CA MICS® Resource Management

How to Use the PSP

Release 12.9

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Chapter 1: INTRODUCTION

Regular maintenance and enhancements to CA MICS are delivered through the Product Support Program or PSP. The PSP is delivered once a year. It comprises product changes that include both technical enhancements and scheduled maintenance for CA MICS products.

From time to time, product changes are delivered between PSP cycles if corrections or product enhancements are important enough to make available immediately. For a more detailed discussion of the different categories of CA MICS maintenance, see Chapter 5 of the CA MICS Planning, Installation, Operation, and Maintenance (PIOM) Guide.

This guide explains the tools and methodology that you should use when applying product changes to your CA MICS system. Below is a brief discussion of the other guides that are sources of information for the System Administrator. This guide refers to sections of these other guides for further discussion of important topics.

- The PIOM is the system administrator's main source of information for questions about installing and operating CA MICS.

- The CA MICS system administrator (SAG) Guide supplements the PIOM with additional information about operating CA MICS.

- The CA MICS System Modification Guide (SMG) contains a detailed description of the maintenance policies for CA MICS, which are designed to support an environment where user modifications are required. Refer to this guide when using CA MICS' FDA (field developed application) facilities including MTI (CA MICS NSM Integration) and MSI (CA MICS SAS Interface). Refer to the material in the SMG before making any modifications to CA MICS.

Product changes can be applied to your CA MICS system using PSP Online Services. This chapter discusses product changes and using PSP Online to apply changes.

The remaining chapters of this guide cover the following topics:

Chapter 2 provides instructions to refresh your PSP libraries in preparation for maintenance.

Chapter 3 provides checklists to assist you in applying maintenance using PSP Online.

Chapter 4 explains how to generate the Product Change Status Report and contains specialized information on using the PSP GENLIB compare utility.

Appendix A describes how to set the optional parameters including overriding dynamic allocation parameters and excluding specific products.

Appendix B describes the Product Change Status Report.

Appendix C contains troubleshooting information related to the PSP refresh.

Appendix D describes PSP Online initialization, both for first-time use and after a new PSP distribution is installed.

Appendix E presents a detailed description of the services offered by PSP Online and the PSP Online panel flow.

Appendix F describes the two types of libraries used in applying product changes to CA MICS: the PSP libraries and the CA MICS installation libraries.

This section contains the following topics:

1.1 Product Change Description and Terminology

Each product change consists of two parts: a text member that explains the product change and a member that contains both the coded change and the JCL to apply it. Unless specifically stated in their text members, product changes are compatible with previous versions of vendor software and CA MICS component levels.

Product changes are identified by a product change number, cccnnnn, where ccc is the component and nnnn is the change control number. For example, for RMF6770, the component is RMF and the control number is 6770.

Product changes use some specific terminology to explain how one product change relates to other product changes. These terms are found at the top of the product change text. A description of product change terminology follows:

PREREQUISITES: indicates that this delivered product change needs another product change to be applied before applying this product change.

COREQUISITES: indicates that this delivered product change works with another product change and both product changes must be applied to be effective.

SUPERSEDES: indicates that this delivered product change includes one or many product changes.

1.2 PSP Online Services

PSP (Product Support Program) Online is an automated tool for applying product changes to CA MICS. PSP Online allows the CA MICS system administrator to browse available PSP distribution material (changes and this guide) under ISPF, investigate problems and fixes, resolve prerequisite and corequisite requirements, and prepare fixes for application using specialized CA MICS panels.

Applying product changes with PSP Online also produces an audit trail of applied changes. This audit trail is central to the functions of recognizing automatic prerequisite and corequisite changes and checking application integrity.

PSP Online is a CA MICS subsystem that is a set of ISPF dialogs. The PSP Online dialogs are executed under the control of the CA MICS Workstation Facility (MWF), the CA MICS ISPF application driver.

Before you can operate PSP Online, you must install the CA MICS Workstation Facility. You can do this using the instructions in the PIOM, Sections 3.3.6 and 4.4.1.

To initialize PSP Online, follow the directions in Appendix D of this guide.

Chapter 2: PSP LIBRARY REFRESH AND CHECKLISTS

When you refresh your PSP libraries, the refresh process analyzes your CA MICS complex, alerts you to unapplied maintenance that is now available, automatically allocates PSP data sets, and loads only product changes that your complex needs.

The PSP is available through a distribution tape or through Electronic Software Delivery (ESD PAX). The tape is delivered upon your request. ESD PAX uses a PAX file and writes the distribution files to disk at your site without using a tape.

To utilize ESD PAX, you must be registered for technical support at our Support Online website http://ca.com/support. Contact your account representative or Technical Support for details on registering and downloading products from our website. Once you are registered, you can access the ESD PAX files for your authorized products.

Detailed ESD PAX instructions are in Download Help. To find them go to the CA website, log on to Technical Support, go to Download Center and locate Download Help in the right pane. Select "Pax Enhanced Electronic Software Delivery (ESD) Guide".

Those instruction will help you copy the CA MICS ESD PAX file to your mainframe and unzip it.

Once you have a tape or have unzipped the ESD PAX equivalent, go to Section 2.1 of this guide to begin the PSP refresh process.

This section contains the following topics:

2.1 Requirements for Refreshing PSP Libraries

__ 1. CA LMP (License Management Program) is operational.

CA MICS requires CA LMP (License Management Program), one of the CA Common Services, before you can install or run CA MICS.

For a CA MICS oriented discussion of CA LMP, see the PIOM, Section 3.2.2.

For a full description of the procedure for defining the CA LMP execution key to the CAIRIM (CA Resource Initialization Manager) parameters, see the CA Common Services for z/OS Getting Started guide.

__ 2. The CA MICS ISPF environment is set up.

If the ISPF environment is not set up, see the PIOM, Section 3.3.6, Set Up the CA MICS ISPF Environment.

__ 3. PSP Online Services have been activated.

If PSP Online has not been activated, see Appendix D, PSP Online Initialization.

__ 4. Your PSP libraries have not been refreshed previously at this PSP level.

If you have previously unloaded this tape, contact Technical Support for assistance at http://ca.com/support.

__ 5. If your complex has not had maintenance applied in over two years, contact Technical Support at http://ca.com/support for advice on how to proceed.

When all requirements have been met, complete a refresh checklist in Section 2.2 of this guide.

2.2 PSP Refresh Process and Checklists

The PSP refresh process uses a SAS "front end" that eliminates errors and conserves DASD space during your PSP library refresh.

Your complex's product change status table is queried for a list of applied product changes. This list is merged with information supplied in the PSP distribution to determine your complex's PSP level (the maintenance level of your complex). The PSP level is in turn used to identify the members that will be copied from the distribution medium to your PSP libraries. If your complex has no maintenance left to apply from the previous PSP, only the members required for the most recent PSP will be loaded.

A Product Change Status Report is printed in the PSPRPT SYSOUT data set. See Appendix B for an example of this report.

Any interim PTF maintenance that has been applied will be preserved in the sharedprefix.MICS.PSP.PC.TEXT library. This will accumulate over time. Hence, the space and directory block estimates for this library have been incremented to allow for interim PTF maintenance. Ensure that this library has at least 40 free directory blocks before proceeding.

All partitioned PSP data sets are allocated with DISP=OLD and their directories are reset. The encrypted PSP file is decrypted and the appropriate PSP DASD data sets are refreshed.

Note that only the sharedprefix.MICS.PSP.PC.TEXT library is preserved. Consequently, any interim PTF maintenance added to the PSP libraries will be lost. If those PTFs have not already been applied, it will be necessary to retrieve them again from CA via Support Online after the PSP refresh.

To help conserve DASD space, a symbolic JCL parameter, RLS, is used to release all unused space from each PSP data set after it has been loaded by IEBCOPY.

The standard refresh process may be executed via MICF panels or a manually submitted batch job. See the sections below:

1 - PSP Refresh Checklist (Panel Driven)
2 - PSP Refresh Checklist (Batch Driven)
3 - ESD PAX Refresh Checklist (Batch Driven)

2.2.1 PSP Refresh Checklist (Panel Driven - Tape/PAX)

```
************************************************************
*  Note:  Complete these instructions only after your      *
*         CA MICS system meets the standard PSP refresh    *
*         requirements that are identified earlier in this *
*         chapter.                                         *
************************************************************

___  1. Review the cover letter.

        Review the cover letter and associated product
        maintenance letters (PML) for the latest important
        technical information.

___  2. Plan for CA MICS products for which you are licensed,
        but are not applying maintenance. For example:

        o If your site is licensed for a CA MICS product that
          is not yet installed.

        o If you have a component that has not had
          maintenance applied to it in over two years.

          Note: The PSP refresh job abends if the result of
          running the job would be that unapplied maintenance
          is lost.

        If either of the previous conditions are true, plan
        to do the following:

        o Exclude the product from PSP processing using the
          PSPOVER feature that is documented in Appendix A.2.

        o Refresh your PSP libraries.

        o After the PSP libraries are refreshed, you can
          install the excluded product.  See the PIOM,
          Section 3.8.6.  You need the same PSP distribution
          files as you used in the PSP refresh job.  You also
          need the product's three-letter code.

___  3. Check the Product Change Status table.

        Do this by displaying PSP Online's Select Product
        Changes for Apply menu (MWF;5;2;2).  Ensure there are
        no product changes displayed with the letter "A"
        beneath the "Line CMD" column.  The "A" indicates
        that the product change is in APPLYING status.  This
```

```
        means it was selected for application, but failed to
        successfully complete.  Determine the cause, correct
        the failure, and apply the product change before
        proceeding.

        If JCL for a product change has to be submitted, exit
        MWF and repeat this step until there are no more
        product changes in APPLYING status.

___  4. Using your site's utilities, compress all complex
        level libraries.

___  5. Using your site's utilities, back up all existing
        complex level and PSP libraries.  By default, these
        begin with the qualifiers:

        sharedprefix.MICS           (complex level libraries)
        sharedprefix.MICS.PSP       (PSP libraries)

___  6. Ensure that sharedprefix.MICS.TAPELOAD.CNTL exists.
        If it does not, create
        sharedprefix.MICS.TAPELOAD.CNTL using these
        parameters:

        SPACE UNITS        ===> BLOCK
        PRIMARY QUANTITY   ===> 250
        SECONDARY QUANTITY ===> 50
        DIRECTORY BLOCKS   ===> 25
        RECORD FORMAT      ===> FB
        RECORD LENGTH      ===> 80
        BLOCK SIZE         ===> 6160

___  7. Optionally, edit sharedprefix.MICS.TAPELOAD.CNTL
        member PSPOVER and override the PSP data set
        allocation parameters.

        Use this option if any one of the following
        conditions is true:

        o  Your PSP data sets are to be allocated on more
           than one VOLSER.

        o  You have specific data set attributes that you
           want to modify.

        o  Your PSP library names do not conform to the
           default names.  See Appendix A.1 for an
           explanation.
```

```
        If PSPOVER does not exist, copy it from
        sharedprefix.MICS.SOURCE into
        sharedprefix.MICS.TAPELOAD.CNTL.

___  8. Recall all migrated PSP libraries.  Ensure that no
        PSP libraries are allocated to any user.  The load
        job dynamically allocates all PSP libraries as
        OLD.  If any PSP libraries are allocated to another
        user, the job fails with a dynamic allocation
        error.

___  9. Set up and execute the PSP load JCL to refresh the
        PSP libraries.

        This step uses a panel-driven process to generate the
        JCL to load your PSP DASD data sets.  It combines
        parameters that you provide on MWF panels with
        parameters that were specified during the
        complex-level JCLGEN, and generates the JCL to load
        the PSP data sets.

___10a. Determine the mode you want to use for the load
        job's initial execution.

        If your site restricts the allocation of new data
        sets to specific DASD administrators, execute the
        load job with MODE specified as RPT.  See the
        description of the MODE parameter that follows.

___10b. Go to PSP Online and select the Submit the PSP
        TAPELOAD Job With Dynamic Allocation panel
        (MWF;5;2;3;2).

___10c. Complete the following options and parameters on the
        panel as appropriate:

        From    When the incoming PSP distribution files are
        Tape    on a tape, enter YES.    Otherwise, enter
                NO or leave this blank.  Note that this
                option is mutually exclusive with the "From
                ESD-DASD" option.

        Tape    Enter the volume serial number of the PSP
        VOLSER  distribution tape that you want to load.

        Tape    Enter the expiration date for a foreign tape
        EXPDT   if your tape management system requires one.

        Tape    Enter the name of the tape device on which
```

UNIT	the CA MICS distribution tape is to be mounted.
From ESD-DASD	When the incoming PSP distribution files are from ESD PAX, enter YES. Otherwise, enter NO or leave this blank. Note that this option is mutually exclusive with the "From Tape" option.
High Level Qualifier	Enter the high-level data set qualifier common to all the incoming PSP distribution files on DASD. This corresponds to "yourHLQ" used in the ESD PAX UNZIPJCL job.
PSP VOLSER	Enter the volume serial number of the direct access storage device to be used to store the new PSP libraries. This is used as the default VOLSER for allocation of new PSP data sets. It can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1. If the "SMS JCL Tailoring" option that follows is YES, this parameter is ignored.
Release space	specifies whether unused space is released from the PSP data sets. RLSE causes the job to release unused space. If you want to retain the unused space, blank this out.
PSP UNIT	Enter the unit name of the direct access storage device to be used to store the new PSP data sets. This entry is used as the default unit for allocation of new PSP data sets. It can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1. If the "Omit UNIT & VOL=SER from JCL" option that follows is YES, this parameter is ignored.
PSP STOR-CLAS	Enter the SMS STORCLAS to be used to store the new PSP data sets. This entry is used as the default STORCLAS for allocation of new PSP data sets. It can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1.
PSP DATA-	Enter the SMS DATACLAS to be used to store the new PSP data sets. This entry is used as

CLAS	the default DATACLAS for allocation of new PSP data sets. It can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1.
PSP MGMT-CLAS	Enter the SMS MGMTCLAS to be used to store the new PSP data sets. This entry is used as the default MGMTCLAS for allocation of new PSP data sets. It can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1. We recommend that a class be used that does not have the PARTIAL_RELEASE=YES_IMMED attribute.
PSP DSNTYPE	Enter blank or LIBRARY. Specify LIBRARY to allocate new or reallocated PSP data sets as partitioned data set extended (PDSE) data sets. It can be overridden for individual data set names except for the PSP LOAD library, by modifying entries in PSPOVER as described in Appendix A.1.
Loader	Enter the program name of the IBM Loader at your site. This entry is typically IEWLDRGO, HEWLDRGO, or LOADER. If in doubt, contact your system programmer.
Warn	Specify whether to abend with U0998 based on the status of your product changes. If WARN=YES and your complex has an unapplied product change that is no longer available on this PSP distribution, the job abends before the PSP libraries are refreshed. Existing PSP data sets will not be touched. If WARN=NO, the job executes even if there are unavailable product changes that have not been applied to the CA MICS system. Note: If you specify WARN=NO, all unapplied and unavailable maintenance are permanently deleted from your PSP libraries.

Mode	Enter either RPT or DASD. When MODE is specified as RPT, the load job analyzes existing PSP data sets, produces a report, and terminates with an ABEND code of U0100. The report that is produced shows you how much DASD space is required for each PSP data set. The report will also shows you whether the existing PSP data sets are too small or whether they contain enough space and directory blocks to accommodate the distribution files when they are loaded to DASD. When MODE is specified as DASD, the load job analyzes existing PSP data sets, reports on them (as with RPT), dynamically deletes PSP data sets that are too small, dynamically allocates new data sets, and allows the job to continue loading the PSP data sets. If your site restricts the allocation of new data sets to specific DASD administrators, you should execute the load job with MODE=RPT. Provide the report to your DASD administrator and ask that the DASD administrator allocate all PSP data sets that cannot be reused. Then execute the load job again with MODE=RPT to verify that the allocations were correct. After you have allocated the new data sets to the correct size, execute the load job with MODE=DASD to load the PSP data sets.
Omit UNIT & VOL=SER From JCL	This value causes the JCL to be generated without "VOL=SER=" or "UNIT=" parameters in DD statements for temporary disk data sets or for allocating new PSP data sets. Enter YES if System Managed Storage (DFSMS) implementation at your site requires that UNIT= and VOL=SER= parameters be omitted. Otherwise, enter NO.
Edit gener-ated JCL	Enter YES or NO. If YES, then you are given an opportunity to edit the load JCL before it is submitted.

___10d. When you finish entering your parameters, press END

```
        to continue or type CANCEL and press Enter to stop
        the process.

___10e. (Required for JES2 sites only)

        If you pressed END when the edit-generated JCL field
        was specified as YES, you see a temporary data set
        that contains the generated load job.

        Review the JCL and ensure that it conforms to your
        site's standards.  Then press END to submit the job.

        If you pressed END when the edit-generated JCL field
        was specified as NO, you are not be able to edit the
        generated load JCL and the job is submitted
        automatically.

        Note: Modules are written to disk by executing the
        program that is named LPEBLDD, which runs as a
        "non-authorized" program. Some mainframe security
        systems, such as CA Top Secret, have a feature that
        restricts non-authorized programs from writing
        authorized load modules. (An authorized load module
        is link-edited with an attribute of AC(1)).

        If your site has this security feature activated and
        is licensed for the CA MICS Space Collector option
        (VCC), the load job fails with an S913 ABEND while
        trying to write an authorized VCC load module.  To
        prevent this ABEND, ask your security administrator
        to permit LPEBLDD to write authorized load modules.

        Skip step 10f and go to step 10g.

___10f. (Required for JES3 sites only)

        If you pressed END to continue, you see a temporary
        data set containing the generated load jobs.

        Delete the &PSPJOB2, &PSPJOB3, and &PSPJOB4
        statements.

        Review the JCL and ensure that it conforms to your
        site's standards.  Press END to submit the jobs.
        After the first job runs, release the second job.

        Note: Modules are written to disk by executing the
        program named LPEBLDD, which runs as a
        "non-authorized" program. Some mainframe security
```

systems, such as CA Top Secret, have a feature that restricts non-authorized programs from writing authorized load modules. (An authorized load module is link-edited with an attribute of AC(1)).

If your site has this security feature activated and is licensed for the CA MICS Space Collector Option (VCC), the load job fails with an S913 ABEND while trying to write an authorized VCC load module. To prevent this ABEND, ask your security administrator to permit LPEBLDD to write authorized load modules.

___10g. After the job finishes, review the condition codes.

Step DMABEND is typically bypassed (flushed).

The step #PCHFND might complete with a condition code of 2 as part of normal operation.

If the job was submitted with MODE=RPT, then the PSPEXEC step must abort with an ABEND code of U0100. If the job was submitted with MODE=DASD, PSPEXEC and all subsequent steps must complete with a condition code of zero.

If the job abends or if a step completes with an unexpected condition code (greater than 2), take corrective action and resubmit the job. See Appendix C for a list of commonly experienced errors and their corrective actions.

___10h. Review the Product Change Status Report in the PSPRPT SYSOUT data set from the PSPEXEC step. The report identifies the PSP levels that will be loaded to the PSP data sets. See Appendix B for details.

___10i. If you submitted the job with MODE specified as DASD, proceed to step 11.

If you submitted the job with MODE specified as RPT, review the "Information for PSP Data Sets Before Allocation" report in the PSPLOG SYSOUT data set. It identifies all the PSP data sets, their attributes, and whether they will be deleted, allocated, or reused. See step 10a for more information about the MODE parameter.

If you want to refine your data set allocation, you have two choices: Override individual parms by

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          repeating this procedure beginning at step 7; or
          override the default PSP allocation parms by
          repeating this procedure beginning at step 10b.

          When you are satisfied with the contents of the
          report, return to step 10a, change MODE to specify
          DASD, and resubmit the load job.

___  11. Optionally, review the product change texts for all
          product changes and upgrades that are new with this
          PSP. Review by browsing the PCTEXT member in
          sharedprefix.MICS.TAPELOAD.CNTL.

          To print PCTEXT, edit the PRPCTEXT member in
          sharedprefix.MICS.TAPELOAD.CNTL.  Provide a JOB
          statement, complete the sharedprefix parameter on the
          SYSUT1 DD statement, and submit the job.  PCTEXT is
          printed with ASA carriage control characters.

___  12. Optionally, print or view the CA MICS System
          Administrator Guide (SAG).

          To print it, edit sharedprefix.MICS.CNTL(DOCUMENT)
          and specify BS after MANUAL=.  Then submit the job.

          To view it through CA MICS Document Access, first run
          the job in sharedprefix.MICS.CNTL(DOCAGEN).  Then you
          can browse the SAG using MWF 1;1.

          Note: All of the CA MICS guides are also available
          online in HTML or PDF format. To view or print them,
          go to CA Support Online at http:/ca.com/support, log
          in, and select Documentation.

___  13. Retain sharedprefix.MICS.TAPELOAD.CNTL.  It will be
          reused in all future CA MICS tape loads for both PSP
          and optional products.

___  14. Receive the new distribution tables. See Appendix D.2
          in this guide for the steps.

___  15. Use PSP Online for change review, problem analysis,
          and product change application.  See Chapter 3 and
          Appendix E in this guide.

************************************************************
*       This completes refreshing your PSP libraries.      *
************************************************************
```

2.2.2 PSP Refresh checklist (Batch Driven - Tape)

```
************************************************************
 *  Note:  Complete these instructions only after your      *
 *         CA MICS system meets the standard PSP refresh    *
 *         requirements identified earlier in this chapter. *
 ************************************************************

 ___  1. Review the cover letter.

         Review the cover letter and associated product
         maintenance letters (PML) for the latest important
         technical information.

 ___  2. Plan for CA MICS products for which you are licensed,
         but are not applying maintenance. Here are examples:

         o If your site is licensed for a CA MICS product that
           is not yet installed.

         o If you have a component that has not had
           maintenance applied to it in over two years.

           Note: The PSP refresh job abends if the result of
           running the job would be that unapplied maintenance
           is lost.

         If either of the previous conditions are true, plan
         to do the following:

         o Exclude the product from PSP processing using the
           PSPOVER feature that is documented in Appendix A.2.

         o Refresh your PSP libraries.

         o After the PSP libraries are refreshed, you can
           install the excluded product. For more information,
           see the PIOM section 3.8.6.  You need the same PSP
           distribution files as you used in the PSP refresh
           job.  You also need the product's three-letter
           code.

 ___  3. Review the Product Change Status table.

         Review the table by displaying PSP Online's Select
         Product Changes for the Apply menu (MWF;5;2;2).
         Verify that there are no product changes displayed
         with the letter "A" beneath the "Line CMD" column.
         The letter "A" indicates that the product change is
         in APPLYING status.  This means that it was selected
```

```
        for application, but failed to complete successfully.
        Determine the cause, correct the failure, and apply
        the product change before proceeding.

        If JCL for a product change has to be submitted, exit
        MWF and repeat this step until there are no more
        product changes in APPLYING status.

___  4. Using your site's utilities, compress all complex
        level libraries.

___  5. Using your site's utilities, back up all existing
        complex level and PSP libraries.  By default, these
        begin with the qualifiers:

        sharedprefix.MICS          (complex level libraries)
        sharedprefix.MICS.PSP      (PSP libraries)

___  6. Verify that the data sets that follow do not exist.
        If they do exist, delete them.

          sharedprefix.MICS.TAPELOAD.CNTL
          sharedprefix.MICS.TAPELOAD.LOAD

___  7. Copy the installation libraries from the PSP
        distribution medium.

        ******************************************************
        *                 C A U T I O N                      *
        *                                                    *
        *  The library that is needed for PSP library        *
        *  refresh is loaded with IEBCOPY.  You MUST use     *
        *  the JCL as it is written in the following step.   *
        *                                                    *
        *  The PSP library refresh process creates two       *
        *  utility data sets.                                *
        *                                                    *
        *  You must name these data sets as follows:         *
        *                                                    *
        *      sharedprefix.MICS.TAPELOAD.CNTL               *
        *      sharedprefix.MICS.TAPELOAD.LOAD               *
        *                                                    *
        ******************************************************

        Create the JCL that follows.  Complete the JOB
        statement and parameters and submit the job.

        //jobname JOB .........
        //LOAD EXEC PGM=IEBCOPY
```

```
//SYSPRINT DD SYSOUT=*
//#CNTL DD DSN=CAI.TAPELOAD.CNTL,
//         UNIT=______,VOL=SER=______,
//         LABEL=(1,SL,EXPDT=______)
//         DISP=SHR
//#LOAD DD DSN=CAI.TAPELOAD.LOAD,
//         VOL=REF=*.#CNTL,
//         LABEL=(2,SL,EXPDT=______)
//         DISP=SHR
//CNTL  DD DSN=sharedprefix.MICS.TAPELOAD.CNTL,
//         DISP=(,CATLG,DELETE),UNIT=______,
//         VOL=SER=______,SPACE=(6160,(400,30,20)),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//LOAD  DD DSN=sharedprefix.MICS.TAPELOAD.LOAD,
//         DISP=(,CATLG,DELETE),UNIT=______,
//         VOL=SER=______,SPACE=(6160,(14,7,1)),
//         DCB=(RECFM=U,BLKSIZE=6160)
//SYSIN DD *
   COPY INDD=#CNTL,OUTDD=CNTL
   COPY INDD=#LOAD,OUTDD=LOAD
/*

UNIT, VOL=SER, and EXPDT on the #CNTL and #LOAD
  statements are needed when your PSP distribution
  files are on tape.  These statements specify the
  unit name of the tape device on which the CA MICS
  distribution tape is to be mounted; the volume
  serial number of the tape; and, if you are using a
  tape management system, the tape expiration date.

sharedprefix on the CNTL and LOAD statements
  completes the name of the installation data sets
  and should be replaced with your CA MICS high-level
  qualifier.

UNIT and VOL=SER on the CNTL and LOAD statements
  specify the unit name of the direct access device
  and the volume serial number of the volume on which
  the installation libraries are to be allocated.

Ensure that the job completes with a condition code
of zero.
```

___ 8. Optionally, review the product change texts for all product changes that are new with this PSP. Do this by browsing the PCTEXT member in sharedprefix.MICS.TAPELOAD.CNTL.

To print PCTEXT, edit the PRPCTEXT member in

```
          sharedprefix.MICS.TAPELOAD.CNTL. Provide a JOB
          statement, complete the sharedprefix parameter on the
          SYSUT1 DD statement, and submit the job. PCTEXT
          printed with ASA carriage control characters.

___   9. Optionally, edit sharedprefix.MICS.TAPELOAD.CNTL
          member PSPOVER and override the PSP data set
          allocation parameters.

          Use this option if any one of the following
          conditions are true:

          o  Your PSP data sets are to be allocated on more
             than one VOLSER.

          o  You have specific data set attributes that you
             want to modify.

          o  Your PSP library names do not conform to the
             default names. For more detailed information and
             instructions, see Appendix A.1.

          If PSPOVER does not exist, copy it from
          sharedprefix.MICS.SOURCE into
          sharedprefix.MICS.TAPELOAD.CNTL.

___ 10a. Required for JES2 sites only:

          Edit sharedprefix.MICS.TAPELOAD.CNTL(PSPyymmL),
          where yymm is the PSP distribution being processed.
          This is the CNTL data set that was loaded from the
          PSP distribution medium in step 7 of these
          instructions.

          If upgrades were added to this medium, they are
          automatically loaded, provided your site is licensed
          for them.

___ 10b. Required for JES3 sites only:

          Submit the following jobs in sequential order:

            sharedprefix.MICS.TAPELOAD.CNTL(J3PyymmA)
            sharedprefix.MICS.TAPELOAD.CNTL(J3PyymmB)

          J3PyymmA checks for prerequisites, analyzes space of
          existing data sets, reports on them, then allocates
          them if the mode is specified as DASD.
```

J3PyymmB loads the PSP libraries and records the event.

If upgrades were added to this medium, they are automatically loaded, provided your site is licensed for them.

___ 11a. Provide a JOB statement. Although the required CPU time for the job is unpredictable because of varying processor types and product configurations, 5 CPU minutes should be adequate. A region of 6M should be adequate.

___ 11b. The number of lines that are output is unpredictable, but a safe estimate is 30 KB. Sample JES2 and JES3 parameter statements are provided. Use the one appropriate for your site and delete the other.

___ 11c. The first step of the job executes a CA MICS-generated PROC named MICSDM. Check to see if your site has the MICSDM PROC in sharedprefix.MICS.PROCLIB.

Two possible reasons that the PROC name might not be MICSDM are:

o A test version was created. For more information, see section 5.1.1 in the PIOM.

o Your site's PROC naming conventions have forced MICSDM to be renamed.

___ 11d. If required at your site, provide the name of the procedure library that contains the MICSDM PROC. See step 11c.

___ 11e. If you do not execute the MICSDM PROC, find the character string:

//MICSDM EXEC MICSDM

Change MICSDM to identify the PROC as described in step 11c.

___ 11f. Find the following character string:

sharedprefix.MICS.TAPELOAD.CNTL(PSPBATC1)

```
                Change sharedprefix.MICS to identify the data set
                that you are editing. Do not change the member name.

