

# **System Maintenance Aid**

## **Using SMA Under z/OS**

Version 2.2.1

June 2019

This document applies to System Maintenance Aid Version 2.2.1 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

Copyright © 2019 Software AG, Darmstadt, Germany and/or Software AG USA, Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA, Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

Use of this software is subject to adherence to Software AG's licensing conditions and terms. These terms are part of the product documentation, located at <http://softwareag.com/licenses/> and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third-Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with Software AG.

**Document ID: SMA-USINGOS-221-20190624**

## Table of Contents

|  |    |
|--|----|
| Preface .....  | v  |
| 1 About this Documentation .....                               | 1  |
| Document Conventions .....                                     | 2  |
| Online Information and Support .....                           | 2  |
| Data Protection .....  | 3  |
| 2 Prepare z/OS Parameters .....                                | 5  |
| Adapt Global SMA Parameters .....                              | 6  |
| Adapt SMA Parameters for Your Environment .....                | 7  |
| 3 Important JCL Skeletons .....                                | 11 |
| Copy Steps .....   | 12 |
| Commit Steps .....   | 12 |
| Other Steps .....  | 13 |
| 4 Sequence of Generated Jobs .....                             | 15 |
| 5 Load SMA Tables from a Tape and Copy Data Sets to Disk ..... | 17 |
| Loading the SMA Tables from a Tape (Tabload) .....             | 18 |
| Mark a Data Set for Copy .....                                 | 18 |
| Generate Copy Job from the Tape Menu .....                     | 20 |
| Generate Copy Job from User Environment .....                  | 21 |



---

# Preface

---

This section contains information relevant when using SMA under z/OS.

|  |
|--|
| <a href="#">Prepare z/OS Parameters</a>                                |
| <a href="#">Important JCL Skeletons</a>                                |
| <a href="#">Sequence of Generated Jobs</a>                             |
| <a href="#">Load SMA Tables from a Tape and Copy Data Sets to Disk</a> |

---

# 1 About this Documentation

---

|  |   |
|--|---|
| ▪ Document Conventions .....           | 2 |
| ▪ Online Information and Support ..... | 2 |
| ▪ Data Protection .....                | 3 |

## Document Conventions

---

| Convention     | Description  |
|----------------|--|
| <b>Bold</b>    | Identifies elements on a screen.   |
| Monospace font | Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.  |
| <i>Italic</i>  | Identifies:<br><br>Variables for which you must supply values specific to your own situation or environment.<br>New terms the first time they occur in the text.<br>References to other documentation sources. |
| Monospace font | Identifies:<br><br>Text you must type in.<br>Messages displayed by the system.<br>Program code.  |
| { }            | Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.   |
|                | Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the   symbol.  |
| [ ]            | Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.  |
| ...            | Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).  |

## Online Information and Support

---

### Software AG Documentation Website

You can find documentation on the Software AG Documentation website at <http://documentation.softwareag.com>. The site requires credentials for Software AG's Product Support site Empower. If you do not have Empower credentials, you must use the TECHcommunity website.

### Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to [empower@softwareag.com](mailto:empower@softwareag.com) with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at <https://empower.softwareag.com/>.



You can find product information on the Software AG Empower Product Support website at <https://empower.softwareag.com>.

To submit feature/enhancement requests, get information about product availability, and download products, go to [Products](#).

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the [Knowledge Center](#).

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at [https://empower.softwareag.com/public\\_directory.asp](https://empower.softwareag.com/public_directory.asp) and give us a call.

### **Software AG TECHcommunity**

You can find documentation and other technical information on the Software AG TECHcommunity website at <http://techcommunity.softwareag.com>. You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

## **Data Protection**

---

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

---

# 2 Prepare z/OS Parameters

---

- Adapt Global SMA Parameters ..... 6
- Adapt SMA Parameters for Your Environment ..... 7

This section describes the parameters relevant for SMA usage under z/OS.



**Note:** In this section, the term “tape” represents any installation media (e.g. tape and CD-ROM) supported by Software AG. The information provided here applies to the use of any of these media.

