

# XPAF 7.0 Upgrade from XPAF 5.0/XPAF 6.0 Quick Reference

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Changes are periodically made to this document. Changes, technical inaccuracies, and typographical errors will be corrected in subsequent editions.

# 1.Table of contents

<u>1.</u>	<u>Table of contents</u>	
<u>2.</u>	Introduction	5
	- Overview	5
	Install the base software	5
	Skip the installation of resources	5
	Assemble and install any XPAF User exits	5
	Add the XPAF 5.0 license key	5
<u>3.</u>	Electronic Installation	9
	Download the installation files	11
	Generate the Stage Two installation members	12
	Run the installation jobs	15
<u>4.</u>	Preparing a test FSS	19
	Define the subsystem name	19
	APF Authorize the XPAF Load Library	19
	ACF Authorize the XOSF started task for TCP/IP	19
	Preparing a JES2 system	

# 2. Introduction

This document provides an overview of the customization tasks necessary to upgrade an earlier version of XPAF to XPAF 6.0. It is intended as a quick reference guide for users familiar with the XPAF installation process.

For additional information on the subjects covered in this document, refer to the XPAF 6.0 User Guide, Section Two.

For more information on the MVS commands, refer to the IBM "MVS System Commands" manual for your operating system level.

#### **Overview**

This section provides an overview of the steps necessary to upgrade your XPAF system.

#### Install the base software

Upgrading an existing XPAF 5.0 or 6.0 system to XPAF 7.0 simply requires installing the XPAF 6.0 base software and latest maintenance. The XPAF 7.0 software, by default, will reside in its own SMPE CSI.

#### Review new functionality

Review the new functionality documented in Chapter Three and plan to implement any new features you wish to take advantage of.

#### Assemble and install any XPAF User exits

If you are using any XPAF user exits in your current XPAF system, you will need to reassemble and install them in your 7.0 system. Refer to the "Installing User Exits" section of the XPAF 7.0 User documentation (Page 3-43, PDF page 115) for additional information.

#### Copy your existing license key to XPAF 7.0

Copy your existing XPAF license string(s) from the XPAF 5.0 or XPAF 6.0 XINPARM(XINSLSTR) member to your new XPAF 7.0 XINPARM PDS.

XPAF 7.0 will not function without a valid license string.

# **3.New Features**

### XPAF 7.0 New Features

The following new features are available with XPAF 7.0

LCDS to PDF document splitting

#### XPAF 6.0 New Features

The following new features were made available with XPAF 6.0, they are included here for customers upgrading from XPAF 5.0 to XPAF 7.0.

### Dynamic LCDS font/logo conversion

This section applies to customers who use any of the following transforms:

LCDS-to-PCL

LCDS-to-PDF

Page Format to PCL

Page Format to PDF

XPAF 6.0 has the capability to dynamically convert LCDS (also known as centralized or DJDE) fonts (.FNTs) and logos (.LGOs) to PCL or PDF. There is no longer any need to manually pre-convert these resources with XPAF 6.0.

In order to allow for dynamic LCDS font and logo conversion, XPAF 6.0 has been enhanced to use a new format of the intermediate Xerox Escape Sequence (XES) font stored in DFONTLIB. This new "XES-like" format removes the 64K font size and 256 dot character width restrictions of the original XES format. This results in a font that cannot be used on an XES device.

If you are still using XES devices you must disable the dynamic conversion feature by specifying FNTLGOCONV=M in your initialization parameter member, XINPARM(XINSXOSF).

LCDS fonts are also used for formatting Page Format documents to PCL or PDF and the dynamic conversion of these resources also applies to this type of conversion.

#### New Decentralized Character Mapping Variation DCMV60

The enhanced font conversion process no longer requires centralized fonts to be split into different planes due to size constraints. The 224 printable character limitation still exists.

A new Decentralized character mapping variation, DCMV60, has been provided that places more characters in plane 1 than the DCMV01 mapping variation provided in previous releases.