                Find the following character string:

                sharedprefix.MICS.TAPELOAD.CNTL(PSPMAT)

                Change sharedprefix.MICS to identify the data set
                that you are editing. Do not change the member name.

___ 11g. If you want this job to use any non-default PSP
         data set names (you might have specified these to
         PSP Online using option 1 - Define the PSP
         Libraries), change the default name of each of those
         libraries to the non-default name.

___ 11h. Determine the MODE you want to use for the load
         job's initial execution.

                When MODE is specified as RPT, the load job analyzes
                existing PSP data sets, produces a report, and
                terminates with an ABEND code of U0100.  The report
                that is produced shows you how much DASD space is
                required for each PSP data set.  This report also
                shows whether the existing PSP data sets are too
                small or whether they contain enough space and
                directory blocks to accommodate the distribution
                files when they are loaded to DASD.

                When MODE is specified as DASD, the load job
                analyzes existing PSP data sets, reports on them (as
                with RPT), dynamically deletes PSP data sets that
                are too small, dynamically allocates new data sets,
                and allows the job to continue loading the PSP data
                sets.

                If your site restricts the allocation of new data
                sets to specific DASD administrators, you should
                execute the load job with MODE=RPT.  Provide the
                report to your DASD administrator and ask that the
                DASD administrator allocate all PSP data sets that
                cannot be reused.

                Note:  Regarding sharedprefix.MICS.PSP.PC.TEXT:
                When this data set must be manually re-allocated,
                ensure that the contents of the old data set are
                copied to the new data set.

                After the new data sets are allocated, execute the
```

```
        load job again with MODE=RPT to verify that the
        allocations were correct.  After you have allocated
        the new data sets to the correct size, execute the
        load job with MODE=DASD to load the PSP data sets.

        You will specify the MODE in the next step.

___ 11i. Complete the following parameters on the LOADPSP
        EXEC statement and not on the PROC statement:

        //LOADPSP  EXEC PSPPROC,
        //  SPREFIX='_______________',
        //  SMICS='MICS.',
        //  SASPFX='_______________',
        //  SASNAME='entry',
        //* SASENV='TKMVSENV(TKMVSENV)',
        //  LANG1='',
        //  LANG2='',
        //  TUNIT='____',
        //  TVOL=______,
        //  TEXPDT=98000,
        //  PSPUNIT=,
        //  PSPVOL=,
        //  PSPSTORC=,
        //  PSPDATAC=,
        //  PSPMGMTC=,
        //  PSPDSNT=,
        //  WKUNIT=SYSDA,
        //  WARN=YES,
        //  MODE=____,
        //  RLS=RLSE,
        //  LOADER=IEWLDRGO


        SPREFIX Specifies the standard CA MICS sharedprefix.
                Do not end the sharedprefix with a period
                (.).

        SMICS   Specifies whether MICS is used in the name
                of the CA MICS libraries.  If you used MICS
                in the data set names, terminate it with a
                period.  If you omitted MICS from the data
                set names, change SMICS to null (that is,
                'SMICS=,').

        SASPFX  Specifies the common data set name prefix
                for your SAS libraries.
                Note: This name is specified with no
                trailing period.  This prefix is used in the
```

```
                following DDs to form the names of your
                site's SAS libraries used for CA MICS:

                  STEPLIB - SAS load library
                  SASHELP - SAS help library
                  SASMSG  - SAS message library

                Review the data set names that are specified
                in the DDs. If they are not correct, edit in
                the correct names and comment out SASPFX.

SASNAME         Specifies the program name of the SAS
                Program Product in the load library
                specified in the STEPLIB DD.

SASENV          This file is needed only if you have this
                SAS library.  If you do not, comment out all
                TKMVSENV DD statements.

LANG1           Specifies the language code required for
                SAS. For example, EN stands for English.

LANG2           Specifies the encoding value required for
                SAS.  The value for EBCDIC is W0 and must
                have a trailing period (.).

TUNIT,          Specify the unit name of the tape device on
TVOL,           which the CA MICS distribution tape is to
and             be mounted; the volume serial number of the
TEXPDT          tape; and, if you are using a tape
                management system, the appropriate tape
                expiration date code.

PSPUNIT         Specify the unit name and volume serial
and             number of the direct access storage device
PSPVOL          to be used to store the new PSP libraries.
                These parameters are used as default
                parameters for allocation of new PSP data
                sets. These parameters can be overridden for
                individual data set names by modifying
                entries in PSPOVER as described in Appendix
                A.1.  If you do not need to specify a
                parameter for PSPUNIT, code it as a null,
                that is, 'PSPUNIT=,'.  Likewise, if you do
                not need to specify a parameter for PSPVOL,
                code it as null, that is, 'PSPVOL=,'.

PSP             Specifies the SMS STORCLAS to be used to
STORC           store the new PSP libraries.  This is used
```

```
                as the default STORCLAS for allocation of
                new PSP data sets. PSPSTORC can be
                overridden for individual data set names by
                modifying entries in PSPOVER as described in
                Appendix A.1.  If you do not need to specify
                a parameter for PSPSTORC, code PSPSTORC as
                null, that is, 'PSPSTORC=,'.

PSP     Specifies the SMS DATACLAS to be used to
DATAC   store the new PSP libraries.  This is
                used as the default DATACLAS for allocation
                of new PSP data sets. PSPDATAC can be
                overridden for individual data set names by
                modifying entries in PSPOVER as described in
                Appendix A.1.  If you do not need to specify
                a parameter for PSPDATAC, code PSPDATAC as
                null, that is, 'PSPDATAC=,'.

PSP     Specifies the SMS MGMTCLAS to be used to
MGMTC   store the new PSP libraries.  This is used
                as the default MGMTCLAS for allocation of
                new PSP data sets. PSPMGMTC can be
                overridden for individual data set names by
                modifying entries in PSPOVER as described in
                Appendix A.1.  If you do not need to specify
                a parameter for PSPMGMTC, code PSPMGMTC as
                null, that is, 'PSPMGMTC=,'.

                We recommend that a class be used that does
                not have the PARTIAL_RELEASE=YES_IMMED
                attribute.

PSPDSNT Can be either blank or LIBRARY.  Specifies
                the LIBRARY to allocate new or reallocated
                PSP data sets as partitioned data set
                extended (PDSE) data sets.  PSPDSNT can be
                overridden for individual data set names
                except for the PSP LOAD library, by
                modifying entries in PSPOVER as described in
                Appendix A.1.

WKUNIT  Specifies the unit name for a direct access
                work device.

WARN    Specifies whether to abend with a U0998
                based on the status of your product changes.

                If WARN=YES and your complex has an
                unapplied product change that is no longer
```

```
                    available on this PSP distribution, the job
                    abends before the PSP libraries are
                    refreshed.  Existing PSP data sets are not
                    be touched.

                    If WARN=NO, the job executes even if there
                    are unavailable product changes that have
                    not been applied to the CA MICS system.

                    Note: If you specify WARN=NO, all unapplied
                    and unavailable maintenance are permanently
                    deleted from your PSP libraries.

               MODE Specifies either RPT or DASD. See step 11h
                    for an explanation of this parameter.

               RLS  Specifies whether unused space will be
                    released from the PSP data sets. The
                    default, RLSE, causes the job to release
                    unused space.  If you want to retain the
                    unused space, change RLS to null, that is,
                    'RLS=,'.

               LOADER Specifies the program name of the IBM Loader
                    at your site. This is typically IEWLDRGO,
                    HEWLDRGO, or LOADER. If in doubt, contact
                    your system programmer.

___ 11j. If your site requires that your sort program load
         library is explicitly identified, continue with
         this step. Otherwise, skip to step 11k.

         Find the first occurrence of //SORTLIB. The last DD
         is reserved for the sort library name. Fill in the
         names as appropriate. If you do not fill in a name,
         the default permits normal operation of the load
         job.

___ 11k. Recall all migrated PSP libraries. Verify that no
         PSP libraries are allocated to any user. The load
         job dynamically allocates all PSP libraries as OLD.
         If any PSP libraries are allocated to another user,
         the job fails with a dynamic allocation error.

___ 11l. Refresh the PSP libraries by reading and completing
         the following:

         Note: Modules are written to disk by executing the
         program named LPEBLDD.  This program runs as a
```

```
              "non-authorized" program.  Some mainframe security
              systems, such as CA Top Secret, have a feature that
              restricts non-authorized programs from writing
              authorized load modules.  (An authorized load module
              is link-edited with an attribute of AC(1)).

              If your site has this security feature activated and
              is licensed for the CA MICS Space Collector Option
              (VCC), the load job will fail with an S913 ABEND
              while trying to write an authorized VCC load module.
              To prevent this ABEND, ask your security
              administrator to permit LPEBLDD to write authorized
              load modules.

              Submit the load job.

              Since this job allocates
              sharedprefix.MICS.TAPELOAD.CNTL with a DISP=OLD, it
              is important that you end all editing now and ensure
              this data set is not allocated to your interactive
              session.

___ 11m.  After the job finishes, review the condition codes.

              Steps DMABEND and MICSVRAB are typically bypassed
              (flushed).

              The step #PCHFND might complete with a condition
              code of 2 as part of normal operation.

              If the job was submitted with MODE=RPT, then the
              PSPEXEC step must abort with an ABEND code of
              U0100. If the job was submitted with MODE=DASD,
              PSPEXEC and all subsequent steps must complete with
              a condition code of zero.

              If the job abends or if a step completes with an
              unexpected condition code (greater than 2), take
              corrective action and resubmit the job. For more
              information about a list of commonly experienced
              errors and their corrective actions, see Appendix C.

___ 11n.  Review the Product Change Status Report in the
          PSPRPT SYSOUT data set from the PSPEXEC step.  The
          report identifies the PSP levels that is loaded to
          the PSP data sets.  See Appendix B for details.

___ 11o.  If you submitted the job with MODE=DASD, proceed
          to step 12.
```

```
          If you submitted the job with MODE=RPT, review the
          "Information for PSP Data Sets Before Allocation"
          report in the PSPLOG SYSOUT data set.  This report
          identifies all the PSP data sets, their attributes,
          and whether they will be deleted, allocated, or
          reused.  See step 11h for more information about the
          MODE parameter.

          You can refine your data set allocation parameters
          by modifying them for individual data sets as
          explained in Appendix A.1, or for all PSP data sets
          by using JCL parameters as explained in step 11i.
          Once the desired changes have been made, return to
          step 11l and resubmit the load job.

          When you are satisfied with the contents of the
          report, change MODE=RPT to MODE=DASD and resubmit
          the job.

___ 12. Optionally, print or view the CA MICS System
        Administrator Guide (SAG).

        To print it, edit sharedprefix.MICS.CNTL(DOCUMENT)
        and specify BS after MANUAL=.  Then submit the job.

        To view it through CA MICS Document Access, first run
        the job in sharedprefix.MICS.CNTL(DOCAGEN).  Then you
        can browse the SAG using MWF 1;1.

        Note: All of the CA MICS guides are also available
        online in HTML or PDF format. To view or print them,
        go to CA Support Online at http:/ca.com/support, log
        in, and select Documentation.

___ 13. Retain sharedprefix.MICS.TAPELOAD.CNTL.  It will be
        reused in all future CA MICS tape loads for both PSP
        and optional products.

___ 14. Receive the new distribution tables. See Appendix D.2
        in this guide for the steps.

___ 15. Use PSP Online for change review, problem analysis,
        and product change application.  See Chapter 3 and
        Appendix E in this guide.

************************************************************
*       This completes refreshing your PSP libraries.      *
************************************************************
```

2.2.3 PSP Refresh Checklist (Batch Driven - PAX)

```
************************************************************
 *  Note:  Complete these instructions only after your      *
 *         CA MICS system meets the standard PSP refresh    *
 *         requirements identified earlier in this chapter. *
 ************************************************************

 ___  1. Review the cover letter.

         Review the cover letter and associated product
         maintenance letters (PML) for the latest important
         technical information.

 ___  2. Plan for CA MICS products for which you are licensed,
         but are not applying maintenance. Here are examples:

         o If your site is licensed for a CA MICS product that
           is not yet installed.

         o If you have a component that has not had
           maintenance applied to it in over two years.

           Note: The PSP refresh job abends if the result of
           running the job would be that unapplied maintenance
           is lost.

         If either of the previous conditions are true, plan
         to do the following:

         o Exclude the product from PSP processing using the
           PSPOVER feature that is documented in Appendix A.2.

         o Refresh your PSP libraries.

         o After the PSP libraries are refreshed, you can
           install the excluded product. For more information,
           see the PIOM section 3.8.6.  You need the same PSP
           distribution files as you used in the PSP refresh
           job.  You also need the product's three-letter
           code.

 ___  3. Review the Product Change Status table.

         Review the table by displaying PSP Online's Select
         Product Changes for the Apply menu (MWF;5;2;2).
         Verify that there are no product changes displayed
         with the letter "A" beneath the "Line CMD" column.
         The letter "A" indicates that the product change is
         in APPLYING status.  This means that it was selected
```

```
        for application, but failed to complete successfully.
        Determine the cause, correct the failure, and apply
        the product change before proceeding.

        If JCL for a product change has to be submitted, exit
        MWF and repeat this step until there are no more
        product changes in APPLYING status.

___  4. Using your site's utilities, compress all complex
        level libraries.

___  5. Using your site's utilities, back up all existing
        complex level and PSP libraries.  By default, these
        begin with the qualifiers:

        sharedprefix.MICS          (complex level libraries)
        sharedprefix.MICS.PSP      (PSP libraries)

___  6. Verify that the data sets that follow do not exist.
        If they do exist, delete them.

          sharedprefix.MICS.TAPELOAD.CNTL
          sharedprefix.MICS.TAPELOAD.LOAD

___  7. Copy the installation libraries from the PSP
        distribution medium.

        ****************************************************
        *                 C A U T I O N                    *
        *                                                  *
        *  The library that is needed for PSP library      *
        *  refresh is loaded with IEBCOPY.  You MUST use   *
        *  the JCL as it is written in the following step. *
        *                                                  *
        *  The PSP library refresh process creates two     *
        *  utility data sets.                              *
        *                                                  *
        *  You must name these data sets as follows:       *
        *                                                  *
        *      sharedprefix.MICS.TAPELOAD.CNTL             *
        *      sharedprefix.MICS.TAPELOAD.LOAD             *
        *                                                  *
        ****************************************************

        Create the JCL that follows.  Complete the JOB
        statement and parameters and submit the job.

        //jobname JOB .........
        //LOAD EXEC PGM=IEBCOPY
```

```
//SYSPRINT DD SYSOUT=*
//#CNTL DD DISP=SHR,
//         DSN=yourHLQ.CAI.MICSESD.TAPELOAD.CNTL
//#LOAD DD DISP=SHR,
//         DSN=yourHLQ.CAI.MICSESD.TAPELOAD.LOAD
//CNTL  DD DSN=sharedprefix.MICS.TAPELOAD.CNTL,
//         DISP=(,CATLG,DELETE),UNIT=______,
//         VOL=SER=______,SPACE=(6160,(400,30,20))
//LOAD  DD DSN=sharedprefix.MICS.TAPELOAD.LOAD,
//         DISP=(,CATLG,DELETE),UNIT=______,
//         VOL=SER=______,SPACE=(6160,(14,7,1))
//SYSIN DD *
   COPY INDD=#CNTL,OUTDD=CNTL
   COPY INDD=#LOAD,OUTDD=LOAD
/*

yourHLQ on the #CNTL and #LOAD statements specifies
  the high level qualifier of the ESD PAX data sets
  and should be replaced with the "yourHLQ" used in
  the ESD PAX UNZIPJCL job.

sharedprefix on the CNTL and LOAD statements
  completes the name of the installation data sets
  and should be replaced with your CA MICS high-level
  qualifier.

UNIT and VOL=SER on the CNTL and LOAD statements
  specify the unit name of the direct access device
  and the volume serial number of the volume on which
  the installation libraries are to be allocated.

Ensure that the job completes with a condition code
of zero.
```

___ 8. Optionally, review the product change texts for all product changes that are new with this PSP. Do this by browsing the PCTEXT member in sharedprefix.MICS.TAPELOAD.CNTL.

To print PCTEXT, edit the PRPCTEXT member in sharedprefix.MICS.TAPELOAD.CNTL. Provide a JOB statement, complete the sharedprefix parameter on the SYSUT1 DD statement, and submit the job. PCTEXT printed with ASA carriage control characters.

___ 9. Optionally, edit sharedprefix.MICS.TAPELOAD.CNTL member PSPOVER and override the PSP data set allocation parameters.

```
          Use this option if any one of the following
          conditions are true:

          o  Your PSP data sets are to be allocated on more
             than one VOLSER.

          o  You have specific data set attributes that you
             want to modify.

          o  Your PSP library names do not conform to the
             default names. For more detailed information and
             instructions, see Appendix A.1.

          If PSPOVER does not exist, copy it from
          sharedprefix.MICS.SOURCE into
          sharedprefix.MICS.TAPELOAD.CNTL.

___ 10a. Required for JES2 sites only:

          Edit sharedprefix.MICS.TAPELOAD.CNTL(ESDyymmL),
          where yymm is the PSP distribution being processed.
          This is the CNTL data set that was loaded from the
          PSP distribution medium in step 7 of these
          instructions.

          If upgrades were added to this medium, they are
          automatically loaded, provided your site is licensed
          for them.

___ 10b. Required for JES3 sites only:

          Submit the following jobs in sequential order:

            sharedprefix.MICS.TAPELOAD.CNTL(ESDJES3A)
            sharedprefix.MICS.TAPELOAD.CNTL(ESDJES3B)

          ESDJES3A checks for prerequisites, analyzes space of
          existing data sets, reports on them, then allocates
          them if the mode is specified as DASD.

          ESDJES3B loads the PSP libraries and records the
          event.

          If upgrades were added to this medium, they are
          automatically loaded, provided your site is licensed
          for them.

___ 11a. Provide a JOB statement. Although the required CPU
          time for the job is unpredictable because of
```

```
          varying processor types and product configurations,
          5 CPU minutes should be adequate. A region of 6M
          should be adequate.

___ 11b.  The number of lines that are output is
          unpredictable, but a safe estimate is 30 KB. Sample
          JES2 and JES3 parameter statements are provided. Use
          the one appropriate for your site and delete the
          other.

___ 11c.  The first step of the job executes a CA
          MICS-generated PROC named MICSDM.  Check to see if
          your site has the MICSDM PROC in
          sharedprefix.MICS.PROCLIB.

          Two possible reasons that the PROC name might not be
          MICSDM are:

          o A test version was created. For more information,
            see section 5.1.1 in the PIOM.

          o Your site's PROC naming conventions have forced
            MICSDM to be renamed.

___ 11d.  If required at your site, provide the name of the
          procedure library that contains the MICSDM PROC.
          See step 11c.

___ 11e.  If you do not execute the MICSDM PROC, find the
          character string:

          //MICSDM EXEC MICSDM

          Change MICSDM to identify the PROC as described in
          step 11c.

___ 11f.  Find the following character string:

          sharedprefix.MICS.TAPELOAD.CNTL(PSPBATC1)

          Change sharedprefix.MICS to identify the data set
          that you are editing. Do not change the member name.

          Find the following character string:

          sharedprefix.MICS.TAPELOAD.CNTL(PSPMAT)

          Change sharedprefix.MICS to identify the data set
          that you are editing. Do not change the member name.
```

___ 11g. If you want this job to use any non-default PSP data set names (you might have specified these to PSP Online using option 1 - Define the PSP Libraries), change the default name of each of those libraries to the non-default name.

___ 11h. Determine the MODE you want to use for the load job's initial execution.

When MODE is specified as RPT, the load job analyzes existing PSP data sets, produces a report, and terminates with an ABEND code of U0100. The report that is produced shows you how much DASD space is required for each PSP data set. This report also shows whether the existing PSP data sets are too small or whether they contain enough space and directory blocks to accommodate the distribution files when they are loaded to DASD.

When MODE is specified as DASD, the load job analyzes existing PSP data sets, reports on them (as with RPT), dynamically deletes PSP data sets that are too small, dynamically allocates new data sets, and allows the job to continue loading the PSP data sets.

If your site restricts the allocation of new data sets to specific DASD administrators, you should execute the load job with MODE=RPT. Provide the report to your DASD administrator and ask that the DASD administrator allocate all PSP data sets that cannot be reused.

Note: Regarding sharedprefix.MICS.PSP.PC.TEXT: When this data set must be manually re-allocated, ensure that the contents of the old data set are copied to the new data set.

After the new data sets are allocated, execute the load job again with MODE=RPT to verify that the allocations were correct. After you have allocated the new data sets to the correct size, execute the load job with MODE=DASD to load the PSP data sets.

You will specify the MODE in the next step.

___ 11i. Complete the following parameters on the LOADPSP EXEC statement and not on the PROC statement:

```
//LOADPSP  EXEC PSPPROC,
//  YOURHLQ='_____________'
//  SPREFIX='_____________',
//  SMICS='MICS.',
//  SASPFX='_____________',
//  SASNAME='entry',
//* SASENV='TKMVSENV(TKMVSENV)',
//  LANG1='',
//  LANG2='',
//  PSPUNIT=,
//  PSPVOL=,
//  PSPSTORC=,
//  PSPDATAC=,
//  PSPMGMTC=,
//  PSPDSNT=,
//  WKUNIT=SYSDA,
//  WARN=YES,
//  MODE=____,
//  RLS=RLSE,
//  LOADER=IEWLDRGO

YOURHLQ Specifies the high level qualifier of the
        ESD PAX data sets on the #CNTL and #LOAD
        statements. This parameter must be replaced
        with the "yourHLQ" used in the ESD PAX
        UNZIPJCL job.

SPREFIX Specifies the standard CA MICS sharedprefix.
        Do not end the sharedprefix with a period
        (.).

SMICS   Specifies whether MICS is used in the name
        of the CA MICS libraries.  If you used MICS
        in the data set names, terminate it with a
        period.  If you omitted MICS from the data
        set names, change SMICS to null (that is,
        'SMICS=,').

SASPFX  Specifies the common data set name prefix
        for your SAS libraries.
        Note: This name is specified with no
        trailing period.  This prefix is used in the
        following DDs to form the names of your
        site's SAS libraries used for CA MICS:

          STEPLIB - SAS load library
          SASHELP - SAS help library
          SASMSG  - SAS message library
```

	Review the data set names that are specified in the DDs. If they are not correct, edit in the correct names and comment out SASPFX.
SASNAME	Specifies the program name of the SAS Program Product in the load library specified in the STEPLIB DD.
SASENV	This file is needed only if you have this SAS library. If you do not, comment out all TKMVSENV DD statements.
LANG1	Specifies the language code required for SAS. For example, EN stands for English.
LANG2	Specifies the encoding value required for SAS. The value for EBCDIC is W0 and must have a trailing period (.).
PSPUNIT and PSPVOL	Specify the unit name and volume serial number of the direct access storage device to be used to store the new PSP libraries. These parameters are used as default parameters for allocation of new PSP data sets. These parameters can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1. If you do not need to specify a parameter for PSPUNIT, code it as a null, that is, 'PSPUNIT=,'. Likewise, if you do not need to specify a parameter for PSPVOL, code it as null, that is, 'PSPVOL=,'.
PSP STORC	Specifies the SMS STORCLAS to be used to store the new PSP libraries. This is used as the default STORCLAS for allocation of new PSP data sets. PSPSTORC can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1. If you do not need to specify a parameter for PSPSTORC, code PSPSTORC as null, that is, 'PSPSTORC=,'.
PSP DATAC	Specifies the SMS DATACLAS to be used to store the new PSP libraries. This is used as the default DATACLAS for allocation of new PSP data sets. PSPDATAC can be overridden for individual data set names by

modifying entries in PSPOVER as described in Appendix A.1. If you do not need to specify a parameter for PSPDATAC, code PSPDATAC as null, that is, 'PSPDATAC=,'.

PSP MGMTC — Specifies the SMS MGMTCLAS to be used to store the new PSP libraries. This is used as the default MGMTCLAS for allocation of new PSP data sets. PSPMGMTC can be overridden for individual data set names by modifying entries in PSPOVER as described in Appendix A.1. If you do not need to specify a parameter for PSPMGMTC, code PSPMGMTC as null, that is, 'PSPMGMTC=,'.

We recommend that a class be used that does not have the PARTIAL_RELEASE=YES_IMMED attribute.

PSPDSNT — Can be either blank or LIBRARY. Specifies the LIBRARY to allocate new or reallocated PSP data sets as partitioned data set extended (PDSE) data sets. PSPDSNT can be overridden for individual data set names except for the PSP LOAD library, by modifying entries in PSPOVER as described in Appendix A.1.

WKUNIT — Specifies the unit name for a direct access work device.

WARN — Specifies whether to abend with a U0998 based on the status of your product changes.

If WARN=YES and your complex has an unapplied product change that is no longer available on this PSP distribution, the job abends before the PSP libraries are refreshed. Existing PSP data sets are not be touched.

If WARN=NO, the job executes even if there are unavailable product changes that have not been applied to the CA MICS system.

Note: If you specify WARN=NO, all unapplied and unavailable maintenance are permanently deleted from your PSP libraries.

MODE Specifies either RPT or DASD. See step 11h for an explanation of this parameter.

RLS Specifies whether unused space will be released from the PSP data sets. The default, RLSE, causes the job to release unused space. If you want to retain the unused space, change RLS to null, that is, 'RLS=,'.

LOADER Specifies the program name of the IBM Loader at your site. This is typically IEWLDRGO, HEWLDRGO, or LOADER. If in doubt, contact your system programmer.

___ 11j. If your site requires that your sort program load library is explicitly identified, continue with this step. Otherwise, skip to step 11k.

Find the first occurrence of //SORTLIB. The last DD is reserved for the sort library name. Fill in the names as appropriate. If you do not fill in a name, the default permits normal operation of the load job.

___ 11k. Recall all migrated PSP libraries. Verify that no PSP libraries are allocated to any user. The load job dynamically allocates all PSP libraries as OLD. If any PSP libraries are allocated to another user, the job fails with a dynamic allocation error.

___ 11l. Refresh the PSP libraries by reading and completing the following:

Note: Modules are written to disk by executing the program named LPEBLDD. This program runs as a "non-authorized" program. Some mainframe security systems, such as CA Top Secret, have a feature that restricts non-authorized programs from writing authorized load modules. (An authorized load module is link-edited with an attribute of AC(1)).

If your site has this security feature activated and is licensed for the CA MICS Space Collector Option (VCC), the load job will fail with an S913 ABEND while trying to write an authorized VCC load module. To prevent this ABEND, ask your security administrator to permit LPEBLDD to write authorized load modules.

```
            Submit the load job.

            Since this job allocates
            sharedprefix.MICS.TAPELOAD.CNTL with a DISP=OLD, it
            is important that you end all editing now and ensure
            this data set is not allocated to your interactive
            session.

___ 11m. After the job finishes, review the condition codes.

            Steps DMABEND and MICSVRAB are typically bypassed
            (flushed).

            The step #PCHFND might complete with a condition
            code of 2 as part of normal operation.

            If the job was submitted with MODE=RPT, then the
            PSPEXEC step must abort with an ABEND code of
            U0100. If the job was submitted with MODE=DASD,
            PSPEXEC and all subsequent steps must complete with
            a condition code of zero.

            If the job abends or if a step completes with an
            unexpected condition code (greater than 2), take
            corrective action and resubmit the job. For more
            information about a list of commonly experienced
            errors and their corrective actions, see Appendix C.

___ 11n. Review the Product Change Status Report in the
            PSPRPT SYSOUT data set from the PSPEXEC step.  The
            report identifies the PSP levels that is loaded to
            the PSP data sets.  See Appendix B for details.

___ 11o. If you submitted the job with MODE=DASD, proceed
            to step 12.

            If you submitted the job with MODE=RPT, review the
            "Information for PSP Data Sets Before Allocation"
            report in the PSPLOG SYSOUT data set.  This report
            identifies all the PSP data sets, their attributes,
            and whether they will be deleted, allocated, or
            reused.  See step 11h for more information about the
            MODE parameter.

            You can refine your data set allocation parameters
            by modifying them for individual data sets as
            explained in Appendix A.1, or for all PSP data sets
            by using JCL parameters as explained in step 11i.
```

```
          Once the desired changes have been made, return to
          step 11l and resubmit the load job.