## Adapt Global SMA Parameters

- [Global SMA Parameters Used For Commit, Tabload, Generate](#)
- [Global SMA Parameters Used For Copy Jobs](#)

### Global SMA Parameters Used For Commit, Tabload, Generate

These parameters are used in **commit steps**, tabload job and generate job only.

| Parameter Name    | Default Value   | Function  |
|-------------------|-----------------|---|
| MVS-DB-DEVICE     | 3390            | DB device type  |
| MVS-DSN-ADA-LOAD  | SAG.ADABAS.LOAD | Name of Adabas load library   |
| MVS-DSN-USER-LOAD | SAG.USER.LOAD   | Name of load library containing the batch-mode Natural nucleus module |
| MVS-JOB-CLASS     | 1               | Default tape job class  |
| MVS-JOB-CLASS-2   | G               | Default job class   |
| MVS-JOB-PREFIX    | SMA             | Default job prefix (first 4 characters of the job name)               |
| MVS-NAT-BATCH     | NATBATCH        | Name of the executable batch-mode Natural module                      |
| MVS-OUTPUT-CLASS  | X               | Default output class  |
| MVS-SVC           | 249             | SVC number for Adabas to be used in batch-mode job ADARUN statements  |
| MVS-TAPE-DEVICE   | 3490            | Tape device used  |

### Global SMA Parameters Used For Copy Jobs

These parameters are used in copy jobs generated from the Tape menu within SMA.

| Parameter Name     | Default Value | Function  |
|--------------------|---------------|---|
| MVS-LIB-ALLOC-TYPE | TRK           | Type of the default allocation type used (see description for MVS-LIB-GROUP)  |
| MVS-LIB-GROUP      | SAG           | Name of the lib group used as default, when generating the tape copy job from the Tape menu in SMA (T). If the copy job is generated from the user environment, the LIB-GROUP parm from the user environment is used instead. |

| Parameter Name     | Default Value | Function  |
|--------------------|---------------|---|
| MVS-LIB-GROUP-UNIT | 3390          | Name of the default unit used (see description for MVS-LIB-GROUP)   |
| MVS-LIB-GROUP-VOL  | VVVVVV        | Name of the default volume used (see description for MVS-LIB-GROUP) |

## Adapt SMA Parameters for Your Environment

You may need to adapt the following SMA parameters to meet your site's requirements. Find the following parameters in your SMA environment (Groups BASIC and OPTION). You can change these parameters in the OS/MVS default environment if you want to use them as default values for all other user environments.

- [Library Group Parameters](#)
- [SMA Parameters](#)
- [z/OS Parameters](#)
- [Job Parameters](#)
- [CICS Parameters](#)
- [VSAM Parameters](#)

### Library Group Parameters

| Parameter Name | Default Value | Group  | Function   |
|----------------|---------------|--------|--|
| LIB-GROUP      | SAGLIB        | LIBGRP | Library group. Used as default Hi-Level-Qualifier for new data set copies. |
| LIB-GROUP-UNIT | 3390          | LIBGRP | Default device for new data set copies                                     |
| LIB-GROUP-VOL  | VVVVVV        | LIBGRP | Default volume for new data set copies                                     |

### SMA Parameters

These parameters are related to SMA library usage. See also the section Concepts, Library Organization.

| Parameter Name    | Default Value                 | Group  | Function   |
|-------------------|-------------------------------|--------|--|
| DSN-SMALOAD       | #V-LIB-GROUP#.#S-ENV#.SMALOAD | BASIC  | Name of load library for results of LINK jobs generated by SMA |
| DSN-SMASRCE       | #V-LIB-GROUP#.#S-ENV#.SMASRCE | BASIC  | Name of source library for source members generated by SMA     |
| SMA-FIRST-INSTALL | Y                             | OPTION | Set according to first or migration installation               |

**z/OS Parameters**

| Parameter Name  | Default Value    | Group | Function  |
|-----------------|------------------|-------|---|
| ASMBLR          | IEV90            | BASIC | Assembler program name                                      |
| DSN-APFLIB      | SYS1.APFLIB      | BASIC | Name of APF-authorized library                              |
| DSN-CEEMACLIB   | SYS1.CEE.MACLIB  | BASIC | Name of LE370 macro library                                 |
| DSN-LE-SCEERUN  | SYS1.LE.SCEERUN  | BASIC | Name of language-edition support library                    |
| DSN-SYSLINKLIB  | SYS1.LINKLIB     | BASIC | Name of OS system link library                              |
| DSN-SYSLPALIB   | SYS1.LPALIB      | BASIC | Name of OS system LPS library                               |
| DSN-SYSMODGEN   | SYS1.MODGEN      | BASIC | Name of OS system library                                   |
| DSN-SYSPARMLIB  | SYS1.PARMLIB     | BASIC | Name of OS parameter library                                |
| DSN-USERPROCLIB | USER.PROCLIB     | BASIC | Name of the OS user proclib where started tasks are located |
| LKED            | IEWL             | BASIC | Linkage editor program name                                 |
| TCPIP-DATA      | TCPIP.TCPIP.DATA | BASIC | Name of the IBM TCP/IP data file                            |
| TCPIP-JOBNAME   | blank            | BASIC | Job name for IBM TCPIP                                      |