The source for DCMV60 is provided in XPFSAMP(DCMV60).

DCMV60 is now the default value for the OFORMAT parameter when loading LCDS fonts.

#### Converting existing XPAFXFI entries to use DCMV60

To avoid having to reload all your LCDS fonts into the XPAF 6.0 CFONTLIB just to update the Decentralized Mapping Variation table to DCMV60 a utility, UFT6DCMV, has been provided that will update all entries in the XPAFXFI table.

As part of the installation process the STAGE2 library member UPGJ101, can be used to create a copy of your existing XPAF TABLELIB, install the new DCMV60 mapping table, install the new XPFA2A and XPAFE2A table entries, and update XPAFXFI table entries to use DCMV60.

#### Copying Decentralized Replica Fonts

Customers that use either the AFP-to-PCL or AFP-to-PDF transforms and want to use the new Decentralized mapping format will need to copy their Decentralized Replica fonts from their old XPAF DFONTLIB to the new XPAF 6.0 DFONTLIB using the provided utility, UFT6DREP.

Sample JCL to run the UFT6DREP utility is provided in STAGE2 library member UPGJ102.

UPGJ102 will, allocate a new DFONTLIB modeled on the existing DFONTLIB, scan the XPAFI2X table in the XPAF TABLELIB and copy any replica fonts referenced in the XPAFI2X table from the old DFONTLIB library to the new DFONTLIB.

Note: The XPAFI2X table contains entries for the default set of supported AFP Character Sets, including the Core Interchange font set as well as reserved font names for character sets that do not include glyphs for certain character identifiers. This will result in the XUPGDREP utility reporting these fonts as missing.

### Loading LCDS Printer Resources from a FreeFlow Print Server

Additional utilities are included with XPAF6.0 to provide an easy method of transferring LCDS from a FreeFlow Print Server controller to the mainframe and preparing them for loading into XPAF VSAM libraries via XOAF.

Sample jobs to run these utilities are provided in STAGE2 members RJOB301, RJOB302 and RJOB303.

RJOB301 allocates the additional datasets needed by the two subsequent jobs.

RJOB302 needs to be modified with the printers IP address, and a user id and password of an account on the printer that has FTP access to the LCDS resources directory (/var/spool/XRXnps/resources/lcds). Once customized and run, this job will execute a REXX EXEC that will FTP to the printer controller and get a listing of the relevant printer resources. A second REXX is then executed that takes the listing and builds a third REXX that contains the individual FTP commands to 'get' each resource from the printer in the correct format and, if necessary, adjusting the file name to a valid member name for storing in the relevant PDS on the mainframe. The third REXX is then run to transfer the files from the printer to the mainframe.

RJOB303 adds the "LPS header record" to each resource object in preparation for loading into XPAF.

#### Additional log handling options

XPAF 6.0 installation will now allocate and initialize alternate XOAF and XOSF log datasets, XOAFLOGA and XOSFLOGA. The sample XOAF and XOSF initialization parameter libraries have been updated to include references to these alternate logs.

An additional XOAFLOG.ARCHIVE dataset is also created during the install process. The XOAFLOG.ARCHIVE is used in the updated XOAF batch procedure, XOAFBAT

XOAFBAT will now re-initialize the XOAFLOG prior to the XOAF Batch step, copy the log dataset to SYSOUT=\* enabling all XOAFLOG messages to be viewed on the JES spool and then append the XOAFLOG messages to XOAFLOG.ARCHIVE to keep an ongoing record of XPAF Batch messages.

Two new XOAF Batch procedures will be created in the STAGE2 library, XOAFBATP and XOAFBATO

XOAFBATP will re-initialize the XOAFLOG prior to the XOAF Batch step and then copy the log dataset to SYSOUT=\* enabling all XOAFLOG messages to be viewed.

