

Migration Guide

IBM IMS Fast Path Solution Pack for z/OS 2.1

Migrating from Fast Path Basic Tools to Fast Path
Advanced Tool

Second Edition (August 2025)

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1. Introduction

As stated in the announcement letter of IMS Fast Path Solution Pack for z/OS 2.1, IBM is stabilizing the Fast Path Basic Tools; discontinuance of support for these tools may be announced at a future date. Early migration from Fast Path Basic Tools (FPB) to Fast Path Advance Tool (FPA) is strongly recommended.

This guide summarizes instructions and considerations to help you migrate from FPB to FPA smoothly.

If you want to migrate from FPB to Fast Path Online Tools (FPO) and need our support, open a case to IBM.

1.1 Scope of impact

The Fast Path Basic (FPB) Tools impacted by this Statement of Direction include the following:

- DEDB Unload (FABCUR1)
- DEDB Reload (FABCUR3)
- DEDB Pointer Checker (FABADA1, FABADA3, FABADA4, FABADA5)
- DEDB Tuning Aid (FABBME1, FABBME3, FABADA5)

The following supplementary utilities are not part of the FPB Tools, so they are **not** impacted by the Statement of Direction:

- SDEP Space Utilization utility (FABADA7, FABADA8 and FABADA9)
- Database Definition Record Create utility (FABCUR5)
- DEDB Reload Segment Data Set Create utility (FABCUR6)
- DEDB Unloaded Segment Data Set Retrieve utility (FABCUR7)
- HD To DEDB Unload Data Set Conversion utility (FABCUR8)
- DEDB Unload Conversion utility (FABCUR9)

2. Functional differences between FPB and FPA

The following table lists the FPA functions. For those that have an equivalent FPB function, the FPB function name is also listed.

DEDB maintenance task	Solution function	FPB tool	FPA function (HFPMAIN0)
Managing space	Unload	DEDB Unload (FABCUR1)	Unload
	Reload	DEDB Reload (FABCUR3)	Reload
	Single-step shadow area restructure	N/A	Change
	In-place area reorganization	N/A	Reorg
Analyzing space utilization	Integrity verification and space analysis	DEDB Pointer Checker (FABADA1, FABADA3, FABADA4, FABADA5)	Analyze
	Print DMAC	N/A	DMAC Print
Tuning space and randomizers		DEDB Tuning Aid (FABBME1, FABBME3, FABADA5)	Tune
Extracting segment data		N/A	Extract
Managing IMS FP secondary indexes (FPSI)	FPSI building	N/A	Build Index
	FPSI synchronization	N/A	Resync
	FPSI space reclaim	N/A	Freespace Reclaim
Initializing area	Area initialization	N/A	Initialize

FPA has the following advantages over FPB:

- Simpler JCL
 - One job step
 - Internal sort
 - Same program (PGM=HFPMAN0) for all FPA functions
 - Minimizes DD statements by dynamically allocating work data sets and output data sets
- Additional functions
 - Supports Reorg, Extract, Initialize, DMAC Print, and multiple FPSI maintenance functions that FPB does not support
 - Runs unload and reload in a single job step (FPA Change function)
 - Provides integrated functions:
 - Runs pointer check after reload or reorganization (FPA Analyze function)
 - Generates image copies (via IBM IMS High Performance Image Copy, included in IMS Fast Path Solution Pack)
 - Creates an RDE (via IBM IMS Library Integrity Utilities, included in IMS Fast Path Solution Pack)
 - Stores reports and sensor data in IMS Tools Knowledge Base (ITKB) repositories (via separate product IBM IMS Tools Base)
- Better performance
 - Internal sort
 - Uses Media Manager calls
 - Uses data space
 - Processes multiple DEDB areas concurrently
- Better usability
 - Fewer DD statements to specify: Supports keywords for specifying data set names and masks (IDSNMASK and ODSNMASK keywords)
 - Syntax checking capability: Verifies the syntax and parameters of the command without running actual FPA functions (SCAN=YES on GLOBAL command)
 - Consolidate site default options into one module: Site default options for all FPA functions are defined in one site default module (Sample JCL HFPCZZMJ provided in the SHFPSAMP data set)
 - Provides more information:
 - DBD Definition Report to easily view DBD source
 - More diagnostic information to help troubleshoot problems

3. Migrating from FPB Unload to FPA Unload

FPA Unload supports the following features that FPB Unload does not support:

- Supports [checkpoint restart option](#) (RESTART keyword)
- Supports up to 9999 areas
- Supports unload from image copy
- Optionally generates image copies (ICOUT keyword)
- Supports [integration with IMS Library Integrity Utilities](#) for checking the contents of the DMB that IMS is using against the registered DMB information
- Supports user-defined header and trailer records (USER_RECORD subcommand)
- Optionally skips the segment edit/compression routine process (EDITCOMP_SKIP keyword)
- Optionally stores reports in ITKB repositories (ITKBSRVR keyword)
- Optionally adds the FILSZ parameter to the SORT control statement to prevent job failure due to insufficient capacity of sort work datasets (SORTOPT_FILSZ keyword)

FPA Unload does not support the following features that FPB Unload supports:

- Change DBD name (NEWDBDNM control statement)
- Generate secondary unloaded file (DURDzzzE or XDzzzzzE DD)
- Unload only the specified segment records (SEGMCCTL control statement, EXzzzzzO or EXzzzzzE DD)

Follow the instructions in the following topics to migrate from FPB Unload to FPA Unload.

3.1 PGM name

Change FPB Unload PGM name FABCUR1 to FPA PGM name HFPMAIN0.

3.2 EXEC parameters

The following table shows the corresponding EXEC parameters for FPB Unload and FPA Unload. Specify EXEC parameters for FPA Unload by referring to the following table.

FPB Unload	FPA Unload
DBRC	DBRC keyword (GLOBAL command)
AREC	AREA_INFORMATION_RECORD keyword (UNLOAD command)
DBRCGRP	No change required
IMSID	No change required
IMSPLEX	No change required

3.3 DD statements

The following table shows the corresponding DD statements for FPB Unload and FPA Unload. Specify DD statements for FPA Unload by referring to the following table.

FPB Unload	FPA Unload
JOBLIB or STEPLIB	No change required
SYSIN	HFPSYSIN
<i>areaxxx</i> or <i>adsxxx</i>	<i>addnnname</i> or <i>areaname</i>
OLDACB	IMSACB
NEWACB	No change required
RMODLIB	NEWRESLB
RECON1/2/3	No change required
EXITLIB	No change required
IMSDALIB	No change required
SYSPRINT	HFPPRINT
DURAUDIT	HFPRPTS
DURDBDFN	Not supported FPA Unload does not use this data set. FPA Reload obtains DBD information from IMSACB DD.
DURDzzzO or XDzzzzzO	OAREAnnn or OARnnnnnn
DURDzzzE or XDzzzzzE	Not supported FPA Unload does not generate secondary unloaded file.
DURSzzzO or XSzzzzzO	Not supported FPA Unload does not write SORT control statements; SORT control statements are generated and used internally.
UR1TOTAL	HFPTOTAL
EXzzzzzO or EXzzzzzE	OAREAnnn or OARnnnnnn To write only selected segments to the output file, use FPA Extract.