          When you are satisfied with the contents of the
          report, change MODE=RPT to MODE=DASD and resubmit
          the job.

___ 12. Optionally, print or view the CA MICS System
        Administrator Guide (SAG).

        To print it, edit sharedprefix.MICS.CNTL(DOCUMENT)
        and specify BS after MANUAL=.  Then submit the job.

        To view it through CA MICS Document Access, first run
        the job in sharedprefix.MICS.CNTL(DOCAGEN).  Then you
        can browse the SAG using MWF 1;1.

        Note: All of the CA MICS guides are also available
        online in HTML or PDF format. To view or print them,
        go to CA Support Online at http:/ca.com/support, log
        in, and select Documentation.

___ 13. Retain sharedprefix.MICS.TAPELOAD.CNTL.  It will be
        reused in all future CA MICS tape loads for both PSP
        and optional products.

___ 14. Receive the new distribution tables. See Appendix D.2
        in this guide for the steps.

___ 15. Use PSP Online for change review, problem analysis,
        and product change application.  See Chapter 3 and
        Appendix E in this guide.

*************************************************************
*       This completes refreshing your PSP libraries.       *
*************************************************************
```

Chapter 3: APPLY PSP PRODUCT CHANGES

Follow the guidelines in this chapter to apply the PSP.

This section contains the following topics:

3.1 Selecting the Product Changes to Apply

There are panel options other than those mentioned below that may suit your preference, but this section suggests a common way to proceed.

To identify product changes to apply from the current PSP distribution:

1. Review unapplied product changes by selecting the Select Product Changes option on the Problem Analysis menu (MWF;5;2;1;2). Use the BROWSE command to see more information about each product change.

2. Note which product changes you want to apply at this time.

3. Use the SELECT line command to select these product changes for application. Enter the END command to proceed.

4. When the Sorted Change List appears, enter the END command to print the product change installation checklist(s). On the Print Options panel, we recommend that the following options be specified:

   Print individual PC text or consolidated checklist - TEXT or CKLIST.

   Specify CKLIST (may be abbreviated as C) to print a consolidated installation checklist for all of the product changes you have selected. The consolidated checklist is generated by combining the individual checklists that were delivered with each product change. Redundant and duplicate steps found across checklists are removed during the consolidation process.

   Use composite UNITGEN in consolidated checklist - YES or NO.

   Specify Y (YES) to generate a consolidated checklist for the selected product changes using the composite UNITGEN process for unit-level JCL and parameter generation.

   Print summary of change libraries/members - YES or NO.

   Specify Y (YES) to print a summary of the changed libraries or members.

Optionally, you can browse the CA MICS library members affected by selecting the CA MICS Libraries option on the Problem Analysis menu.

5. Review the generated installation checklist to understand the whole work effort involved in the product changes you have selected. Any selected change may be reset or additional changes may be selected by going back to the Select Product Changes panel.

Continue with Section 3.2 to apply the product changes.

3.2 Applying Product Changes

To apply selected product changes:

1. Select the PSP Online option. Apply Product Changes (MWF;5;2;2). The Select Product Changes for Apply panel is displayed. Review the product changes you selected. Selected changes may be reset or additional changes may be selected. When your review is complete, enter the END command.

2. The Sorted Change List is displayed. Enter the END command to print the product change installation checklist(s) if this has not already been done. Note that we recommend choosing the consolidated checklist.

3. When the Apply Product Changes menu is displayed, select the Generate Apply Job option to prepare product change JCL. Review the generated JCL and make necessary changes, such as to JOB statement parameters. Enter the END command to submit the job.

4. Examine the submitted product change update job for successful completion. Then continue the product change installation by following the instructions in the product change installation checklist.

   Note: The APPLY job stream may perform only some of the steps required to apply a product change. Therefore, it is important that you print the installation checklist and follow each step listed.

   If a product change APPLY job fails with a JCL error or completes abnormally, product changes will display a status of A or APPLYING on the Select Product Changes for Apply panel. In this situation, you will have to issue the RESET line command followed by the SELECT command to reset each product change back to a status of S or SELECTED, enter the END command, and resubmit the APPLY job stream.

Chapter 4: Supplemental Information

This chapter contains special information that you might need when applying product changes to your CA MICS installation. This information supplements product change installation instructions when special steps are required.

The subjects discussed in this chapter are:

1 - Generating the CA MICS PSP Product Change Status Report
2 - Using the PSP GENLIB Compare Utility

This section contains the following topics:

4.1 Generating the CA MICS PSP Product Change Status Report

The product change status report assists you in planning PSP upgrades by providing a complex-wide view of unapplied and current CA MICS upgrade levels. Use this report to see which units are impacted by unapplied product changes. You can also track the status, date, and job name of product change apply jobs.

The report has the following five sections:

- Apply Product Change Status Exceptions

  Lists product change exceptions.

- Pending Product Change not Associated with a Unit

  Lists unapplied product changes not associated with a CA MICS database unit (for example, CA MICS Capacity Planner Option or CA MICS Performance Manager Option).

- Pending Product Change Grouped by Product and Database

  Lists unapplied product changes based on CA MICS product with affected database units.

- Applied Product Change Status Grouped by Product

  Lists applied product changes listed according to CA MICS product.

- Applied Product Change Status Grouped by Date

  Lists applied product changes by date.

Figure 4-1 illustrates a sample CA MICS PSP product change status report.

```
+-------------------------------------------------------------------------------------------+
|                             CA MICS PSP PRODUCT CHANGE STATUS REPORT                       |
| Reporting on CA MICS Complex: complex.prefix   05AUGyyyy  10:12:28                        |
| -------------------------                                                                 |
|   Section 1 -- Apply Product Change Status Exceptions                                     |
|   Section 2 -- Pending Product Change not Associated with a Unit                          |
|   Section 3 -- Pending Product Change Grouped by Product and Database                     |
|   Section 4 -- Applied Product Change Status Grouped by Product                           |
|   Section 5 -- Applied Product Change Status Grouped by Date                              |
|                                                                                           |
|                                Product Change Status Exceptions                           |
| No apply Product Change status exceptions were found                                      |
|                                                                                           |
|                                   Pending Product Changes                                 |
|                         Grouped by Installed Product and Database Unit                    |
| SNT                                                                                       |
| ---                                                                                       |
| Units: (P:FORALL, 9:R2AXI)                                                                |
| SNT6570 -- UNAPPLIED   -- Product Change Date: 20JULyy -- NPM VTAM Buffer Pool Statist... |
| SNT6560 -- UNAPPLIED   -- Product Change Date: 15OCTyy -- ORGSYSID ???? Support and Co... |
|                                                                                           |
|                                Applied Product Change Status                              |
|                                      Grouped by Product                                   |
| ACT                                                                                       |
| ---                                                                                       |
| ACT7130 was applied 01JUNyy by mntjob0.                                                   |
| ...                                                                                       |
|                                                                                           |
| BAS                                                                                       |
| ---                                                                                       |
| BAS7325 was applied 02AUGyy by mntjob5.                                                   |
| ...                                                                                       |
+-------------------------------------------------------------------------------------------+
```

Figure 4-1. Sample Product Change Status Report (Part 1 of 2)

```
+-------------------------------------------------------------------------------------------+
|                                                                                           |
|                                Applied Product Change Status                              |
|                                       Grouped by Date                                     |
| CAP6410 was applied 05AUGyy by mntjob0.                                                   |
| BAS7325 was applied 02AUGyy by mntjob5.                                                   |
| ACT7140 was applied 28JULyy by mntjob1.                                                   |
| CIC6550 was applied 16JULyy by mntjob1.                                                   |
| MQR7140 was applied 13JULyy by mntjob3.                                                   |
| STG6080 was applied 13JULyy by mntjob0.                                                   |
| RMF6710 was applied 09JULyy by mntjob1.                                                   |
| MQS6410 was applied 07JULyy by mntjob1.                                                   |
| AUM6380 was applied 02JULyy by mntjob2.                                                   |
| ACT7130 was applied 01JUNyy by mntjob0.                                                   |
|                                                                                           |
+-------------------------------------------------------------------------------------------+
```

Figure 4-1. Sample Product Change Status Report (Part 2 of 2)

To generate the CA MICS PSP Product Change Status Report, do one of the following:

- Submit the PSPSTAT job in sharedprefix.MICS.CNTL. You can run this job in batch mode.
- Select Option 4 (Submit the PSP Status Report) on the Status panel (MWF;5;2;1;4). See Appendix E for a description of the Status panel.

4.2 Using the PSP GENLIB Compare Utility

The PSP GENLIB compare utility is packaged with product changes (PTFs) that update component database definitions in sharedprefix.MICS.GENLIB(cccGENIN), where ccc is the component identifier (e.g., RMF, SMF, CIC, etc.). The utility program performs two primary functions:

1) Detects if any product change updates will overlay user modifications made to the Component Definition Statements member (cccGENIN) in sharedprefix.MICS.GENLIB, where ccc is the component identifier (e.g., CICGENIN, RMFGENIN, SMFGENIN). The utility report highlights these potentially disruptive updates. The report also shows which cccGENIN statements have been modified by the user, and those that are updated by the product change. At the end of the report, recommendations are made for the user to consider when applying the product change.

2) Creates a member in sharedprefix.MICS.GENLIB that contains lines you have modified in cccGENIN. The member created is named Ucccnnnn, where ccc is the component identifier and nnnn is the component product change number (e.g., URMF6810, UCIC8220, USMF7210). The Ucccnnnn member is prepared in IEBUPDTE format so that it can be used to re-apply your user modifications to a pristine copy of a cccGENIN member thereby replicating your user modifications.

JCL for the compare job is packaged with product changes that update cccGENIN. When the product change is loaded to the MICS complex level PSP libraries, the compare job is placed in sharedprefix.MICS.PSP.CNTL as member cccnnnnC, where ccc is the component identifier and nnnn is the component product change number (e.g., RMF6810C, CIC8220C, SMF7210C).

How to Execute the PSP GENLIB Compare Utility Job

When you download a product change that updates cccGENIN, the utility job is placed in sharedprefix.MICS.PSP.CNTL with the member name of cccnnnnC, where cccnnnn is the product change name. The PSP GENLIB compare utility JCL looks like this:

```
//CMPR     EXEC MICSCOM,SYSPARM=cccnnnn
//GENUPD   DD   DISP=SHR,DSN=sharedprefix.MICS.PSP.GENLIB
//SYSIN    DD   DSN=sharedprefix.MICS.SOURCE(PSPGCMPR),
//              DISP=SHR
```

where ccc is the component identifier
      nnnn is the component product change number

You must edit sharedprefix.MICS.PSP.CNTL(cccnnnnC) to add a job card and update the sharedprefix.MICS literal in the //GENUPD and //SYSIN DD statements. The product change number is pre-coded into the SYSPARM parameter.

After adding the job card and updating the GENUPD and SYSIN DD statements, submit the job.

NOTE: The PSP GENLIB Compare Utility can be run multiple times with no adverse effects. For example, if the utility report indicates you have some insignificant user modifications in sharedprefix.MICS.GENLIB(cccGENIN), you can edit cccGENIN to eliminate the insignificant modifications and re-run the utility. The new report should validate that you correctly removed the insignificant user modifications.

PSP GENLIB Compare Utility ABENDS

The PSP GENLIB Compare Utility will generate a U0998 ABEND for any of the following reasons:

1) The sharedprefix.MICS.HOLD.PARMS(cccGENIN) and/or
   sharedprefix.MICS.GENLIB(cccGENIN) member does not contain
   "MICS" in columns 73-76 in the first line.

2) The sharedprefix.MICS.HOLD.PARMS(cccGENIN) and/or
   sharedprefix.MICS.GENLIB(cccGENIN) member contains
   out-of-order sequence numbers.

3) The sharedprefix.MICS.HOLD.PARMS(cccGENIN) and/or
   sharedprefix.MICS.GENLIB(cccGENIN) member is not found.

4) The SYSPARM value on the //CMPR EXEC statement is blank or
   does not consist of seven characters.

5) The CA MICS BASE maintenance level cannot be determined
   because sharedprefix.MICS.GENLIB(DBTABLE) is corrupted.

6) The CA MICS BASE maintenance level is not at the required
   level according to sharedprefix.MICS.GENLIB(DBTABLE).

The PSP GENLIB Compare Utility will generate a U0999 ABEND
and a SASLOG error message if either the
sharedprefix.MICS.GENLIB(DBTABLE) or
sharedprefix.MICS.GENLIB(COMPTDEF) members are not found.

If any of these ABENDs occur, the problem must be resolved
before the utility program can be run.

How the PSP GENLIB Compare Utility Works

One of the System Modification checklist steps for a product
change that modifies cccGENIN will instruct you to execute
the cccnnnnC job. This is generally step 2 of the checklist.

When executed, the utility first performs a check to ensure
that your CA MICS system is at an acceptable maintenance
level.

Next, the compare utility compares the pristine copy of the
Component Definition Statements (cccGENIN) in
sharedprefix.MICS.HOLD.PARMS with the working copy in
sharedprefix.MICS.GENLIB to discover your user modifications.
Individual lines in sharedprefix.MICS.GENLIB(cccGENIN) that
you have modified are written to member Ucccnnnn in
sharedprefix.MICS.GENLIB.

```
At the same time, the utility examines the product change
updates to cccGENIN to see if any of them collide with your
user modifications. The utility produces a report that shows
your user modifications (if any) as well as the product
change updates to cccGENIN. It highlights cases where product
change updates collide with your user modifications.

Note: The cccGENIN members in sharedprefix.MICS.HOLD.PARMS
should never be modified. These members exist to serve as a
basis for comparison against their companion members in
sharedprefix.MICS.GENLIB.  If you have made any changes to
the cccGENIN members in sharedprefix.MICS.HOLD.PARMS, contact
Technical Support.


What is Considered a User Modification?
---------------------------------------
If there are any differences between a line in
sharedprefix.MICS.HOLD.PARMS and the corresponding line in
sharedprefix.MICS.GENLIB, the line is considered to be "user
modified." Corresponding lines are those that have the same
sequence number in columns 73-80.

There are two major types of user modifications:
operationally significant and operationally insignificant.


Operationally Significant User Modifications
--------------------------------------------
Operationally significant user modifications consist of user
additions, user deletions, and significant changes to
existing statements.  Significant changes are those that
impact the parsing results as the line is interpreted by the
component generation job, sharedprefix.MICS.CNTL(cccCGEN).

- User Additions:  A user addition is defined as any line in
  sharedprefix.MICS.GENLIB(cccGENIN) that has a sequence
  number (columns 73-80) not found in
  sharedprefix.HOLD.PARMS(cccGENIN).

  For example, to add data elements to a file, TYPE and NAME
  statements may be added to
  sharedprefix.MICS.GENLIB(cccGENIN).  The user selects
  unique sequence numbers for these new statements. Lines
  with these unique sequence numbers will not be found in
  sharedprefix.MICS.HOLD.PARMS(cccGENIN).
```

- User Deletions: A user deletion is defined as any line in sharedprefix.MICS.HOLD.PARMS(cccGENIN) with a sequence number not found in sharedprefix.GENLIB(cccGENIN). This situation can only occur if the user has deleted a line from sharedprefix.MICS.GENLIB(cccGENIN), or changed the sequence number of an existing line.

  NOTE: Users should never delete lines or alter sequence numbers of lines delivered by CA MICS in sharedprefix.MICS.GENLIB(cccGENIN). If deletions are highlighted in the PSP GENLIB Compare utility report, the original line should be replaced (using the appropriate line from sharedprefix.HOLD.PARMS), and the statement parameters should then be updated to effect the desired change. For example, if you do not want a particular data element in a file, do not delete the NAME statement defining the element. Instead, turn the data element off using the data element timespan activation switches.

- Significant Changes: A significant change is any change to a line in sharedprefix.MICS.GENLIB(cccGENIN) that results in a real difference in how the line is interpreted by the component generation job, sharedprefix.MICS.CNTL(cccCGEN). Changes to parameter values, keywords (e.g., NAME to NAMX), and case changes or intraword spacing changes in a label are examples of significant changes.

Operationally Insignificant User Modifications

Operationally insignificant user modifications consist of any change that has no impact on how the line is interpreted by the sharedprefix.MICS.CNTL(cccCGEN) component generation job. A keyword case change (e.g., "NAME" versus "name"), and spacing differences between parameters (e.g., "N N N" versus "N N N") are examples of operationally insignificant user modifications.

```
The PSP GENLIB Compare Utility Report
-------------------------------------
The report generated by the PSP GENLIB compare utility job is
written to the //SASLIST output DD.

It is imperative that you examine the report output. The
report serves a number of purposes:

1) Each line in sharedprefix.MICS.GENLIB(cccGENIN) that is
   user modified is displayed, preceded by the unaltered
   line. This allows a visual comparison to see how the line
   was modified.

2) Each existing line updated by the product change is
   displayed, preceded by the line as it existed prior to
   update. This permits a visual comparison to see how the
   product change is updating the line.

3) Each line added to sharedprefix.MICS.GENLIB(cccGENIN) by
   either the product change or the user is displayed.

4) Any lines deleted by the user are identified--and the
   deleted line is shown as it exists in
   sharedprefix.MICS.HOLD.PARMS(cccGENIN).

5) Finally, and most importantly, any lines in
   sharedprefix.MICS.GENLIB(cccGENIN) with significant user
   modifications that will be overlayed by the product change
   updates are highlighted as a CONFLICT that must be
   resolved (or accepted) during product change application.

The PSP GENLIB Compare Utility Generated Ucccnnnn Member
--------------------------------------------------------
A successful execution of the PSP GENLIB Compare Utility
results in the creation of a member in
sharedprefix.MICS.GENLIB that contains any user modified
lines from sharedprefix.MICS.GENLIB(cccGENIN). The member
created is named Ucccnnnn, where ccc is the component
identifier and nnnn is the component product change number
(e.g., URMF6810, UCIC8220, USMF7210).  The Ucccnnnn member is
prepared in IEBUPDTE format so that it can be used to
re-apply your user modifications to a pristine copy of a
cccGENIN member thereby replicating your user modifications.
The member is always created, but will be empty if no user
modifications were found.
```

There is no requirement to execute an IEBUPDTE to apply these modifications to sharedprefix.MICS.GENLIB(cccGENIN) because the modifications already exist. In the case where a product change CONFLICT overlays a line that you modified, however, the Ucccnnnn contains the line with your modification and can be used to re-impliment your user modification before you execute sharedprefix.MICS.CNTL(cccCGEN).

Note: If a user modification is replicated by the product change, it is no longer considered a user modifications and will not be written to the Ucccnnnn member.

Note: While the Ucccnnnn member contains sharedprefix.MICS.GENLIB(cccGENIN) user modified lines, it should not be a substitute for maintaining documentation regarding GENLIB user modifications in sharedprefix.MICS.LOCALMOD.CNTL. All modifications to any MICS modules should be documented in the LOCALMOD.CNTL library.

The following section explains how to interpret and use the PSP GENLIB Compare Utility report output:

1 - Interpreting and Using the Utility Report

4.2.1 Interpreting and Using the Utility Report

This section provides several examples of the utility SASLIST report output. The report is divided into two sections.

- The first report section shows product change updates and user modifications in detail. It is followed by a summary of the various types of modifications and product change updates encountered. This first section is repeated for each cccGENIN updated by the product. Most product changes update a single cccGENIN, but a product change for the CA MICS Tape Analyzer Option, for example, is likely to update both TLMGENIN and VTSGENIN.

- The second report section provides recommendations for how to proceed based on the utility analysis.

EXAMPLE 1: Product Change Where cccGENIN has no User Modifications

---

o First Report Section

```
                                    CA MICS PWR7777 GENLIB Analysis Report            18:50 Wednesday, June 23, yyyy  1
MEMBER=PWRGENIN

        */* (C) 1994,1999  COMPUTER ASSOCIATES INTERNATIONAL, INC.          */  00002000  AS DISTRIBUTED
        */* Copyright (C) 2010 CA. All rights reserved.                    */   00002000  PWR7777 UPDATE

        */* PWR7777|        |mmyy|Simple Product Change                     */  00002477  PWR7777 ADDITION

        FILE  PJB   00  1  Y N N Y Y Y N Y  VSE/POWER Job Activity File         00025000  AS DISTRIBUTED
        FILE  PJB   00  1  Y N N Y Y Y Y Y  VSE/POWER Job Activity File         00025000  PWR7777 UPDATE

        NAME  PJBNEWWW  00  0 N N N N New Element                               00062900  PWR7777 ADDITION


                                    CA MICS PWR7777 GENLIB Analysis Report            18:50 Wednesday, June 23, yyyy  2
+-------------------------------------------------------------------------------------------------------+
|  PWRGENIN  User Modification Analysis Summary                                                         |
|  ------------------------------------------                                                           |
|  No USER modifications found                                                                          |
|                                                                                                       |
|                                                                                                       |
|  Product Change PWR7777  - Update Analysis Summary for PWRGENIN                                       |
|  ------------------------------------------------------------                                         |
|  Additions                        2                                                                   |
|  Updates                          2                                                                   |
|  User Modification Replications   0                                                                   |
|  User Modification CONFLICTS      0                                                                   |
|                                                                                                       |
+-------------------------------------------------------------------------------------------------------+
```

This example shows a very simple product change that updates two existing lines and adds two lines to PWRGENIN. Note that where an existing line is updated, the report shows how the line looked prior to the product change update. It is a best practice to closely examine each product change addition and update. You may decide to make some modifications if you do not want to accept how the product change is updating existing lines. In the example above, you may decide that you want the new data element on in all timespans, instead of just in DETAIL as PWR7777 is delivering it. If so, you could change the '0 N N N N' to '0 0 0 0 0' after the product change apply, and before executing sharedprefix.MICS.CNTL(PWRCGEN).

EXAMPLE 1: Product Change Where cccGENIN has no User Modifications (Continued)

o Second Report Section

```
+-------------------------------------------------------------------------------------------+
|----------------  UTILITY ANALYSIS RECOMMENDATIONS FOR PRODUCT CHANGE PWR7777  ----------------|
+-------------------------------------------------------------------------------------------+
|                                                                                           |
|  o - No problems detected                                                                 |
|  o - Examine the report output to review product change updates                           |
|                                                                                           |
|  o - No user modifications--empty member will be created in sharedprefix.MICS.GENLIB(UPWR7777)  |
|      Check MICSLOG for member creation confirmation.                                      |
|                                                                                           |
|  Reference: CA MICS How to Use the PSP guide, Section 4.2                                 |
|                                                                                           |
+-------------------------------------------------------------------------------------------+
```

The second, final section of the report provides recommendations based on the analysis of the product change and any user modifications.

This example shows the simplest possible result. There were no user modifications and the only task required is to take a look at how the product change has updated cccGENIN. If you decide that you do not want any of the additions, or updates, as delivered, you can update sharedprefix.MICS.GENLIB(cccGENIN) after the product change apply step, and before you execute sharedprefix.MICS.CNTL(cccCGEN).

The note regarding the utility created member, shareprefix.MICS.GENLIB(UPWR7777) tells you that the member will be empty because GENLIB(PWRGENIN) had no user modifications.

EXAMPLE 2: Product Change Where cccGENIN has User Modifications
---

o First Report Section

```
                                    CA MICS PWR7777 GENLIB Analysis Report            18:50 Wednesday, June 23, yyyy  1
 MEMBER=PWRGENIN

        */* (C) 1994,1999  COMPUTER ASSOCIATES INTERNATIONAL, INC.          */  00002000  AS DISTRIBUTED
        */* Copyright (C) 2010 CA. All rights reserved.                    */   00002000  PWR7777 UPDATE

        */* PWR7777|        |mmyy|Simple Product Change                     */  00002477  PWR7777 ADDITION

        FILE  PJB   00  1  Y N N Y Y Y N Y  VSE/POWER Job Activity File         00025000  AS DISTRIBUTED
        FILE  PJB   00  1  Y N N Y Y Y Y Y  VSE/POWER Job Activity File         00025000  PWR7777 UPDATE

        NAME  PJBGRPRC  00  0 N N N N Job Group Received                       00061000  AS DISTRIBUTED
 >>---> NAME  PJBGRPRC  00  0 n n N N Job Group Received                       00061000  USER MODIFICATION: Insignificant  <---<<

        NAME  PJBNEWWW  00  0 N N N N New Element                             00062900  PWR7777 ADDITION

        NAME  PJBMASK   00  0 N N N N Record Construction Audit Mask           00065000  AS DISTRIBUTED
 >>---> NAME    PJBMASK   00  0  N N N N Record Construction Audit Mask       00065000  USER MODIFICATION: Insignificant  <---<<

        NAMX  PJBORGJN  00  0 N N N N Origin Job Number                       00070000  AS DISTRIBUTED
 >>---> NAMX  PJBORGJN  00  0 N N N N Origin JOB NUMBER                       00070000  USER MODIFICATION                 <---<<

        NAMX  PJBORGNN  00  0 N N N N Origin Node Name                       00087000  AS DISTRIBUTED
 >>---> NAMX  PJBORGNN  00  0 0 0 0 0 Origin Node Name                       00087000  USER MODIFICATION                 <---<<

        NAME  PRAERROR  00  0 0 0 0 0 Errors Count                           00678000  AS DISTRIBUTED
 >>--->                                                                               USER DELETION: Should FIX this!!! <---<<

                                    CA MICS PWR7777 GENLIB Analysis Report            18:50 Wednesday, June 23, yyyy  1
+-------------------------------------------------------------------------------------------------+
|  PWRGENIN  User Modification Analysis Summary                                                   |
|  ------------------------------------------                                                     |
|  Modifications                  2                                                               |
|  Modifications-Insignificant    2       <-- FIX AND RE-RUN UTILITY                              |
|  Additions                      0                                                               |
|  Deletions                      1       <-- FIX AND RE-RUN UTILITY                              |
|                                                                                                 |
|                                                                                                 |
|  Product Change PWR7777  - Update Analysis Summary for PWRGENIN                                 |
|  ------------------------------------------------------------                                   |
|  Additions                      2                                                               |
|  Updates                        2                                                               |
|  User Modification Replications 0                                                               |
|  User Modification CONFLICTS    0                                                               |
|                                                                                                 |
+-------------------------------------------------------------------------------------------------+
```

This second example shows the same product change, but there are a number of user modifications to PWRGENIN.

Notice that user modifications are bracketed with arrows (>>---> and <---<<). Legitimate modifications are simply labeled USER MODIFICATION. If a user modification is labeled as USER MODIFICATION: Insignificant, or USER DELETION, you should take the time to correct them.

USER MODIFICATION: Insignificant are a nuisance--they are operationally equivalent to the corresponding line in sharedprefix.MICS.HOLD.PARMS(cccGENIN), but show up as different in comparisons between HOLD.PARMS and GENLIB. To fix insignificant modifications, replace the line in GENLIB(cccGENIN) with the corresponding line (same sequence number) from HOLD.PARMS. When you re-run the PSP GENLIB Compare Utility program they will no longer show up as user modifications.

USER DELETIONS are bad. Lines should never be deleted from sharedprefix.MICS.GENLIB(cccGENIN). If you have any user deleted lines, copy the corresponding line from HOLD.PARMS(cccGENIN) and use statement parameters to inactivate the statement.

Notice that the analysis summary quantifies the types of user modifications encountered, and encourages you to fix any insignificant modifications or deletions, and then re-run the utility.

EXAMPLE 2: Product Change Where cccGENIN has User Modifications (Continued)

---

o Second Report Section

```
+-------------------------------------------------------------------------------------------+
|-----------------  UTILITY ANALYSIS RECOMMENDATIONS FOR PRODUCT CHANGE PWR7777  -----------|
+-------------------------------------------------------------------------------------------+
|                                                                                           |
|  o - No problems detected                                                                 |
|  o - Product change does not appear to conflict with user modifications                   |
|  o - Examine the report output to review product change updates                           |
|                                                                                           |
|  o - BEST PRACTICE: Resolve the 2  insignificant user mods then re-execute utility        |
|  o - BEST PRACTICE: Resolve the 1  user deletions then re-execute utility                 |
|                                                                                           |
|  o - User modifications will be saved in sharedprefix.MICS.GENLIB(UPWR7777)               |
|      Check MICSLOG for member creation confirmation.                                      |
|                                                                                           |
|  Reference: CA MICS How to Use the PSP guide, Section 4.2                                 |
|                                                                                           |
+-------------------------------------------------------------------------------------------+
```

The second, final section of the report is different when user modifications are found.

The recommendations acknowledge that user modifications were found, and that it appears as though the product change updates do not interfere with the user mods. You are still encouraged to examine the report to see how the product change has updated cccGENIN. If you decide that you do not want any of the additions, or updates, as delivered, you can update sharedprefix.MICS.GENLIB(cccGENIN) after the product change apply step and before you execute sharedprefix.MICS.CNTL(cccCGEN).

You are also encouraged to take care of any insignificant user modifications or user deletions.

Notice that the note regarding the utility created member, shareprefix.MICS.GENLIB(UPWR7777), is different because GENLIB(PWRGENIN) did have user modifications. This report is generated just before the creation of the Ucccnnnn member--so to confirm that it was indeed created, you can check MICSLOG.

EXAMPLE 3: Product Change with CONFLICTS and Replications
---

o First Report Section