XOAFBATO is the pre-XPAF 6.0 XOAF batch procedure

#### Additional STAGE2 Resource Management Members

The following STAGE2 members are now generated as part of the installation process and provide customized templates for the following:

RJOB201	Delete, allocate and initialize a single XPAF VSAM Library
RJOB202	Resize an existing XPAF resource library
RJOB301	FreeFlow Print Server LCDS resource upload: allocation of datasets
RJOB302	FreeFlow Print Server LCDS resource upload: FTP resources to host
RJOB303	FreeFlow Print Server LCDS resource upload: Add LCDS tape header
RLFNTLD	LCDS font load via XOAF Batch
RLFRMLD	LCDS form load via XOAF Batch
RLIMGLD	LCDS image load via XOAF Batch
RLJSLLD	LCDS JSL load/compile via XOAF BATCH
RLJLGOLD	LCDS logo load via XOAF BATCH

# **4.Electronic Installation**

This section describes how to install XPAF by using the electronic distribution files.

The electronic distribution files are in the TSO TRANSMIT format and will need to be RECEIVED on your system.

Note: The upgrade installation package will include the latest level of XPAF maintenance, which will be installed as part of the upgrade process. There is no need to separately download the XPAF 6.0 maintenance kit.

#### Download the installation files

- Step 1. Download the XPAF 7.0 upgrade installation kit 'XPAF60.EI.UPGD.XMTPDS.XMT from the Xerox website at: <u>http://www.support.xerox.com/support/xpaf/software/enus.html?fileLanguage=en</u>
- **Step 2.** Allocate a dataset to receive the xmt files (the same dataset can be used for all the xmt files using the following allocation:

RECFM=FB,LRECL=80 SPACE=(CYL,350,5)

- **Step 3.** Binary transfer the XPAF70EI.UPGD.XMTPDS.XMT file into the dataset created in step 1
- **Step 4.** Issue the 'TSO RECEIVE' command on the 'xmit.in' dataset to restore the XMTPDS PDS. Due to the large file size, this step may take several minutes to complete.

```
TSO RECEIVE INDA(xmit.in)
 INMR9011 Dataset MKEAN.XPAF70EI.XMTPDS from MKEAN on NJEXE01
 INMR906A Enter restore parameters or 'DELETE' or 'END' +
da(`yourhlq.XPAF70.XMTPDS')
                                         IEBCOPY MESSAGES AND CONTROL
IEB1135I IEBCOPY FMID HDZ1A10 SERVICE LEVEL UA46465 DATED 20090319
IEB1035I MKEAN
                  $$$X40
                           $$$X40
                                    07:59:51 FRI 12 MAR 2010 PARM='WO
COPY INDD=((SYS00100,R)),OUTDD=SYS00098
IEB1013I COPYING FROM PDSU INDD=SYS00100 VOL=DATA02 DSN=SYS10071.T07
IEB1014I
                   TO PDS OUTDD=SYS00098 VOL=DATA01 DSN=yourhlq.XPAF70
IEB167I FOLLOWING MEMBER(S) LOADED FROM INPUT DATA SET REFERENCED BY
IEB154I @RESTORE HAS BEEN SUCCESSFULLY LOADED
IEB154I AFPFONTS HAS BEEN SUCCESSFULLY LOADED
IEB154I BASEPTFI HAS BEEN SUCCESSFULLY LOADED
IEB154I CFONTLIB HAS BEEN SUCCESSFULLY LOADED
. . .
IEB154I XPDLMSG HAS BEEN SUCCESSFULLY LOADED
IEB1098I 27 OF 27 MEMBERS LOADED FROM INPUT DATA SET REFERENCED BY
IEB144I THERE ARE 390 UNUSED TRACKS IN OUTPUT DATA SET REFERENCED BY
IEB149I THERE ARE 18 UNUSED DIRECTORY BLOCKS IN OUTPUT DIRECTORY
```

```
IEB147I END OF JOB - 0 WAS HIGHEST SEVERITY CODE
INMR001I Restore successful to dataset 'yourhlq.XPAF70.XMTPDS'
***
```