**Job Parameters**

| Parameter Name | Default Value | Group  | Function   |
|----------------|---------------|--------|--|
| EXPIRATION     | 00365         | BASIC  | Expiration date used in all DD statements for tape data sets   |
| JOB-PREFIX     | SMA           | BASIC  | First 4 characters of job names  |
| JOBACCOUNT     | SMA           | BASIC  | Job account information  |
| JOBCLASS       | G             | BASIC  | Job class  |
| JOBMSGCL       | X             | BASIC  | Value of the MSGCLASS parameter  |
| LE370          | NO            | BASIC  | Set to YES if LE370 is used and to NO if not. (support of LE370 calling conventions for 3GL subprograms) |
| SMS            | N             | OPTION | Set to Y if you want SMS-managed data sets for the database  |
| SMSCLASS       | SMS           | BASIC  | SMS class name   |
| SYSOUT         | *             | BASIC  | SYSOUT parameter for DD SYSOUT statements  |
| TAPEUNIT       | TAPE          | BASIC  | UNIT parameter for all DD statements when reading from tape  |
| TEMPUNIT       | 3390          | BASIC  | Disk unit for work data sets   |

## CICS Parameters

| Parameter Name  | Default Value    | Group | Function  |
|-----------------|------------------|-------|---|
| DSN-CICSDFHCSD  | CICS.SDFHCSD     | BASIC | Name of the CICS CSD data set                                   |
| DSN-CICSLOADLIB | CICS.SDFHLOAD    | BASIC | Name of the load library containing CICS system programs        |
| DSN-CICSMACLIB  | CICS.SDFHMAC     | BASIC | Name of the CICS macro library                                  |
| DSN-CICSUSERLIB | DSN-CICSUSERLIB  | BASIC | Name of the load library containing CICS user programs (RPLLIB) |
| RDO-GROUP       | #V-LIB-GROUP#GRP | NCI   | Name of CICS RDO group (for DFHCSDUP utility)                   |

## VSAM Parameters

| Parameter Name | Default Value | Group  | Function   |
|----------------|---------------|--------|--|
| SMS-VSAMALLOC  | blank         | OPTION | Set to Y if you want to allocate VSAM files on SMS |
| VS-EXPIRATION  | 2000365       | BASIC  | Expiration date for VSAM clusters                  |







# 3 Important JCL Skeletons

---

- Copy Steps ..... 12
- Commit Steps ..... 12
- Other Steps ..... 13

This section describes the most important JCL skeletons related to z/OS usage.

-  **Caution:** Be aware that if you change skeletons in the default environment, they will be overwritten by Software AG.
-  **Note:** In this section, the term “tape” represents any installation media (e.g. tape and CD-ROM) supported by Software AG. The information provided here applies to the use of any of these media.

## Copy Steps

---

| Skeleton Name | Function  |
|---------------|---|
| COPY-PS       | Copy a sequential data set from tape to disk    |
| COPY-PO       | Copy a PO data set from tape to disk            |
| COPY-POE      | Copy a POE data set from tape to disk           |
| COPY-PS2      | From CD: Restore sequential, PO or POE data set |

## Commit Steps

---

| Skeleton Name | Function   |
|---------------|--|
| SMA-COMMIT    | The final installation step, which informs SMA that all jobs have been completed successfully, runs in an existing Natural environment and not necessarily in an environment created by SMA. Therefore, it is usually necessary to adapt the skeleton SMA-COMMIT to the existing environment. Ensure that only global parameters (see Global Parameters in section Menus and Line Commands) are used in this skeleton. |
| ZAP-COMMIT    | The JCL skeleton ZAP-COMMIT is used to generate the last step in the jobs which apply or undo Zaps. This skeleton must be modified for the default environment OS/MVS. Ensure that only global parameters (see Global Parameters in section Menus and Line Commands) are used in this skeleton.  |

---

## Other Steps

---

| Skeleton Name    | Function   |
|------------------|--|
| JOB-CARD         | This skeleton is used as job card for all jobs generated and submitted by SMA  |
| ADA-FILES        | This skeleton contains the DD statements for the files of the Adabas databases   |
| TABLOAD2         | This skeleton contains JCL used for the Tabload function in SMA  |
| SMA-GENERATE-JCL | The JCL skeleton SMA-GENERATE-JCL is used to generate the installation JCL in batch mode using the line command <code>JB</code> in the Environment menu. It may be modified in a user environment. |



# 4 Sequence of Generated Jobs

---

This section describes the sequence of SMA-generated jobs.