3.4 Utility control statements

The following table shows the corresponding utility control statements for FPB Unload and FPA Unload. Specify control statements for FPA Unload by referring to the following table.

FPB Unload	FPA Unload
DBDNAME statement	DBD keyword (UNLOAD command)
REORG keyword (DBDNAME statement)	Not supported FPA runs in REORG mode if IMSACB DD is specified without NEWACB DD.
NEWDBDNM keyword (DBDNAME statement)	Not supported FPA does not support changing DBD names.
HIERCHNG keyword (DBDNAME statement)	Not supported FPA determines the processing mode by comparing DMB between IMSACB and NEWACB.
RMODTYPE keyword (DBDNAME statement)	Not supported FPA does not require a randomizer type to be specified.
STATS keyword (DBDNAME statement)	Not supported FPA does not generate VSAM buffer statistics nor write-latch-contention statistics.
COMPRESS keyword (DBDNAME statement)	COMPRESS keyword (UNLOAD command)
SDEP keyword (DBDNAME statement)	SDEP keyword (UNLOAD command)
ACCESS keyword (DBDNAME statement)	Not supported FPA uses the DFSMS Media Manager to read data from ADS.
PAD keyword (DBDNAME statement)	PAD keyword (UNLOAD command)
AREACTL statement	IAREA keyword (UNLOAD command)
FILECTL statement	FILECTL subcommand
TASKCTL statement	ITASKCTL keyword (UNLOAD command) ITASKCTL specifies the number of unload subtasks. The number of IOVF buffers and the BASE/DOVF buffer area size parameters are not needed because FPA Unload calculates them.
FORMAT statement	FORMAT keyword (UNLOAD command)
EXITRTN statement	EXITRTN keyword (UNLOAD command)
LOADCTL statement	SEGMENT and INSERT_LIMIT_COUNT keywords (LOADCTL subcommand of FPA Reload)
LOADPLACE statement	LOCATION keyword (LOADCTL subcommand of FPA Reload) FPA Unload supports DOVF and IOVF only.
PTRERROR statement	PTRCHK keyword (UNLOAD command)

KEYSEQERROR statement	KEYSEQCHK keyword (UNLOAD command)
KEYCHGCHECK statement	KEYCHGCHK keyword (UNLOAD command)
LRECL statement	LRECL keyword (UNLOAD command)
SEGMCTL statement	Not supported FPA Unload does not support writing only the specified segment records.
IMSCATHLQ statement	IMSCATHLQ keyword (GLOBAL command)
IMSCATACB_INPUT statement	IMSCATACB_INPUT keyword (GLOBAL command)
IMSCATACB_OUTPUT statement	IMSCATACB_OUTPUT keyword (UNLOAD command)

For other FPA Unload subcommands and keywords, see [Utility control statements for the Unload function](#).

3.5 Site default options

The following table shows the corresponding site default options for FPB Unload and FPA Unload. Specify site default options for FPA Unload by referring to the following table.

FPB Unload (FABCOPI1M)	FPA Unload
TYPRUN keyword	Not supported FPA runs in: - REORG mode if IMSACB DD is specified without NEWACB DD. - CHANGE mode if both IMSACB and NEWACB DDs are specified.
DBRC keyword	Not supported Whether FPA connects to the DBRC interface is determined based on the IMS load module library.
STATS keyword	Not supported FPA does not generate VSAM buffer statistics nor write-latch-contention statistics.
COMPRESS keyword	COMPRESS keyword (UNLOAD command)
SDEP keyword	SDEP keyword (UNLOAD command)
ACCESS keyword	Not supported FPA uses the DFSMS Media Manager to read data from ADS.
PAD keyword	PAD keyword (UNLOAD command)
FORMAT keyword	FORMAT keyword (UNLOAD command)
PTRERROR keyword	PTRCHK keyword (UNLOAD command)
KEYSEQERROR keyword	KEYSEQCHK keyword (UNLOAD command)
KEYCHGCHECK keyword	KEYCHGCHK keyword (UNLOAD command)
LRECL keyword	LRECL keyword (UNLOAD command)
LOADPLACE keyword	LOCATION keyword (LOADCTL subcommand of FPA Reload) FPA Unload supports DOVF and IOVF only.
AREC keyword	AREA_INFORMATION_RECORD keyword (UNLOAD command)
IMSCATHLQ keyword	IMSCATHLQ keyword (GLOBAL command)
IMSCATACB_INPUT keyword	IMSCATACB_INPUT keyword (GLOBAL command)
IMSCATACB_OUTPUT keyword	IMSCATACB_OUTPUT keyword (UNLOAD command)

3.6 Reports

The following table shows the corresponding reports for FPB Unload and FPA Unload.

FPB Unload	FPA Unload
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Unload Audit Control report	Unloaded report Reloaded report Output File report
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FPA Unload also generates the following reports:

- Audit report
- Processing report
- DBD Definition report
- CI Map/CI Dump report (when CISNAP=YES is specified and pointer errors are detected)
- Site and System Default report (when the site default options are specified)
- Process Summary report
- Image Copy Output report (when ICOUT=YES is specified)

3.7 Example of JCL conversion

The following table shows the FPB Unload JCL and the FPA Unload JCL that provide the equivalent unloading functionality.

FPB Unload JCL	FPA Unload JCL
<pre>//FABCUR1 EXEC PGM=FABCUR1 //STEPLIB DD DISP=SHR,DSN=IMSTJP.FPS210.SHFFPLMD0 // DD DISP=SHR,DSN=IMS.IFJ1.PGMLIB //OLDACB DD DISP=SHR,DSN=IMSDEV.FPT.JCLCONV.IMS15.ACBLIB //SYSPRINT DD SYSOUT=* //DURAUDIT DD SYSOUT=* //DURDBDFN DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DURDBDFN, // DISP=(NEW,CATLG,CATLG),SPACE=(TRK,(1,1,10)) //DURS0010 DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DURS0010, // DISP=(NEW,CATLG,CATLG),SPACE=(TRK,(1,1,10)) //DURS0020 DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DURS0020, // DISP=(NEW,CATLG,CATLG),SPACE=(TRK,(1,1,10)) /*----- INPUT ADS >>>-----* //DB30AR0 DD DISP=SHR,DSN=IMSDEV.FPT.JCLCONV.DB30AR0.ADS1 //DB30AR1 DD DISP=SHR,DSN=IMSDEV.FPT.JCLCONV.DB30AR1.ADS1 /*----- OUTPUT USR >>>-----* //DURD0010 DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DB30AR0,DISP=SHR //DURD0020 DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DB30AR1,DISP=SHR /*----- SYSIN CARD >>>-----* //SYSIN DD * DBDNAME=DEDBJN30 AREACTL=ALL FORMAT=DBT FILECTL=1,1 FILECTL=2,2 TASKCTL=(2) /*</pre>	<pre>//HFP EXEC PGM=HFPMAIN0 //STEPLIB DD DISP=SHR,DSN=IMSTJP.FPS210.SHFFPLMD0 // DD DISP=SHR,DSN=IMS.IFJ1.SDFSRESL // DD DISP=SHR,DSN=IMS.IFJ1.PGMLIB //IMSACB DD DISP=SHR,DSN=IMSDEV.FPT.JCLCONV.IMS15.ACBLIB /*----- SYSIN CARD >>>-----* //HFP SYSIN DD * GLOBAL DBRC=NO UNLOAD DBD=DEDBJN30, IAREA=ALL, FORMAT=DBT, ITASKCTL=2, IDSNMASK='IMSDEV.FPT.JCLCONV.&AREA.ADS1', ODSNMASK='IMSDEV.FPT.JCLCONV.FPA.UNL.&AREA' /*</pre>

For more FPA Unload JCL examples, see [Examples for the Unload function](#).