**Step 5.** Edit XMTPDS(@RESTORE), to insert a valid job card and specify the correct names and high level qualifiers, then submit the job

```
//MYJOB JOB <INSERT A VALID JOB CARD>
//*
//* JCL TO RUN THE REXX EXEC TO RESTORE THE XPAF 7.0 INSTALLATION FILES
//*
//* THE RESTORE REXX TAKES TWO PARAMETERS
//*
     - THE FULLY QUALIFIED DSN OF THE XMTPDS
//*
    - THE HIGH LEVEL QUALIFIER FOR THE XPAF INSTALATION
//*
//*
//INFO
         EXEC PGM=IKJEFT01,DYNAMNBR=25
//ISPPROF DD DUMMY
//ISPPLIB DD DUMMY
//ISPMLIB DD DUMMY
//ISPTLIB DD DUMMY
//ISPSLIB DD DUMMY
//SYSPRINT DD SYSOUT=Z
//SYSPROC DD DISP=SHR,DSN=YOURHLQ.XMTPDS
                                            <== THIS DATASET
//SYSTSPRT DD SYSOUT=*
//SYSTSIN DD *
   RESTORE YOURHLQ.XMTPDS YOURHLQ
11
```

Generate the Stage Two installation members

**Step 1.** Update INSTLIB(\$GENINST). Refer to the XPAF 7.0 User Documentation Section 2 and the following sample member for more information

```
#GENDFLT
                                                     Х
           DUNIT=SYSALLDA,
                            * DASD UNIT TYPE DEFAULT
                                                     Х
           DVOLSER=,
                           * DASD VOLUME SERIAL DEFAULT X
                          * Electronic Install HLQ X
* DEFAULT HIGH LEVEL QUALIFIER X
           EIHLQ=your.hlq,
           HLQ=your.hlq,
           LOADSIZE=,
                            * USER SPECIFIED LOAD LIB SIZE X
           OCLASS=Y,
                           * DEFAULT PRINTED OUTPUT CLASS X
                           * DEFAULT OPTIONS
           OPTIONS=,
                                                     Х
           SMS=YES,
                            * SMS NON-VSAM CLASSES
                                                    Х
                          * SMS VSAM CLASSES
           SMSVSAM=YES,
                                                    Х
                            * USER SOURCE LIBRARY
           SRCLIB=,
                                                    Х
          TSOBLKSIZE=,
                            * DEFAULT TSO ISP LIBRARY BLKSZ
THE #GENJBCD MACRO IS USED TO SPECIFY JOB CARD PARAMETERS THAT
      WILL BE GENERATED ON THE JOB CARD FOR INSTALLATION. OPTIONS *
*
*
      ARE ALSO PROVIDED TO SUPRESS THE GENERATION OF JOB CARDS ON *
      INSTALLATION JOBS.
*
      #GENJBCD
                                                     Х
           JOBCD1='(D498,400),''XPAF 7.0 INSTALL'',', * JOB CD1 X
           JOBCD2='CLASS=S,MSGCLASS=Y,NOTIFY=userid', * JOB CD2 X
           JOBCD3 = .
                            * JOB CARD #3
                                                     х
                           * JOBNAME FOR INSTALL JOBS
           JOBNAME=userx,
                                                     Х
           JOBOPT=,
                            * JOB OPTIONS
                                                     Х
           JOBPARM=,
                            * JOB PARM CARD
                                                     Х
           JOBVARY=YES
                            * VARY JOBNAME
*
THE #GENJES MACRO IS USED TO SPECIFY INFORMATION ABOUT THE JOB
*
      ENTRY SUBSYSTEM TO THE INSTALLATION PROCESS.
                                                    *
*
      #GENJES
                                                     Х
          JESFSSID=<mark>XOSF</mark>,
                        * PRODUCT FUNCTIONAL SUBSYS ID X
                            * JES SOURCE/MACRO LIBRARY
           JESMAC=,
                                                     Х
                          * JOB ENTRY SUBSYSTEM NAME
           JESPROD=JES2,
                                                    Х
                            * USER JES SYSTEM MACLIB
           JESUMAC=,
                                                     Х
                         * TO INSERT MIDDLE QUAL IN DSN
           JESLVL= V1R4M0
      *
  THE #GENPROD MACRO SPECIFIES THE PARAMETERS USED TO GENERATE
*
                                                    *
      PRODUCT LIBRARY PLACEMENT, USERMOD NAMES AND OTHER OPTIONS
      USED FOR PRODUCT INSTALLATION.
#GENPROD
                                                     Х
```