Four groups of jobs are generated (*xxx* represents a three-digit number):

- **T<sub>xxx</sub>**: Tape copy jobs. These jobs copy the libraries and the marked data sets. One job is generated per tape.
- **P<sub>xxx</sub>**: Preparatory jobs. These jobs perform preparatory tasks for the installation.
- **I<sub>xxx</sub>**: Installation jobs. The last I<sub>xxx</sub> job changes the status of products and parameters from *status to be installed* to *installed*.
- Other jobs are example jobs, which might be useful to the user, but are not part of the product installation.

| Job Name | Description                           |
|----------|---------------------------------------|
| P010     | Create the SAGLIB                     |
| P020     | Define/Restore libraries/sublibraries |
| P040     | Catalog procedures                    |
| P060     | Preparation instructions              |
| P080     | Delete/Define VSAM clusters           |
| I003     | Create conversion jobs                |
| I005     | Update CICS tables                    |
| I006     | Update CICS tables with utility       |
| I008     | Allocate data sets                    |
| I009     | Copy data sets                        |
| I010     | Install permanent ADASVC              |
| I011     | Install temporary ADASVC              |
| I015     | Create sample jobs/source             |

| Job Name | Description  |
|----------|--|
| I017     | Stop/Start jobs (i.e. global bufferpool)   |
| I020     | Adabas IOR parameters and defaults   |
| I025     | Com-plete installation steps   |
| I026     | Com-plete migration steps  |
| I030     | Define and format the Adabas database  |
| I040     | Start the Adabas nucleus   |
| I050     | Load Adabas files into database  |
| I051     | Migration job  |
| I052     | Define VSAM data sets  |
| I053     | IMS PSB/DBD/ACB generation   |
| I054     | Assemble the Natural parameter module if common for batch/online                       |
| I055     | Preparations for linking batch-mode Natural  |
| I056     | Auxiliary assembly jobs  |
| I060     | Assemble the Natural parameter module and link batch-mode Natural                      |
| I061     | Load Natural applications with INPL  |
| I065     | Example jobs to test NATBAT  |
| I070     | Preparations for linking online-mode Natural   |
| I075     | Auxiliary jobs for online-mode Natural   |
| I080     | Assemble the Natural parameter module and link online-mode Natural                     |
| I081     | Initialize VSAM roll files   |
| I082     | Migration job  |
| I088     | Link the Adabas Link modules   |
| I090     | Catalog thread part into Com-plete   |
| I100     | Setup and installation verification  |
| I200     | Setup jobs   |
| I500     | Migration jobs   |
| I999     | SMA: commit environment, tapes and/or library corrections; generate Environment Report |
| E100     | Load example jobs  |
| E600     | Predict migration steps  |
| Z010     | Apply Zaps   |
| Z020     | Load corrections with INPL   |



**Note:** The above table does not contain the complete list of jobs. New jobs may be introduced as needed.

# 5

## Load SMA Tables from a Tape and Copy Data Sets to Disk

---

- Loading the SMA Tables from a Tape (Tabload) ..... 18
- Mark a Data Set for Copy ..... 18
- Generate Copy Job from the Tape Menu ..... 20
- Generate Copy Job from User Environment ..... 21

This section provides an overview of the parameters used during loading of SMA tables and copy steps.

## Loading the SMA Tables from a Tape (Tabload)

---

During the loading of SMA tables from a tape (Tabload), the library group definition is taken from the global variable MVS-LIB-GROUP and is stored into the field Library Grp for each data set on the tape (see Copy Parameters screen below).

```
08:31:54          *** SYSTEM MAINTENANCE AID ***          2005-10-10
User: SAG          - Copy Parameters -                    TPCDSM11
Volser ..... T78063
Name on tape NAT414.JOBS
Description ..... MVS Example jobs for installation
Symbolic Dataset Name NAT414.JOBS
Dataset Organization PO
Size (Kilo byte) .... 1204

Dataset created on .. 2005-10-07 08:01:50
Dataset copied on....

Library Grp  SAGLIB_____
Name on Disk _____
Disk ..... _____
Device Type _____
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit                                     Canc
```

To change the library group after loading the SMA tables from a tape, go to each data set (T(ape) > DA(taset) > M0(dify)) and change the Library Grp field.



**Note:** A change of the global variable MVS-LIB-GROUP after loading from a tape will have no effect on the data set entries or copy steps.