4. Migrating from FPB Reload to FPA Reload

FPA Reload supports the following features that FPB Reload does not support:

- Supports [checkpoint restart option](#) (RESTART keyword)
- Supports up to 9999 areas
- Supports [integration with IMS Library Integrity Utilities](#) for checking the contents of the DMB that IMS is using against the registered DMB information
- Optionally performs pointer checking after reload (PTRCHKLVL keyword)
- Optionally stores reports and sensor data in ITKB repositories (ITKBSRVR and SENSOR keywords)
- Optionally defines reloaded ADS internally (ALLOCATE subcommand)
- Optionally adds the FILSZ parameter to the SORT control statement to prevent job failure due to insufficient capacity of sort work datasets (SORTOPT_FILSZ keyword)

FPA Reload does not support the following feature that FPB Reload supports:

- Check the validity of RAP data in the prefix part of the unloaded segment record by using the result of randomizer call

Follow the instructions in the following topics to migrate from FPB Reload to FPA Reload.

4.1 PGM name

Change FPB Reload PGM name FABCUR3 to FPA PGM name HFPMAIN0.

4.2 EXEC parameters

The following table shows the corresponding EXEC parameters for FPB Reload and FPA Reload. Specify EXEC parameters for FPA Reload by referring to the following table.

FPB Reload	FPA Reload
DBRC	DBRC keyword (GLOBAL command)
AREC	AREA_INFORMATION_RECORD keyword (RELOAD command)
DBRCGRP	No change required
GSGNAME	No change required
IMSPLEX	No change required

4.3 DD statements

The following table shows the corresponding DD statements for FPB Reload and FPA Reload. Specify DD statements for FPA Reload by referring to the following table.

FPB Reload	FPA Reload
JOBLIB or STEPLIB	No change required
SYSIN	HFPSYSIN
ACBLIB	IMSACB
RMODLIB	IMSRESLB
RECON1/2/3	No change required
EXITLIB	No change required
IMSDALIB	No change required
DURDBDFN	Not supported FPA Reload retrieves DMB from the ACBLIB library (IMSACB DD).
DURDATA	IAREAnnn or IARnnnnn
DURIWRK	Not supported FPA Reload uses data space to control how IOVF is created and used.
DURSDWRK	Not supported FPA Reload uses data space to control SDEP CIs.
SYSPRINT	HFPPRINT
DURAUDIT	HFPRPTS
areaxxx or adsxxx	addnnname or areaname
HDIAUDIT	ICEPRINT
HDLxxxP or XLxxxxP	Not supported The image copy output data set is determined by HPIC specification (ICEIN DD of IMS HP Image Copy).
HDLxxxS or XLxxxxS	Not supported The image copy output data set is determined by HPIC specification (ICEIN DD of IMS HP Image Copy).
ERRORSEG	HFPSEQER To generate the sequence error segment data records in this data set, use the FPA Unload function and specify KEYSEQCHK=BYPASS or KEYSEQCHK=WARNING.
IMS	Not supported FPA Reload retrieves DMB from the ACBLIB library (IMSACB DD).
MSGOUT	Not supported Messages issued by FPA Analyze (invoked by FPA Reload) are written to HFPPRINT.
REPORTS	Not supported Reports generated by FPA Analyze (invoked by FPA Reload) are stored in HFPRPTS.
SNAPDPIT	HFPASNAP

SORTIN	Not supported FPA Reload internally sorts segment records.
SORTOUT	Not supported FPA Reload internally sorts segment records.
SORTWK nn	Not supported FPA Reload internally sorts segment records.
SYSOUT	Not supported FPA Reload dynamically allocates this data set.

4.4 Utility control statements

The following table shows the corresponding utility control statements for FPB Reload and FPA Reload. Specify control statements for FPA Reload by referring to the following table.

FPB Reload	FPA Reload
DBDNAME statement	DBD keyword (RELOAD command)
IOVFBUF statement	Not supported FPA Reload uses data space to control how IOVF is created and used.
STARTAREA statement	Not supported FPA Reload determines the area to restart from.
TBENTRY statement	Not supported FPA Reload estimates the number of entries in the internal segment parentage table.
EXITRTN statement	EXITRTN keyword (RELOAD command)
IMGCPY statement	ICOUT keyword (RELOAD command)
ICHASH statement	PTRCHKLVL=QUICK keyword (RELOAD command) FPA Reload invokes FPA Analyze to do hash check against the reloaded ADS instead of image copy data sets.
ICCOMPRESS statement	COMP and COMPRTN keywords (ICEIN DD of IMS HP Image Copy)
KEYSEQERROR statement	KEYSEQCHK keyword (RELOAD command)
KEYCHGCHK statement	KEYCHGCHK keyword (RELOAD command)
SDEPRELOCATE statement	RELOCATE_SDEP keyword (UNLOAD command)
IMSCATHLQ statement	IMSCATHLQ keyword (GLOBAL command)
IMSCATACB_INPUT statement	IMSCATACB_INPUT keyword (GLOBAL command)
RAPERROR statement	Not supported FPA Reload does not check the validity of RAP data in the prefix part of the unloaded segment record.

For other FPA Reload subcommands and keywords, see [Utility control statements for the Reload function](#).

4.5 Site default options

The following table shows the corresponding site default options for FPB Reload and FPA Reload. Specify site default options for FPA Reload by referring to the following table.

FPB Reload (FABCO3M)	FPA Reload
IOVFBUF keyword	Not supported FPA Reload uses data space to control how IOVF is created and used.
IMGCPY keyword	ICOUT keyword (RELOAD command)
ICHASH keyword	PTRCHKLV=QUICK keyword (RELOAD command) FPA Reload invokes FPA Analyze to do hash check against the reloaded ADS instead of image copy data sets.
ICCOMPRESS keyword	COMP and COMPRTN keywords (HPIC keywords)
DBRC keyword	Not supported Whether FPA connects to the DBRC interface is determined based on the IMS load module library.
KEYSEQERROR keyword	KEYSEQCHK keyword (RELOAD command)
SDEPRELOCATE keyword	RELOCATE_SDEP keyword (UNLOAD command)
KEYCHGCHECK keyword	KEYCHGCHK keyword (RELOAD command)
RAPERROR keyword	Not supported FPA Reload does not check the validity of RAP data in the prefix part of the unloaded segment record.
IMSCATHLQ keyword	IMSCATHLQ keyword (GLOBAL command)
IMSCATACB_INPUT keyword	IMSCATACB_INPUT keyword (GLOBAL command)

4.6 Reports

The following table shows the corresponding reports for FPB Reload and FPA Reload.