DVOLSER=, HLQ=,	" PRODUCI DAIA SEI UNII SPEC	Х
HLQ=,	* PRODUCT DATA SET VOLUME SPEC	Х
	* DEFAULT PRODUCT HLQ	Х
HLQLPA=,	* OPTION HLQ FOR PRODUCT LPA	Х
HLOMST=,	* OPT HLQ PRODUCT LOAD & LPA	Х
OPTIONS=,	* PRODUCT OPTIONS	Х
PRODUCT=XPAF,	* CODE OF TARGET PRODUCT	Х
PRODVRM=700,	* TARGET PRODUCT VER/RLSE/MOD	Х
SMS= <b>YES</b> ,	* PRODUCT SMS NON-VSAM CLASSES	Х
SMSVSAM= <b>YES</b> ,	* PRODUCT SMS VSAM CLASSES	Х
UMODJOFT=	* JES TABLE SMP USERMOD NAME	
*		
*		
*		
*****	******	* *
* THE #GENLESTE MACEO SPECIFIES THE	VALUES NEEDED TO GENERATE THE	*
* DRODUCT LICENSE STRING		*
**************************************	****	**
+		
#GENLSTK	* CDUID OF PROCESSO	A V
CPUID=FFUI565A2066,	· CPUID OF PROCESSOR	X
EXPDATE = 10 - Mar - 2015,	* EXPIRATION Date	X
FEATURE=XPAF,	* FEATURE LICENSE IS FOR	Х
LSTRING=BF5E1B28860BDE	C368606D9481B6F	Х
* LICENSE STRI	ING FOR THIS FEATURE	
*		*
*		
* ENVIRONMENT TO THE INSTALLAT	CION PROCESS.	*
*		* *
#CENCMD		**
#GENSMP	* CMD INTE EVDE FOR ALLOG	* * X
#GENSMP DUNIT=, DUNIT=	* SMP UNIT TYPE FOR ALLOC	* * X X
#GENSMP DUNIT=, DVOLSER=, DVOCLSER=,	* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC	* * X X X
#GENSMP DUNIT=, DVOLSER=, DWORK=,	* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC * SMP TEMPORARY WORK UNIT	** X X X X
#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, UN ONCOM	* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC * SMP TEMPORARY WORK UNIT * SMP NON-VSAM DS HLQ	X X X X X X
#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=,	* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC * SMP TEMPORARY WORK UNIT * SMP NON-VSAM DS HLQ * SMP VSAM DATA SET HLQ * OPTIONAL MTG A DEPART	× * X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO,</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* GMP DELED SE LEVEL (5. 12)</li> </ul>	× × × × × × × × × ×
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=,</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> </ul>	** X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES,</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> </ul>	** X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES,</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> </ul>	** X X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=,</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIER</li> </ul>	x x x x x x x x x x x x x x x x x x x
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=,</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEN</li> <li>* USER SMP DATA SET OPTION</li> </ul>	x x x x x x x x x x x x x x x x x x x
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL=</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEH</li> <li>* USER SMP DATA SET OPTION</li> <li>* VOLSER FOR VSAM CSI DATA SET</li> </ul>	x x x x x x x x x x x x x x x x x x x
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= *</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEH</li> <li>* USER SMP DATA SET OPTION</li> <li>* VOLSER FOR VSAM CSI DATA SET</li> </ul>	X X X X X X X X X X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * *</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEH</li> <li>* USER SMP DATA SET OPTION</li> <li>* VOLSER FOR VSAM CSI DATA SET</li> </ul>	x x x x x x x x x x x x x x x x x x x