## Mark a Data Set for Copy

---

Enter the tape menu and the line command MA for a specific tape.





```
08:31:54          *** SYSTEM MAINTENANCE AID ***          2005-10-10
User:  SAG              - Copy Parameters -              TPCDSM11
Volser .....  T78063
Name on tape  NAT414.JOBS
Description .....  MVS Example jobs for installation
Symbolic Dataset Name  NAT414.JOBS
Dataset Organization   PO
Size (Kilo byte) .... 1204

Dataset created on .. 2005-10-07 08:01:50
Dataset copied on.... 2005-10-10 08:38:54

Library Grp  SAGLIB_____
Name on Disk SAGLIB.NAT414.JOBS_____
Disk .....  SAGVOL
Device Type  3390____
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit                               Canc
```

## Generate Copy Job from the Tape Menu

Enter the tape menu and the line command JC (Generate JCL).

```
09:10:29          *** SYSTEM MAINTENANCE AID ***          2005-10-10
User:  SAG              - Archived Tapes -              TPVOLM11
Page:  1  sorted by              Rec: 0001
---->
Code Volser  Description          Add Date
* _____* _____          * _____
JC  T78063   SMA211                2005-10-07

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit  Sort Prnt  --  -  +  ++          Prod Canc
```

The copy job will be generated.

```

10:09:03          *** SYSTEM MAINTENANCE AID ***          2005-10-10
User:  SAG          - Generated Tape Jobs -          TPJOBM11
Reposition to Job: _____          Tape: T78063
  Cmd      Job      Description          Status
  ---      ---      ---          ---
   _      T063      COPY DATASETS FROM TAPE          Open

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  --  ++          -  +  Print          Canc

```

The involved skeletons for copy data sets all start with COPY-\* (i.e. COPY-PO, COPY-POE, COPY-PS...). Depending on the Dataset Organization in the data set parameters the corresponding skeleton will be selected. (i.e. if the Dataset Organization parameter is PO, then the skeleton COPY-PO is selected). The Library Group, Unit and Volume will be taken from the corresponding fields on the Copy-Parameters screen for the data set. Other values such as Expiration Date and Tape Unit will be taken from the default environment (OS/MVS).

## Generate Copy Job from User Environment

Enter the environment menu and the line command JC (Generate JCL).

```

07:31:52          ***      SYSTEM MAINTENANCE AID      ***          2005-09-27
User:  SAG              - Environment Maintenance -          ENMENM11
Page: 1                                          Rec: 0007
Code Environment      Description
  *-----*-----
  ___ OS/MVS          DEFAULT-ENVIRONMENT FOR OS/MVS
  JC PROD1          PRODUCTION 1
  ___ PROD2          PRODUCTION 2
  ___ SMA            SMA INSTALLATION
  ___ TDEV           DEVELOPMENT
  ___ TEST1         TEST INSTALLATION 1
  ___ TEST2         TEST INSTALLATION 2

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit Sort Prnt  --  -  +  ++          Canc
  
```

The copy job will be generated.

```

07:51:23          ***      SYSTEM MAINTENANCE AID      ***          2005-09-28
User:  SAG              - Generated Environment Jobs -          ENJOBM11
Page: 1              Environment: PROD1                    Rec: 0021
Code   Job            Description              Status
  *-----*-----*-----*-----
  ___  Report         Installation Guide      Open
  ___  T955          COPY DATASETS FROM TAPE Open
  ___  P060           READ ME; DO NOT SUBMIT Open
  ___  I005           CREATE TABLES FOR TP MONITOR Open
  ___  I008           ALLOCATE DATASETS      Open
  ___  I009           COPY DATASETS          Open
  ___  I010           INSTALL PERMANENT ADASVC Open
  ___  I011           INSTALL TEMPORARY ADASVC Open
  ___  I030           DEFINE AND FORMAT DATABASE Open
  ___  I040           ADABAS NUCLEUS        Open
  ___  I050           CREATE ADABAS FILES    Open
  ___  I055           ASSEMBLIES OF BATCH NATURAL Open
  ___  I056           AUXILIARY ASSEMBLIES  Open
  ___  I060           PARM + LINK BATCH NATURAL Open

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit          Prnt --  -  +  ++  Refr  Canc
  
```

The involved skeletons for copying data sets all start with COPY- (i.e. COPY-PO, COPY-POE, COPY-PS...). If the LIBGROUP parameter in the user environment differs from the Library Grp field in the data set entry:

- the generated job will first copy the data set from the tape to the original Library Group (Library Grp field) if the data set has not been copied yet to that location and is set to *mark for copy* (manually or automatically by SMA)
- afterwards a copy step will copy the data set from that original location to a data set with the LIBGROUP setting of the user environment.

Other values such as Expiration Date and Tape Unit will be taken from the values of the user environment.