FPB Reload	FPA Reload
Reload Audit Control report	Reloaded report

FPA Reload also generates the following reports:

- Audit report
- Processing report
- DBD Definition report
- Input File report
- Site and System Default report (when the site default options are specified)
- Process Summary report
- Image Copy Output report (when ICOUT=YES is specified)
- Sensor Data Statistics report (when SENSOR=YES is specified)
- RBA of Used IOVF CI report (when IOVFCI_RBA_REPORT=YES is specified)
- Reports related to the Analyze process (when PTRCHKLV=QUICK or FULL is specified)

4.7 Example of JCL conversion

The following table shows the FPB Reload JCL and the FPA Reload JCL that provide the equivalent reloading functionality.

FPB Reload JCL	FPA Reload JCL
<pre>//FABCUR3 EXEC PGM=FABCUR3 //STEPLIB DD DISP=SHR,DSN=IMSTJP.FPS210.SHFPLMD0 // DD DISP=SHR,DSN=IMS.IFJ1.PGMLIB //ACBLIB DD DISP=SHR,DSN=IMSDEV.FPT.JCLCONV.IMS15.ACBLIB //DURAUDIT DD SYSOUT=* //SYSPRINT DD SYSOUT=* /*----- INPUT USR -----* //DURDATA DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DB30AR0,DISP=SHR // DD DSN=IMSDEV.FPT.JCLCONV.FPB.UNL.DB30AR1,DISP=SHR /*----- OUTPUT ADS -----* //DB30AR0 DD DSN=IMSDEV.FPT.JCLCONV.DB30AR0.REL.ADS1,DISP=SHR //DB30AR1 DD DSN=IMSDEV.FPT.JCLCONV.DB30AR1.REL.ADS1,DISP=SHR //SYSIN DD * DBDNAME=DEDBJN30 /*</pre>	<pre>//HFP EXEC PGM=HFPMAIN0 //STEPLIB DD DISP=SHR,DSN=IMSTJP.FPS210.SHFPLMD0 // DD DISP=SHR,DSN=IMS.IFJ1.SDFSRESL // DD DISP=SHR,DSN=IMS.IFJ1.PGMLIB //IMSACB DD DISP=SHR,DSN=IMSDEV.FPT.JCLCONV.IMS15.ACBLIB //HFPYSIN DD * GLOBAL DBRC=NO RELOAD DBD=DEDBJN30, ITASKCTL=2, IDSNMASK='IMSDEV.FPT.JCLCONV.FPA.UNL.&AREA', ODSNMASK='IMSDEV.FPT.JCLCONV.&AREA.REL.ADS1' /*</pre>

For more FPA Reload JCL examples, see [Examples for the Reload function](#).

5. Migrating from FPB Pointer Checker to FPA Analyze

FPA Analyze supports the following features that FPB Pointer Checker does not support:

- Runs the DEDB integrity validation in full or quick mode, and generates complete analysis reports in a single job step
- Processes multiple areas of a DEDB in parallel in a single job step
- Supports up to 9999 areas
- Optionally generates image copies (ICOUT keyword)
- Optionally stores reports and sensor data in ITKB repositories (ITKBSRVR and SENSOR keywords)
- Optionally adds the FILSZ parameter to the SORT control statement to prevent job failure due to insufficient capacity of sort work datasets (SORTOPT_FILSZ keyword)
- Optionally verifies integrity between DEDB and secondary index databases (INDEXDBD keyword)

FPA Analyze does not support the following features that FPB Pointer Checker supports:

- Support image copy data sets generated by Image Copy 2 utility as input
- Print a list of all pointers that point to each target RBA that DAR4USER DD specifies

Follow the instructions in the following topics to migrate from FPB Pointer Checker to FPA Analyze.

5.1 PGM name

1. Change FPB Pointer Checker PGM name FABADA1 to FPA PGM name HFPMAIN0.
2. Delete other job steps. Other job steps are not needed because FPA Analyze performs equivalent functions in a single job step.

5.2 EXEC parameters

The following table shows the corresponding EXEC parameters for FPB Pointer Checker and FPA Analyze. Specify EXEC parameters for FPA Analyze by referring to the following table.

FPB Pointer Checker	FPA Analyze
FABADA1 program	HFPMAIN0 program
DBRC	DBRC keyword (GLOBAL command)
DBRCGRP	No change required
FORCE	Not supported Use DBRC=IGNORE (GLOBAL command) to bypass the DBRC process when DBRC=FORCE is set for IMS. This allows FPA Analyze to continue processing even if area status is 'RECOVERY NEEDED' or if the database is being accessed by other IMS online programs.
IMSPLEX	No change required
FABADA4 program	N/A
blank	Not supported
DAR4ERRS	FPA Analyze dynamically allocates intermediate segment record data sets.
DAR4USER	
BOTH	

5.3 DD statements

The following table shows the corresponding DD statements for FPB Pointer Checker and FPA Analyze. Specify DD statements for FPA Analyze by referring to the following table.

FPB Pointer Checker	FPA Analyze
FABADA1 program	HFPMAIN0 program
JOBLIB or STEPLIB	No change required

SYSIN	HFPSYSIN
ACBLIB	IMSACB
IMSACBA	No change required
IMSACBB	No change required
MODSTAT	No change required
MODSTAT2	No change required
RECON1/2/3	No change required
DFSUDUMP	<i>addnname</i> or <i>areaname</i>
DARVSAM	<i>addnname</i> or <i>areaname</i>
areaname	<i>addnname</i> or <i>areaname</i>
RMODLIB	JOBLIB or STEPLIB The library in which the IMS HP Image Copy compression routine resides must be added to JOBLIB or STEPLIB concatenation. The library in which the segment edit/compression routines reside must be added to JOBLIB or STEPLIB concatenation, or IMSRESLB.
IMSDALIB	No change required
SYSPRINT	HFPPRINT
REPORTS	HFPRPTS
DAR12O or DAR12	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
DAR13SO or DAR13S	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SORT12	Not supported FPA Analyze internally sorts segment records.
SORT3CS	Not supported FPA Analyze internally sorts segment records.
SNAPPIT	HFPASNAP
DAR3CSO or DAR3CS	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
FABADA3 program	N/A
SYSIN	HFPSYSIN
DAR13SI or DAR13S	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
DAR3CSI or DAR3CS	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SYSPRINT	HFPPRINT
DAR13O or DAR13R	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SORTR13 or SORT13R	Not supported FPA Analyze internally sorts segment records.

DAR4ERRS	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SORT4CTL	Not supported FPA Analyze internally sorts segment records.
FABADA4 program	N/A
ACBLIB	IMSACB
DFSUDUMP	<i>addnname</i> or <i>areaname</i>
DARVSAM	<i>addnname</i> or <i>areaname</i>
DAR4ERRS	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
DAR4USER	Not supported FPA Analyze does not print a list of all pointers that point to each target RBA that DAR4USER DD specifies.
DAR13SI	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SORTIN	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SORT3CS	Not supported FPA Analyze internally sorts segment records.
SYSOUT	Not supported FPA Analyze dynamically allocates this data set.
SYSPRINT	HFPFPRINT
REPORTS	HFPASNAP
RMODLIB	JOBLIB or STEPLIB The library in which the IMS HP Image Copy compression routine resides must be added to JOBLIB or STEPLIB concatenation.
SNAPPIT	HFPASNAP
SORTOUT	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
SORTWKnn	Not supported FPA Analyze internally sorts segment records.
FABADA5 program	N/A
DAR12I or DAR12	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
DAR13I or DAR13R	Not supported FPA Analyze dynamically allocates intermediate segment record data sets.
PARMCTL	HFPAPARM
THRCTL	Not supported FPA Analyze supports the THRESHOLD subcommand to specify thresholds.

