunit,VOL=SER=CUS200,
// LABEL=(2,SL),DISP=(OLD,KEEP)
//OUT DD DSN=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// VOL=SER=dasdvol,UNIT=dunit,
// DCB=*.STEP1.IN,SPACE=(TRK,(3,1,2))
//SYSUT3 DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN DD *
COPY INDD=IN,OUTDD=OUT
/*
```

where **tunit** is the unit value matching the product tape or cartridge, **jcl-library-name** is the name of the data set where the sample jobs will reside, **dasdvol** is the volume serial of the DASD device where the data set will reside, and **dunit** is the DASD unit type of the volume.

You can also access the sample installation jobs by performing an SMP/E RECEIVE for FMID HCUS200, and then copying the jobs from data set **hlq.IBM.HCUS200.F1** to a work data set for editing and submission.

6.1.5 Perform SMP/E RECEIVE (CUSRECVE)

Edit and submit sample job CUSRECVE to perform the SMP/E RECEIVE for Screen Customizer. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages:

This step should complete with Return Code = 0.

6.1.6 Allocate SMP/E Target and Distribution Libraries and Paths (CUSALLOC)

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

Expected Return Codes and Messages:

This step should complete with Return Code = 0.

6.1.7 Create DDDEF Entries (CUSDDDEF)

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

Expected Return Codes and Messages:

This step should complete with Return Code = 0.

This step may receive warning message GIM56501W and rc=4. This message is issued when DDDEF entries are added because they did not exist prior to running the job.

This step may also receive warning message GIM27701W and rc=4. This message is issued when DDDEF entries are added because they did not exist prior to running the job.

6.1.8 Allocate Screen Customizer HFS Data Set (CUSHFS) - Optional

IBM WebSphere Screen Customizer V2 can be installed into any HFS. However, if you wish to create your own HFS for Screen Customizer, edit and submit sample job CUSHFS to allocate the HFS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages:

This step should complete with Return Code = 0.

6.1.9 Allocate HFS Mount Points and Paths (CUSISMKD)

In this step you will create the HFS paths and the mount point for Screen Customizer. The instructions to create the mount point for Screen Customizer is detailed below as well as directions for running the CUSISMKD job which will create the paths.

The distribution libraries are assumed to be contained in a single HFS data set whose mount point is */usr/lpp/customizer*. Screen Customizer can be installed into an existing HFS or a new one created using the CUSHFS sample job. Use the commands below and the CUSISMKD job as needed to create the paths and mount points for Screen Customizer. If you created a new HFS, you will need to complete all three (3) steps below. If you are installing into an existing HFS, you will only have to do step #3 (omit steps 1 and 2).

Note: The TSO MKDIR commands must be invoked using a RACF userid with root authority in the OS/390 UNIX System. Path as well as mount point specification in the OS/390 UNIX System is case sensitive.

Follow these steps to create the mount point and directories:

1. From TSO issue the following TSO MKDIR command to create the */usr/lpp/customizer* mount point.

```
TSO MKDIR '-PATHPREFIX-/usr/lpp/customizer' MODE (7,5,5)
```

Note: Change the occurrences of the string *-pathprefix-* to the appropriate high level directory name. For users installing in the root, this would be null. For others, the high level directory may be something like */service/* or a more meaningful name. Please note the replacement string is case sensitive.

2. Issue the following MOUNT command to mount the HFS on the */usr/lpp/customizer* mount point. The HFS was previously allocated by the CUSHFS job.

Note: The mount command should be on one line.

Note: Change the **hfsprfx** qualifier to the name of the qualifier used in the CUSHFS installation job.

```
TSO MOUNT FILESYSTEM('hfsprfx.hfs')  
MOUNTPOINT('-PATHPREFIX-/usr/lpp/customizer') TYPE(HFS)
```

Note: Change the occurrences of the string *-pathprefix-* to the appropriate high level directory name. For users installing in the root, this would be null. For others, the high level directory may be something like */service/* or a more meaningful name. Please note the replacement string is case sensitive.

3. Edit and submit sample job CUSISMKD to allocate the HFS paths for Screen Customizer. Consult the instructions in the sample job for more information.

This job calls CUSMKDIR which creates the directory structure for Screen Customizer. CUSMKDIR is a REXX script which is called by CUSISMKD. CUSMKDIR should not be invoked by itself.

If you plan to create a new HFS for this product, you should consider updating the BPXPRMxx PARMLIB member to mount the new HFS at IPL time. This may be helpful if an IPL occurs before the installation is complete.

Expected Return Codes and Messages:

This step should complete with Return Code = 0.

6.1.10 Perform SMP/E APPLY (CUSAPPLY)

Edit and submit sample job CUSAPPLY to perform an SMP/E APPLY CHECK for Screen Customizer. 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 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).

Once 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:

This step should complete with Return Code = 0.

6.1.11 Perform SMP/E ACCEPT (CUSACCT)

Edit and submit sample job CUSACCT to perform an SMP/E ACCEPT CHECK for Screen Customizer. 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 apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

Expected Return Codes and Messages:

This step should complete with Return Code = 0.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/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.

