IBM

Program Directory for

IBM HourGlass

V07.01.00

Program Number 5655-U59

FMID HAD5710

for Use with
z/OS

Document Date: November 2013

GI13-2928-00

Note

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 19.

Contents

Figures

Manual'

1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM HourGlass. This publication refers to IBM HourGlass as HourGlass.

The Program Directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic program materials and documentation for HourGlass.

- 3.0, "Program Support" on page 5 describes the IBM support available for HourGlass.

- 4.0, "Program and Service Level Information" on page 6 lists the APARs (program level) and PTFs (service level) that have been incorporated into HourGlass.

- 5.0, "Installation Requirements and Considerations" on page 8 identifies the resources and considerations that are required for installing and using HourGlass.

- 6.0, "Installation Instructions" on page 14 provides detailed installation instructions for HourGlass. It also describes the procedures for activating the functions of HourGlass, or refers to appropriate publications.

Before installing HourGlass, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that are supplied with this program in softcopy format and this Program Directory; 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.

HourGlass is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The Program Directory that is provided in softcopy format on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for HourGlass are included on the CBPDO tape.

Do not use this program directory if you install HourGlass with a SystemPac or ServerPac. When you use one of those offerings, use the jobs and documentation supplied with the offering. The offering will point you to specific sections of this program directory as needed.

1.1 HourGlass Description

HourGlass facilitates the testing of time-sensitive applications by eliminating the POR (Power-On-Reset) procedures. Additionally, unlike the POR method, one may set as many altered date and time values as needed, and the altered values affect only the applications specified. All other applications and system components such as tape management system and system catalog are unaffected. With HourGlass, the testing of time-sensitive applications becomes simpler and less disruptive to operation.

1.2 HourGlass FMIDs

HourGlass consists of the following FMIDs:

HAD5710

2.0 Program Materials

An IBM program is identified by a program number. The program number for HourGlass is 5655-U59.

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.

The program announcement material describes the features supported by HourGlass. 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 physical media or downloadable files. This program is in SMP/E RELFILE format and is installed by using SMP/E. See 6.0, "Installation Instructions" on page 14 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for HourGlass in the *CBPDO Memo To Users Extension*.

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for HourGlass.

2.3 Program Publications

The following sections identify the basic publications for HourGlass.

Figure 1 identifies the basic unlicensed publications for HourGlass.

Figure 1. Basic Material: Unlicensed		
Publication Title	**Form Number**	**Media Format**
HourGlass for z/OS License Information	GI13-2929-00	
HourGlass for z/OS Program Directory	GI13-2928-00	
HourGlass Usage and Installation Guide	SC23-8561-02	

2.4 Program Source Materials

No program source materials or viewable program listings are provided for HourGlass.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 2 on page 4 during the installation of HourGlass.

Figure 2. Publications Useful During Installation		
Publication Title	**Form Number**	**Media Format**
IBM SMP/E for z/OS User's Guide	SA22-7773	http://www.ibm.com/shop/ publications/order/
IBM SMP/E for z/OS Commands	SA22-7771	http://www.ibm.com/shop/ publications/order/
IBM SMP/E for z/OS Reference	SA22-7772	http://www.ibm.com/shop/ publications/order/
IBM SMP/E for z/OS Messages, Codes, and Diagnosis	GA22-7770	http://www.ibm.com/shop/ publications/order/

3.0 Program Support

This section describes the IBM support available for HourGlass.

3.1 Program Services

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

3.2 Preventive Service Planning

There is no PSP support for HourGlass.

For program support, access the Software Support Website at http://www-01.ibm.com/software/support/.

3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 3 identifies the component IDs (COMPID) for HourGlass.

Figure 3. Component IDs			
FMID	**COMPID**	**Component Name**	**RETAIN Release**
HAD5710	5655U4200	HourGlass	710

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of HourGlass. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

The following APAR fixes against previous releases of HourGlass have been incorporated into this release. They are listed by FMID.