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * *</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEH</li> <li>* USER SMP DATA SET OPTION</li> <li>* VOLSER FOR VSAM CSI DATA SET</li> </ul>	x x x x x x x x x x x x x x x x x x x
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * *</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEH</li> <li>* USER SMP DATA SET OPTION</li> <li>* VOLSER FOR VSAM CSI DATA SET</li> </ul>	** X X X X X X X X X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * * * * * * * * * * * THE #GENEND MACRO IS USED TO SPEC</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEN</li> <li>* USER SMP DATA SET OPTION</li> <li>* VOLSER FOR VSAM CSI DATA SET</li> </ul>	** X X X X X X X X X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * * * * * * * * * * * * * * * * * * *</pre>	<pre>* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC * SMP TEMPORARY WORK UNIT * SMP NON-VSAM DS HLQ * SMP VSAM DATA SET HLQ * OPTIONAL MTS LIBRARY NAME * SMP RELEASE LEVEL (5 OR &gt;) * SMP SMS NON-VSAM CLASSES * SMP SMS VSAM CLASSES * USER SMP HIGH LEVEL QUALIFIEN * USER SMP DATA SET OPTION * VOLSER FOR VSAM CSI DATA SET CIFY THE TYPE OF STAGE 2 TO BE GENERATED.</pre>	** X X X X X X X X X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * * * * * * * * * * * * * * * * * * *</pre>	* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC * SMP TEMPORARY WORK UNIT * SMP NON-VSAM DS HLQ * SMP VSAM DATA SET HLQ * OPTIONAL MTS LIBRARY NAME * SMP RELEASE LEVEL (5 OR >) * SMP SMS NON-VSAM CLASSES * USER SMP HIGH LEVEL QUALIFIEN * USER SMP HIGH LEVEL QUALIFIEN * USER SMP DATA SET OPTION * VOLSER FOR VSAM CSI DATA SET CIFY THE TYPE OF STAGE 2 TO BE GENERATED.	** X X X X X X X X X X X X X X X X X X
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<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * * * * * * * * * * * * * * * * * * *</pre>	<pre>* SMP UNIT TYPE FOR ALLOC * SMP VOLSER FOR ALLOC * SMP TEMPORARY WORK UNIT * SMP NON-VSAM DS HLQ * SMP VSAM DATA SET HLQ * OPTIONAL MTS LIBRARY NAME * SMP RELEASE LEVEL (5 OR &gt;) * SMP SMS NON-VSAM CLASSES * SMP SMS VSAM CLASSES * USER SMP HIGH LEVEL QUALIFIEH * USER SMP DATA SET OPTION * VOLSER FOR VSAM CSI DATA SET CIFY THE TYPE OF STAGE 2 TO BE GENERATED.</pre>	** X X X X X X X X X X X X X X X X X X
<pre>#GENSMP DUNIT=, DVOLSER=, DWORK=, HLQ=, HLQVSAM=, MTS=yourhlq.SMPMTS NO, RELEASE=, SMS=YES, SMSVSAM=YES, USERHLQ=, USEROPT=, VSMVOL= * * * * * * * * * * * * * * * * * * *</pre>	<ul> <li>* SMP UNIT TYPE FOR ALLOC</li> <li>* SMP VOLSER FOR ALLOC</li> <li>* SMP TEMPORARY WORK UNIT</li> <li>* SMP NON-VSAM DS HLQ</li> <li>* SMP VSAM DATA SET HLQ</li> <li>* OPTIONAL MTS LIBRARY NAME</li> <li>* SMP RELEASE LEVEL (5 OR &gt;)</li> <li>* SMP SMS NON-VSAM CLASSES</li> <li>* SMP SMS VSAM CLASSES</li> <li>* USER SMP HIGH LEVEL QUALIFIEH</li> <li>* USER FOR VSAM CSI DATA SET</li> </ul>	** X X X X X X X X X X X X X