UOWCTL	HFPAUOWC
SYSPRINT	HFPPRINT
REPORTS	Not supported FPA Analyze generates analysis reports in the data set that the REPORTDD keyword of the REPORT subcommand specifies. (Default is HFPRPTS.)
UOWRPT	Not supported FPA Analyze generates the UOW report to the data set that the REPORTDD keyword of the REPORT subcommand specifies. (Default is HFPRPTS.)
UOWEXCP	Not supported FPA Analyze generates the UOW Exception report to the data set that the REPORTDD keyword of the REPORT subcommand specifies. (Default is HFPRPTS.)
REORGCTL	HFPARERG
HISTORY	HFPAHST
HISTORY2	HFPAHST2
LARGEREC	Not supported FPA Analyze generates the Largest Database Records report, but it does not write largest database records to a data set.

5.4 Utility control statements

The following table shows the corresponding utility control statements for FPB Pointer Checker and FPA Analyze. Specify control statements for FPA Analyze by referring to the following table.

FPB Pointer Checker		FPA Analyze
FABADA1 SYSIN		HFPSYSIN
DBDNAME statement		DBD keyword (ANALYZE command)
AREA statement		IAREA keyword (ANALYZE command)
TYPRUN statement		PTRCHKLVL keyword (ANALYZE command)
	TYPRUN=RPT statement	PTRCHKLVL=FULL keyword (ANALYZE command) Specify REPORT subcommand if FABADA3.SYSIN and FABADA5.PARMCTL are used for FPB.
	TYPRUN=PTRALL statement	PTRCHKLVL=FULL keyword (ANALYZE command) Do not specify the REPORT subcommand if FABADA3.SYSIN is used for FPB.
	TYPRUN=FS statement	PTRCHKLVL=QUICK keyword (ANALYZE command) Specify REPORT subcommand if FABADA3.SYSIN and FABADA5.PARMCTL are used for FPB.
	TYPRUN=PTRSCAN statement	PTRCHKLVL=QUICK keyword (ANALYZE command)
	TYPRUN=MODEL statement FABADA1 appends the root key value to the segment information records for: - Database tuning with DEDB Tuning Aid - Generating the Largest Database Records report	Not supported To tune the database, use FPA Tune. Specify REPORT subcommand if FABADA5.PARMCTL is used for FPB. To generate the Largest Database Records report without database tuning, use FPA Analyze. Specify PTRCHKLVL=FULL and LARGEREC_REPORT=YES.
	TYPRUN=DATA statement	Not supported
TYPRUN=DATACMP statement		Not supported
VSAM statement		Not supported

	FPA Analyze determines whether to use VSAM data sets or image copy data sets as input.
SDEP statement	SDEPCHKLVL keyword (ANALYZE command)
OVRD statement	Not supported FPA Analyze does not check the discrepancy between the DBD member date (the date of ACBGEN for the DBD) and the image copy date.
STATS statement	Not supported FPA Analyze does not generate run totals and statistics.
TBENTRY statement	Not supported FPA Analyze estimates the number of entries in the SDEP table.
SPTFALL statement	Combination of PTRCHKLVL=QUICK and SDEPCHKLVL=FULL keywords (ANALYZE command)
IMSCATHLQ statement	IMSCATHLQ keyword (GLOBAL command)
IMSCATACB_INPUT statement	IMSCATACB_INPUT keyword (GLOBAL command)
FABADA3 SYSIN	HFPSYSIN
TBENTRY statement	Not supported FPA Analyze estimates the number of entries in the UOW table.
STATS statement	Not supported FPA Analyze does not generate run totals and statistics.
FABADA4 DAR4USER	HFPSYSIN
AREANUM statement	Not supported FPA Analyze does not print a list of all pointers that point to specified target RBA.
RBA statement	Not supported FPA Analyze does not print a list of all pointers that point to specified target RBA.
FABADA5 PARMCTL	HFPAPARM
SYNTBL statement	SYNTBL keyword

RBASEFS statement		RBASEFS keyword
RDOVFFS statement		RDOVFFS keyword
UDOVFFS statement		UDOVFFS keyword
MAXLREC statement		LARGEREC_COUNT keyword (REPORT subcommand) The first parameter of the LARGEREC_COUNT keyword specifies the number of reporting entries for the Largest Database Records report.
ARDIGIT statement		ARDIGIT keyword
RGROUP statement		RGROUP keyword
FABADA5 THRCTL		HFPSYSIN
1	Value T	N/A
2-5	Synonym Chain Length	SYN_PCT_LEN keyword (THRESHOLD subcommand)
6	Not used	N/A
7-9	Average Synonym Chain Length	SYN_LEN_AVG keyword (THRESHOLD subcommand) FPB Pointer Checker requires an implied decimal point before the third digit. FPA Analyze supports integer only.
10-11	Maximum Synonym Chain Length	SYN_MAX keyword (THRESHOLD subcommand)
12	Not used	N/A
13-15	Average Root I/O	ROOTIO_AVG keyword (THRESHOLD subcommand) FPB Pointer Checker requires an implied decimal point before the third digit. FPA Analyze supports integer only.
16-17	Maximum Root I/O	ROOTIO_MAX keyword (THRESHOLD subcommand)
18	Not used	N/A
19-21	Average Record I/O	RECIO_AVG keyword (THRESHOLD subcommand) FPB Pointer Checker requires an implied decimal point before the third digit. FPA Analyze supports integer only.
22-23	Maximum Record I/O	RECIO_MAX keyword (THRESHOLD subcommand)
24	Not used	N/A

25-26	Percentage of RAA BASE CIs that use either DOVF or IOVF	RAPOVFL_PCT keyword (THRESHOLD subcommand)
27-28	Percentage of UOWs that use DOVF	UOWDOVF_PCT keyword (THRESHOLD subcommand)
29-30	Percentage of UOWs using IOVF	UOWIOVF_PCT keyword (THRESHOLD subcommand)
31	Not used	N/A
32-33	Percentage of Available IOVF CIs	IOVFUSED_PCT keyword (THRESHOLD subcommand) Unlike FPB, IOVFUSED_PCT specifies a threshold for the percentage of IOVF CIs that are used.
34	Not used	N/A
35-37	Average Number of IOVF CIs used by UOW	UOWIOVF_AVG keyword (THRESHOLD subcommand) FPB Pointer Checker requires an implied decimal point before the third digit. FPA Analyze supports integer only.
38-39	Maximum Number of IOVF CIs used by UOW	UOWIOVF_MAX keyword (THRESHOLD subcommand)
40	Not used	N/A
41-42	Percentage of Records that use IOVF CIs	RECIOVF_PCT keyword (THRESHOLD subcommand)
43	Not used	N/A
44-46	Percentage of free space in RAA BASE.	RAAFS_PCT keyword (THRESHOLD subcommand)
47-49	Percentage of free space in DOVF	DOVFFS_PCT keyword (THRESHOLD subcommand)
50-52	Percentage of free space in IOVF	IOVFFS_PCT keyword (THRESHOLD subcommand)
53	Not used	N/A
54-59	Free space relationship between RAA BASE, DOVF, and IOVF	FS_RAADOVFIOVF keyword (THRESHOLD subcommand) if xx, yy, and zz are specified for FPB. FS_RAADOVF keyword (THRESHOLD subcommand) if only xx and yy are specified for FPB. FS_RAAIOVF keyword (THRESHOLD subcommand) if only xx and zz are specified for FPB.
60	Not used	N/A