```
                                    CA MICS PWR7777 GENLIB Analysis Report            18:50 Wednesday, June 23, yyyy  1
MEMBER=PWRGENIN

        */* Copyright (C) 2010 CA. All rights reserved.                   */   00002000  PWR7777 UPDATE

        */* PWR7777|        |mmyy|Simple Product Change                     */  00002477  PWR7777 ADDITION

        FILE  PJB   00  1  Y N N Y Y Y N Y  VSE/POWER Job Activity File         00025000  AS DISTRIBUTED
 >>---> FILE  PJB   00  1  Y N N Y Y Y Y Y  VSE/POWER Job Activity File         00025000  USER MODIFICATION: Replicated     <---<<
        FILE  PJB   00  1  Y N N Y Y Y Y Y  VSE/POWER Job Activity File         00025000  PWR7777 UPDATE

        NAME  PJBNEWWW  00  0 N N N N New Element                              00062900  PWR7777 ADDITION

        NAMX  PJBORGJN  00  0 N N N N Origin Job Number                         00070000  AS DISTRIBUTED
 >>---> NAMX  PJBORGJN  00  0 N N N N Origin JOB NUMBER                         00070000  USER MODIFICATION                 <---<<
        NAMX  PJBORGJN  00  0 0 0 0 0 Origin Job Number                         00070000  PWR7777 UPDATE:    CONFLICT       <---<<

        NAMX  PJBORGNN  00  0 N N N N Origin Node Name                          00087000  AS DISTRIBUTED
 >>---> NAMX  PJBORGNN  00  0 0 0 0 0 Origin Node Name                          00087000  USER MODIFICATION                 <---<<
                                       CA MICS PWR7777 GENLIB Analysis Report              16:15 Thursday, June 24, 2010  2
+-------------------------------------------------------------------------------------------------------+
|  PWRGENIN  User Modification Analysis Summary                                                         |
|  ----------------------------------------                                                             |
|  Modifications                  2                                                                     |
|  Modifications-Insignificant    0                                                                     |
|  Additions                      0                                                                     |
|  Deletions                      0                                                                     |
|                                                                                                       |
|                                                                                                       |
|  Product Change PWR7777  - Update Analysis Summary for PWRGENIN                                       |
|  ------------------------------------------------------------                                         |
|  Additions                      2                                                                     |
|  Updates                        2                                                                     |
|  User Modification Replications 1                                                                     |
|  User Modification CONFLICTS    1       <-- WARNING--ANALYZE AND REACT                                |
|                                                                                                       |
+-------------------------------------------------------------------------------------------------------+
```

This final example shows a similar product change where there is a conflict with a user modification as well as a replication of a user modification.

USER MODIFICATION: Replicated - This means that the user had modified a line in GENLIB(cccGENIN) and the product change is delivering the line exactly as the user had modified it. Notice that the count of user modifications is 2, even though three are noted in the report. The replicated line is no longer a user modification. It will no longer appear in the GENLIB(Ucccnnnn) member that contains user modified lines.

PWR7777 UPDATE: CONFLICT - This requires your careful examination. Whenever a CONFLICT is noted, it means that a modification you have made is being overlayed by the product change. In the example above, the user has modified the data element label from "Origin Job Number" to "Origin JOB NUMBER." The product change is updating the timespan activation switches for the element. If you do nothing, the data element will now be on in all timespans, and the label will revert to the original value. You may decide that you want to go ahead and accept the timespan activation changes, but you also want to preserve your data element label modification.

To accomplish this, you would need to apply the product change. After the apply step, you must update sharedprefix.MICS.GENLIB(PWRGENIN) to update the data element label before you execute sharedprefix.MICS.CNTL(PWRCGEN).

It is very important to review the PSP GENLIB Compare Utility SASLIST output to see if any conflicts occur. If the lines impacted are OPTION or FILE statements, you can seriously impact operational behavior and database content if you neglect to examine cases where your database modifications are overlayed by product change updates.

EXAMPLE 3: Product Change with CONFLICTS and Replications (Continued)

```
+-------------------------------------------------------------------------------------------+
|----------------  UTILITY ANALYSIS RECOMMENDATIONS FOR PRODUCT CHANGE PWR7777  ----------------|
+-------------------------------------------------------------------------------------------+
|                                                                                           |
|  o - WARNING: CONFLICTS FOUND!!!                                                          |
|      Review the 1  product change update(s) that conflict with user modifications        |
|      If you want to preserve your modifications, update the CONFLICT lines               |
|      AFTER executing the PSP apply job and BEFORE executing the cccCGEN job.             |
|                                                                                           |
|                                                                                           |
|  o - User modifications will be saved in sharedprefix.MICS.GENLIB(UPWR7777)               |
|      Check MICSLOG for member creation confirmation.                                      |
|                                                                                           |
|  Reference: CA MICS How to Use the PSP guide, Section 4.2                                 |
|                                                                                           |
+-------------------------------------------------------------------------------------------+
```

When conflicts are found, the final section of the report provides a WARNING, encourages you to review the user modifications impacted, and explains the actions necessary to preserve your user modifications.

Appendix A: SETTING OPTIONAL PARAMETERS

Setting optional parameters is not required for the successful completion of most PSP installations.

This section contains the following topics:

A.1 Overriding Dynamic Allocation Parameters

The standard PSP refresh job estimates space and directory blocks required for PSP data sets automatically. It compares the allocated space and directory blocks of existing PSP data sets to the required amounts. If either is insufficient, the data set is marked for deletion and a report is produced in the PSPLOG.

- If the JCL parameter MODE is set to RPT, the refresh job ends with an abend code of U0100.

- If MODE is set to DASD, the refresh job deletes unsuitable PSP data sets and allocates all required PSP data sets.

The data set names for this process are determined using the default &SPREFIX..&SMICS (provided in JCL) as the high-level qualifier followed by the standard PSP data set names that are identified in Figure A-1. If you do not want to use the standard PSP data set names, you may override them as described below. The overridden data set names are used to search for existing PSP data sets, and if required, to allocate new data sets.

CAUTION: You should change PSP data set names only if absolutely necessary. If you change names, you must ensure that the PSP data sets named in the batch-driven refresh job are modified modified to reflect the overridden data set names.

You must also ensure that the corresponding data set names are changed in the PSP Online panel, Define the PSP Libraries (MWF Option 5;2;3;1). See Figure A-2 for the correlation between the PSP installation ddnames and the PSP Online ddnames.

You can also override a limited number of parameters used in the allocation of new PSP data sets. These parameters are ignored, however, if an existing PSP data set meets the space and directory block requirements. The parameters are:

PARAMETER	FORMAT
Data set name	DSN=fully qualified data set name
Block size	BLKSIZE=nnnnn
Expiration date	EXPDT=yyddd
Retention period	RETPD=nnnn
Volume serial	VOLSER=vvvv
Unit	UNIT=uuuuuuuu
SMS STORCLAS	STORCLAS=cccccccc

```
 SMS DATACLAS          DATACLAS=cccccccc
 SMS MGMTCLAS          MGMTCLAS=cccccccc
 DSNTYPE*              DSNTYPE=cccccccc
 Private               PRIVATE=PRIVATE

 Note, DSNTYPE specified for ddname PLOAD is ignored.

$SCOL
 Each PSP library's ddname and the defaults for data set name,
 block size, unit, and VOLSER are listed in Figure A-1.

 If you want to override any of these parameters, edit the
 PSPOVER member of sharedprefix.MICS.TAPELOAD.CNTL and specify
 the desired ddnames and parameters.  Separate each parameter
 with a blank.  If a statement must be continued, follow the
 completed parameter with a slash (/) and continue the
 statement on the next line. Do not leave a blank line between
 any statements. If the default is desired, do not code it.

 If no overrides are desired, do not edit PSPOVER.


 EXAMPLES OF CHANGES IN PSPOVER:

 1. The PSP ISPF table library (ISPTLIB) is reblocked to a
    block size of 23440; all other allocations use the
    defaults:

    DDN=PISPT BLKSIZE=23440

 2. The PSP.LOAD library must be allocated on a 3390 that has
    a VOLSER of PSPLOD; all other allocations use the
    defaults:

    DDN=PLOAD VOLSER=PSPLOD UNIT=3390

 3. The name for the PSP source library is BDEF.ISMGMT.PSPSRC;
    all other allocations use the defaults:

    DDN=PSRC DSN=BDEF.ISMGMT.PSPSRC

 4. The name for the PSP documentation text library is
    BDEF.ISMGMT.MICS6.PSP.DOC.TEXT.  Its VOLSER is PSPDOC,
    which is a 3380.  This statement uses the continuation
    character:

    DDN=PDOCTX DSN=BDEF.ISMGMT.MICS6.PSP.DOC.TEXT       /
    VOLSER=PSPDOC UNIT=3380
$SCOL
```

NOTES:

o Code the DDN first.

o If you specify a VOLSER, you MUST specify a UNIT.

o Do not use quotes on data set names.

o If a data set name is specified, you must edit the equivalent name in the batch-driven refresh job. You must also specify the name in the PSP Online panel, Define the PSP Libraries (MWF Option 5;2;3;1).

o Do not reblock the PLOAD library to a smaller block size!

o Do not specify a block size of zero.

o Do not code EXPDT and RETPD together on any override; dynamic allocation will fail.

o If EXPDT or RETPD is used, your system operator will receive a message requesting permission to write on the data set.

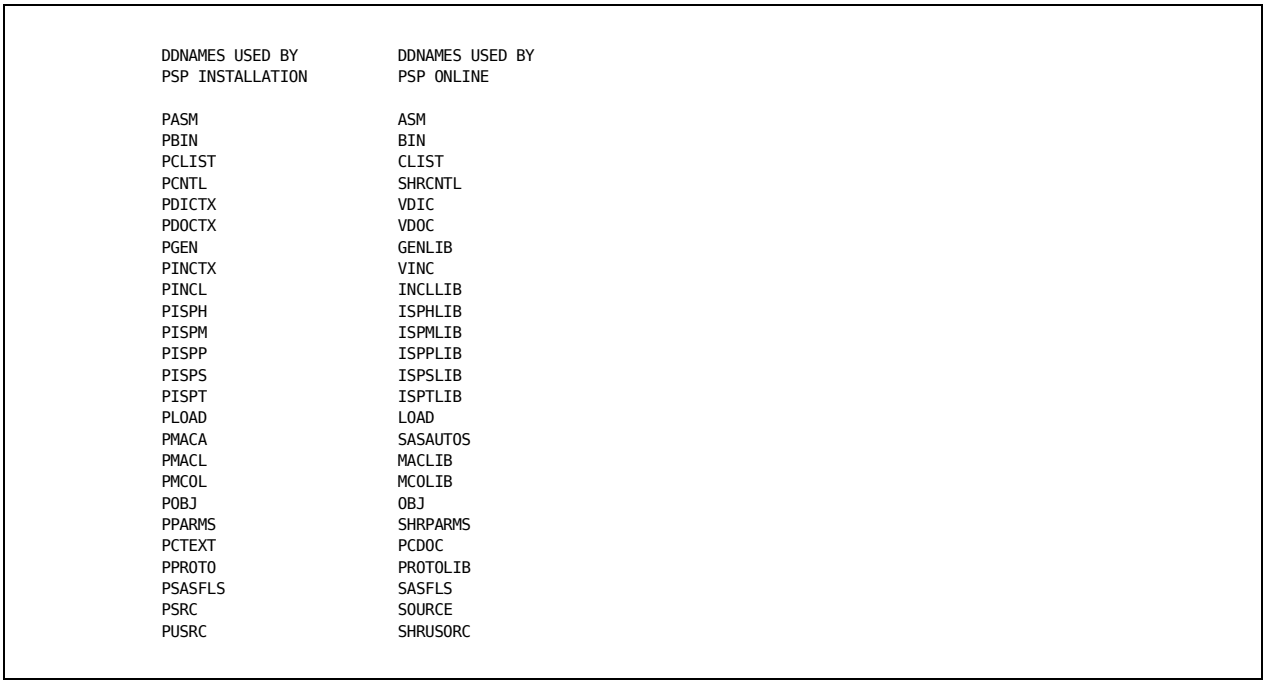
o Do not use blank lines.

o If a data set can be reused, its block size will not be overridden.

DDNAME	DATA SET NAME	RECFM	LRECL	BLKSIZE	DSORG	UNIT	VOLSER
PASM	&SPREFIX..&SMICS.PSP.ASM	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PBIN	&SPREFIX..&SMICS.PSP.BIN	VB	6140	6144	PO	&PSPUNIT	&PSPVOL
PCLIST	&SPREFIX..&SMICS.PSP.CLIST	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PCNTL	&SPREFIX..&SMICS.PSP.CNTL	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PDICTX	&SPREFIX..&SMICS.PSP.DIC.TEXT	VB	137	6160	PO	&PSPUNIT	&PSPVOL
PDOCTX	&SPREFIX..&SMICS.PSP.DOC.TEXT	VB	137	6160	PO	&PSPUNIT	&PSPVOL
PGEN	&SPREFIX..&SMICS.PSP.GENLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PINCTX	&SPREFIX..&SMICS.PSP.INC.TEXT	VB	137	6160	PO	&PSPUNIT	&PSPVOL
PINCL	&SPREFIX..&SMICS.PSP.INCLLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PISPH	&SPREFIX..&SMICS.PSP.ISPHLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PISPM	&SPREFIX..&SMICS.PSP.ISPMLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PISPP	&SPREFIX..&SMICS.PSP.ISPPLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PISPS	&SPREFIX..&SMICS.PSP.ISPSLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PISPT	&SPREFIX..&SMICS.PSP.ISPTLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PLOAD	&SPREFIX..&SMICS.PSP.LOAD	U	0	6160	PO	&PSPUNIT	&PSPVOL
PMACA	&SPREFIX..&SMICS.PSP.MACAUTOS	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PMACL	&SPREFIX..&SMICS.PSP.MACLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PMCOL	&SPREFIX..&SMICS.PSP.MCOLIB	FB	6144	6144	PO	&PSPUNIT	&PSPVOL
POBJ	&SPREFIX..&SMICS.PSP.OBJ	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PPARMS	&SPREFIX..&SMICS.PSP.PARMS	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PCTEXT	&SPREFIX..&SMICS.PSP.PC.TEXT	VB	137	6160	PO	&PSPUNIT	&PSPVOL
PPROTO	&SPREFIX..&SMICS.PSP.PROTOLIB	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PSASFLS	&SPREFIX..&SMICS.PSP.SASFLS	FB	6144	6144	PO	&PSPUNIT	&PSPVOL
PSRC	&SPREFIX..&SMICS.PSP.SOURCE	FB	80	6160	PO	&PSPUNIT	&PSPVOL
PUSRC	&SPREFIX..&SMICS.PSP.USOURCE	FB	80	6160	PO	&PSPUNIT	&PSPVOL

Figure A-1. Default PSP Installation Library DDnames, Data Set Names and Parameters

&SPREFIX, &SMICS, &PSPUNIT, and &PSPVOL all come from sharedprefix.MICS.TAPELOAD.CNTL(PSPyymmL), which is used to execute the PSP refresh job. Likewise, default SMS storage class, data class, and management class as well as data set name type, are taken from the &PSPSTORC, &PSPDATAC, &PSPMGMTC, and &PSPDSNT parameters in sharedprefix.MICS.TAPELOAD.CNTL(PSPyymmL), which is used to execute the PSP refresh job.



DDNAMES USED BY PSP INSTALLATION	DDNAMES USED BY PSP ONLINE
PASM	ASM
PBIN	BIN
PCLIST	CLIST
PCNTL	SHRCNTL
PDICTX	VDIC
PDOCTX	VDOC
PGEN	GENLIB
PINCTX	VINC
PINCL	INCLLIB
PISPH	ISPHLIB
PISPM	ISPMLIB
PISPP	ISPPLIB
PISPS	ISPSLIB
PISPT	ISPTLIB
PLOAD	LOAD
PMACA	SASAUTOS
PMACL	MACLIB
PMCOL	MCOLIB
POBJ	OBJ
PPARMS	SHRPARMS
PCTEXT	PCDOC
PPROTO	PROTOLIB
PSASFLS	SASFLS
PSRC	SOURCE
PUSRC	SHRUSORC

Figure A-2. DDnames Used in PSP Installation and DDnames Used by PSP Online

Use Figure A-2 only if you want to change the name of any of your PSP libraries:

- The names in the column DDNAMES USED BY PSP INSTALLATION can be coded in PSPOVER.
- The names in the column DDNAMES USED BY PSP ONLINE are used to identify PSP data sets in the PSP Online "Define the PSP Libraries" panel (MWF Option 5;2;3;1).

A.2 Excluding Specific Products

The PSP distribution contains two PSP levels of product changes. These are for the current PSP and the previous PSP. The standard PSP refresh job deletes all maintenance on existing PSP data sets before it loads the contents of the PSP distribution to DASD. The refresh job also determines if your CA MICS complex has any unapplied product changes that are no longer available on the PSP distribution. If any are found, the job abends before the existing maintenance is deleted.

A situation might occur where you want to exclude a product from the refresh process in order to prevent the abend from occurring. For example, if you have not maintained a product and you plan to reinstall it, you will want to exclude that product to prevent the abend.

CONSEQUENCES OF EXCLUDING PRODUCTS

When you exclude products from the PSP refresh process, you will see the following changes:

- The excluded products do not appear on the product change status report.
- The refresh job does not abend if there are unapplied and unavailable product changes for the excluded products.
- No product changes for the excluded products are loaded from the PSP distribution to PSP libraries.
- PSP Online does not display any available product changes for the excluded products.
- PSP Online ignores product changes that belong to the excluded product if they are listed as corequisites or prerequisites.
- BAS cannot be excluded; attempts to exclude BAS will be ignored.

Excluding products from the refresh process is an extreme measure; do this only after you thoroughly consider the potential consequences. If there is any question about whether to use this option, contact Technical Support. For online assistance and a complete list of locations, primary service hours, and telephone numbers, contact Technical Support at http://ca.com/support.

```
HOW TO EXCLUDE PRODUCTS

To exclude products from the PSP refresh process, edit
sharedprefix.MICS.TAPELOAD.CNTL(PSPOVER) and add the
following statement:

  PRODEXCL = ccc

where ccc is the three-letter product identifier.

To exclude one or more products, separate their three-letter
identifiers by one or more spaces:

  PRODEXCL = ccc ccc

A list of excluded products is produced in the PSPLOG SYSOUT
data set.
```

Appendix B: PRODUCT CHANGE STATUS REPORT

This section contains the following topics:

B.1 PRODUCT CHANGE STATUS REPORT

This report has two sections:

- The summary section identifies which PSP levels will be loaded from the PSP distribution to DASD. It identifies the oldest unapplied product change that is available in the PSP distribution and the PSP level in which the change was first generally available. PSP level is specified as PSPyymm, where yy is year and mm is month.

- The detail section lists product change status information for each licensed product. Each product has its own section with a three-letter identifier at the top. The product change status information is listed below the identifier with four product changes listed on each line. The product change name is first, followed by its status, which may be APPLIED, UNAPPLIED, or APPLYING. The PSP level of the product change is last. If a change is unapplied and not available on the PSP distribution, it will be flagged with asterisks. Superseded product changes are excluded from the report, thus reducing unneeded information.

For the purposes of refreshing the PSP libraries, a product change in the applying status is regarded as unapplied.

The PSP level may be blank for one of several reasons. The product change may never have been available in a PSP distribution. This is true for optional products (ccc0000) and for prerelease product changes installed using PSP Online that were never generally available. Another possibility is that the product change is one that does not verify through PSP Online. In any case, if the product change's PSP level is blank, that product change is not one of the ones that is loaded.

The last line for each product is a statement of the oldest unapplied available product change or the fact that there are no unapplied available product changes.

An abbreviated sample report is in Figure B-1.

```
                                PSPnnnn  PRODUCT CHANGE STATUS REPORT
                                  RUN DATE: ddmmmyy RUN TIME: 15:21

                                           SUMMARY

THERE ARE UNAPPLIED PRODUCT CHANGES THAT ARE NOT AVAILABLE ON THIS TAPE. THEY HAVE BEEN MARKED WITH ASTERISKS (*)

PLEASE REFER TO APPENDIX C OF REFRESHING THE CA MICS PRODUCT SUPPORT PROGRAM LIBRARIES FOR CORRECTIVE ACTION.

THE OLDEST UNAPPLIED OR APPLYING PRODUCT CHANGE OVER ALL LICENSED PRODUCTS AVAILABLE ON THIS TAPE
IS BASnnnn AT THE PSPnnnn LEVEL.

THE PSPnnnn AND ALL SUBSEQUENT PSP LEVELS WILL BE LOADED TO DASD.


                                            DETAIL

                  THE FOLLOWING REPORT DISPLAYS YOUR COMPLEX'S  PRODUCT  CHANGE
                  STATUS.  THIS  INFORMATION  IS  LISTED BY PRODUCT,  WITH FOUR
                  PRODUCT CHANGES DISPLAYED  PER  LINE.  IN  EACH  DISPLAY  THE
                  PRODUCT  CHANGE  NAME  APPEARS  FIRST,  THE  STATUS (APPLIED,
                  UNAPPLIED, APPLYING) IS SECOND, AND THE PSP DATE USED FOR PSP
                  ANALYSIS IS LAST.  IN CASES WHERE ANALYSIS IS NOT NEEDED, THE
                  DATE IS BLANK. ASTERISKS INDICATE AN UNAPPLIED PRODUCT CHANGE
                  THAT IS  NOT  AVAILABLE  IN THIS PSP DISTRIBUTION.  NOTE THAT
                  SUPERSEDED CHANGES ARE NOT LISTED.

-----------------------------------------BAS-------------------------------------------------
BASnnnn UNAPPLIED PSPnnnn | BASnnnn UNAPPLIED PSPnnnn | BASnnnn UNAPPLIED PSPnnnn

THE OLDEST AVAILABLE UNAPPLIED OR APPLYING PRODUCT CHANGE FOR BAS IS BASnnnn AT THE PSPnnnn PSP LEVEL
-----------------------------------------------------------------------------------------------

-----------------------------------------SMF-------------------------------------------------
SMFnnnn     APPLIED   PSPnnnn