		TYPE=INSTALL	*	GENERATE	SMP	INSTALL	JOBS	
*								
*								
	END							
								-

Step 2. Allocate the STAGE2 library by modifying and submitting INSTLIB(\$STG2ALO)

```
//*----> ADD A VALID JOBCARD BEFORE THIS LINE <-----
//*
//* JOB SOURCE:
//*
           ALOCSTG2
//*
//* JOB MACRO:
//*
           NONE
//*
//* JOB FUNCTION:
//*
          ALLOCATES A JCL TARGET LIBRARY FOR THE
//*
           STAGE 1 GENERATION OF STAGE 2 JOBS.
//*
//* NOTE:
//*
    - THIS JOB NEED ONLY BE RUN IF THE USER HAS
//*
       CHOSEN TO PLACE THEIR STAGE 2 JOBS INTO A
//*
       SEPARATE DATA SET FROM THE STAGE 1 JOB AND
//*
      MACROS.
//*
//*
     - BE SURE TO CHANGE THE HLQ= PARAMETER AT THE
//*
       END OF THIS JOB TO REFLECT THE USER DEFINED
                                                  *
//*
       DATA SET NAMES FOR PRODUCT INSTALLATION.
                                                  *
//*
                                                  *
//ALOCSTG2 PROC
//ALLOC
       EXEC PGM=IEFBR14
        DD DSN=&HLQ..&STAGE2,DISP=(,CATLG),
//DD1
// UNIT=SYSALLDA,
                                       <=== REVIEW THIS VALUE
11
    SPACE=(TRK,(15,5,20)),
     DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040)
11
// PEND
//*
//*
//*
//BLDJCL EXEC ALOCSTG2,
           HLQ='yourhlq.XPAF700', <===== CHANGE
11
           STAGE2=STAGE2
11
```

```
Step 3. Submit INSTLIB($ASMUPD)
```

#### Run the installation jobs

Step 1. Verify and submit STAGE2(IJOB101, IJOB102, IJOB103, IJOB104, IJOB105, IJOB106, IJOB107, and IJOB108)

**Step 2.** Review INSTLIB(\$GENMNT). Refer to the XPAF 6.0 User Documentation, Section 2 and the following sample member for more information

THIS SAMPLE GENMNT MEMBER IS SUPPLIED FOR USE AS A SKELETON FOR THE USER TO COMPLETE USING THE INSTALLATION GUIDE AS A REFERENCE TO THE VALUES OF MACROS AND PARAMETERS. \* \* \* NOTE: MACRO PARAMETERS THAT HAVE DEFAULTS IF LEFT BLANK \* CONTAIN THEIR DEFAULT VALUE IN THIS SAMPLE. \* \* \* THE #GENMNT MACRO IS USED FOR MAINTENANCE GENERATION ONLY \*\*\*\*\* \* #GENMNT JT HOLDFILE=, \* USE WHEN SALE SMPSRCID=SAXXXX, \* SMP SOURCEID \* ELECTRONIC INSTALL HLQ Х \* USE WHEN SMPHOLD REQUIRED Х Х \* \* THE #GENEND MACRO IS USED TO SPECIFY THE TYPE OF STAGE 2 \* \* INSTALLATION OUTPUT THAT IS TO BE GENERATED. \* #GENEND TYPE=MNT \* TYPE OF INSTALLATION GEN \* \* END

- Step 3. Edit INSTLIB(\$ASMUPD) to specify "INSTYPE=\$GENMNT" and submit the job
- Step 4. Verify and submit STAGE2(MPJOB101, MPJOB102, MPJOB103, MPJOB104, and MPJOB105)
- Step 5. Verify and submit STAGE2(UMJOB100 and UMJOB101)

If you are upgrading an XPAF 6.0 system, proceed to step 10.