61-64	Free space relationship between DOVF and IOVF	FS_DOVFIOVF keyword (THRESHOLD subcommand)
65-72	Not used	N/A
FABADA5 UOWCTL		HFPAUOWC
1-3 or 1-5	AREA number	No change required
4-10 or 6-12	Start UOW number	No change required
11-17 or 13-19	Stop UOW number	No change required
18-20 or 20-22	Filler	No change required
21-36 or 23-38	description of the UOW group	No change required
37-70 or 39-72	Filler	No change required

For other FPA Analyze subcommands and keywords, see [Utility control statements for the Analyze function](#).

5.5 Site default options

The following table shows the corresponding site default options for FPB Pointer Checker and FPA Analyze. Specify site default options for FPA Analyze by referring to the following table.

FPB Pointer Checker (FABAOP1M)	FPA Analyze
DBRC keyword	Not supported Whether FPA connects to the DBRC interface is determined based on the IMS load module library.
FORCE keyword	Not supported Use DBRC=IGNORE (GLOBAL command) to bypass the DBRC process when DBRC=FORCE is set for IMS. This allows FPA Analyze to continue processing even if area status is 'RECOVERY NEEDED' or if the database is being accessed by other IMS online programs.
VSAM keyword	Not supported FPA Analyze determines whether to use VSAM data sets or image copy data sets as input.
SDEP keyword	SDEPCHKLVL keyword (ANALYZE command)
OVRD keyword	Not supported FPA Analyze does not override the DBD member date (the date of ACBGEN for the DBD) to resolve discrepancy between image copy date.
STATS keyword	Not supported FPA Analyze does not generate run totals and statistics.
TBENTRY keyword	Not supported FPA Analyze estimates the number of entries in the SDEP table.
SPTFALL keyword	Combination of PTRCHKLVL=QUICK and SDEPCHKLVL=FULL keywords (ANALYZE command)
IMSCATHLQ keyword	IMSCATHLQ keyword (GLOBAL command)
IMSCATACB_INPUT keyword	IMSCATACB_INPUT keyword (GLOBAL command)

5.6 Reports

The following reports, which are generated by FPB Pointer Checker, are also generated by FPA Analyze:

- DEDB Area Analysis report
- Freespace Analysis report
- DB Record Profile Analysis report
- DB Record Placement Analysis report
- Segment Placement Analysis report
- Segment I/O Analysis report
- Synonym Chain Analysis report
- Pointer Chain Reconstruction report
- Largest Database Records report
- CI Map/CI Dump report
- UOW report
- UOW Exception report

FPA Analyze also generates the following reports:

- Audit report
- Processing report
- DBD Definition report
- Resolve Pointers report (when PTRCHKLVL=FULL or SDEPCHKLVL=FULL is specified)
- Pointer Checksum report (when PTRCHKLVL=QUICK or SDEPCHKLVL=QUICK is specified)
- Process Summary of Analysis report
- Site and System Default report (when the site default options are specified)
- Image Copy Output report (when ICOUT=YES is specified)
- Consolidated Largest Database Records report (when LARGEREC_REPORT=YES and LARGEREC_COUNT=(value1,value2) are specified)
- Secondary Index Definition report (when INDEXDBD keyword is specified)
- Secondary Index Analysis report (when INDEXDBD keyword is specified)
- Pointer Segment Dump report (when INDEXDBD keyword is specified)
- Sensor Data Statistics report (when SENSOR=YES is specified)
- Segment Length Distribution report (when SEGLDIST=YES is specified)
- DB Record Length Distribution report (when DBRLDIST=YES is specified)
- RBA of Used IOVF CI report (when IOVFCI_RBA_REPORT=YES is specified)

5.7 Example of JCL conversion

The following table shows the FPB Pointer Checker JCL and the FPA Analyze JCL that provide the equivalent analyzing functionality.