THE OLDEST AVAILABLE UNAPPLIED OR APPLYING PRODUCT CHANGE FOR SMF IS SMFnnnn AT THE PSPnnnn PSPLEVEL.
```

Figure B-1. Sample Product Change Status Report (Abbreviated)

Appendix C: COMMON INSTALLATION ERRORS & CORRECTIVE ACTIONS

This section contains the following topics:

C.1 COMMON INSTALLATION ERRORS & CORRECTIVE ACTIONS

Following are errors, messages, and corrective actions for situations that may arise during execution of the PSP refresh jobs. Once the error has been corrected, resubmit the job.

- MICSDM STEP FAILS WITH USER ABEND U0998. SAS LOG CONTAINS MESSAGE: ERROR ENCOUNTERED ATTEMPTING TO RETRIEVE TABLE STATISTICS FOR TABLE: MWF$MAT. THE TABLE CANNOT BE FOUND.

  This condition occurs when the load job attempts to read sharedprefix.MICS.ISPTLIB(MWF$MAT). This is an ISPF table that identifies product changes applied to your CA MICS system. The usual cause is that PSP Online has not been activated properly to build MWF$MAT. Ensure that you have activated PSP Online by following the instructions in Appendix D.

  It is also possible that the ISPTLIB data set used by the load job's ISPTLIB DD is not the same as the one used by PSP Online. Review the JCL PROC executed in the MICSDM step and determine the name of ISPTLIB. Enter PSP Online and select the CA MICS Data Sets for ISPF Applications panel (MWF;5;0;1). Ensure that the CA MICS ISPF tables data set name is the same as that of ISPTLIB.

- PSPEXEC STEP ABENDS WITH SYSTEM SECURITY ERRORS WHEN TRYING TO ACCESS PSP DISTRIBUTION DATA SETS.

  Your site has implemented a security system that restricts your access to specific data set high-level qualifiers. To correct this problem, have your system security administrator give your user ID "read access" to these data sets. If the current PSP distribution medium is tape, the high level qualifier is "CAI".

- PSPEXEC STEP ABENDS WITH ONE OF THE FOLLOWING MESSAGES IN THE JOB LOG:

  MIM4004 PGM SAS ATTEMPTING TO CHANGE RECFM....
  - or -
  MIM4007 TASK WILL BE ABENDED BY DATASET ATTRIBUTE VERIFICATION

  CA MIM Resource Sharing for z/OS is installed at your site. It intercepted the PSP load job's use of PROC PDS to reuse existing partitioned data sets. To prevent the abend, have your CA MIM administrator add the program name of your SAS program product to the EXEMPT parameter list in the DEFAULT processing statement found in the EDIPARMS member of the parameter data set.

- PSPEXEC STEP FAILS WITH USER ABEND U0998. PSPLOG CONTAINS A MESSAGE ABOUT MISSING sharedprefix.MICS.PSP.PC.TEXT OR sharedprefix.MICS.PSP.CNTL.

  These two data sets are shipped with every new CA MICS system and are required by PSP Online. They may contain installation instructions and JCL for optional products that are not shipped on the PSP. The PSP.CNTL data set is also used by PSP Online as an interim holding place for the names of product changes that have been applied. The instructions, JCL, and applied product change information are copied by the PSP load job and are written back to the data sets after their directories have been initialized.

  If a data set is missing, restore it from a backup or migration copy. If a copy is not available, allocate a one-track partitioned data set using the RECFM, LRECL, and BLKSIZE as listed in Figure A-1 of Appendix A.1.

- PSPEXEC STEP FAILS WITH USER ABEND U0998. PSPLOG CONTAINS THE MESSAGE: A CRITICAL ERROR WAS DETECTED TRYING TO ALLOCATE TEST DATA SETS USED IN THE VALIDATION OF ALLOCATION PARAMETERS.

One-track test data sets are allocated before any existing PSP data sets are deleted and before any PSP data sets are allocated. This is done to validate the unit and VOLSER parameters prior to deletion of the PSP data sets. An error was encountered during the allocation of one or more test data sets named in an earlier message in the PSPLOG. To correct this, investigate the batch PSP allocation parameters, PSPUNIT, PSPVOL, PSPSTORC, PSPDATAC, and PSPMGMTC or their ISPF panel equivalents. See the documentation in sections 2.2.1, 2.2.2, or 2.2.3. Also, review the dynamic allocation parameters specified in PSPOVER. Ensure that the information specified in each occurrence of VOLSER and UNIT is correct. For more information on PSPOVER, see Appendix A.1.

- PSPEXEC STEP FAILS WITH USER ABEND U0998. PSPLOG CONTAINS THE MESSAGE: UNEXPECTED FAILURE IN DYNAMIC ALLOCATION WHILE ATTEMPTING TO...

  All PSP data sets are dynamically allocated using SVC99. If SVC99 returns either a non-zero error code or a non-zero information code, then the code, the failing data set name, the DDNAME, and system messages are printed in PSPLOG. One cause of this problem is the migration of data sets by a DASD management system. Ensure that all cataloged PSP data sets are online and that none are migrated. If there are no migrated data sets, review the codes and messages in PSPLOG and correct the errors.

- PSPEXEC STEP FAILS WITH USER ABEND U0998. PSPLOG CONTAINS THE MESSAGE: THERE IS AT LEAST ONE UNAPPLIED PRODUCT CHANGE THAT IS NOT AVAILABLE IN THIS PSP DISTRIBUTION.

  The load job detected an unapplied product change that is no longer available on the current PSP distribution. Refer to the Product Change Status Report in the PSPRPT portion of the load job's output. Find all occurrences of asterisks (*) for the unapplied, unavailable product changes and note them. If the changes are for a product that you have chosen not to maintain, see Appendix A.2 and set the PRODEXCL parm to exclude that product. If you choose not to exclude the product, contact Technical Support for the required corrective action. For online assistance and a complete list of locations, primary service hours, and telephone numbers, contact Technical Support at http://ca.com/support.

- PSPEXEC STEP FAILS WITH USER ABEND U0998. PSPLOG CONTAINS A MESSAGE ABOUT DATA SETS WITH A ZERO BLOCK SIZE.

  PSP data sets identified in prior PSPLOG messages have a zero block size. The common reasons are that they have been archived or migrated. If this is the case, subsequent recalls could create problems with the application of product changes by back-leveling PSP libraries.

  There are several options to correct this condition. If the data sets were migrated, check to see if your system has automatically recalled them. If not, you may want to recall them now. If you cannot recall them, or if they were not migrated, uncatalog the data sets.

  Note 1: All efforts must be expended in restoring the sharedprefix.MICS.PSP.PC.TEXT data set.

  Note 2: If either sharedprefix.MICS.PSP.CNTL or sharedprefix.MICS.PSP.PC.TEXT is uncataloged, you must allocate it as a one-track partitioned data set using the RECFM, LRECL, and BLKSIZE as listed in Figure A-1 of Appendix A.1. Furthermore, a member named @@BAS must be added to the sharedprefix.MICS.PSP.PC.TEXT data set. This member must contain one line that contains only 00010000 starting in column 1.

- PSPEXEC STEP FAILS WITH USER ABEND U0998. PSPLOG CONTAINS A MESSAGE ABOUT A SEVERE ERROR AND NOTES THIS SAS VERSION IS NOT SUPPORTED BY CA MICS.

  The load job has been submitted using a version of SAS not supported by CA MICS. Contact Technical Support for the required corrective action. For online assistance and a complete list of locations, primary service hours, and telephone numbers, use http://ca.com/support.

- PSP LOAD JOB ABENDS WITH AN S913 SECURITY VIOLATION

  Modules are written to disk by executing the program named LPEBLDD. It runs as a "non-authorized" program. Some mainframe security systems, such as CA Top Secret, have a feature that restricts non-authorized programs from writing authorized load modules. (An authorized load module is link-edited with an attribute of AC(1)). If your site has this security feature activated and is licensed for the CA MICS Space Collector (VCC), then the load job will fail with an S913 abend while trying to write an authorized VCC load module. To prevent this abend, request your security administrator to permit LPEBLDD to write authorized load modules.

- STEP MICSVRAB ABENDS WITH U0998. SAS LOG CONTAINS THE MESSAGE: THE TARGET CA MICS COMPLEX IS THE WRONG VERSION.

  In the unlikely event that you encounter an abend with this message, contact Technical Support. For online assistance and a complete list of locations, primary service hours, and telephone numbers use http://ca.com/support.

- STEP #PCHOLD ENDS WITH CONDITION CODE 4 AND THE MESSAGE WARNING: NO MEMBERS FOUND TO MATCH @@

  It is assumed that the original valid sharedprefix.MICS.PSP.PC.TEXT data set is no longer available and not recoverable, and an empty data set has been allocated to take its place.

  To allow the PSP refresh job to be rerun, a member named @@BAS must be added to the sharedprefix.MICS.PSP.PC.TEXT data set. This member must contain one line that contains only 00010000 starting in column 1.

Appendix D: PSP ONLINE INITIALIZATION

Each time you invoke PSP Online, it runs an initialization process. During initialization, PSP Online performs a variety of functions in response to your site's environment. These environmental conditions are:

- A completely or partially uninitialized PSP Online system
- A newly-installed PSP distribution
- New product changes delivered in PSP format as on-request upgrades
- A flag indicating that a product change apply job completed successfully

Each time you invoke PSP Online, the dialog checks if one or more of these conditions exists. If so, PSP Online responds by requesting necessary information and then automatically updates the appropriate PSP Online tables with new product change and parameter information.

As a user of PSP Online, you need to respond only to the panels displayed to you. Knowledge of how the mechanism works is not required to operate it, but a little background may help to orient the new user.

This appendix describes the initialization process and briefly describes how PSP Online records information when a product change is applied to your CA MICS system:

This section contains the following topics:

D.1 Initializing PSP Online for the First Time

First-time initialization automatically requests information about the CA MICS PSP data set names (PSP option 3.1). It also requests default values for each option listed on the PSP Options menu (PSP option 0).

First-time initialization also automatically runs the Receive New PSP Tables dialog (PSP option 4.1) listed on the PSP Utility menu. After PSP has guided you through these panels, you are placed at the PSP Online main menu.

To invoke PSP Online for the first time, follow the steps below, depending on whether MWF has been initialized.

If the CA MICS Workstation Facility has not been initialized:

1. Establish the CA MICS ISPF environment by following the instructions in the PIOM, Section 3.3.6.

2. Activate the CA MICS Workstation Facility (MWF) by executing the CLIST or TSO LOGON PROC you coded for MWF.

3. Specify the MWF parameters as the MWF initialization panels are presented. Use the HELP command on each panel for information about the parameters on the panel. This dialog is also documented in the PIOM, Section 4.4.1.

4. Follow the instructions for sites that have initialized the CA MICS Workstation Facility.

If the CA MICS Workstation Facility has been initialized:

1. Select the CA MICS Administrator Facility (MAF) option from the MWF menu. From CA MICS Administrator Facility menu, select the Product Support Program (PSP) option.

2. Specify the initialization options as panels are displayed. Use the HELP command on each panel for information about the initialization parameters on each panel.

3. Allow the initialization dialogs to complete before signing off. This step may run for a long time the first time you use PSP Online. The duration varies with CPU and the number of CA MICS products installed.

D.2 Receiving a New PSP Distribution

Maintenance that is delivered in PSP format includes a directory entry named ##MIT in the sharedprefix.MICS.PSP.CNTL data set.

Each time you invoke PSP Online, the dialog checks for the presence of this member. If it is found, PSP Online automatically triggers the Receive New PSP Tables dialog (PSP option 4.1) to incorporate the new PSP distribution information into your PSP Online system. The dialog deletes the ##MIT directory entry after the Record and Receive dialogs are completed to indicate that the distribution has been processed and places you at the PSP Online main menu.

When you install a new PSP distribution in PSP format, PSP Online is updated with information by the following steps:

1. Activate the CA MICS Workstation Facility (MWF) by executing the CLIST or TSO LOGON PROC you coded for MWF.

2. Select the CA MICS Administrator Facility (MAF) option from the MWF menu. From CA MICS Administrator Facility menu, select the PSP Online Services option.

3. The Receive New PSP Tables panel will be displayed automatically.

4. Allow the Receive New PSP Tables dialog to complete before signing off.

   Note: This step may run for a long time.

D.3 Completing the Product Change Apply Job Successfully

To ensure that maintenance is applied completely and correctly, PSP Online adds a job step to the apply job. This step creates a directory entry that updates the status information maintained about product changes.

This extra step runs the MAAUDIT program for the product change and creates an empty member, #cccnnnn, in the sharedprefix.MICS.PSP.CNTL data set.

Each time you invoke PSP Online, the dialog checks the PSP.CNTL library for the presence of member names in the form #cccnnnn. If any is found, PSP Online automatically updates the status information on each corresponding product change and then deletes the #cccnnnn member to indicate that the status information has been updated.

When you submit a product change apply job through PSP Online, product change status information is updated by the following steps:

1. Wait for the apply job to run to completion. Be sure to exit and re-enter the PSP Online dialog. Changes are not recorded until the Product Support Program (PSP) option is re-entered.

   You will notice a slight pause followed by a display of the PSP Online main menu. The status tables in PSP Online will now contain any updated information from previous apply jobs.

2. You can check the status of any product change from the Change Status dialog. Also, if a previous apply job did not run successfully, you can reset (R) the change and resubmit it from the Apply Product Changes dialog.

Appendix E: PSP ONLINE PANEL FLOW AND DIALOG DESCRIPTIONS

The CA MICS Workstation Facility (MWF) is the CA MICS ISPF main driver application. CA MICS ISPF functions are implemented as subsystems under MWF and are entered by selecting options on the MWF major menu. PSP Online is a subprocess under the CA MICS Administrator Facility (MAF), which is one of the MWF subsystems.

This appendix describes the services offered by PSP Online. We recommend that you read the overview of PSP Online services and then read the detailed description of each service. You can use these sections to orient yourself to PSP Online before you use the facility. You can also use these sections as reference material while operating PSP Online.

Chapter 2 presents the PSP Online execution checklists that enable you to use the information presented here.

We recommend using PSP Online for product change application in the following way:

1. Use the Problem Analysis menu to examine available product changes.

2. Select the product changes you wish to apply.

3. Use the Apply Product Changes option to apply the changes chosen in the previous step.

4. Complete the product change installation checklists.

This section contains the following topics:

E.1 Overview of PSP Online Services

PSP Online is a hierarchy of ISPF dialogs that perform CA MICS maintenance functions. The hierarchical dialog map in Figure E-1 illustrates the functions of PSP Online.

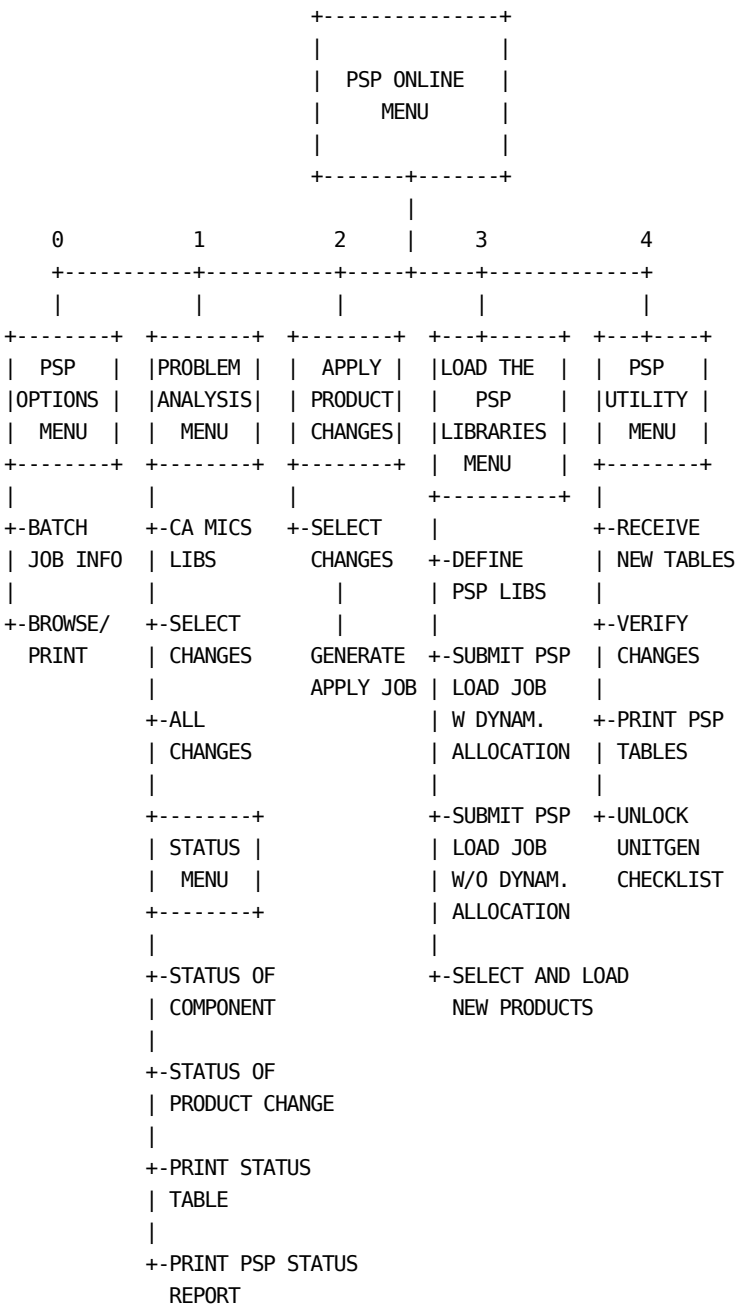


Figure E-1. PSP Online Menu Functions

```
_______________________________________________________________________________
--------------------  PSP Online Services  ---------------------------------
Option ===> _


      0 - PSP Options
          Define batch job, browse, and print options.
      1 - Problem Analysis
          Browse descriptions of product changes, select product changes,
          and browse CA MICS libraries.
      2 - Apply Product Changes
          Apply product changes to CA MICS libraries.
      3 - Load the PSP Libraries
          Prepare the PSP libraries, load product changes and new products.
      4 - PSP Utilities
          General PSP utility programs and online functions.




_______________________________________________________________________________

PSP Online Services panel (PSP@PRIM)


PSP ONLINE MENU SELECTIONS

PSP Online provides an interactive panel-driven application
for reviewing, preparing, and applying product changes to the
CA MICS system. PSP Online provides facilities for reviewing
available product changes, applying product changes, and
reviewing the status of your CA MICS system maintenance.

PSP Online automatically identifies prerequisite and
corequisite product changes to ensure proper maintenance
installation.  It also provides a complete audit trail of all
changes.  PSP Online reduces product change recognition and
installation time, as well as the possibility of error.

OPTION 0:  PSP OPTIONS

PSP Options establishes default parameter values for browsing
and printing PSP information.  It also defines default batch
job specifications.


OPTION 1:  PROBLEM ANALYSIS
```

```
Problem Analysis identifies and selects product changes for
installation on your CA MICS system.  It provides facilities
for reviewing available product changes and identifying
current maintenance status.

OPTION 2:  APPLY PRODUCT CHANGES

Apply Product Changes applies selected product changes to
your CA MICS system.  When this option is selected, the
product changes you have selected for application are
displayed.  Once you have reviewed and verified that these
changes are to be installed, the Apply Product Changes
process generates appropriate documentation and batch job
streams for implementing your specifications.

OPTION 3:  LOAD THE PSP Libraries

Load the PSP Libraries is used to define the PSP libraries
and load the PSP information from the PSP distribution.

OPTION 4:  PSP UTILITIES

PSP Utilities provides general utility functions in support
of CA MICS maintenance activities.  These include
building/updating the inventory of CA MICS maintenance and
printing the contents of the ISPF tables used by PSP Online.
```

E.2 Option 0 - PSP Options

```
_______________________________________________________________________________
------------------------------  PSP Options  ------------------------------
Option ===> _


      1 - Batch Job Definitions
          Define default job card, temporary data set allocation parameters,
          and generated jobstream edit specification.
      2 - Browse/Print Options
          Define the level of information provided when browsing or printing
          product changes, PSP Appendix A, and installation checklists.









_______________________________________________________________________________
```

PSP Options menu panel (PSP0MENU)

The PSP Options process establishes default parameter values
for browsing and/or printing PSP information. It also
defines default batch job specifications. This information
is saved in your ISPF profile data set and kept until
changed.

E.2.1 Batch Job Definitions

```
_______________________________________________________________________________
--------------------------  Batch Job Definitions  --------------------------
Command ===> _


Enter CANCEL command to exit without saving these definitions


DASD work VOLSER   => ______     (name of a volume for TEMP files)
DASD work unit     => SYSDA      (unit identifier for above volume)

Edit generated JCL => YES        (YES/NO)

Job statements:
    => //useridA  JOB  (ACCTCODE),'CA MICS PSP JOB',
    => // NOTIFY=userid,MSGCLASS=A
    => //*
    => //*









_______________________________________________________________________________

Batch Job Definition panel (PSP0JOB)


The Batch Job Definitions process defines your default job
statement (job card) and allocation parameters for batch job
temporary data sets.  It also includes an option to edit
generated batch job streams before execution.
```

E.2.1.1 Data Entry Instructions

DASD work VOLSER - Optional. No default. 1-6 character DASD volume serial number (VOLSER). Specify this parameter to allocate ALL temporary data sets for PSP Online batch jobs on a single, specific DASD volume. This parameter is NOT validated; however, batch job execution will fail if an invalid value is specified.

DASD work unit - Required. Defaults to SYSDA. 1-8 character DASD unit name. Temporary data sets for PSP Online batch jobs will be allocated using this unit specification. This parameter is NOT validated; however, batch job execution will fail if an invalid value is specified.

Edit generated JCL - Required. Defaults to YES (Y), which allows you to edit generated batch job streams before executing them. This provides the opportunity to alter or cancel the generated batch job stream. Specify NO (may be abbreviated as N) to bypass the generated batch job stream display.

Job statements - Required. Data entry fields are provided for four lines of job statement information. This job statement will be followed by the generated JCL statements to execute the PSP Online process.

E.2.1.2 Primary/Line Command Considerations

CANCEL - Use the CANCEL command to exit from this process without saving these definitions.

END - The END command records the batch job definitions.

E.2.2 Browse/Print Options

```
_______________________________________________________________________________
---------------------------  Browse/Print Options  ---------------------------
Command ===> _

Enter CANCEL command to exit without saving these definitions

During Select Product Change processing:
  Print individual PC text or consolidated checklist => CKLIST (TEXT/CKLIST)
  Use composite UNITGEN in consolidated checklist    => YES    (YES/NO)
    Print summary of changed libraries/members       => NO     (YES/NO)
    Print product change appendix       => NO     (YES/NO)
During Print Check List processing:
  Print individual PC text or consolidated checklist => TEXT   (TEXT/CKLIST)
  Use composite UNITGEN in consolidated checklist    => YES    (YES/NO)
    Print summary of changed libraries/members       => NO     (YES/NO)
    Print product change appendix       => NO     (YES/NO)
During PSP Appendix A processing:
   Print individual PC text or consolidated checklist => TEXT   (TEXT/CKLIST)
   Use composite UNITGEN in consolidated checklist    => YES    (YES/NO)
     Print summary of changed libraries/members       => NO     (YES/NO)
     Print product change appendix                    => NO     (YES/NO)
Edit Print JCL => YES      (YES/NO)            Default=YES


_______________________________________________________________________________

Browse/Print Options panel (PSP0MEM)

The Browse/Print Options panel defines the default level of
product change information that can be browsed and printed.
Separate defaults are provided for the browse/print
facilities of the Select Product Change, PSP Appendix A
processing (both for new and all product changes), and Print
Product Change Checklist processing.
```

E.2.2.1 Data Entry Instructions

The Browse/Print Options parameters control the information to be included when browsing or printing product change entries. Default values follow the parameter descriptions.

Print individual PC text or consolidated checklist - Required. TEXT or CKLIST.

Specify TEXT (may be abbreviated as T) to print the individual product change description, installation checklist, and associated installation JCL for each product change you have selected.

Specify CKLIST (may be abbreviated as C) to print a consolidated installation checklist for all of the product changes you have selected. The consolidated checklist is generated by combining individual checklists delivered with each product change. Redundant and duplicate steps found across checklists are removed during the consolidation process.

Use composite UNITGEN in consolidated checklist - Required if Print parameter is CKLIST, ignored if Print parameter is TEXT. YES or NO.

Specify Y (YES) to generate a consolidated checklist for the selected product changes using the composite UNITGEN process for unit-level JCL and parameter generation.

Note: This item may be locked until an active maintenance process is finished by completing a previous checklist.

Specify N (NO) to generate a consolidated checklist for the selected product changes using the individual CA MICS generation jobs (for example, cccPGEN, JCLGENC, CYCLEGEN, GDGSGEN) for unit-level JCL and parameter generation.

This parameter is valid only when you specify CKLIST for the Print parameter above.

Note: If you get an error message because this item is locked, complete the active composite UNITGEN process before trying again. There is also a forced unlock option available in the PSP Utilities panel, option 4. We do not recommend that you use this option unless it is impossible to complete the active composite UNITGEN

```
     process.

Print summary of changed libraries/members -
     Required.  YES or NO.

     Specify YES (may be abbreviated as Y) to print a
     list of the libraries or members that have changed.

 Print product change appendix -
      Required.  YES or NO.

      Specify YES (may be abbreviated as Y) to print the
      product change appendix with details about data element
      changes, if there are any, in the consolidated
      checklist.

During Select Product Change processing -
     These parameters apply to the Select Product Change
     panels of the Problem Analysis and Apply Product Change
     processes.  Print parameter defaults to CKLIST and Use
     composite UNITGEN parameter defaults to YES.

During PSP Appendix A processing -
     These parameters apply to the New Product Change
     Abstracts and the All Product Change Abstracts To-Date
     options of the Problem Analysis process.  Print
     parameter defaults to TEXT and Use composite UNITGEN
     parameter defaults to YES.

During Print Check List processing -
     These parameters apply to the Print Product Change Check
     List process within the Problem Analysis and Apply
     Product Change processes.  Print parameter defaults to
     TEXT and Use composite UNITGEN parameter defaults to
     YES.

Edit Print JCL - Required.  Defaults to YES.  Specify YES
     (may be abbreviated as Y) to display generated batch
     print job streams using the PDF EDIT service prior to
     executing these job streams.  Specify NO (may be
     abbreviated as N) to bypass the generated batch job
     stream display.
```

E.2.2.2 Primary/Line Command Considerations

```
CANCEL  -  Use the CANCEL command to exit from this process
     without saving these definitions.

END - The END command records the batch job definitions.
```

E.3 Option 1 - Problem Analysis

```
_______________________________________________________________________________
--------------------  PSP Online Services  ----------------------------------
Option ===> _


      0 - PSP Options
          Define batch job, browse, and print options.
      1 - Problem Analysis
          Browse descriptions of product changes, select product changes,
          and browse CA MICS libraries.
      2 - Apply Product Changes
          Apply product changes to CA MICS libraries.
      3 - Load the PSP Libraries
          Prepare the PSP libraries, load product changes and new products.
      4 - PSP Utilities
          General PSP utility programs and online functions.


_______________________________________________________________________________

PSP Online Services panel (PSP@PRIM)


The Problem Analysis process identifies and selects product
changes for installation on your CA MICS system. It provides
facilities for reviewing available product changes and
identifying current maintenance status.  It also provides
access to your CA MICS complex and unit database libraries
with the PDF BROWSE service.


_______________________________________________________________________________
-----------------------------  Problem Analysis  ------------------------------
Option ===> _


      1 - CA MICS Libraries
          Browse the CA MICS complex and database unit libraries.
      2 - Select Product Changes
          Review change text and code and select changes to be applied .
      3 - All Product Change Abstracts To-Date
          Displays ALL product change abstracts delivered to-date.
      4 - Change Status
          List the status of a component or product change.


_______________________________________________________________________________

Problem Analysis panel (PSPPMENU)
```

The Problem Analysis option is a comprehensive tool for analyzing the applicability of CA MICS product changes to your installation.

The following is a description of a typical use of the Problem Analysis option:

1. Review product changes by selecting All Product Change Abstracts To-Date.

2. Note which product changes may apply to your environment. You can browse the product change text for a full description of the problem and problem solution.

3. Review the product change candidates by using the Select Product Changes option. Only those changes that have not been applied are shown. The text may be printed to aid in your research.

4. If necessary, browse the CA MICS library members affected by selecting the CA MICS Libraries option.

5. Select product changes to apply by using the Select Product Changes option. Return to the main PSP Online menu by entering the END command and use the Apply Product Changes option to apply the product changes you have selected.

6. If you notice specific problem symptoms in your CA MICS system that do not seem to be described by any product change, contact technical support. For online assistance and a complete list of locations, primary service hours, and telephone numbers use http://ca.com/support. In many cases, a product change will be available for the problem or there may be actions you can take to reduce the impact of the problem.

E.3.1 CA MICS Libraries

```
_______________________________________________________________________________
-----------------------------  CA MICS Libraries ------------------------------
Option ===> _

Unit ID=> _  - - - - - - - - Unit Libraries - - - - - - - - - - - - - - - - - -

   CK  - CHECKPT.DATA        P   - PARMS             US  - USER.SOURCE
   C   - CNTL                RS  - RESTART.CNTL

- - - - - - - - - - - - - - - Complex Libraries - - - - - - - - - - - - - - - -

   A   - ASM                 I   - INCLLIB           ML  - MACLIB
   B   - BIN                 IH  - ISPHLIB           O   - OBJ
   CL  - CLIST               IM  - ISPMLIB           CP  - PARMS
   CN  - CNTL                IP  - ISPPLIB           PL  - PROCLIB
   DD  - DIC.TEXT            IS  - ISPSLIB           PR  - PROTOLIB
   D   - DOC.TEXT            IT  - ISPTLIB           PC  - PSP.CNTL
   G   - GENLIB              L   - LOAD              PT  - PSP.PC.TEXT
   HP  - HOLD.PARMS          LM  - LOCALMOD.CNTL     S   - SOURCE
   HUS - HOLD.USER.SOURCE    MA  - MACAUTOS          CUS - USER.SOURCE
   INC - INC.TEXT



_______________________________________________________________________________

CA MICS Library Browse Selection panel (PSPPMICS)


The CA MICS Libraries process of Problem Analysis provides
access to your CA MICS complex and unit database libraries
with the PDF BROWSE service.  This option displays a menu of
CA MICS libraries and saves you the trouble of entering the
CA MICS library data set names.

Data sets are identified with a 1- to 3-character identifier.
The real data set name is obtained from a CA MICS ISPF data
set name table which contains the fully qualified data set
name of all complex data sets and all active unit data sets.
If the data set selected is a unit data set and the unit ID
was not specified, a list of defined units is presented.
```

E.3.1.1 Select Unit Database

```
_______________________________________________________________________________
---------------------------  Select Unit Database ----------------------------
Command ===> _                                              Scroll ===> PAGE

Line Cmds: S Select

     Unit   Unit
Cmd   ID    Name    Unit Database Title (or Long Name)
 -    -   --------  ---------------------------------------
 _    P   PRIMARY   Primary CA MICS database
 _    T   TESTUNIT  Test unit database - all components
 _    C   PRODCICS  C.I.C.S. production database
 _    D   DASD      DASD space management database unit
****************************** BOTTOM OF DATA  *******************************
```

```
_______________________________________________________________________________

CA MICS Unit Database Selection panel (PSPODBID)
```

The Select Unit Database panel is displayed when you select one of the Unit Libraries options from the CA MICS Libraries panel without specifying the unit database ID. This panel displays a list of the unit databases in your CA MICS complex. The unit database ID, name, and title (or long name) are listed for each unit database. Use the Select line or primary command to specify the unit database to be processed.

E.3.1.2 Browse CA MICS Member List

```
_______________________________________________________________________________
BROWSE - sharedprefix.MICS.SOURCE----------------------------------------------
COMMAND ===> _                                              SCROLL ===> PAGE
   Name     Prompt             Size      Created        Changed          ID
. $ACTSFD
. $ASTEXIT
. $ASTMSTR
. $ASTSFD
. $ASTXDEF
. $AUMEXIT
. $AUMMSTR
. $AUMSFD
. $AUMXDEF
. $BASIUAL
. $BASIUCK
. $BASMSTR
. $BASSFD
. $BASXCHK
. $BASXCKP
. $BASXDLY
. $BASXDSA
. $BASXDYU
. $BASXFIX
_______________________________________________________________________________
```

Browse Member List panel

The CA MICS Member List is the standard PDF BROWSE member list of the selected CA MICS library. Standard PDF BROWSE commands are available.

E.3.1.3 CA MICS Member Browse Panel

```
_____________________________________________________________________________
Member =   DYVCAFMT   Library =  sharedprefix.MICS.SOURCE
COMMAND ===> _                                          SCROLL ===> PAGE
DATA                                                                 00069000
                                                                     00070000
                                                                     00071000
  VCA_VS00  (KEEP=__VSKPDT PREV_TS)                                  00072000
  _VSBCS00  (KEEP=__VSKPDT PREV_TS                                   00073000
             RENAME=(DAAOWNER=BCSOWNER DAABNAME=BCSBNAME             00074000
                     CREATEDT=BCSCREDT EXPDT=BCSEXPDT                00075000
                     DAACFLAG=BCSCFLAG DAAPFLAG=BCSPFLAG             00076000
                     DAAHIKY =BCSHIKY  DAAIMBED=BCSIMBED) )          00077000
  _VSVDS00  (KEEP=__VSKPDT PREV_TS)                                  00078000
  VCADAA00  (KEEP=_DAAKPDT PREV_TS VCCVER)                           00079000
  VCAVOA00  (KEEP=_VOAKPDT VCCVER)                                   00080000
  _VCAJ_VS                                                           00081000
  _VCAJDAA                                                           00082000
  _USRFMT1                                                           00083000
  _ADMX.CKPTDATA(LABEL='INPUT STATISTICS FOR CURRENT DATA'           00084000
      KEEP=_WHLKPDT) ;                                               00085000
                                                                     00086000
/* EXIT RETURN INDICATOR SET                                      */ 00087000
_EXITCK                                                              00088000
                                                                     00089000
/* COMMON LENGTH/FORMAT AND LABELS DEFINITION                     */ 00090000
_____________________________________________________________________________

CA MICS Library Member Browse panel (PSPOMBRW)



The member you select from the specified CA MICS library is
displayed by PDF BROWSE service.  Full standard PDF BROWSE
commands are available.
```

E.3.2 Select Product Changes

```
_______________________________________________________________________________
PSPPCHGI -----------------  Select Product Changes  -------------------------
Command ===> _                                                Scroll ===> PAGE

CA MICS Component => ALL (ccc or ALL)
Show requisites => YES (YES/NO)     Show selected changes only => NO   (YES/NO)

Line Cmds: B Browse  P Print  S Select  R Reset  X Emergency Force
Cmd   Change  Subject
- - - ------- ---------------------------------------------------------------
_     ACT7075 EISFR Enhancements and Consolidated Maintenance
_               ACT7073 is Superseded by fix  ACT7075
_               BAS7175 is a Prerequisite for ACT7075
_               ACT7050 is a Prerequisite for ACT7075
_     AUM6220 Support for MeasureWare C.03.05 for HP/UX
_               BAS7175 is a Prerequisite for AUM6220
_               AUM6210 is a Prerequisite for AUM6220
_     BAS7175 Consolidated Maintenance and Enhancements
_               BAS7189 is Superseded by fix  BAS7175
_               BAS7183 is Superseded by fix  BAS7175
_               BAS7171 is Superseded by fix  BAS7175
_               BAS7153 is Superseded by fix  BAS7175
_               BAS7152 is Superseded by fix  BAS7175
_               BAS7151 is Superseded by fix  BAS7175
_               BAS7149 is Superseded by fix  BAS7175
_______________________________________________________________________________
```

Select Product Changes panel (PSPPCHGI)

The Select Product Changes panel displays the product changes that have NOT been applied to your CA MICS system. This process is primarily intended to assist you in identifying and selecting product changes to be applied at a later time. The panel displays the prerequisites and corequisites for each product change and provides access to both the product change description and the actual product change job stream. You can limit the list of product changes to a specific CA MICS component or to all changes that are pending.

The scrollable display includes the product change number and the first 65 characters of the subject or description. Flags between the Line Cmd and Change columns have the following meaning:

```
S - Selected for apply
D - To be superseded (Dropped)
A - Applying, change has been submitted but has not
    completed
- - Note added to the requisite line
E - ERROR, see note at end of the requisite line
W - WARNING, see note at end of the requisite line
```

E.3.2.1 Data Entry Instructions

```
CA MICS Component - Required.  Defaults to ALL.  Specify a
    three-character CA MICS component ID to restrict the
    display to only those product changes for the specified
    CA MICS component.  Specify ALL to display all
    outstanding product changes.