6.2 Activating Screen Customizer

After the SMP/E installation steps have been completed for Screen Customizer, the **mvsvcli.sh** shell script must be run to properly configure Screen Customizer and Host On-Demand for operation.

The **mvsvcli.sh** shell script is located by default in the */usr/lpp/customizer* directory. If you changed the default path during your SMP/E install (ie., */service/lpp/customizer*), you will find the shell script in this directory. Invoke the shell script from the directory where it was installed. The **mvsvcli.sh** shell script untars both the Screen Customizer code and documentation to the created HFS directories. The shell script also creates other HFS directories as it executes and also calls the *HODSEDLINK-UNIX* shell script which creates symbolic links to Host On-Demand. You should not have to call *HODSEDLINK-UNIX* yourself. A *HODLINK-UNIX-errors* file is created during the installation. If the shell script ran without errors, the last two lines in the file should be *Linking HOD files* and *Done.* with no error messages. If any errors occurred during the execution of this shell script, they will be found in this file and displayed to your USS console.

The basic functions of Screen Customizer can be executed from one of the supported internet browsers via a Host On-Demand session. This will allow you to view default and any customized Screen Customizer screens. There are two ways to bring up a screen via your browser and a Host On-Demand session. One way is to **enable** an existing Host On-Demand User/Session to view Screen Customizer screens. The second way is to define a new Host On-Demand User, create **enabled** sessions for this new User for Screen Customizer and bring up a screen under this new User. Both methods are detailed below.

Enabling Screen Customizer with an *existing* Host On-Demand User/Session:

1. Enter the Host On-Demand Admin URL in your browser window to access Host On-Demand administrator functions
 - Log On to your Admin ID (requires Admin ID and Password)
2. Select the **Users** tab
3. Expand the **Users** dropdown to reveal previously defined Users
4. Left click on an existing User ID to highlight
5. Select **Sessions** button to bring up a window with all configured sessions for that User
 - Right Click on selected session type (ie., 3270 Display) and select **Properties**
 - Under **Screen** tab, set Screen Customizer parameter to **Enabled**
 - Select the **OK** button
 - Select the **OK** button

6. Log Off your Host On-Demand Admin ID
7. Log On to your **enabled** User/Session:
 - Enter the Host On-Demand Client URL in your browser window
 - Enter your Screen Customizer **enabled** User ID and Password
8. Right click on your **enabled** defined session(s) (ie.,3270 Display)
 - Select **Start Session** to bring up your Screen Customizer screen(s)

Enabling Screen Customizer with a *new* Host On-Demand User - Create New User

1. Enter the Host On-Demand Admin URL in your browser window to access Host On-Demand administrator functions
 - Log On to your Admin ID (requires Admin ID and Password)
2. Select the **Users** tab
3. Expand the **Users** dropdown to reveal defined users
4. Select the **New User** button and fill in the following:
 - User ID name
 - Description
 - Password information
 - Add new User to a Group (Member of area)
 - Select **Apply** and then **Close** to add your new user to **Users** dropdown
5. Left click on your newly created User ID to highlight
6. Select **Sessions** button
 - Configure new session type (ie., 3270 Display) button
 - Under **Connection** tab, enter appropriate session information for your site
 - Under **Screen** tab, set Screen Customizer parameter to **Enabled**
 - Select the **OK** button and a new configured session will be created for the new User
 - Select the **OK** button
7. Log Off your Host On-Demand Admin ID
8. Log On to your newly created User/Session:
 - Enter the Host On-Demand Client URL in your browser window
 - Enter your new User ID and Password
9. Right click on your **enabled** defined session(s) (ie.,3270 Display)
 - Select **Start Session** to bring up your Screen Customizer screen(s)

Note: As mentioned previously, you must separately purchase the Administrator and Customization Studio components for administrative and customization capabilities with Screen Customizer. Screen Customizer provides the capability to view default and previously customized Screen Customizer screens. Contact your IBM representative to order the Administrator and Customization Studio.

Note: Some VTAM installations have an optimizer installed that can merge fields to enhance performance. This option must be turned off. A field merge effect may also be caused by CICS and IMS applications that write the data stream directly, rather than utilizing BMS or MFS mapping systems. Screens similar in appearance may significantly differ in the number and length of fields, and this can cause problems associating customization to a screen. Screen Customizer's default interface can accommodate such data streams, because it creates an interface instantly according to the data stream that is sent to the client. However, customizing such screens can be difficult because you have to account for all of the iterations to the screen and import the customization to all of the screens.

Appendix A. Screen Customizer Install Logic

A.1 SMP/E Modification Control Statements

The SMP/E Modification Control Statements (SMPMCS) for Screen Customizer are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS data set, with a member name matching the FMID, when the FMID is SMP/E RECEIVED. You may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

A.2 SMP/E JCLIN

There is no JCLIN required for Screen Customizer.

Reader's Comments

Program Directory for IBM WebSphere Screen Customizer V2

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

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

RATING SCALE					
very satisfied	<=====	3	4	=====	very dissatisfied
1	2	3	4	5	not applicable N

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

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 MVS products?

- Yes



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CU77VNA
CU7BLNA

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