XPAF 8.0
Upgrade from XPAF 6.0/XPAF 7.0 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.

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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 6.0 or 7.0 system to XPAF 8.0 simply requires installing the XPAF 8.0 base software and latest maintenance. The XPAF 8.0 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 8.0 system. Refer to the "Installing User Exits" section of the XPAF 8.0 User documentation (Page 3-43, PDF page 115) for additional information.

Copy your existing license key to XPAF 8.0

Copy your existing XPAF license string(s) from the XPAF 6.0 or XPAF 8.0 XINPARM(XINSLSTR) member to your new XPAF 8.0 XINPARM PDS.

XPAF 8.0 will not function without a valid license string.

3.New Features

XPAF 8.0 New Features

The following new features were made available with XPAF 8.0.

AFP character set to Xerox replica font conversion

XOAF has been updated with a new function that will convert IBM AFP character sets at 300dpi into Xerox replica fonts simplifying the use of custom AFP character sets in documents processed by XPAF to LCDS, PCL and PDF.

Splitting AFP data streams when converting to PCL/PDF

A single AFP data stream, containing multiple individual reports, such as account statements for multiple customers, can now be split into separate PDF files at print time.

The data stream can be split using a trigger definition file, that describes the contents of a record that indicates when a split should occur.

Mixed-plex mode for AFP documents converted to LCDS

XOSF now supports the DUPLEXSW=MIXED option that converts AFP documents to LCDS with the correct plex-ing mode, simplex or duplex, for each sheet of paper. This provides printing performance improvements on dual engine printers, such as the Xerox Nuvera 288

PCL socket header functionality

XOSF has been updated to send a FreeFlow Print Server socket header that includes the, optionally user customized, jobname for display on the FreeFlow print server job queue for jobs converted to PCL

.

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 8.0 maintenance kit.

Download the installation files

Step 1. Download the XPAF 8.0 upgrade installation kit 'XPAF80.EI.UPGD.XMTPDS.XMT from the Xerox website at:
http://www.support.xerox.com/support/xpaf/software/enus.html?fileLanguage=en

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 XPAF80EI.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)
 INMR901I Dataset MKEAN.XPAF70EI.XMTPDS from MKEAN on NJEXE01
 INMR906A Enter restore parameters or 'DELETE' or 'END' +
da('yourhlq.XPAF80.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.XPAF80.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 8.0 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
//
```

Generate the Stage Two installation members

Step 1. Update INSTLIB($GENINST). Refer to the XPAF 8.0 User Documentation Section 2 and the following sample member for more information

```
*     THIS SAMPLE GENINST 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 #GENDFLT MACRO IS USED TO SPECIFY DEFAULTS USED BY THE       *
*        INSTALLATION PROCESS AND OTHER NON-SPECIFIC SYSTEMS         *
*        INFORMATION NECESSARY FOR PRODUCT INSTALLATION.             *
```

```
*********************************************************************
*
         #GENDFLT                                                  X
               DUNIT=SYSALLDA,          * DASD UNIT TYPE DEFAULT   X
               DVOLSER=,                * DASD VOLUME SERIAL DEFAULT X
               EIHLQ=your.hlq,          * Electronic Install HLQ   X
               HLQ=your.hlq,            * DEFAULT HIGH LEVEL QUALIFIER X
               LOADSIZE=,               * USER SPECIFIED LOAD LIB SIZE X
               OCLASS=Y,                * DEFAULT PRINTED OUTPUT CLASS X
               OPTIONS=,                * DEFAULT OPTIONS          X
               SMS=YES,                 * SMS NON-VSAM CLASSES     X
               SMSVSAM=YES,             * SMS VSAM CLASSES         X
               SRCLIB=,                 * USER SOURCE LIBRARY      X
              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                                                  X
               JOBCD1='(D498,400),''XPAF 8.0 INSTALL'',',   * JOB CD1  X
               JOBCD2='CLASS=S,MSGCLASS=Y,NOTIFY=userid',   * JOB CD2  X
               JOBCD3=,                 * JOB CARD #3              X
               JOBNAME=userx,           * JOBNAME FOR INSTALL JOBS X
               JOBOPT=,                 * JOB OPTIONS              X
               JOBPARM=,                * JOB PARM CARD            X
               JOBVARY=YES              * VARY JOBNAME
*
*
*
*********************************************************************
*   THE #GENJES MACRO IS USED TO SPECIFY INFORMATION ABOUT THE JOB  *
*        ENTRY SUBSYSTEM TO THE INSTALLATION PROCESS.               *
*********************************************************************
*
         #GENJES                                                   X
               JESFSSID=XOSF,           * PRODUCT FUNCTIONAL SUBSYS ID X
               JESMAC=,                 * JES SOURCE/MACRO LIBRARY X
               JESPROD=JES2,            * JOB ENTRY SUBSYSTEM NAME X
               JESUMAC=,                * USER JES SYSTEM MACLIB   X
               JESLVL=  V1R4M0          * TO INSERT MIDDLE QUAL IN DSN
*
*
*
*
*********************************************************************
*   THE #GENPROD MACRO SPECIFIES THE PARAMETERS USED TO GENERATE    *
*        PRODUCT LIBRARY PLACEMENT, USERMOD NAMES AND OTHER OPTIONS *
*        USED FOR PRODUCT INSTALLATION.                             *
*********************************************************************
*
```