Show requisites - Required.  Defaults to YES.  Specify YES
    (Y) to display prerequisite and corequisite changes for
    each listed product change.  Specify NO (N) to omit
    prerequisite and corequisite information.

Show selected changes only - Required.  Defaults to NO.
    Specify YES (Y) to display only those product changes
    that are pending application to your CA MICS system.
    (that is, marked via the Select primary or line command
    or still in an APPLYING status).  This specification will
    override the CA MICS component parameter.  Specify NO (N)
    to display both pending and non-selected product changes.
```

E.3.2.2 Primary/Line Command Considerations

CANCEL - The CANCEL command will negate (or back out) any
product change selections entered on this panel.

END - If one or more product changes have been selected (that
is, marked to be applied to your CA MICS system), the END
command displays the next panel.

SELECT - The SELECT primary and line commands mark the
indicated product change for application to your CA MICS
system.

PRT - The PRT primary and line commands mark the indicated
product change for printing. Printing does not start
until the END command is entered. A print option panel
is displayed before the changes are printed.

RESET - The RESET primary and line commands return the
product changes to their prior status. If APPLYING (have
an A next to the CMD column), they revert to SELECTED and
if SELECTED, they return to the UNAPPLIED status.

X - The Emergency Force primary and line commands select any
product change regardless of its status. Corequisites
and prerequisites are ignored. USE THIS WITH EXTREME
CARE!

Usage note: The Emergency Force command should not be needed
under normal circumstances. If, for instance, a product
change apply job failed to complete and you need to resubmit
the apply job, use the RESET command rather than the X
command. This changes the status of the product change from
"A" (applying) back to "S" (selected), and will again take
requisite changes into account when recreating the apply
job.

By contrast, the Emergency Force command ignores information
about requisite changes. If you must use this command to
make a fix available for selection, use care in determining
whether requisite changes are already applied. If you force
a change and then want to bring it back to "S" (selected)
status, you may reset the change and then select it again.
This method causes PSP to check requisites when you re-select
the change.

E.3.2.3 Sample Select Product Changes Panel

```
_____________________________________________________________________________
--------------------------  Select Product Changes  --------------------------
Command ===> _                                              Scroll ===> PAGE

CA MICS Component => ALL (ccc or ALL)
Show requisites => YES (YES/NO)     Show selected changes only => NO   (YES/NO)

Line Cmds: B Browse  P Print  S Select  R Reset  X Emergency Force

Cmd   Change  Subject
- - - ------- ------------------------------------------------------------------
_ S   ACT7075 EISFR Enhancements and Consolidated Maintenance
_ -             ACT7073 is Superseded by fix  ACT7075 (Already SUPERSEDED)
_               BAS7175 is a Prerequisite for ACT7075 (Selected)
_ -             ACT7050 is a Prerequisite for ACT7075 (Already APPLIED)
_     AUM6220 Support for MeasureWare C.03.05 for HP/UX
_               BAS7175 is a Prerequisite for AUM6220 (Selected)
_               AUM6210 is a Prerequisite for AUM6220 (Already APPLIED)
_ S   BAS7175 Consolidated Maintenance and Enhancements
_ -             BAS7175 is a Prerequisite for AUM6220
_ -             BAS7175 is a Prerequisite for ACT7075
_ -             BAS7189 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7183 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7171 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7153 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7152 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_____________________________________________________________________________
```

This sample panel is automatically displayed after selecting ACT7075. Note that BAS7175 is automatically selected because it is a prerequisite of ACT7075.

E.3.2.4 Browse Product Change Text/JCL Members

```
_______________________________________________________________________________
                          Product Change: ACT7075
COMMAND ===>                                                  SCROLL ===> PAGE
******************************** Top of Data ********************************
PRODUCT CHANGE:  ACT7075

DATE:  April 15, 2002

SUBJECT:   EISFR Enhancements and Consolidated
           Maintenance

PREREQUISITES: ACT7050 BAS7175

COREQUISITES:  None

SUPERSEDES:   ACT7073


LIBRARIES/MEMBERS UPDATED:

  sharedprefix.MICS.MACAUTOS(ACTRTEMP)

  sharedprefix.MICS.PROTOLIB
    ACTADJLD ACTJU    ACTRSJLD ACTRTSIM ACTXADJ  DYACT199
    PRORATEU PRORTUPT RATERPT
_______________________________________________________________________________

Product Change BROWSE panel (PSPPBBRW)


The BROWSE command is used to browse an item in a scrollable
display.  It performs the same function as the B (Browse)
line command.

The BROWSE command is entered following the Command ===>
prompt as BROWSE sss, where sss identifies the row of the
display to be browsed.  This is the value found in the column
of the display following the Cmd field of the desired
parameter row.  The browsed row need NOT appear on the
current screen of the display.  The BROWSE command may be
abbreviated as B.

The BROWSE command is useful when a selection panel is
displayed and you do not wish to scroll the display to the
desired row (for example, to use the B line command).
```

E.3.2.5 Upgrade as a Prerequisite Warning

```
_______________________________________________________________________________
--------------------  Upgrade as a Prerequisite Warning  --------------------
Command ===> _
                          ***  W A R N I N G  ***

RMF6700 is a required prerequisite product upgrade and must be applied before
BAS7000 . Any product changes selected that require this upgrade have been
reset and will not be applied at this time.  You may reselect BAS7000 after
the prerequisite upgrade is COMPLETELY applied through the last step of its
check list.


Enter CONTINUE to select the prerequisite product upgrade
Enter CANCEL to exit without selecting the prerequisite









_______________________________________________________________________________
```

Upgrade as a Prerequisite Warning panel (PSPOHPRE)

The Upgrade as a Prerequisite Warning panel is displayed only when the selected product changes have a product upgrade change (that is, any product change ending with 00) as a prerequisite. Since product upgrades must be applied alone, all product changes that require this upgrade are reset and will not be applied at this time. When the upgrade has been applied and all checklist steps have been finished, you will be able to reselect the original changes.

E.3.2.6 Applying Requisite Warning

```
_______________________________________________________________________________
------------------------  Applying Requisite Warning  ------------------------
Command ===>
                            ***  W A R N I N G  ***

BAS7000 has been selected but has a requisite for RMF6700 which is still in an
APPLYING status (i.e., the apply job stream has not ended).  All product
changes that require the applying change have been reset and will not be
applied at this time.  You may reselect BAS4400 after the applying change job
stream has ended.


Press ENTER to continue

_______________________________________________________________________________
```

Applying Requisite Warning panel (PSPOAPRE)

The Applying Requisite Warning panel is displayed only if the selected product changes have a requisite for a product change that is still in an APPLYING status. All product changes that require the change that is still APPLYING are reset and will not be applied at this time. When the job stream of the APPLYING change has completed successfully, you may reselect the original changes.

E.3.2.7 Sorted Change List

```
_______________________________________________________________________________
----------------------------  Sorted Change List  ---------------  ROW 1 OF 7
Command ===> _                                                Scroll ===> PAGE
Enter END command to continue - Enter CANCEL command to exit with no save


The selected product changes will be applied in the following order.
Do you require a print of the check list(s) now => YES     (YES/NO)

   Change  Subject
   ------- ------------------------------------------------------------------
   ACT7150 Increased Rate and Charge Precision and Consolidated Maintenance
   BAS7290 SAS 9.1.3 Support
   BAS7350 Consolidated Platform Maintenance
   CIC6560 Consolidated Maintenance
   RMF6730 zAAP Support, Product Enhancements and Consolidated Maintenance
   SMF6730 New zAAP CPU Time Metrics and Consolidated Maintenance
   VMC6430 z/VM V5R1 Capacity Upgrade on Demand Enhancement and Maintenance
****************************** BOTTOM OF DATA  ********************************



_______________________________________________________________________________

Sorted Change List panel (PSPAPPLY)


The Sorted Change List panel appears automatically after you
enter END from the Select Product Changes panel.  It displays
the product changes sorted into the proper apply sequence.
You may request a printed system modification checklist for
the changes listed on the screen by specifying YES to the "Do
you require..." prompt.
```

E.3.2.7.1 Checklist Print Options

```
_______________________________________________________________________________
------------------------------  Print Options  ------------------------------
Command ===> _
Enter CANCEL command to exit without printing

Print individual PC text or consolidated checklist => CKLIST (TEXT/CKLIST)
Use composite UNITGEN in consolidated checklist    => YES    (YES/NO)
  Print summary of changed libraries/members       => YES    (YES/NO)
  Print product change appendix                    => NO     (YES/NO)
Print dataset name   => userid.MICS.USER.PSP1.LIST
  DASD Volume serial => ______     (Blank for default volume)
  DASD Unit name     => ________   (Generic group name or unit address)
  Block size         => 6160       (LRECL=137,RECFM=VBA)
Print job:
  Edit JCL           => YES        (YES/NO)
  Number of copies   => 1          (1-99)
  SYSOUT      class  => A  form    => ________  code => ________
                          program => ________
  Job statement:
      //jobname  JOB  (ACCTCODE),'MICS PSP PRINT',
      //       MSGCLASS=A,NOTIFY=&sysuid
      //*
      //*



_______________________________________________________________________________

Print Options panel (PSPOPRT)


When you specify YES on the Sorted Change List panel for a
print of the checklists, the Print Options panel is
displayed.  This panel allows you to override the default
parameters specified in PSP Options for this process.  You
can also cancel the print request from this panel.

Data Entry Instructions

Default values are specified through the Browse/Print Options
process of PSP Options for each of the three PSP Online
processes that provide facilities for printing product
changes.  The default values displayed on this panel depend
upon the process from which the print request was issued.

Print individual PC text or consolidated checklist -
     Required.  TEXT or CKLIST.
```

```
          Specify TEXT (may be abbreviated as T) to print the
          individual product change description, installation
          checklist, and associated installation JCL for each
          product change you have selected.

          Specify CKLIST (may be abbreviated as C) to print a
          consolidated installation checklist for all of the
          product changes you have selected.  The consolidated
          checklist is generated by combining individual
          checklists, delivered with each product change.
          Redundant and duplicate steps found across checklists
          are removed during the consolidation process.

     Use composite UNITGEN in consolidated checklist - Required,
          if Print parameter is CKLIST, ignored if Print parameter
          is TEXT.  YES or NO.

          Specify Y (YES) to generate a consolidated checklist for
          the selected product changes using the composite UNITGEN
          process for unit-level JCL and parameter generation.

          Note: This item may be locked until an active
          maintenance process is finished by completing a previous
          checklist.

          Specify N (NO) to generate a consolidated checklist for
          the selected product changes using the individual CA
          MICS generation jobs (for example, cccPGEN, JCLGENC,
          CYCLEGEN, GDGSGEN) for unit-level JCL and parameter
          generation.

          This parameter is valid only when you specify CKLIST
          for the Print parameter above.

          Note: If you get an error message because this item is
          locked, complete the active composite UNITGEN process
          before trying again. There is also a forced unlock
          option available in the PSP Utilities panel, option 4.
          We do not recommend that you use this option unless it
          is impossible to complete the active composite UNITGEN
          process.

     Print summary of changed libraries/members - YES or NO.
          Specify Y (YES) to print a summary of the changed
          libraries or members.

          This parameter is valid only when you specify CKLIST
          for the Print parameter above.
```

```
Print product change appendix - YES or NO.
      Specify Y (YES) to print the product change appendix
      with details about data element changes, if there are
      any, in the consolidated checklist.

      This parameter is valid only when you specify CKLIST
      for the Print parameter above.

Print data set name - Required if a consolidated checklist
    has not been requested; ignored if individual
    checklists are being printed.  Defaults to
    userid.MICS.USER.PSPn.LIST, where userid is your TSO
    logon-ID and n is a sequential number to keep the data
    set name unique.  If you enter a data set name or a name
    has been retrieved from your profile, it must be the name
    of an existing data set.  The selected product change
    information will be written to this data set.  A batch
    job will be generated to print the contents of this data
    set, then delete the data set.

DASD Volume serial - Optional.  Defaults to the last value
    specified for this parameter.  6 character VOL=SER name.
    The print data set will be allocated (if new) using this
    volume specification.  This parameter is NOT validated;
    however, allocation will fail if you specify an invalid
    value.  This parameter should match the volume
    specification normally used to allocate TSO user data
    sets at your data center.

DASD Unit name - Optional.  Defaults to the last value
    specified for this parameter.  1-8 character DASD unit
    name.  The print data set will be allocated using this
    unit specification.  This parameter should match the unit
    specification normally used to allocate TSO user data
    sets at your data center.  This parameter is NOT
    validated; however, allocation will fail if an invalid
    value is specified.

Block size - Required.  Defaults to the last value specified
    for this parameter.  Number between 141 and 32760.  This
    is the block size (that is, BLKSIZE = parameter) for the
    print data set.

Edit JCL - Required.  Defaults to the last value specified
    for this parameter.  Specify YES (may be abbreviated as
    Y) to display the print job stream using the PDF EDIT
    service prior to executing this job stream.  This
    provides the opportunity to alter or cancel the print job
```

stream. Specify NO (may be abbreviated as N) to bypass the generated batch job stream display.

Number of copies - Required. Defaults to the last value specified for this parameter. 1-99. This is the number of copies of the product change information to be printed.

SYSOUT class - Required. Defaults to the last value specified for this parameter, A-Z, 0-9, or *. This is the SYSOUT class for printing the product change information. Normal SYSOUT options can be specified to handle special forms (that is, SYSOUT=(*,,GB66)).

Job statement - Required. Data entry fields are provided for four lines of job statement information. This job statement precedes the generated JCL statements to print the product change information.

Primary/Line Command Considerations

CANCEL - The CANCEL command exits from this process without printing the selected product change information. The product change print request will be erased and CANNOT be recovered without re-marking the product changes (that is, using the P line command or PRT primary command).

END - The END command writes the product change information to the print data set and then generates the batch job to print and delete the data set. If you specify YES following the Edit Print JCL => prompt, the generated print job stream is displayed using the PDF EDIT service.

E.3.2.7.2 EDIT Checklist Print Job Stream

```
_____________________________________________________________________________
EDIT    -  userid.MICS.USER.TEMP1.CNTL ---------------------- Columns 001 072
Command ===> _                                                Scroll ===> PAGE
Enter END command to SUBMIT JOB TO PRINT THE PRODUCT CHANGE
Enter CANCEL command to EXIT WITHOUT PRINTING
****** ***************************** TOP OF DATA ******************************
000001 //jobname  JOB  (ACCTCODE),'CA MICS PSP PRINT',
000002 //       MSGCLASS=A,NOTIFY=&sysuid
000003 //*
000004 //*
000005 //*
000006 //*   PRINT PSP PRODUCT CHANGE - yy/mm/dd  hh:mm
000007 //*
000008 //PSP010  EXEC  PGM=IEBGENER
000009 //SYSUT1   DD DISP=(OLD,DELETE),DSN=userid.MICS.USER.PSP1.LIST
000010 //SYSUT2   DD SYSOUT=(A,,),
000011 //            COPIES=1,DCB=(userid.MICS.USER.PSP1.LIST)
000012 //SYSIN    DD DUMMY
000013 //SYSPRINT DD DUMMY
****** **************************** BOTTOM OF DATA ****************************
```

```
_____________________________________________________________________________

Edit panel (PSPOEDIT)
```

E.3.3 All Product Change Abstracts To-Date

```
_______________________________________________________________________________
--------------------  All Product Change Abstracts To-Date  ------------------
-
Command ===> _

Enter CANCEL command to return to the menu


Display product changes since => 92 / 10    (YY / MM)

   Display all product change descriptions since the above date up to
   and including the current PSP.
```

```
_______________________________________________________________________________

All Product Change Abstracts To-Date panel (PSPPACUM)


This panel is displayed when the All Product Change Abstracts
To-Date option is selected from the Problem Analysis menu.
It lets you specify the starting year and month for
displaying product changes distributed until today.  Specify
YY / MM following the "Display product changes since =>"
prompt, where yy is a two-digit year between 00 and 99 and mm
is a two-digit month between 01 and 12 (for example, 05/04 or
05/10).

Note:  Values of yy between 00 and 59 are assumed to
       represent years between 2000 and 2059 while values
       between 60 and 99 are assumed to represent years
       between 1960 and 1999.
```

E.3.3.1 PSP Appendix A - Product Change Index

```
_______________________________________________________________________________
------------------  PSP Appendix A - Product Change Index  ------ Row 1 of 28
Command ===>                                                 Scroll ===> PAGE

                    Product Change Abstracts since 98/10
Line Cmds: S Select
Cmd    Selected    Component     Number      (Total       82 )
 -        ---         ---         ------
 _                    ACT              5
 _                    AST              2
 _                    AUM              2
 _                    BAS              6
 _                    CAP              5
 _                    CIC              4
 _                    DB2              3
 _                    DEX              3
 _                    IDM              2
 _                    IMS              4
 _                    LDE              1
 _                    MMG              1
 _                    MQR              3
 _                    MQS              3
 _                    PER              1
 _                    RMF              3
 _                    SMF              4
_______________________________________________________________________________
```

PSP Appendix A - Product Change Index panel (PSPPXAI)

The PSP Appendix A - Product Change Index panel is displayed when the All Product Change Abstracts To-Date option is selected from the Problem Analysis menu. The panel provides a scrollable list of CA MICS components and the number of product changes included for each.

Use the SELECT primary or line command to select a component's changes for review. When a component is selected, the PSP Appendix A - Product Change Abstract panel is displayed. After you select a component, this product change index panel is redisplayed. The Selected column will contain YES to indicate that the component has been selected and viewed during this session. A NO indicates the component has been selected but not viewed.

E.3.3.2 PSP Appendix A - Product Change Abstract

```
_______________________________________________________________________________
-----------------  PSP Appendix A - Product Change Abstract  -----------------
Command ===>                                                 Scroll ===> CSR

BAS product change abstract since 03/10        (      4 changes)

Line Cmds: B Browse change  P Print change
Cmd     Change       Subject
 - -    -------      ------------------------------------------------------
 _      BAS7310      Consolidated Platform Enhancements
 _                   ------------------------------------------------------
 _      BAS7305      Consolidated Maintenance
 _                   ------------------------------------------------------
 _      BAS7280      Enhancements to Data Export Facilities, Archive
 _                   Audit and Consolidated Checklist Print
 _                   ------------------------------------------------------
 _      BAS7275      Consolidated Maintenance and Enhancements
 _                   ------------------------------------------------------
******************************* Bottom of data ********************************


_______________________________________________________________________________

 PSP Appendix A - Product Change Abstract panel (PSPPXA)


The PSP Appendix A -  Product Change Abstract panel displays
the product changes for the selected CA MICS component. The
scrollable display is sequenced by product change number (for
example, BAS7310).  It provides a brief description of the
product change.  You can use the BROWSE primary and line
commands to browse (using the PDF BROWSE service) product
change documentation.  The specific information displayed in
response to the browse command depends upon your
specifications on the Browse/Print Options panel of PSP
Options.  The PRT primary command and P line command mark
product changes for printing upon exit from this process.
```

E.3.4 Change Status

```
_______________________________________________________________________________
---------------------------------  Status  ---------------------------------
Option ===> _


      1 - Status of Component
          List all changes for a component, show if Applied,
          Selected, or Unapplied
      2 - Status of Product Change
          List members and CA MICS libraries affected by a change,
          show if Applied, Selected, or Unapplied
      3 - Print the Status Table
          Generate a job to print the contents of the Status Table
      4 - Submit the PSP Status Report
          Submit the batch Product Change Status Report




_______________________________________________________________________________

Change Status menu panel (PSPSMENU)



Processing Notes:

1)  A  component name (ccc)  can be entered after the  option number.

    Option ===> 1 ccc

2)  A  product change  number can be entered after the option number.

    Option ===> 2 cccnnnn

The Change Status process of Problem Analysis reviews the
status of CA MICS maintenance. It displays product changes by
CA MICS component and indicates whether the change has been
applied (or selected for application).  It can also display a
list of the libraries and modules updated by a product
change.
```

E.3.4.1 Status of Component

```
_____________________________________________________________________________
---------------------------  Status of Component  -------------  ROW 1 OF 197
Command ===> _                                                 Scroll ===> PAGE

CA MICS component => ALL (ccc or ALL)

Line Cmds: S Select change status  B Browse change  P Print change
Cmd Print Change   Status       Apply Date Time  Jobname   Supd By
 -    -   -------  -----------  ---------------  --------  -------
 _        ACT6202  UNAPPLIED
 _        ACT6200  SELECTED
 _        ACT6136  APPLIED      97/05/11 12:55   MNTJOB4
 _        ACT6123  SUPERSEDED   97/05/11 12:55             ACT6136
 _        ACT6122  SUPERSEDED   97/04/22 09:14   MNTJOB1   ACT6136
 _        ACT6111  SELECTED
 _        ACT6082  UNAPPLIED
 _        ACT6026  UNAPPLIED
 _        BAS6305  UNAPPLIED
 _        BAS6304  SELECTED
 _        BAS6303  SELECTED
 _        BAS6300  APPLIED      97/03/28 13:15   BAS6300
 _        BAS6228  SUPERSEDED   97/03/28 13:15             BAS6300
 _        BAS6227  SUPERSEDED   97/03/28 13:15             BAS6300
 _        BAS6210  SUPERSEDED   97/03/28 13:15             BAS6300
 _        CIC6725  APPLYING
_____________________________________________________________________________

Status of Component panel (PSPSCCC)

Processing Notes:

1)  Line command S (Select) will switch to the Status of Product Change panel
    to give more information about that change.

2)  The PRT primary command or P line command cause the change to be printed
    when leaving the main Status menu. (All changes to be printed are printed
    together.) The print command acts like a toggle switch; the first print
    request will flag the product change for printing (P shown next to the CMD
    column), the second time will turn it off.

The Status of Component process of Change Status reviews the
status of your CA MICS maintenance. It displays a list of all
product changes and indicates whether each change has been
APPLIED, SUPERSEDED, SELECTED for application, HELD, or is
still APPLYING or UNAPPLIED.  You can limit the display to a
single CA MICS component by specifying the three-character
```

```
component ID, (example: SMF) following the "CA MICS
component=>" prompt.  Enter "ALL" to display all applying or
unapplied maintenance.  Product changes can be browsed,
marked for printing when you exit from this process, or
selected to display a list of libraries and members affected
by a change.
```

E.3.4.2 Status of Product Change

```
_______________________________________________________________________________
-------------------------  Status of Product Change  -----------  ROW 1 OF 68
Command ===> _                                                Scroll ===> PAGE

=> ACT4202   Installation Accounting Component support for the DB2

    Status:  UNAPPLIED  -

Line Cmds: S Select member status  B Browse CA MICS member
Cmd  Member    Action    Library
 -  --------  ---------  ----------------------------------------
 _  COSTRTE   REPLACED   sharedprefix.MICS.HOLD.PARMS
 _  ELEMTBL   REPLACED   sharedprefix.MICS.HOLD.PARMS
 _  RTBLDB2   ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLIDMA  ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLIDMC  ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLIMSF  ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLMAZ   ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLTSOC  ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLTSOI  ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLTSOU  ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLVCA   ADDED      sharedprefix.MICS.HOLD.PARMS
 _  RTBLVMC   ADDED      sharedprefix.MICS.HOLD.PARMS
 _  #DBMACT   UPDATED    sharedprefix.MICS.SOURCE
 _  ACTAUDPT  UPDATED    sharedprefix.MICS.SOURCE
_______________________________________________________________________________

Status of Product Change panel (PSPSCHG)

Processing Notes:

1)  Status can be:

    UNAPPLIED
    SELECTED
    APPLYING   - YY/MM/DD HH:MM - BY userid
    APPLIED    - YY/MM/DD HH:MM - BY userid
    SUPERSEDED - YY/MM/DD HH:MM - BY cccnnnn

2)  You  can specify another change by keying over the change number.

3)  The first product change found in  the  status  table  is displayed
    if a change number was not entered on the menu option line.

The Status of Product Change panel reviews the libraries and
members affected by a product change.  It displays a list of
the members (by member name within library name) altered by a
```

selected product change. This process can be entered from the Change Status menu or by selecting a product change from the Status of Component display. The change being processed is specified following the => prompt; a new product change can be viewed by entering its ID here.

E.3.4.3 Print the Status Table

The Print the Status Table process prints a formatted copy of the Component Status Table used by PSP Online. You can use this report when viewing the various PSP Online displays for problem research and analysis.

E.3.4.3.1 Table Print Options

```
_______________________________________________________________________________
---------------------------  Table Print Options  ---------------------------
Command ===> _
Enter CANCEL command to exit without printing

Print data set name  => userid.MICS.USER.PSP2.LIST
  DASD Volume serial => ______     (Blank for default volume)
  DASD Unit name     => ________   (Generic group name or unit address)
  Block size         => 6160       (LRECL=137,RECFM=VBA)

Print job:
  Edit JCL           => YES        (YES/NO)
  Number of copies   => 1          (1-99)
  SYSOUT      class  => A  form    => ________  code => ________
                          program => ________
  Job statement:
      //jobname  JOB  (ACCTCODE),'MICS PSP PRINT',
      //       MSGCLASS=A,NOTIFY=&sysuid
      //*
      //*
```

```
_______________________________________________________________________________

Table Print Options panel (PSPOTPRT)


The Table Print Options panel is displayed by the Print the
Status Table process.  You may cancel the print request from
this panel.

Data Entry Instructions

Print data set name - Required.  Defaults to
    userid.MICS.USER.PSPn.LIST, where userid is your TSO
    logon ID and n is a sequential number to keep the data
    set name unique.  The selected PSP table information will
    be written to this data set.  A batch job will be
    generated to print and then delete the contents of this
    data set.

DASD Volume serial - Optional.  Defaults to the last value
```

```
    specified for this parameter. Six character volume name.
    The print data set will be allocated (if new) using this
    volume specification.  This parameter is NOT validated;
    however, allocation will fail if you specify an invalid
    value.  This parameter should match the volume
    specification normally used to allocate TSO user data
    sets at your installation.

DASD Unit name - Optional.  Defaults to the last value
    specified for this parameter.  1-8 character DASD unit
    name.  The print data set will be allocated using this
    unit specification.  This parameter should match the unit
    specification normally used to allocate TSO user data
    sets at your installation.  This parameter is NOT
    validated; however, allocation will fail if an invalid
    value is specified.