- FMID HAD5710

PK81066	PK94396	PM15205
PK81080	PK94397	PM15606
PK81098	PK94575	PM15676
PK81100	PK95315	PM15867
PK81278	PK95509	PM16057
PK82052	PK95519	PM16799
PK82447	PK96126	PM18113
PK86775	PK98424	PM19115
PK86794	PK99207	PM20198
PK86795	PK99814	PM20658
PK86796	PM00061	PM21047
PK86798	PM00355	PM21144
PK86799	PM00571	PM21182
PK86800	PM02032	PM22315
PK86801	PM02893	PM25274
PK86802	PM04690	PM25472
PK86803	PM04915	PM25670
PK86804	PM05558	PM26414
PK86805	PM06005	PM26818
PK87318	PM06208	PM27485
PK87604	PM06582	PM28973
PK87637	PM06799	PM33209
PK88355	PM07294	PM33599
PK88589	PM07467	PM35278
PK89033	PM07635	PM36581
PK89040	PM08044	PM37250
PK89730	PM08630	PM37628
PK90161	PM09479	PM37643
PK93439	PM10892	PM38177
PK93863	PM11926	PM38400
PK94395	PM14561	PM38595

PM40104	PM51282	PM73129
PM41332	PM51395	PM73265
PM41945	PM52437	PM73337
PM42251	PM54009	PM74980
PM43152	PM55005	PM76101
PM43809	PM55864	PM77478
PM43893	PM56071	PM77566
PM44038	PM56781	PM78106
PM44843	PM57148	PM78419
PM44890	PM58160	PM79053
PM45625	PM58669	PM79435
PM46440	PM59205	PM80243
PM47071	PM60597	PM81065
PM47207	PM61047	PM81392
PM47725	PM61297	PM81626
PM48773	PM63648	PM81636
PM48835	PM64382	PM81742
PM48919	PM64814	PM82171
PM49197	PM71432	PM83340
PM49347	PM72250	PM83745
PM50172	PM72760	PM85098
		PM85996

4.2 Service Level Information

No PTFs against this release of HourGlass have been incorporated into the product package.

Frequently check the HourGlass PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the **FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE)** operand on your APPLY CHECK command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.

5.0 Installation Requirements and Considerations

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

- *Driving system*: the system on which SMP/E is executed to install the program.

  The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.

- *Target system*: the system on which the program is configured and run.

  The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must 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.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.

- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can 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 HourGlass.

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 4. Driving System Software Requirements				
Program Number	**Product Name**	**Minimum VRM**	**Minimum Service Level will satisfy these APARs**	**Included in the shipped product?**
Any **one** of the following:				
5694-A01	z/OS	V01.12.00	N/A	No
5655-G44	IBM SMP/E for z/OS	V03.05.00	N/A	No

Note: Installation might require migration to new z/OS releases to be service supported. See http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html.

5.2 Target System Requirements

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

HourGlass 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

Installation requisites identify products that are required and *must* be present on the system or products that are not required but *should* be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product. These products are specified as PREs or REQs.

HourGlass has no mandatory installation requisites.

Conditional installation requisites identify products that are *not* required for successful installation of this product but can resolve such things as certain warning messages at installation time. These products are specified as IF REQs.

HourGlass has no conditional installation requisites.

5.2.2.2 Operational Requisites

Operational requisites are products that are required and *must* be present on the system or products that are not required but *should* be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions. These products are specified as PREs or REQs.

Figure 5. Target System Mandatory Operational Requisites	
Program Number	**Product Name and Minimum VRM/Service Level**
5694-A01	z/OS V01.12.00 or higher

5.2.2.3 Toleration/Coexistence Requisites

Toleration/coexistence requisites identify products that must be present on sharing systems. 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 environment at different time intervals.

5.2.2.4 Incompatibility (Negative) Requisites

Negative requisites identify products that must *not* be installed on the same system as this product.

HourGlass has no negative requisites.

5.2.3 DASD Storage Requirements

HourGlass libraries can reside on all supported DASD types.

Figure 6 lists the total space that is required for each type of library.

Figure 6. Total DASD Space Required by HourGlass		
Library Type	**Total Space Required in 3390 Trks**	**File System Description**
Target	111	
Distribution	111	

Notes:

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

2. Abbreviations used for data set types are shown as follows.

U   Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.

S   Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in 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 other products. This data set is *not* allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in 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.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old release and reclaim the space that was used by the old release and any service that had been installed. You can determine whether 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 about the names and sizes of the required data sets, see 6.1.5, "Allocate SMP/E Target and Distribution Libraries" on page 16.

3. Abbreviations used for the file system path type are as follows.

N   New path, created by this product.
X   Path created by this product, but might 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 can be changed.
- The default block size of the data set can be changed.
- The data set can be merged with another data set that has equivalent characteristics.
- The data set can be either a PDS or a PDSE.

5. All target libraries listed have the following attributes:

- These data sets can be SMS-managed, but they are not required to be SMS-managed.
- These data sets are not required to reside on the IPL volume.
- The values in the "Member Type" column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.