FPB Pointer Checker JCL	FPA Analyze JCL
<pre> //RPT PROC ACBLIB='IMSDEV.IFF8.ACBLIB', // AREADS1=AREADS1, DSNNAME OF AREA DATA SET // SRTBLK=6144 BLOCKSIZE FOR SORT FILES // //FABADA1 EXEC PGM=FABADA1 ***** EXTRACT DATA ***** //SYSPRINT DD SYSOUT=* //REPORTS DD SYSOUT=* //SNAPPIT DD SYSOUT=* //ACBLIB DD DSN=&ACBLIB,DISP=SHR //DARVSAM DD DSN=&AREADS1,DISP=SHR //DAR120 DD DSN=&DA12,DISP=(NEW,PASS), // UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK,SPACE=(CYL,(3,2),RLSE) //DAR130 DD DSN=&DA13S,DISP=(NEW,PASS), // UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK,SPACE=(CYL,(3,2),RLSE) //DAR3CS0 DD DSN=&DA3CS,DISP=(NEW,PASS), // UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK,SPACE=(CYL,(3,2),RLSE) //SORT12 DD DSN=&SORT12,DISP=(NEW,PASS), // UNIT=SYSDA,SPACE=(TRK,(2,1),RLSE) //SORT3CS DD DSN=&SORT3CS,DISP=(NEW,PASS), // UNIT=SYSDA,SPACE=(TRK,(2,1),RLSE) // //SORT3CS EXEC PGM=SORT ***** SORT DA3CS RECORDS //SORTLIB DD DSN=SYS1.SORTLIB,DISP=SHR //SYSOUT DD SYSOUT=* //SYSIN DD DSN=&SORT3CS,DISP=(OLD,PASS) //SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTIN DD DSN=&DA3CS, // DISP=(OLD,DELETE,KEEP) //SORTOUT DD DSN=&SDA3CS, // DISP=(NEW,PASS,DELETE), // UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK, // SPACE=(CYL,(3,2),RLSE) // //FABADA3 EXEC PGM=FABADA3 ***** RESOLVE DA13S + DA3CS RECS * //SYSPRINT DD SYSOUT=* //DAR13SI DD DSN=&DA13S,DISP=(OLD,PASS) //DAR3CSI DD DSN=&SDA3CS,DISP=(OLD,PASS) //DAR4ERRS DD DSN=&DAR4ERRS,DISP=(NEW,PASS), // UNIT=SYSDA,SPACE=(TRK,(3,2),RLSE) //DAR130 DD DSN=&RDA13,DISP=(NEW,PASS), // UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK,SPACE=(CYL,(3,1),RLSE) //SORT4CTL DD DSN=&SORT4S,DISP=(NEW,PASS), // UNIT=SYSDA,SPACE=(TRK,(2,1),RLSE) //SORTR13 DD DSN=&SORTR13,DISP=(NEW,PASS), // UNIT=SYSDA,SPACE=(TRK,(2,1),RLSE) // //SORT4 EXEC PGM=SORT ***** SORT DAR4ERRS RECORDS ***** //SORTLIB DD DSN=SYS1.SORTLIB,DISP=SHR //SYSOUT DD SYSOUT=* //SYSIN DD DSN=&SORT4S,DISP=(OLD,DELETE) //SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTIN DD DSN=&DAR4ERRS,DISP=(OLD,DELETE) //SORTOUT DD DSN=&DAR4S,DISP=(NEW,PASS), // UNIT=SYSDA,SPACE=(CYL,(3,2),RLSE) // //FABADA4 EXEC PGM=FABADA4 //SYSPRINT DD SYSOUT=* //REPORTS DD SYSOUT=* //SNAPPIT DD SYSOUT=* //ACBLIB DD DSN=&ACBLIB,DISP=SHR //DARVSAM DD DSN=&AREADS1,DISP=SHR //DAR13SI DD DSN=&DA13S,DISP=(OLD,DELETE) //SYSOUT DD SYSOUT=* //SORTIN DD DSN=&SDA3CS,DISP=(OLD,DELETE) //SORTOUT DD DSN=&SDA3CI,DISP=(NEW,DELETE), // UNIT=SYSDA,SPACE=(CYL,(3,2),RLSE) //SORT3CS DD DSN=&SORT3CS,DISP=(OLD,DELETE) //SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //DAR4ERRS DD DSN=&DAR4S,DISP=(OLD,DELETE) // //SORT12 EXEC PGM=SORT ***** SORT DA12 RECORDS ***** //SORTLIB DD DSN=SYS1.SORTLIB,DISP=SHR //SYSOUT DD SYSOUT=* //SYSIN DD DSN=&SORT12,DISP=(OLD,DELETE) //SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,2)) //SORTIN DD DSN=&DA12,DISP=(OLD,DELETE) //SORTOUT DD DSN=&SDA12,DISP=(NEW,PASS), // UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK,SPACE=(CYL,(3,2),RLSE) // //SORTR13 EXEC PGM=SORT ***** SORT RDA13 RECORDS ***** </pre>	<pre> //HFPUNL EXEC PGM=HFPMAIN0 //STEPLIB DD DISP=SHR,DSN=IMSTJP.FPS210.SHFP1MD0 // DD DISP=SHR,DSN=IMSDEV.IFF8.EXIT // DD DISP=SHR,DSN=IMS.IFJ1.SDFSRESL // DD DISP=SHR,DSN=IMS.IFJ1.PGMLIB // DD DISP=SHR,DSN=IMSDEV.FPT.COMMON.IMS15.PGMLIB // ACBLIB >>>---* //IMSACB DD DISP=SHR,DSN=IMSDEV.IFF8.ACBLIB // INPUT IC >>>---* //D04A010 DD DISP=SHR,DSN=IMSDEV.IFF8.DEDB0004.D04A010.ADS1 // CONTROL CARD >>>---* //HFPYSIN DD * GLOBAL DBRC=NO, SCAN=NO ANALYZE DBD=DEDB0004, IAREA=D04A010, PTRCHKLVL=FULL REPORT THRESHOLD SYN PCT LEN=(49,9), SYN LEN AVG=5, SYN MAX=9 /* </pre>

```

//SORTLIB DD DSN=SYS1.SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=*
//SYSIN DD DSN=&SORTR13,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,2))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,2))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,2))
//SORTIN DD DSN=&SRDA13,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&SRDA13,DISP=(NEW,PASS),
//          UNIT=SYSDA,DCB=BLKSIZE=&SRTBLK,SPACE=(CYL,(3,2),RLSE)
//
//FABADA5 EXEC PGM=FABADA5          ***** GENERATE ANALYZER REPORTS *****
//SYSPRINT DD SYSOUT=*
//REPORTS DD SYSOUT=*
//UOWRPT DD SYSOUT=*
//UOWEXCP DD SYSOUT=*
//DAR12I DD DSN=&SDA12,DISP=(OLD,DELETE)
//DAR13I DD DSN=&SRDA13,DISP=(OLD,DELETE)
//REORGCTL DD SYSOUT=*,DCB=BLKSIZE=80
//
//          PEND
//
//
//=====
//* DEDB POINTER CHECKER EXECUTION
//=====
//RPT EXEC RPT,
//          AREADS1='IMSDEV.IFF8.DEDB0004.D04A010.ADS1',
//          SRTBLK=6144          BLOCKSIZE FOR SORT FILES
//FABADA1.SYSIN DD *,DCB=BLKSIZE=80
//          DBDNAME=DEDB0004,AREA=D04A010,VSAM,STATS,TYPRUN=RPT
//
//FABADA5.THRCTL DD *,DCB=BLKSIZE=80
T4909 05009
//
//
*****

```

For more FPA Analyze JCL examples, see [Examples for the Analyze function](#).

6. Migrating from FPB Tuning Aid to FPA Tune

FPA Tune supports the following features that FPB Tuning Aid does not support:

- Processes multiple areas of a DEDB in parallel in a single job step
- Supports up to 9999 areas
- Supports simulation without new ACBLIB
- Optionally simulates changes in segment edit/compression routines (EDITCOMP_CHANGE keyword)
- Optionally adds the FILSZ parameter to the SORT control statement to prevent job failure due to insufficient capacity of sort work datasets (SORTOPT_FILSZ keyword)

All the features supported by FPB Tuning Aid are also supported by FPA Tune.

Follow the instructions in the following topics to migrate from FPB Tuning Aid to FPA Tune.

6.1 PGM name

1. Change FPB Tuning Aid PGM name FABBME1 to FPA PGM name HFPMAIN0.
2. Delete other job steps. Other job steps are not needed because FPA Tune performs equivalent functions in a single job step.

6.2 EXEC parameters

The following table shows the corresponding EXEC parameters for FPB Tuning and FPA Tune. As you can see in the table, no EXEC parameters need to be migrated to FPA Tune.

FPB Tuning Aid	FPA Tune
FABBME3	
L	Not supported FPA Tune runs in load mode when database parameter changes are requested.
R	Not supported FPA Tune runs in reorganization mode when database parameter changes are not requested.

6.3 DD statements

The following table shows the corresponding DD statements for FPB Tuning Aid and FPA Tune. Specify DD statements for FPA Tune by referring to the following table.