Block size - Required.  Defaults to the last value specified
    for this parameter.  Number between 141 and 32760.  This
    is the block size (that is, BLKSIZE = parameter) for the
    print data set.

Edit JCL - Required.  Defaults to the last value specified
    for this parameter.  Specify YES (Y) to display the print
    job stream before executing this job stream.  This
    provides the opportunity to alter or cancel the print job
    stream.  Specify NO (N) to bypass the generated batch job
    stream display.

Number of copies - Required.  Defaults to the last value
    specified for this parameter.  1-99.  This is the number
    of copies of the table information to be printed.

SYSOUT class - Required.  Defaults to the last value
    specified for this parameter, A-Z, 0-9, or *.  This is
    the SYSOUT class for printing the table information.
    Normal SYSOUT options can be specified to handle special
    forms (that is, SYSOUT=(*,,GB66)).

Job statement - Required.  Data entry fields are provided for
    four lines of job statement information.  This job
    statement will be followed by the generated JCL
    statements to print the table information.

Primary/Line Command Considerations

CANCEL - The CANCEL command is used to exit from this process
    without printing the selected table information.
```

```
END - The END command is used to write the table information
    to the print data set and then generate the batch job to
    print and delete the data set.  If YES is specified
    following the Edit Print JCL => prompt, the generated
    print job stream is displayed using the PDF EDIT service.
```

E.3.4.3.2 EDIT Status Table Print Job Stream

```
_______________________________________________________________________________
EDIT   -   userid.MICS.USER.TEMP1.CNTL -------------------- Request completed
Command ===> _                                               Scroll ===> PAGE
Enter END command to SUBMIT JOB TO PRINT THE TABLES
Enter CANCEL command to EXIT WITHOUT PRINTING
****** ***************************** TOP OF DATA ******************************
000001 //jobname  JOB  (ACCTCODE),'CA MICS PSP PRINT',
000002 //       MSGCLASS=A,NOTIFY=&sysuid
000003 //*
000004 //*
000005 //*
000006 //*   PRINT PSP PRODUCT CHANGE - 87/03/31  18:07
000007 //*
000008 //PSP010  EXEC  PGM=IEBGENER
000009 //SYSUT1   DD DISP=(OLD,DELETE),DSN=userid.MICS.USER.PSP2.LIST
000010 //SYSUT2   DD SYSOUT=(A,,),
000011 //            COPIES=1,DCB=(userid.MICS.USER.PSP2.LIST)
000012 //SYSIN    DD DUMMY
000013 //SYSPRINT DD DUMMY
****** **************************** BOTTOM OF DATA ****************************
_______________________________________________________________________________

Edit panel (PSPOEDIT)
```

E.3.4.4 Submit the PSP Status Report

The product change status report will assist you in planning PSP upgrades by providing a complex-wide view of unapplied and current CA MICS upgrade levels. Use this report to see which units will be impacted by unapplied product changes. You can also track the status, date, and job name of product change apply jobs.

When you select Option 4 (Submit the PSP Status Report) on the Status panel, the PSP Status Report Print Options panel will be displayed. You can use this panel to generate the product change status report, or you can submit the PSPSTAT batch job in sharedprefix.MICS.CNTL to generate the report.

See Section 4.1, Generating the Product Change Status Report, for a complete description and an example of this report.

E.4 Option 2 - Apply Product Changes

```
_______________________________________________________________________________
--------------------  PSP Online Services  ---------------------------------
Option ===> _


      0 - PSP Options
          Define batch job, browse, and print options.
      1 - Problem Analysis
          Browse descriptions of product changes, select product changes,
          and browse CA MICS libraries.
      2 - Apply Product Changes
          Apply product changes to CA MICS libraries.
      3 - Load the PSP Libraries
          Prepare the PSP libraries, load product changes and new products.
      4 - PSP Utilities
          General PSP utility programs and online functions.


_______________________________________________________________________________

PSP Online Services panel (PSP@PRIM)


Use the Apply Product Changes option after the Problem
Analysis option to select product changes to apply.  When you
select the Apply Product Changes option, you will see an
index of the changes you have selected.

The following is a typical use of the Apply Product Changes
option:

 1. Review the product changes selected in Problem Analysis
    on the Select Product Changes for Apply panel.  When your
    review is complete, enter the END command.  The Sorted
    Change List is displayed followed by the Apply Product
    Changes menu.

 2. Print the System Modification Checklist, an optional step
    provided by the Sorted Change List panel.

 3. Select the Generate Apply Job option on the Apply Product
    Changes menu to prepare product change JCL to be
    submitted.  Review the generated JCL and make necessary
    changes.  Enter the END command to leave the edit.

 4. Examine the submitted product change update job for
    successful completion.  Then continue the product change
    installation by following the instructions in the product
    change checklist.
```

E.4.1 Select Product Changes for Apply

```
_______________________________________________________________________________
----------------------  Select Product Changes for Apply  ----------------------
Command ===> _                                                Scroll ===> PAGE
Enter END command to apply selected changes - Enter CANCEL command to exit

CA MICS Component => ALL (ccc or ALL)
Show requisites => YES (YES/NO)     Show selected changes only => YES  (YES/NO)

Line Cmds: B Browse  P Print  S Select  R Reset  X Emergency Force
CMD   Change  Subject
- - - ------- ------------------------------------------------------------------
_ S   ACT7075 EISFR Enhancements and Consolidated Maintenance
_ -             ACT7073 is Superseded by fix  ACT7075 (Already SUPERSEDED)
_ -             BAS7175 is a Prerequisite for ACT7075 (Selected)
_ -             ACT7050 is a Prerequisite for ACT7075 (Already APPLIED)
_ S   BAS7175 Consolidated Maintenance and Enhancements
_ -             BAS7175 is a Prerequisite for ACT7075
_ -             BAS7189 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7183 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7171 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7153 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7152 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7151 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7149 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_ -             BAS7147 is Superseded by fix  BAS7175 (Already SUPERSEDED)
_______________________________________________________________________________
```

Select Product Changes for Apply panel (PSPACHGI)

The Select Product Changes for Apply panel displays the product changes which you have already selected in the Problem Analysis process. This scrollable panel is primarily intended for reviewing selected product changes before entering the Apply Product Changes Menu. In addition, you may select product changes by entering the SELECT cccnnnn command following the Command ===> prompt.

The panel displays the prerequisites and corequisites for each product change and provides access to both the product change description and the actual product change job stream.

The display includes the product change number and the first 65 characters of the subject or description. Flags between the CMD and Change columns have the following meaning:

```
S - Selected for apply
D - To be superseded (Dropped)
A - Applying, change has been submitted but has not
    completed
- - Note added to the requisite line
E - ERROR, see note at end of the requisite line
W - WARNING, see note at end of the requisite line
```

E.4.1.1 Data Entry Instructions

```
CA MICS Component - Required. Defaults to ALL.  Specify a
    three-character CA MICS component ID to restrict the
    display to only those product changes for the specified
    CA MICS component.  Specify ALL to display all
    outstanding product changes.

Show requisites - Required.  Defaults to YES.  Specify YES
    (may be abbreviated as Y) to display prerequisite and
    corequisite changes for each listed product change.
    Specify NO (may be abbreviated as N) to omit prerequisite
    and corequisite information.

Show selected changes only - Required.  Defaults to YES.
    Specify YES (may be abbreviated as Y) to display only
    those product changes that are pending application to
    your CA MICS system (that is, marked via the Select
    primary or line command or still being applied).  This
    specification will override the CA MICS Component
    parameter. Specify NO (may be abbreviated as N) to
    display both pending and non-selected product changes.
```

E.4.1.2 Primary/Line Command Considerations

CANCEL - The CANCEL command will negate (or back-out) any product change selections entered on this panel since the last time it was visited.

END - If one or more product changes have been selected (that is, marked to be applied to your CA MICS system), the END command will display the next panel.

SELECT - The SELECT primary and line commands mark the indicated product change for application to your CA MICS system.

PRT - The PRT primary and line commands mark the indicated product change for printing. Printing is not started until the END command is entered.

RESET - The RESET primary and line commands return the product changes to their prior status. If APPLYING (signified by an A next to the CMD column), they revert to SELECTED, and if SELECTED, they return to the UNAPPLIED status.

X - The Emergency Force primary and line commands select any product change regardless of its status. Corequisites and prerequisites are ignored. USE WITH EXTREME CARE!

Usage note: The Emergency Force command should not be needed under normal circumstances. If, for instance, a product change apply job failed to complete and you need to resubmit the apply job, use the RESET command rather than the X command. This changes the status of the product change from "A" (applying) back to "S" (selected), and again takes requisite changes into account when recreating the apply job.

By contrast, the Emergency Force command ignores information about requisite changes. If you must use this command to make a fix available for selection, use care in determining whether requisite changes are already applied. Also, after you force a change to bring it back to "S" (selected) status you may reset the change and then select it again. This method causes PSP to check requisites when you re-select the change.

E.4.1.3 Browse Product Change Text/JCL Members

```
_______________________________________________________________________________
PSPPBBRW                  Product Change: ACT7075
COMMAND ===>                                                 SCROLL ===> PAGE
****************************** Top of Data ***********************************
PRODUCT CHANGE:  ACT7075

DATE:  April 15, 2002

SUBJECT:   EISFR Enhancements and Consolidated
           Maintenance

PREREQUISITES: ACT7050 BAS7175

COREQUISITES:  None

SUPERSEDES:   ACT7073


LIBRARIES/MEMBERS UPDATED:

  sharedprefix.MICS.MACAUTOS(ACTRTEMP)

  sharedprefix.MICS.PROTOLIB
    ACTADJLD ACTJU    ACTRSJLD ACTRTSIM ACTXADJ  DYACT199
    PRORATEU PRORTUPT RATERPT
_______________________________________________________________________________

Product Change BROWSE panel (PSPPBBRW)


The BROWSE command is used to browse an item in a scrollable
display.  It invokes the PDF BROWSE service for the selected
item.  The BROWSE primary command performs the same function
as the B (Browse) line command.

The BROWSE command is entered following the Command ===>
prompt as BROWSE sss, where sss identifies the row of the
display to be browsed.  This is the value found in the column
of the display following the CMD field of the desired
parameter row.  The browsed row need NOT appear on the
current screen of the display.  The BROWSE command may be
abbreviated as B.

The BROWSE command is useful when a selection panel is
displayed and you do not wish to scroll the display to the
desired row (for example, to use the B line command).
```

E.4.2 Upgrade as a Prerequisite Warning

```
_______________________________________________________________________________
--------------------  Upgrade as a Prerequisite Warning  --------------------
Command ===> _
                            ***  W A R N I N G  ***

RMF6700 is a required prerequisite product upgrade and must be applied before
BAS7000.  Any product changes selected that require this upgrade have been
reset and will not be applied at this time.  You may reselect BAS7000 after
the prerequisite upgrade is COMPLETELY applied through the last step of its
check list.


Enter CONTINUE to select the prerequisite product upgrade
Enter CANCEL to exit without selecting the prerequisite









_______________________________________________________________________________
```

Upgrade as a Prerequisite Warning panel (PSPOHPRE)

The Upgrade as a Prerequisite Warning panel is displayed only when the selected product changes have a product upgrade change (that is, any product change ending with 00) as a prerequisite. Since product upgrades should be applied alone, all product changes that require this upgrade are reset and will not be applied at this time. When the upgrade has been applied and all checklist steps have been finished, you may reselect the product changes.

E.4.3 Applying Requisite Warning

```
_______________________________________________________________________________
------------------------  Applying Requisite Warning  ------------------------
Command ===>
                            ***  W A R N I N G  ***

BAS7000 has been selected but has a requisite for RMF6700 which is still in an
APPLYING status (i.e., the apply job stream has not ended).  All product
changes that require the applying change have been reset and will not be
applied at this time.  You may reselect BAS4400 after the applying change job
stream has ended.


Press ENTER to continue

_______________________________________________________________________________
```

Applying Requisite Warning panel (PSPOAPRE)

The Applying Requisite Warning panel is displayed only when the selected product changes have a requisite for a product change that is still in an APPLYING status. All changes that require the change that is still APPLYING are reset and are not applied at this time. When the job stream of the APPLYING change has completed successfully, you can reselect the product changes.

E.4.4 Sorted Change List

```
_______________________________________________________________________________
---------------------------  Sorted Change List  --------------  ROW 1 OF 7
Command ===> _                                                Scroll ===> PAGE
Enter END command to continue - Enter CANCEL command to exit with no save


The selected product changes will be applied in the following order.
Do you require a print of the check list(s) now => YES     (YES/NO)

   Change  Subject
   ------- ------------------------------------------------------------------
   ACT7150 Increased Rate and Charge Precision, and Consolidated Maintenance
   BAS7290 SAS 9.1.3 Support
   BAS7350 Consolidated Platform Maintenance
   CIC6560 Consolidated Maintenance
   RMF6730 zAAP Support, Product Enhancements and Consolidated Maintenance
   SMF6730 New zAAP CPU Time Metrics and Consolidated Maintenance
   VMC6430 z/VM V5R1 Capacity Upgrade on Demand Enhancement and Maintenance
****************************** BOTTOM OF DATA  ********************************
```

```
_______________________________________________________________________________
```

Sorted Change List panel (PSPAPPLY)

When you enter the END command on the Select Product Changes for Apply panel, the Sorted Change List panel appears, showing the product changes sorted into the proper apply sequence. You may request a print of the system modification checklist for the changes listed on the screen by specifying YES to the "Do you require..." prompt.

E.4.5 Print Options

```
_______________________________________________________________________________
------------------------------  Print Options  ------------------------------
Command ===> _
Enter END command to continue or CANCEL command to exit without printing

Print individual PC text or consolidated checklist => CKLIST (TEXT/CKLIST)
Use composite UNITGEN in consolidated checklist    => YES    (YES/NO)
  Print summary of changed libraries/members       => YES    (YES/NO)
  Print product change appendix                    => NO     (YES/NO)
Print dataset name   => userid.MICS.USER.PSP1.LIST
  DASD Volume serial => ______     (Blank for default volume)
  DASD Unit name     => ________   (Generic group name or unit address)
  Block size         => 6160       (LRECL=137,RECFM=VBA)
Print job:
  Edit JCL           => YES        (YES/NO)
  Number of copies   => 1          (1-99)
  SYSOUT      class  => A  Form    => ________  Code => ________
                          Program => ________
  Job statement:
      //jobname  JOB  (ACCTCODE),'MICS PSP PRINT',
      //       MSGCLASS=A,NOTIFY=&sysuid
      //*
      //*



_______________________________________________________________________________

Print Options panel (PSPOPRT)


The Print Options panel is displayed when you specify YES on
the Sorted Change List panel.  This panel overrides the
default parameters specified in PSP Options for this process.
The print request may be canceled from this panel.
```

E.4.5.1 Data Entry Instructions

```
Default values are specified through the Browse/Print Options
process of PSP Options for each of the three PSP Online
processes that provide facilities for printing product
changes.  The default values displayed on this panel depend
upon the process from which the print request was issued.

Print individual PC text or consolidated checklist -
     Required.  TEXT or CKLIST.

     Specify TEXT (may be abbreviated as T) to print the
     individual product change description, installation
     checklist, and associated installation JCL for each
     product change you have selected.

     Specify CKLIST (may be abbreviated as C) to print a
     consolidated installation checklist for all of the
     product changes you have selected.  The consolidated
     checklist is generated by combining the individual
     checklists delivered with each product change.
     Redundant and duplicate steps found across checklists
     are removed during the consolidation process.

Use composite UNITGEN in consolidated checklist - Required if
     Print parameter is CKLIST; ignored if Print parameter is
     TEXT.  YES or NO.

     Specify Y (YES) to generate a consolidated checklist for
     the selected product changes using the composite UNITGEN
     process for unit-level JCL and parameter generation.

     Note: This item may be locked until an active
     maintenance process is finished by completing a previous
     checklist.

     Specify N (NO) to generate a consolidated checklist for
     the selected product changes using the individual CA
     MICS generation jobs (for example, cccPGEN, JCLGENC,
     CYCLEGEN, GDGSGEN) for unit-level JCL and parameter
     generation.

     This parameter is valid only when you specify CKLIST
     for the Print parameter above.

     Note: If you get an error message because this item is
     locked, complete the active composite UNITGEN process
     before trying again. There is also a forced unlock
     option available in the PSP Utilities panel, option 4.
```

```
     We do not recommend that you use this option unless it
     is impossible to complete the active composite UNITGEN
     process.

Print summary of changed libraries/members -
     Required.  YES or NO.

     Specify YES (may be abbreviated as Y) to print a
     list of the libraries or members that have changed.

Print product change appendix -
      Required.  YES or NO.

      Specify YES (may be abbreviated as Y) to print the
      product change appendix with details about data element
      changes, if there are any, in the consolidated
      checklist.

Print data set name - Required.  Defaults to
    userid.MICS.USER.PSPn.LIST, where userid is your TSO
    logon ID and n is a sequential number to keep the data
    set name unique.  The selected product change information
    will be written to this data set.  A batch job will be
    generated to print the contents of this data set and then
    delete the data set.

DASD Volume serial - Optional.  Defaults to the last value
    specified for this parameter.  6 character VOL=SER name.
    The print data set will be allocated (if new) using this
    volume specification.  This parameter is NOT validated;
    however, allocation will fail if you specify an invalid
    value.  This parameter should match the volume
    specification normally used to allocate TSO user data
    sets at your data center.

DASD Unit name - Optional.  Defaults to the last value
    specified for this parameter.  1-8 character DASD unit
    name.  The print data set will be allocated using this
    unit specification.  This parameter should match the unit
    specification normally used to allocate TSO user data
    sets at your data center.  This parameter is NOT
    validated; however, allocation will fail if an invalid
    value is specified.

Block size - Required.  Defaults to the last value specified
    for this parameter.  Number between 141 and 32760.  This
    is the block size (that is, BLKSIZE = parameter) for the
    print data set.
```

Edit JCL - Required. Defaults to the last value specified for this parameter. Specify YES (may be abbreviated as Y) to display the print job stream using the PDF EDIT service prior to executing this job stream. This provides the opportunity to alter or cancel the print job stream. Specify NO (may be abbreviated as N) to bypass the generated batch job stream display.

Number of copies - Required. Defaults to the last value specified for this parameter. 1-99. This is the number of copies of the product change information to be printed.

SYSOUT class - Required. Defaults to the last value specified for this parameter: A-Z, 0-9, or *. This is the SYSOUT class for printing the product change information. Normal SYSOUT options can be specified to handle special forms (that is, SYSOUT = (*,,GB66)).

Job statement - Required. Data entry fields are provided for four lines of job statement information. This job statement will be followed by the generated JCL statements to print the product change information.

E.4.5.2 Primary/Line Command Considerations

CANCEL - The CANCEL command is used to exit from this process without printing the selected product change information. The product change print request will be erased and CANNOT be recovered without re-marking the product changes (that is, using the Print line or PRT primary command).

END - The END command is used to write the product change information to the print data set and then generate the batch job to print and delete the data set. If YES is specified following the Edit Print JCL => prompt, the generated print job stream is displayed using the PDF EDIT service.

E.4.5.3 EDIT Checklist Print Job Stream

```
_____________________________________________________________________________
EDIT    -  userid.MICS.USER.TEMP1.CNTL ---------------------- Columns 001 072
Command ===> _                                                Scroll ===> PAGE
Enter END command to SUBMIT JOB TO PRINT THE PRODUCT CHANGE
Enter CANCEL command to EXIT WITHOUT PRINTING
****** ***************************** TOP OF DATA ******************************
000001 //jobname  JOB  (ACCTCODE),'CA MICS PSP PRINT',
000002 //       MSGCLASS=A,NOTIFY=&sysuid
000003 //*
000004 //*
000005 //*
000006 //*   PRINT PSP PRODUCT CHANGE - yy/mm/dd  hh:mm
000007 //*
000008 //PSP010  EXEC  PGM=IEBGENER
000009 //SYSUT1   DD DISP=(OLD,DELETE),DSN=userid.MICS.USER.PSP1.LIST
000010 //SYSUT2   DD SYSOUT=(A,,),
000011 //            COPIES=1,DCB=(userid.MICS.USER.PSP1.LIST)
000012 //SYSIN    DD DUMMY
000013 //SYSPRINT DD DUMMY
****** **************************** BOTTOM OF DATA ****************************
_____________________________________________________________________________

Edit panel (PSPOEDIT)
```

E.4.6 Apply Product Changes Menu

```
_______________________________________________________________________________
------------------------  Apply Product Changes Menu  -----------------------

Option ===> _

Enter CANCEL command to exit without applying

      1 - Generate APPLY Job for the Production CA MICS Libraries
          Build a job to apply the selected changes to the production CA MICS
          libraries.

    NOTE: Option 1 will allow you to review and edit the generated APPLY Job
          if Edit generated JCL is set to YES on the Batch Job Definitions
          panel under PSP Options.
```

```
_______________________________________________________________________________
```

Apply Product Changes Menu panel (PSPAMENU)

The Apply Product Changes Menu is displayed when you exit from the Sorted Change List display if one or more product changes have been selected (marked) for application to your CA MICS system. This process provides access to facilities that generate the batch job stream to apply the selected change to your CA MICS complex.

The Generate APPLY Job for the Production CA MICS Libraries process will generate a consolidated installation job stream to apply the selected product changes to your production CA MICS environment.

E.4.6.1 Unknown Data Set Name

```
_______________________________________________________________________________
-------------------------  Unknown Data Set Name  --------------------------
Command ===> _
Enter CANCEL command to exit without applying


   The following change contains a pseudo data set name that cannot be
   resolved.  Enter the full data set name without quotes.


Change : BAS7000

Dataset => sharedprefix.MICS.ISPTLIB









_______________________________________________________________________________
```

Unknown Data Set Name panel (PSPAPDSN)

The Unknown Data Set Name panel is displayed during Apply Product Change processing if an invalid or unresolved data set name is encountered. You have the option of terminating this process, or correcting the invalid data set name and continuing. Enter the correct data set name following the Dataset => prompt.

E.4.6.2 Edit APPLY Job for Production Libraries

```
_____________________________________________________________________________
EDIT  -     USER1.MICS.USER.TEMP1.CNTL ---------------------- Columns 001 072
Command ===> _                                                Scroll ===> PAGE
Enter END command to SUBMIT JOB TO APPLY CHANGES TO THE CA MICS LIBRARIES
Enter CANCEL command to EXIT WITHOUT APPLYING CHANGES
****** ***************************** TOP OF DATA ****************************
000001 //jobname   JOB  (ACCTCODE),'CA MICS PSP JOB',
000002 // NOTIFY=&sysuid,MSGCLASS=A
000003 //*
000004 //*
000005 //*
000006 //*        APPLY PSP PRODUCT CHANGE - yy/mm/dd  hh:mm
000007 //*
000008 //ACT4111  EXEC PGM=IEBUPDTE
000009 //SYSPRINT DD SYSOUT=*
000010 //SYSUT1   DD DSN=SHRPRF.MICS.SOURCE,DISP=OLD
000011 //SYSUT2   DD DSN=SHRPRF.MICS.SOURCE,DISP=OLD
000012 //SYSIN    DD DATA,DLM='++'
000013 ./ CHANGE NAME=GNACTRAT
000014  /* ACT4111| 2073   |1185|WRONG USE OF APU FIELD                    */
000015   ACCTMETH = 'R';
000016 ++
000017 //AUDIT    EXEC PGM=MAAUDIT,COND=(4,LT),PARM=(ACT4111)
000018 //STEPLIB  DD   DISP=SHR,DSN=SHRPFX.MICS.LOAD
000019 //SYSUT1   DD   DISP=OLD,DSN=SHRPFX.MICS.PSP.CNTL
_____________________________________________________________________________
```

Edit panel (PSPOEDIT)

Processing Notes:

1) The generated job stream contains the product change code for each selected product change. A job card, defined by the PSP Options - Batch Job Definitions process, is added and all pseudo CA MICS data set name references are replaced with the true library name.

2) When the EDIT session is ENDed, PSP Online submits the job stream and records the selected product changes as APPLYING. They are marked with an A on the Select Product Change panels until the APPLY job completes.

3) An additional step is added behind each product change for program MAAUDIT. This step creates an empty member with ISPF standard directory status information (for example, DATE, TIME, USERID) in sharedprefix.MICS.PSP.CNTL if the change ends with a valid return code. PSP Online looks for this special member to record the date and time that a change was applied and then deletes the member.

E.4.6.3 Sample Select Product Changes Panel for APPLY

```
_______________________________________________________________________________
----------------------  Select Product Changes for Apply  ----------------------
Command ===> _                                                Scroll ===> PAGE
CA MICS Component  => ALL (ccc or ALL)
Show requisites    => YES (YES/NO)  Show selected changes only => NO   (YES/NO)

Line Cmds: B Browse  P Print  S Select  R Reset  X Emergency Force
Cmd   Change  Subject
- - - ------- ------------------------------------------------------------------
_ A   BAS7405 Consolidated Platform Maintenance
_               BAS7386 is Superseded by fix  BAS7405
_               BAS7384 is Superseded by fix  BAS7405
_               BAS7381 is Superseded by fix  BAS7405
_               BAS7379 is Superseded by fix  BAS7405
_               BAS7378 is Superseded by fix  BAS7405
_               BAS7377 is Superseded by fix  BAS7405
_               BAS7371 is Superseded by fix  BAS7405
_               BAS7368 is Superseded by fix  BAS7405
_               BAS7367 is Superseded by fix  BAS7405
_               BAS7366 is Superseded by fix  BAS7405
_               BAS7365 is Superseded by fix  BAS7405
_               BAS7364 is Superseded by fix  BAS7405
_               BAS7363 is Superseded by fix  BAS7405
_               BAS7362 is Superseded by fix  BAS7405
_               BAS7361 is Superseded by fix  BAS7405
_               BAS7336 is Superseded by fix  BAS7405
_               BAS7360 is a Prerequisite for BAS7405
_ A   PER6225 Threshold Reporting and Alerting
_               PER6220 is a Prerequisite for PER6225
_               BAS7405 is a Prerequisite for PER6225
****************************** Bottom of data ********************************
```

E.5 Option 3 - Load the PSP Libraries

```
_______________________________________________________________________________
----------------------  PSP Online Services  --------------------------------
Option ===> _


      0 - PSP Options
          Define batch job, browse, and print options.
      1 - Problem Analysis
          Browse descriptions of product changes, select product changes,
          and browse CA MICS libraries.
      2 - Apply Product Changes
          Apply product changes to CA MICS libraries.
      3 - Load the PSP Libraries
          Prepare the PSP libraries, load product changes and new products.
      4 - PSP Utilities
          General PSP utility programs and online functions.
_______________________________________________________________________________

PSP Online Services panel (PSP@PRIM)


Use the Load the PSP Libraries option (option 3) to define the
PSP libraries and load the PSP information from the PSP
distribution medium.