6. All target libraries that are listed and contain load modules have the following attributes:

- These data sets can be in the LPA, but they are not required to be in the LPA.
- These data sets can be in the LNKLST.
- These data sets are not required to be APF-authorized.

The following figures describe the target and distribution libraries and file system paths required to install HourGlass. The storage requirements of HourGlass must be added to the storage required by other programs that have data in the same library or path.

Note: Use the data in these tables to determine 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 7. Storage Requirements for HourGlass 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
SAGGCLIB	CLIST	TVOL1	U	PDS	FB	80	2	2
SAGGDBRM	DATA	TVOL1	U	PDS	FB	80	2	2
SAGGEXEC	EXEC	TVOL1	U	PDS	FB	80	2	2
SAGGINST	SAMPLE	TVOL1	U	PDS	FB	80	3	3
SAGGLLIB	LMOD	TVOL1	U	PDS	U	0	5	2
SAGGLOAD	LMOD	TVOL1	U	PDS	U	0	36	23
SAGGMLIB	MESSAGES	TVOL1	U	PDS	FB	80	2	2
SAGGNOTC	DATA	TVOL1	U	PDS	VB	1000	2	6
SAGGPINT	DATA	TVOL1	U	PDS	FB	80	27	20
SAGGPLIB	PANEL	TVOL1	U	PDS	FB	80	11	12
SAGGSAMP	SAMPLE	TVOL1	U	PDS	FB	80	19	14

Figure 8 (Page 1 of 2). Storage Requirements for HourGlass 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
AAGGCLIB	U	PDS	FB	80	2	2
AAGGDBRM	U	PDS	FB	80	2	2
AAGGEXEC	U	PDS	FB	80	2	2
AAGGINST	U	PDS	FB	80	3	3
AAGGLLIB	U	PDS	U	0	5	2
AAGGLOAD	U	PDS	U	0	36	23
AAGGMLIB	U	PDS	FB	80	2	2

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
Figure 8 (Page 2 of 2). Storage Requirements for HourGlass Distribution Libraries						
AAGGNOTC	U	PDS	VB	1000	2	6
AAGGPINT	U	PDS	FB	80	27	20
AAGGPLIB	U	PDS	FB	80	11	12
AAGGSAMP	U	PDS	FB	80	19	14

5.3 FMIDs Deleted

Installing HourGlass might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the ++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install HourGlass into separate SMP/E target and distribution zones.

Note: These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands book for details.

5.4 Special Considerations

HourGlass has no special considerations for the target system.

6.0 Installation Instructions

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

Please note the following points:

- If you want to install HourGlass 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.

- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.

- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing HourGlass

6.1.1 SMP/E Considerations for Installing HourGlass

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of HourGlass.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 9. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

Figure 9. SMP/E Options Subentry Values		
Subentry	**Value**	**Comment**
DSSPACE	600,200,300	Space for SMPTLIB
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

6.1.3 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install HourGlass:

Figure 10. Sample Installation Jobs			
Job Name	**Job Type**	**Description**	**RELFILE**
AGG1DCSI	DEFCSI	Sample DEFCSI job	IBM.HAD5710.F1
AGG2RECV	RECEIVE	Sample RECEIVE job	IBM.HAD5710.F1
AGG3ALCS	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HAD5710.F1
AGG4DDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HAD5710.F1
AGG5APLY	APPLY	Sample APPLY job	IBM.HAD5710.F1
AGG6ACPT	ACCEPT	Sample ACCEPT job	IBM.HAD5710.F1

You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.4, "Perform SMP/E RECEIVE" on page 16) then copy the jobs from the RELFILES to a work data set for editing and submission. See Figure 10 on page 14 to find the appropriate relfile data set.

You can also copy the sample installation jobs from the tape or product files by submitting the following job. Depending on your distribution medium, use either the //TAPEIN or the //FILEIN DD statement and comment out or delete the other statement. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

```
//STEP1    EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//TAPEIN   DD DSN=IBM.HAD5710.F1,UNIT=tunit,
//         VOL=SER=volser,LABEL=(x,SL),
//         DISP=(OLD,KEEP)
//FILEIN   DD DSN=IBM.HAD5710.F1,UNIT=SYSALLDA,DISP=SHR,
//         VOL=SER=filevol
//OUT      DD DSNAME=jcl-library-name,
//         DISP=(NEW,CATLG,DELETE),
//         VOL=SER=dasdvol,UNIT=SYSALLDA,
//         SPACE=(TRK,(primary,secondary,dir))
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(TRK,(5,1,5))
//SYSIN    DD *
    COPY INDD=xxxxIN,OUTDD=OUT
/*
```

See the following information to update the statements in the previous sample:

TAPEIN:
> **tunit** is the unit value that matches the product package.
> **volser** is the volume serial that matches the product package.
> **x** is the tape file number that indicates the location of the data set name on the tape.
> See the documentation that is provided by CBPDO for the location of IBM.fmid.Fy on the tape.