If you do not use the PCL or PDF Transforms proceed to step 10

- **Step 6.** Review the INSTLIB(\$GENRSC) member and set the resource library allocations to match your existing XPAF library allocations.
- Step 7. Edit INSTLIB(\$ASMUPD) to specify "INSTYPE=\$GENRSC" and submit the job

- **Step 8.** To use the new character mapping variation DCMV60 Edit STAGE2(UPGJ101) to refer to your existing TABLEIB, review the JCL and submit the job
- **Step 9.** Only perform this step if you use either the AFP-to-PCL or AFP-to-PDF transforms. Copy your AFP replica fonts from your existing DFONTLIB to your new XPAF 7.0 DFONTLIB by editing STAGE2(UPGJ102) to refer to your existing DFONTLIB, review the JCL and submit the job.
- **Step 10.** Review you existing XPAF system for any User Exits and/or XJCFSIM tables that you are using and install them in your new XPAF 7.0 system
- **Step 11.** Copy your existing XPAF license string to XINPARM(XINSLSTR)
- **Step 12.** It is strongly recommended that you test the XPAF 7.0 system in a non-production environment before applying the changes to your existing XPAF system. JES commands to dynamically add a Fucntional Subsystem and JES printer to a JES2 system have been provided in chapter 4 of this document.
- **Step 13.** Update your existing XPAF FSS Procedures so that the STEPLIB points to the new XPAF 7.0 XPFLOAD.
- **Step 14.** Generate the STAGE2 Resource jobs, by editing INSTLIB(\$ASMUPD) to specify \$GENRSC and submit the job.
- **Step 15.** If you are upgrading from an existing XPAF 5.0 system, review the optional upgrade jobs, UPGJ101 and UPGJ102, to determine if you wish to run them.



The following steps can be used to dynamically create a new XPAF Functional Subsytem in order to test your XPAF 6.0 installation.

#### Define the subsystem name

Update the IEFSSNxx member in SYS1.PARMLIB to define the subsystem name of the XOSF FSS:

SUBSYS SUBNAME(XOSF)

To dynamically add the subsystem name use the "SETSSI" MVS command:

SETSSI ADD, S=XOSF

Note: In a JES3 environment, the FSS PROC name must be different from any defined sub system name

### APF Authorize the XPAF Load Library

Add the 'hlq.XPFLOAD' and 'hlq.XPFLPA' datasets to the APF list in 'SYS1.PARMLIB(PROGxx):

APF	ADD	DSNAME(hlq.XPFLOAD)	SMS
APF	ADD	DSNAME(hlq.XPFLPA)	SMS

To dynamically authorize the XPAF load library, use the MVS SETPROG command:

SETPROG APF, ADD, DSNAME=hlq.XPFLOAD, SMS

## ACF Authorize the XOSF started task for TCP/IP

The XOSF started task needs ACF authority to uses the Open MVS (OMVS) segment as well as the relevant authority to read the resource datasets.

Ensure that the USERID associated with the XOAF Started Task has an OMVS segment defined to it. You must also be sure that this Started Task is in the STARTED Class or in ICHRIN03

If you intend to use the TCP/IP LPR protocol or BATCH facility, XOSF will also need authority to create datasets using the high level qualifier defined in the OPHLQ XINSXOSF Initialization parameter.

## Preparing a JES2 system

Follow the XPAF User Documentation to update SYS1.PARMLIB(JES2PARM)

The following steps can be used to update JES dynamically:

#### **Step 1.** Define the functional subsystem to JES:

\$ADD FSS(XOSF), PROC=XOSF, AUTOSTOP=NO

**Step 2.** Define the JES printer to JES:

\$ADD PRT123,W=writer,Q=class,FSS=XOSF,MODE=FSS,PRMODE=(LINE,DJDE,PAGE)

Step 3. Use standard JES commands to control the newly defined printer:

```
$SPRT123
$TPRT123,W=XP83,Q=T,CKPTPAGE=50,S=Y,SEPDS=N
$PPRT123
```