_______________________________________________________________________________
-------------------------  Load the PSP Libraries -------------------------
Option ===> _


      1 - Define the PSP Libraries
          Specify the data set names of the PSP libraries.
      2 - Submit the PSP Load Job With Dynamic Allocation.
          Standard Load for PSP Product Changes to PSP Libraries.
      3 - Submit the PSP Load Job Without Dynamic Allocation
          Emergency Load for PSP Product Changes to PSP Libraries.
      4 - Select New Products and Submit the Product Load Job.
          Load New Products to CA MICS DASD Libraries.
_______________________________________________________________________________

Load the PSP Libraries panel (PSPIMENU)


The names of PSP libraries defined in the PSP load job must
be recorded for PSP Online.  If a new set of PSP libraries
are created, you may notify PSP Online of the changed names
by selecting option 1, Define the PSP libraries.
```

E.5.1 Define the PSP Libraries

```
_______________________________________________________________________________
-------------------------  Define the PSP Libraries  -----------  ROW 1 OF 26
Command ===> _                                                 Scroll ===> PAGE
Enter END command to save the PSP library names - Enter CANCEL command to exit

  DDname   DSname
  -------- -------------------------------------------
  ASM      sharedprefix.MICS.PSP.ASM
  BIN      sharedprefix.MICS.PSP.BIN
  CLIST    sharedprefix.MICS.PSP.CLIST
  GENLIB   sharedprefix.MICS.PSP.GENLIB
  INCLLIB  sharedprefix.MICS.PSP.INCLLIB
  ISPHLIB  sharedprefix.MICS.PSP.ISPHLIB
  ISPMLIB  sharedprefix.MICS.PSP.ISPMLIB
  ISPPLIB  sharedprefix.MICS.PSP.ISPPLIB
  ISPSLIB  sharedprefix.MICS.PSP.ISPSLIB
  ISPTLIB  sharedprefix.MICS.PSP.ISPTLIB
  LOAD     sharedprefix.MICS.PSP.LOAD
  LOCALMOD sharedprefix.MICS.LOCALMOD.CNTL
  MACLIB   sharedprefix.MICS.PSP.MACLIB
  MCOLIB   sharedprefix.MICS.PSP.MCOLIB
  OBJ      sharedprefix.MICS.PSP.OBJ
  PCDOC    sharedprefix.MICS.PSP.PC.TEXT
  PROTOLIB sharedprefix.MICS.PSP.PROTOLIB
  SASAUTOS sharedprefix.MICS.PSP.MACAUTOS
  SASFLS   sharedprefix.MICS.PSP.SASFLS
  SHRCNTL  sharedprefix.MICS.PSP.CNTL
  SHRPARMS sharedprefix.MICS.PSP.PARMS
  SHRUSORC sharedprefix.MICS.PSP.USOURCE
  SOURCE   sharedprefix.MICS.PSP.SOURCE
  VDIC     sharedprefix.MICS.PSP.DIC.TEXT
  VDOC     sharedprefix.MICS.PSP.DOC.TEXT
  VINC     sharedprefix.MICS.PSP.INC.TEXT
_______________________________________________________________________________
```

Define the PSP Libraries panel (PSPINAME)

The Define the PSP Libraries process establishes and modifies data set names for the PSP libraries. These data sets are loaded with the PSP information from the PSP distribution medium. You may want to specify a unique set of library data set names for each PSP distribution, or you may reuse the same set of libraries for each PSP distribution.

You may enter this option to record the current PSP library

names. The only data set that can cause problems for PSP Online is sharedprefix.MICS.PSP.CNTL. This data set is opened during PSP Online initialization. Therefore, any change to this data set should be recorded here first.

The table is initially built using the sharedprefix and MICS levels defined for the complex. If these generated data set names are not correct, enter the correct value.

E.5.2 Submit the PSP Load Job With Dynamic Allocation

```
_______________________________________________________________________________
----------  Load the PSP Libraries (with dynamic library allocation)  ---------
Command ===>

Enter END    command to submit the PSP load job
Enter CANCEL command to exit without loading the PSP libraries

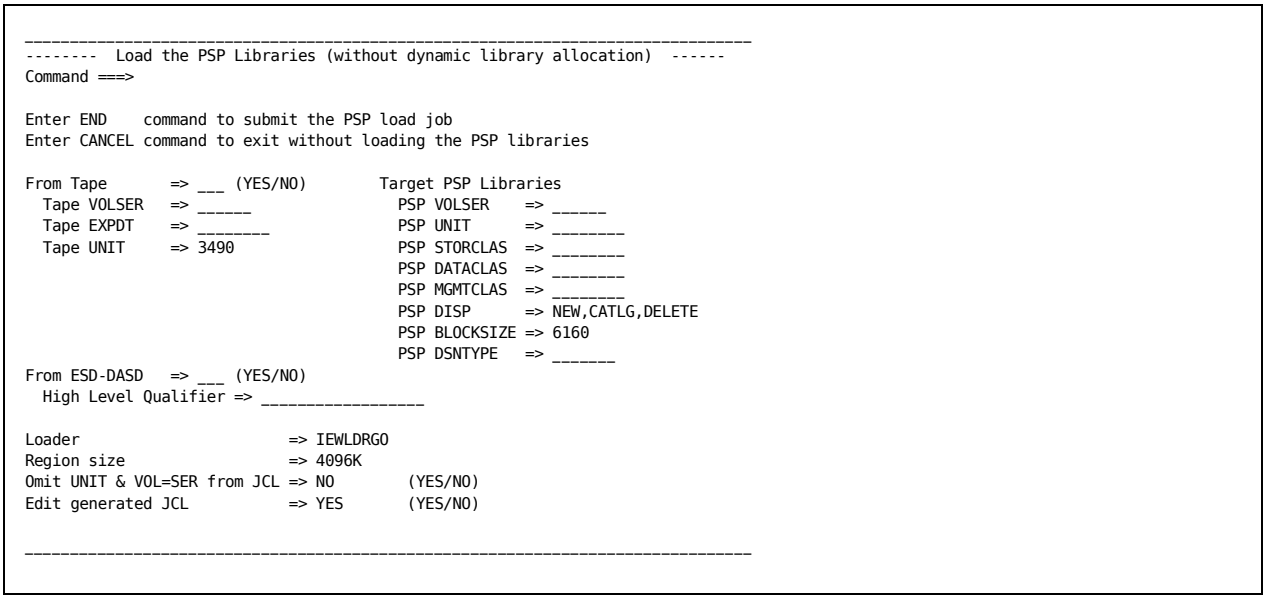
From Tape       => ___ (YES/NO)        Target PSP Libraries
  Tape VOLSER   => ______                PSP VOLSER    => ______
  Tape EXPDT    => ________              Release space => RLSE       (RLSE/NO)
  Tape UNIT     => 3490                  PSP UNIT      => ________
                                         PSP STORCLAS  => ________
                                         PSP DATACLAS  => ________
                                         PSP MGMTCLAS  => ________
                                         PSP DSNTYPE   => ________
From ESD-DASD   => ___ (YES/NO)
  High-Level Qualifier => ____________________

Loader                       => IEWLDRGO
Warn (abend option)          => YES       (YES/NO)
Mode                         => DASD      (RPT/DASD)
Omit UNIT & VOL=SER from JCL => NO        (YES/NO)
Edit generated JCL           => YES       (YES/NO)
_______________________________________________________________________________
```

Load the PSP Libraries (with dynamic library allocation) panel (PSPILOAD)

The Load the PSP Libraries panel generates and submits a batch job to load PSP information to the PSP libraries either from a distribution tape or from ESD PAX distribution files. This process accepts user specifications for either distribution medium (one must be chosen) and for associated batch job control information.

E.5.3 Submit the PSP Load Job Without Dynamic Allocation



```
--------------------------------------------------------------------------------
--------  Load the PSP Libraries (without dynamic library allocation)  ------
Command ===>

Enter END    command to submit the PSP load job
Enter CANCEL command to exit without loading the PSP libraries

From Tape       => ___ (YES/NO)        Target PSP Libraries
  Tape VOLSER   => ______                PSP VOLSER    => ______
  Tape EXPDT    => ________              PSP UNIT      => ________
  Tape UNIT     => 3490                 PSP STORCLAS  => ________
                                        PSP DATACLAS  => ________
                                        PSP MGMTCLAS  => ________
                                        PSP DISP      => NEW,CATLG,DELETE
                                        PSP BLOCKSIZE => 6160
                                        PSP DSNTYPE   => _______
From ESD-DASD   => ___ (YES/NO)
  High Level Qualifier => ___________________

Loader                       => IEWLDRGO
Region size                  => 4096K
Omit UNIT & VOL=SER from JCL => NO        (YES/NO)
Edit generated JCL           => YES       (YES/NO)

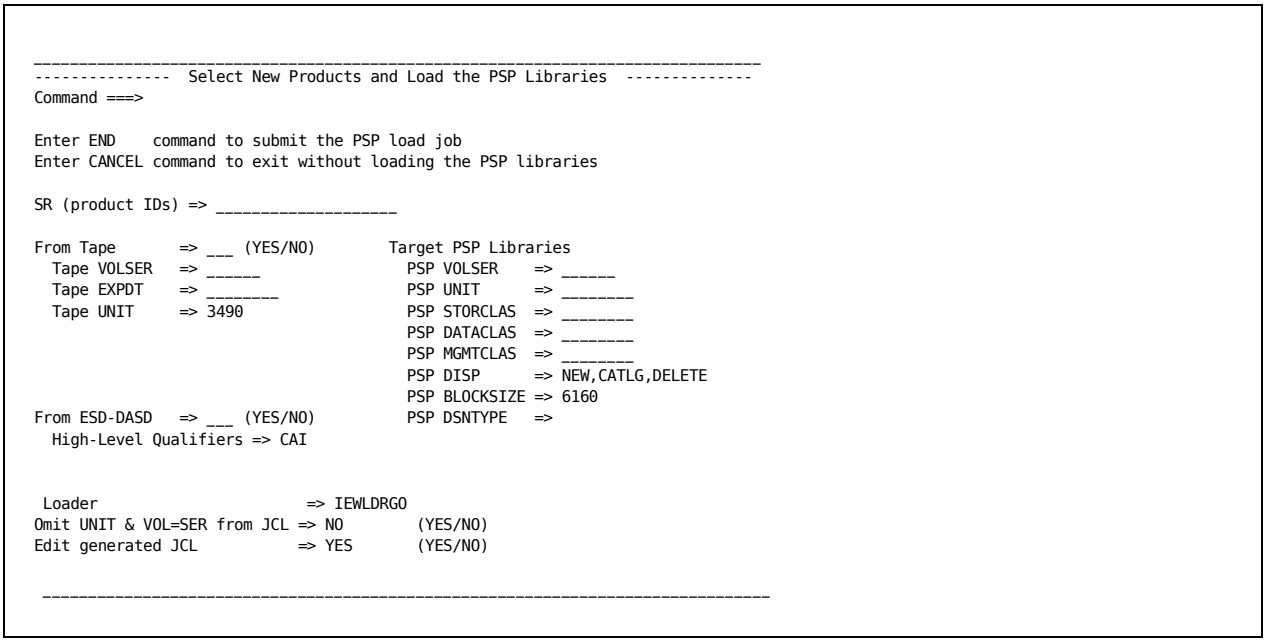
--------------------------------------------------------------------------------
```

Load the PSP Libraries (without dynamic library allocation) panel (PSPIBKUP)

The Load the PSP Libraries panel generates and submits a batch job to load PSP information to the PSP libraries either from a distribution tape or from ESD PAX distribution files. This process accepts user specifications for either distribution medium and for associated batch job control information.

This option has been provided to accommodate an EMERGENCY situation that prevents the full PSP analysis and control of the PSP refresh process via the standard process and checklist. We urge you to avoid this emergency option and checklist. If you think it is your only option, contact CA Technical Support at http://ca.com/support to confirm that the standard checklist will not work for you.

E.5.4 Select New Products and Submit the Product Load Job



Select New Products and Load the PSP Libraries panel (PSPIPROD)

The Select New Products and Load the PSP Libraries panel generates and submits a batch job to load PSP information to the PSP libraries either from a distribution tape or from ESD-DASD distribution files. This process accepts user specifications for either distribution medium (one must be chosen) and for associated batch job control information.

E.6 Option 4 - PSP Utilities

```
_______________________________________________________________________________
--------------------  PSP Online Services  ---------------------------------
Option ===> _


      0 - PSP Options
          Define batch job, browse, and print options.
      1 - Problem Analysis
          Browse descriptions of product changes, select product changes,
          and browse CA MICS libraries.
      2 - Apply Product Changes
          Apply product changes to CA MICS libraries.
      3 - Load the PSP Libraries
          Prepare the PSP libraries, load product changes and new products.
      4 - PSP Utilities
          General PSP utility programs and online functions.


_______________________________________________________________________________

PSP Online Services panel (PSP@PRIM)


The PSP Utilities process (option 4) provides general utility
functions in support of CA MICS maintenance activities. These
include receiving the new PSP tables, verifying the status of
product changes, printing the contents of the ISPF tables
used by PSP Online, and resetting the UNITGEN composite
checklist lock.


_______________________________________________________________________________
-----------------------------  PSP Utility Menu  ----------------------------
Option ===> _


      1 - Receive new PSP Tables
          Process the new Master Inventory, Master Library/Member, and
          Appendix A tables loaded from the new PSP distribution.
      2 - Verify Change History
          Determine which changes have been applied to the CA MICS complex.
      3 - Print PSP tables
          Print PSP/Online ISPF tables.
      4 - Unlock composite UNITGEN checklist
          Reset lock for generating composite UNITGEN consolidated
          checklists


_______________________________________________________________________________

PSP Utility Menu panel (PSPUMENU)
```

```
Note that the verification function, option 2, is executed
once, when PSP Online is first activated.  After that, it
need not be reinvoked unless the Master Audit Table is
damaged or lost.  For this reason, menu selection 2 is not
honored.  If you are certain you want to run Verify Change
History, use the command VERIFY instead of a 2 to begin the
process.
```

E.6.1 Receive New PSP Tables

```
_______________________________________________________________________________
-------------------------  Receive New PSP Tables  -------------------------
Command ===> _


A new tape has been loaded into the CA MICS PSP libraries.  Before continuing,
the newly delivered Master Inventory, Master Library/Member, and Appendix A
Product Change Abstracts tables must be processed from the
sharedprefix.MICS.PSP.ISPTLIB replacing the old Tables in
sharedprefix.MICS.ISPTLIB.



Press Enter to receive the new PSP tables
Enter CANCEL command to exit without replacing the old tables









_______________________________________________________________________________
```

Receive New PSP Tables panel (PSPUNBEG)

The Receive New Inventory and Appendix Tables panel processes the delivered PSP tables, which contain CA MICS maintenance status information. This utility copies the Master Inventory, Master Library/Member, and Appendix A tables from sharedprefix.MICS.PSP.ISPTLIB into sharedprefix.MICS.ISPTLIB, replacing the old tables. During the copy, all items are deleted for those components you are not licensed for, making the tables smaller, faster, and more relevant for your site.

This process will be executed after the PSP distribution has been loaded into the PSP libraries. After that, it need not be reinvoked until the next PSP distribution unless any of these tables are damaged or lost.

E.6.2 Verify Change History

```
_______________________________________________________________________________
-------------------------  Verify Change History  -------------------------
Command ===> _

Press Enter to verify your change history
Enter CANCEL command to exit without verifying the change history


  The Master Audit Table is built by scanning the CA MICS libraries to
  determine if the changes currently in the Master Inventory Table
  have been applied.




_______________________________________________________________________________
```

Verify Change History panel (PSPUVMAT)

The Verify Change History panel creates the Master Audit Table, which contains CA MICS maintenance status information. This process will examine each product change and determine if it has been applied to your CA MICS environment. This is accomplished by examining the Master Library/Member Table to identify the libraries and members updated by a product change. The CA MICS maintenance block within these members is then searched for the product change number. If the product change is found within the member's CA MICS maintenance block, the change is recorded in the Master Audit Table as APPLIED.

This process is executed once, when PSP Online is first activated. After that, it need not be reinvoked unless the Master Audit Table is damaged or lost. For this reason, the option shown as menu selection 2 is not honored. If you are certain you want to run Verify Change History, use the command VERIFY instead of a 2 to begin the process.

E.6.2.1 Verify Change History (Error)

```
_______________________________________________________________________________
--------------------------  Verify Change History  --------------------------
Command ===> _



          sharedprefix.MICS.SOURCE

  The above CA MICS library could not be allocated or opened. The
  error message returned was: NOT IN CATALOG

DATASET COULD NOT BE FOUND IN THE CATALOG

Press ENTER to continue without this CA MICS library
Enter CANCEL command to quit









_______________________________________________________________________________
```

Verify Change History (Error) panel (PSPUVERR)

The Verify Change History (Error) panel is displayed during Verify Change History processing if a CA MICS library cannot be found or cannot be accessed. You have the option of terminating this process, or continuing without the specified CA MICS library. If you allow processing to continue, the resultant product change history information may be incomplete. The information on this panel documents the error condition.

E.6.2.2 Verify Change History (Monitor)

```
_______________________________________________________________________________
--------------------------  Verify Change History  --------------------------
Command ===> _


      CA MICS libraries are being scanned in order to determine
      the current level of maintenance.


      Processing component CIC  -  Please stand by.   07:52


      Components processed =     11

      Changes processed    =    274
        Changes applied    =    189     (Applied   & Superseded =      47 )
        Changes unapplied  =     85     (Unapplied & Superseded =      23 )









_______________________________________________________________________________

Verify Change History (Monitor) panel (PSPUVMON)


The Verify Change History (Monitor) panel is redisplayed for
each component being processed, but the keyboard is locked.
Running totals show the status of the verify process.  This
utility may be interrupted without harming the CA MICS
complex data sets or the PSP tables by pressing the ATTENTION
key.  (Log off and back on to release any data sets that may
be left open before running this utility again.)
```

E.6.2.3 Verify Change History (Finished)

```
_______________________________________________________________________________
-------------------------  Verify Change History  --------------------------
Command ===> _

Press ENTER to save the new Master Audit Table
Enter CANCEL command to exit without saving the results


      Components processed =     17     Start 07:50  End 07:52

      Changes processed    =    337
        Changes applied    =    210     (Applied   & Superseded =      49 )
        Changes unapplied  =    127     (Unapplied & Superseded =      62 )
```

```
_______________________________________________________________________________
```

Verify Change History (Finished) panel (PSPUVEND)

The Verify Change History (Finished) panel is displayed after verifying product change history. This panel gives you the opportunity to exit from this process without updating the Master Audit Table and the Master Inventory Table with the revised product change history.

E.6.3 Print PSP Tables

```
_______________________________________________________________________________
----------------------------  Print PSP Tables  ----------------------------
Option ===> _


      1 - Master Inventory Table
          All delivered product changes, their requisites, and current status
      2 - Master Library/Member Table
          All members and libraries affected by each product change
      3 - Master Audit Table
          All product changes applied to the CA MICS complex
      4 - Appendix A - Product Change Abstract Table
          Cumulative list of product change abstracts









_______________________________________________________________________________
```

Print PSP Tables panel (PSPUPPRT)

The Print PSP Tables panel prints copies of the various tables used by PSP Online. These reports support the PSP Online displays for problem research and analysis. The formatted listing will be written to a data set that will be printed and deleted by a generated print job stream. Specify the option corresponding to the table to be printed and then press ENTER to print the ISPF table.

E.6.3.1 Table Print Options

```
--------------------------------------------------------------------------------
---------------------------  Table Print Options  ---------------------------
Command ===> _
Enter CANCEL command to exit without printing

Print dataset name   => userid.MICS.USER.PSP2.LIST
  DASD Volume serial => ______     (Blank for default volume)
  DASD Unit name     => ________   (Generic group name or unit address)
  Block size         => 6160       (LRECL=137,RECFM=VBA)

Print job:
  Edit JCL           => YES        (YES/NO)
  Number of copies   => 1          (1-99)
  SYSOUT      class  => A  form    => ________  code => ________
                          program => ________
  Job statement:
      //jobname  JOB  (ACCTCODE),'MICS PSP PRINT',
      //       NOTIFY=&sysuid
      //*
      //*
```

```
--------------------------------------------------------------------------------
```

Table Print Options panel (PSPOTPRT)

The Table Print Options panel is displayed upon entry from any process that requests one or more PSP tables to be printed. The print request may be canceled from this panel.

This panel is displayed for the first print request you issue from the Print PSP Tables menu, but not for successive requests issued while remaining within this menu. The print job itself is not submitted until you END from the Print PSP Tables menu. At that time, you are given the opportunity to edit the print job if the EDIT JCL field was set to YES on the Table Print Options panel.

E.6.3.1.1 Data Entry Instructions

```
Print data set name - Required.  Defaults to
    userid.MICS.USER.PSPn.LIST, where userid is your TSO
    Logon-ID and n is a sequential number to keep the data
    set name unique.  The selected PSP table information will
    be written to this data set.  A batch job will be
    generated to print the contents of this data set, and
    then delete the data set.

DASD Volume serial - Optional.  Defaults to the last value
    specified for this parameter.  6 character VOL=SER name.
    The print data set will be allocated (if new) using this
    volume specification.  This parameter is NOT validated;
    however, allocation will fail if you specify an invalid
    value.  This parameter should match the volume
    specification normally used to allocate TSO user data
    sets at your installation.

DASD Unit name - Optional.  Defaults to the last value
    specified for this parameter.  1-8 character DASD unit
    name.  The print data set will be allocated using this
    unit specification.  This parameter should match the unit
    specification normally used to allocate TSO user data
    sets at your installation.  This parameter is NOT
    validated; however, allocation will fail if an invalid
    value is specified.

Block size - Required.  Defaults to the last value specified
    for this parameter.  Number between 141 and 32760.  This
    is the block size (i.e., BLKSIZE= parameter) for the
    print data set.

Edit JCL - Required.  Defaults to the last value specified
    for this parameter.  Specify YES (Y) to display the print
    job stream prior to executing this job stream.  This
    provides the opportunity to alter or cancel the print job
    stream.  Specify NO (N) to bypass the generated batch job
    stream display.

Number of copies - Required.  Defaults to the last value
    specified for this parameter.  1-99.  This is the number
    of copies of the table information to be printed.

SYSOUT class - Required.  Defaults to the last value
    specified for this parameter.  A-Z, 0-9, or   *.  This is
    the SYSOUT class for printing the table information.
    Normal SYSOUT options can be specified to handle special
    forms (i.e., SYSOUT=(*,,GB66)).
```

Job statement - Required. Data entry fields are provided for four lines of job statement information. This job statement will be followed by the generated JCL statements to print the table information.

E.6.3.1.2 Primary/Line Command Considerations

CANCEL - The CANCEL command exits from this process without printing the selected table information.

END - The END command writes the table information to the print data set and then generates the batch job to print and deletes the data set. If you specify YES following the Edit Print JCL => prompt, the generated print job stream is displayed.

E.6.4 Unlock Composite UNITGEN Checklist

```
_______________________________________________________________________________
--------------------  Unlock composite UNITGEN checklist ---------------------
Option ===>


      1 - Browse UNITGEN lock data set
          Evaluate contents of lock data set
      2 - Forced reset of composite UNITGEN checklist lock
          Submit job to reset lock









_______________________________________________________________________________
```

Unlock composite UNITGEN checklist panel (PSPUUSEL)

The Unlock Composite UNITGEN Checklist panel is used to browse the UNITGEN lock data set and to force a reset of the UNITGEN checklist lock.

Until a UNITGEN maintenance process is completed successfully, a lock prevents the printing of a new composite UNITGEN checklist. The lock is reset by the UNITGEN jobs when the maintenance is applied following the current checklist for each unit.

The forced reset function should only be used when you really don't want to finish a composite UNITGEN checklist and are prepared to start over with a new one.

We recommend that you run the necessary UNITGEN jobs instead of using the forced reset function.

E.6.4.1 Browse UNITGEN Lock Data Set

```
_______________________________________________________________________________
 Member  =  UGLOCK     Library =  sharedprefix.MICS.PARMS
 COMMAND ===>                                                SCROLL ===> PAGE
******************************** Top of Data ********************************
* WARNING: THIS MEMBER IS GENERATED BY PSPCKLST.
* DO NOT MAKE MANUAL CHANGES TO THIS MEMBER.
GENERATED 28JUL06:09:01:11
LOCK CHECKLIST YES
LOCK UNITA YES
LOCK UNITP NO      * SET BY jobname, 28JUL06:10:52:38
******************************** Bottom of Data ********************************
```

```
_______________________________________________________________________________

Browse UNITGEN lock data set panel


This function shows the current status of the lock table.
The table resides in sharedprefix.MICS.PARMS, member UGLOCK.

The LOCK CHECKLIST row shows the status of the composite
UNITGEN checklist lock. If it is set (YES), then a UNITGEN
has not yet completed and no new composite UNITGEN checklist
can be produced. If it is not set (NO), there is no
restriction.

Each LOCK UNITx row shows if the UNITGEN for the unit with
the database ID 'x' has yet to run (YES) or if it has
completed successfully (NO).
```

E.6.4.2 Forced UNITGEN Lock Reset

```
_______________________________________________________________________________
------------------------  Forced UNITGEN Lock Reset ------------------------
Command ===>
Enter END command to continue or CANCEL command to exit

Please confirm forced reset of the composite UNITGEN checklist lock:
  Enter YES or NO    => NO

Unlock job:
  Edit JCL           => YES        (YES/NO)
  SYSOUT class       => A  Form    => ________  Code => ________
                           Program => ________
  Job statement:
      //jobname  JOB  (ACCTCODE),'MICS JOB',
      //       NOTIFY=&sysuid
      //*
      //*
_______________________________________________________________________________
```

Forced UNITGEN Lock Reset panel (PSPUURES)

A job is submitted to force a reset of the UNITGEN checklist lock. This function should only be used when you really don't want to finish a composite UNITGEN checklist and are prepared to start over with a new one.

**** Data Entry Instructions ****

Please confirm forced reset, Enter YES or NO - Required. Defaults to NO. You have to confirm the reset with YES; otherwise no action is taken.

Edit JCL - Required. Defaults to the last value specified for this parameter. Specify YES to display the job stream using the PDF EDIT service prior to executing this job stream. Specify NO to bypass the job stream display.

SYSOUT class - Required. Defaults to the last value specified for this parameter, A-Z, 0-9, or *. This is the SYSOUT class for printing the messages. Normal SYSOUT options can be specified to handle special forms.

Job statement - Required. Data entry fields are provided for four lines of job statement information. This job statement will be followed by the generated JCL statements to reset the UNITGEN lock.

Appendix F: LIBRARIES USED BY THE PSP

Two types of libraries are used in applying product changes to CA MICS: the PSP libraries that are loaded during the PSP installation process and the CA MICS complex libraries to which the product changes are applied.

This section contains the following topics:

F.1 PSP Libraries

The PSP libraries that are loaded during the PSP installation are the following:

sharedprefix.MICS.TAPELOAD.CNTL -

Holds the jobs that are used to install the PSP distribution. It contains the following members:

PSPnnnnn - SAS source modules that are used by the standard load job.

PSPyymmL - The standard JCL used to load the PSP distribution, where yy stands for the year and mm stands for the month of issue. This job determines which product changes need to be loaded to DASD and estimates and allocates required space for other PSP libraries.

PSPDYNAM - The program that is used in the installation of the PSP distribution.

sharedprefix.MICS.PSP.CNTL -

Holds the jobs that install the product changes and print the PSP documents. It contains the following members:

##MIT - A flag that indicates a new PSP distribution has been loaded.

cccnnnn - The job that contains the product change code, where ccc is the component and nnnn is the product change number. This member contains in-stream IEBUPDTE and/or IEBCOPY steps that apply the product change to your CA MICS installation libraries. IEBCOPY steps may reference other members of other PSP libraries.

sharedprefix.MICS.PSP.PC.TEXT -

Contains the PSP product change text members. The members have names described by the formats below.

@@ccc - A flag that indicates the ccc product is licensed at your site.

@cccnnnn - A detailed description of the product change, where ccc is the component, nnnn is the product

change number, and the character @ indicates text. The product change text ("pc text") is organized under the following headings:

PRODUCT CHANGE: A number that uniquely identifies the product change. This number is in the form cccnnnn, where ccc is the CA MICS component and nnnn is the product change number.

DATE: The date the change was distributed for use by customers.

SUBJECT: A general description of the contents of the product change, or what the product change does.

PREREQUISITES: The product changes that must be applied before this product change.

COREQUISITES: The product changes that must be applied along with this product change.

SUPERSEDES: If present, indicates that the product change replaces the changes listed.

SUPERSEDED BY: If present, indicates that this product change is obsolete. It has been replaced by the one that is listed in this field.

LIBRARIES/MEMBERS UPDATED, REPLACED, ADDED, OBSOLETED: For each heading, a list of the library member names that are modified or added by this product change.

DESCRIPTION: A detailed discussion of the problem or enhancement.

SYSTEM MODIFICATION: The steps you must perform to install the product change.

PSNAPPXA - Lists the new product changes available on the current PSP distribution in print image format.

sharedprefix.MICS.PSP.qualifier -

Contains updates to the corresponding CA MICS complex (sharedprefix) library. Member names use the normal CA

MICS naming conventions.

F.2 CA MICS Complex Libraries

Product changes are supplied to you in either IEBUPDTE or IEBCOPY format. These utilities apply the product changes to the following CA MICS complex libraries in your installation:

IEBCOPY:
sharedprefix.MICS.BIN
sharedprefix.MICS.DIC.TEXT
sharedprefix.MICS.DOC.TEXT
sharedprefix.MICS.INC.TEXT
sharedprefix.MICS.ISPHLIB
sharedprefix.MICS.ISPMLIB
sharedprefix.MICS.ISPPLIB
sharedprefix.MICS.ISPTLIB
sharedprefix.MICS.LOAD
sharedprefix.MICS.OBJ

IEBUPDTE or IEBCOPY:
sharedprefix.MICS.ASM
sharedprefix.MICS.CLIST
sharedprefix.MICS.GENLIB
sharedprefix.MICS.HOLD.PARMS
sharedprefix.MICS.INCLLIB
sharedprefix.MICS.ISPSLIB
sharedprefix.MICS.MACAUTOS
sharedprefix.MICS.PROTOLIB
sharedprefix.MICS.SOURCE

In some instances, part of the product change will be applied using the IBM IEBUPDTE utility, and part will be applied using the IBM IEBCOPY utility.