FILEIN:
> **filevol** is the volume serial of the DASD device where the downloaded files reside.

OUT:

jcl-library-name is the name of the output data set where the sample jobs are stored.

dasdvol is the volume serial of the DASD device where the output data set resides.

SYSIN:

xxxxIN is either TAPEIN or FILEIN depending on your input DD statement.

6.1.4 Perform SMP/E RECEIVE

If you have obtained HourGlass as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the HourGlass FMIDs, service, and HOLDDATA that are included on the CBPDO package. For more information, see the documentation that is included in the CBPDO.

You can also choose to edit and submit sample job AGG2RECV to perform the SMP/E RECEIVE for HourGlass. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.1.5 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job AGG3ALCS to allocate the SMP/E target and distribution libraries for HourGlass. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.1.6 Create DDDEF Entries

Edit and submit sample job AGG4DDEF to create DDDEF entries for the SMP/E target and distribution libraries for HourGlass. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.1.7 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job AGG5APLY to perform an SMP/E APPLY CHECK for HourGlass. Consult the instructions in the sample job for more information.

2. After you take actions that are 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 applies 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.

6.1.8 Perform SMP/E ACCEPT

Edit and submit sample job AGG6ACPT to perform an SMP/E ACCEPT CHECK for HourGlass. 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 PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of only *errors* but not *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E Commands book for details.

After you take actions that are 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 accepts all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

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

If PTFs that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

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

6.1.9 Enable/Regester HourGlass.

INSTRUCTIONS FOR REGISTERING THE IBM HOURGLASS PRODUCT, VIA THE MVS PRODUCT REGISTRATION SERVICE, ON BEHALF OF THE IBM SUB-CAPACITY REPORTING TOOL (SCRT).

The IBM HourGlass product can be registerd via the MVS Product Registration Service. When HourGlass is registered in this way, the MVS Product Registration Service produces SMF records which can be input to the IBM Sub-Capacity Reporting Tool (SCRT), in order to produce Sub-Capacity reports. Contact your local IBM representative for further information.

If you purchased IBM HourGlass as part of 5655-PDS IBM Problem Determination Solution Pack for z/OS, code these statements in your IFAPRDxx parmlib member (if you have not already done this for another tool in 5655-PDS).

```
PRODUCT OWNER('IBM CORP')
       NAME('IBM PD SOLTN PAC')
       ID(5655-PDS)
       VERSION(*) RELEASE(*) MOD(*)
       FEATURENAME('PROB-DET-SOL-PAC')
       STATE(ENABLED)
```

Sample registration parmlib entry EQAWIFAS, which contains the above statements, is provided in your hlq.SEQASAMP data set.

If you purchased IBM HourGlass as part 5655-DTS IBM Problem Determination Testing Solution Pack for z/OS, code these statements in the IFAPRDxx parmlib member (if you have not already done this for another tool in 5655-DTS).

```
PRODUCT OWNER('IBM CORP')
       NAME('IBM PD TS SO PAC')
       ID(5655-DTS)
       VERSION(*) RELEASE(*) MOD(*)
       FEATURENAME('PR-DE-SOL-TS-PAC')
       STATE(ENABLED)
```

Sample registration parmlib entry EQAWIFAT, which contains the above statements, is provided in your hlq.SEQASAMP data set.

If you purchased IBM HourGlass directly, code these statements in your IFAPRDxx parmlib member.

```
PRODUCT OWNER('IBM CORP')
       NAME('HOURGLASS V7')
       ID(5655-U59)
       VERSION(*) RELEASE(*) MOD(*)
       FEATURENAME('HOURGLASS V7')
       STATE(ENABLED)
```

To activate your specifications in the IFAPRDxx parmlib member, issue the SET PROD=xx operator command. The IBM HourGlass product will then be enabled for product registration/deregistration, as described above, in your z/OS environment.

6.2 Activating HourGlass

The publication *HourGlass User's Guide and Installations, SC23856102* contains the step-by-step procedures to activate the functions of HourGlass.

7.0 Notices

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Program Directory for IBM HourGlass, November 2013

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