```
         #GENPROD                                                    X
               DUNIT=,                 * PRODUCT DATA SET UNIT SPEC    X
               DVOLSER=,               * PRODUCT DATA SET VOLUME SPEC  X
               HLQ=,                   * DEFAULT PRODUCT HLQ           X
               HLQLPA=,                * OPTION HLQ FOR PRODUCT LPA    X
               HLQMST=,                * OPT HLQ PRODUCT LOAD & LPA    X
               OPTIONS=,               * PRODUCT OPTIONS               X
               PRODUCT=XPAF,           * CODE OF TARGET PRODUCT        X
               PRODVRM=700,            * TARGET PRODUCT VER/RLSE/MOD   X
               SMS=YES,                * PRODUCT SMS NON-VSAM CLASSES  X
               SMSVSAM=YES,            * PRODUCT SMS VSAM CLASSES      X
               UMODJOFT=               * JES TABLE SMP USERMOD NAME
*
*
*
********************************************************************
*   THE #GENLSTR MACRO SPECIFIES THE VALUES NEEDED TO GENERATE THE    *
*        PRODUCT LICENSE STRING.                                      *
********************************************************************
*
         #GENLSTR                                                    X
               CPUID=FF01565A2066,     * CPUID OF PROCESSOR          X
               EXPDATE=10-Mar-2018,    * EXPIRATION Date             X
               FEATURE=XPAF,           * FEATURE LICENSE IS FOR      X
               LSTRING=BF5E1B28860BDE368606D9481B6F                  X
                       * LICENSE STRING FOR THIS FEATURE
*                                                                     *
*
*
********************************************************************
*   THE #GENSMP MACRO IS USED TO SPECIFY INFORMATION ABOUT THE SMP/E  *
*        ENVIRONMENT TO THE INSTALLATION PROCESS.                     *
********************************************************************
*
         #GENSMP                                                     X
               DUNIT=,                 * SMP UNIT TYPE FOR ALLOC     X
               DVOLSER=,               * SMP VOLSER FOR ALLOC        X
               DWORK=,                 * SMP TEMPORARY WORK UNIT     X
               HLQ=,                   * SMP NON-VSAM DS HLQ         X
               HLQVSAM=,               * SMP VSAM DATA SET HLQ       X
               MTS=yourhlq.SMPMTS|NO,  * OPTIONAL MTS LIBRARY NAME   X
               RELEASE=,               * SMP RELEASE LEVEL (5 OR >)  X
               SMS=YES,                * SMP SMS NON-VSAM CLASSES    X
               SMSVSAM=YES,            * SMP SMS VSAM CLASSES        X
               USERHLQ=,               * USER SMP HIGH LEVEL QUALIFIERSX
               USEROPT=,               * USER SMP DATA SET OPTION    X
               VSMVOL=                 * VOLSER FOR VSAM CSI DATA SET
*
*
*
********************************************************************
*   THE #GENEND MACRO IS USED TO SPECIFY THE TYPE OF STAGE 2          *
*        INSTALLATION OUTPUT THAT IS TO BE GENERATED.                 *
********************************************************************
*
         #GENEND                                                     X
```

```
               STAGE2=YES,             * USE STAGE 2 LIBRARY          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
//DD1       DD  DSN=&HLQ..&STAGE2,DISP=(,CATLG),
//     UNIT=SYSALLDA,                          <=== REVIEW THIS VALUE
//     SPACE=(TRK,(15,5,20)),
//     DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040)
//  PEND
//*
//*
//*
//BLDJCL EXEC ALOCSTG2,
//             HLQ='yourhlq.XPAF700',          <===== CHANGE
//             STAGE2=STAGE2
```

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                                                   X
               HOLDFILE=,              * USE WHEN SMPHOLD REQUIRED     X
               SMPSRCID=RAxxxx,        * SMP SOURCEID                  X
               EIHLQ=                  * ELECTRONIC INSTALL HLQ
*
*
*
*********************************************************************
*   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)

Step 6. Review you existing XPAF system for any User Exits and/or XJCFSIM tables that you are using and install them in your new XPAF 8.0 system

Step 7. Copy your existing XPAF license string to XINPARM(XINSLSTR)

Step 8. It is strongly recommended that you test the XPAF 8.0 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 9. Update your existing XPAF FSS and XOAF Batch procedures so that the STEPLIB points to the new XPAF 8.0 XPFLOAD.

5. Preparing a test FSS

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
```

Preparing a JES3 system

Update SYS1.PARMLIB(JES3PARM) to define the FSS and Printers

NOTE: On a JES3 system, the FSS and PROC name, must NOT be the same name as a defined sub system

```
*********************************************************************
*
* FSSDEFs for Printers l
*
*********************************************************************
FSSDEF,TYPE=WTR,FSSNAME=XP01,PNAME=XP01
*********************************************************************
*
*********************************************************************
*                       *-----------------------------------------*
*                       | Printer Definitions for FSSDEF XP01.    |
*                       *-----------------------------------------*
*
DEVICE,MODE=FSS,FSSNAME=XP01,DTYPE=PRTAFP1,JNAME=PRT123,
       NPRO=NO,PM=(PAGE,LINE,DJDE),WC=(class),WS=(CL,D),
       DGROUP=destgroup,DGRPONLY=YES,
       JUNIT=(,XE06,,OFF)
*
```

To update JES3 dynamically, copy the new parameters in to a separate member of SYS1.PARMLIB and then use the "*MODIFY,CONFIG,ADD" command to dynamically change the JES3 configuration

```
*F,CONFIG,ADD=JES3XPAF
```