FPB Tuning Aid	FPA Tune
FABBME1 program	HFPMAIN0 program
JOBLIB or STEPLIB	No change required
SYSIN	HFPSYSIN
ACBLIB	Not supported FPA Tune supports the ACBLIB keyword (SIMULATE subcommand) to specify the data set that contains the DMB describing the database configuration to simulate. Note: IMSACB DD used for FPA TUNE, which specifies the current ACBLIB, is equivalent to ACBLIB DD used for FABADA1.
RMODLIB	Not supported FPA Tune supports the RMODLIB keyword (SIMULATE subcommand) to specify the data set containing the randomizer module to simulate.
MEDARI	TARnnnnn
SYSPRINT	HFPPRINT
MESORTCD	Not supported FPA Analyze internally sorts tuning aid records.
MEDARO	Not supported FPA Tune dynamically allocates intermediate segment record data sets.
FABBME3 program	HFPMAIN0 program
MEDARI	Not supported FPA Tune dynamically allocates intermediate segment record data sets.
SYSPRINT	HFPPRINT
MEDAR12O	Not supported FPA Tune dynamically allocates intermediate segment record data sets.
MEDAR3O	Not supported FPA Tune dynamically allocates intermediate segment record data sets.
SORT12	Not supported FPA Analyze internally sorts tuning aid records.
SORT3	Not supported FPA Analyze internally sorts tuning aid records.
FABADA5 program	HFPMAIN0 program
Same as FABADA5 of DEDB Pointer Checker	

6.4 Utility control statements

The following table shows the corresponding utility control statements for FPB Tuning Aid and FPA Tune. Specify control statements for FPA Tune by referring to the following table.

FPB Tuning Aid	FPA Tune
FABBME1 SYSIN	HFPSYSIN
DBDNAME statement	DBD keyword (TUNE command)
AREA statement	IAREA keyword (TUNE command)
RMOD statement	RMOD keyword (SIMULATE subcommand)
RPT statement	REPORT subcommand
FABADA5 PARMCTL	HFPAPARM
Same as FABADA5 PARMCTL of FPB Pointer Check	
FABADA5 THRCTL	HFPSYSIN
Same as FABADA5 THRCTL of FPB Pointer Checker	

6.5 Site default options

FPB Tuning Aid does not support site default options. FPA Tune supports site default options.

6.6 Reports

The following table shows the corresponding reports for FPB Tuning Aid and FPA Tune.

FPB Tuning Aid	FPA Tune
DEDB Area Analysis reports	TUNED DEDB Area Analysis reports
UOW report	TUNED UOW report
UOW Exception report	TUNED UOW Exception report
Largest Database Records report	TUNED Largest Database Records report

FPA Tune also generates the following reports:

- Audit report
- Processing report
- DBD Definition report
- Site and System Default report (when the site default options are specified)
- Reports related to the Analyze process
- Area Tuning Summary report
- Tuning Aid Record Data Set report
- TUNED Consolidated Largest Database Records report (when LARGEREC_REPORT=YES and LARGEREC_COUNT=(value1,value2) are specified)
- TUNED Segment Length Distribution report (when SEGLDIST=YES is specified)
- TUNED DB Record Length Distribution report (when DBRLDIST=YES is specified)

6.7 Example of JCL conversion

The following table shows the FPB Tuning Aid JCL and the FPA Tune JCL that provide the equivalent tuning functionality.

FPB Pointer Checker & FPB Tuning Aid JCL	FPA Tune JCL
<pre> /*===== /** DEDB POINTER CHECKER IN-STREAM PROCEDURE /**===== //FABAPC PROC ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB', DSNNAME of ACB 1 // VSAM=, VSAM='DUMMY,' If no DARVSAM DATA SET // AREADS=, DSNNAME of DARVSAM DATA SET // IMAGE='DUMMY,', IMAGE='DUMMY,' If no DFSUDUMP DATA SET // IMAGESD=, DSNNAME of DFSUDUMP DATASET // RMOD='DUMMY,', RMOD='DUMMY,' If no RANDOMIZER // RMODLIB=, USER_RANDOMIZER </pre>	<pre> //TUNE EXEC PGM=HFPMAIN0 //HFPSYSIN DD * GLOBAL DBRC=NO TUNE DBD=DEDBJN22, EDITCOMP_CHANGE=YES, IAREA=ALL REPORT SIMULATE RMODLIB='IMS.IFJ1.PGMLIB' /* </pre>

```

//          SORTLIB='SYS1.SORTLIB',          DSN= of SORT LIBRARY
//          SRDA13='SRDA13',                  DSN= of INPUT TO FABMEI
//          AL3UNIT='SYSDA',                   UNIT for SRDA13
//          UNIT='SYSDA',                      UNIT for WORK DATASET
//          R12OCYL='3,2',                    SPACE for DARI20 DATA SET
//          R13SCYL='3,2',                    SPACE for DARI30 DATA SET
//          R3CSCYL='3,2',                    SPACE for DAR3CSO DATA SET
//          R13OCYL='3,2',                    SPACE for DARI30 DATA SET
//          SORTCYL='2,2',                    SPACE for SORT WORK
//          SRTBLK=6144                        BLOCKSIZE for SORT FILES
//
/*
/*-----< FABADA1 - EXTRTACT POINTER CHECK DATA >-----*/
/*
//FABADA1 EXEC PGM=FABADA1,PARM=' '
//SYSPRINT DD SYSOUT=A
//SNAPPIT DD SYSOUT=A
//ACBLIB DD DSN=ACBLIB,DISP=SHR
//RMODLIB DD &RMOD.DSN=&RMODLIB,DISP=SHR
//DARVVSAM DD &VVSAM.DSN=&AREADS,DISP=OLD
//DFSUDUMP DD &IMAGE.DSN=&IMAGEDS,DISP=OLD
//DARI20 DD DSN=&DA12,DISP=(NEW,PASS),
//          UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
//          SPACE=(CYL,(&R12OCYL),RLSE)
//DARI30 DD DSN=&DA13,DISP=(NEW,PASS),
//          UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
//          SPACE=(CYL,(&R13SCYL),RLSE)
//DAR3CSO DD DSN=&DA3CS,DISP=(NEW,PASS),
//          UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
//          SPACE=(CYL,(&R3CSCYL),RLSE)
//SORT12 DD DSN=&SORT12,DISP=(NEW,PASS),
//          UNIT=&UNIT,SPACE=(TRK,(2,1),RLSE)
//SORT3CS DD DSN=&SORT3CS,DISP=(NEW,PASS),
//          UNIT=&UNIT,SPACE=(TRK,(2,1),RLSE)
//
/*
/*-----< SORT DA3CS RECORDS >-----*/
/*
//SORT3CS EXEC PGM=sort
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSIN DD DSN=&SORT3CS,DISP=(OLD,PASS)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTIN DD DSN=&DA3CS,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&DA3CS,DISP=(NEW,PASS),
//          UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
//          SPACE=(CYL,(&R3CSCYL),RLSE)
//
/*
/*-----< FABADA3 - RESOLVE 3,C AND 3,S RECORDS >-----*/
/*
//FABADA3 EXEC PGM=FABADA3
//SYSPRINT DD SYSOUT=A
//DAR13SI DD DSN=&DA13S,DISP=(OLD,PASS)
//DAR3CSI DD DSN=&SDA3CS,DISP=(OLD,PASS)
//DAR13O DD DSN=&RDAL3,DISP=(NEW,PASS),
//          UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
//          SPACE=(CYL,(&R13OCYL),RLSE)
//SORTR13 DD DSN=&SORTR13,DISP=(NEW,PASS),
//          UNIT=&UNIT,SPACE=(TRK,(1,1),RLSE)
//DAR4ERRS DD DSN=&DAR4ERRS,DISP=(NEW,PASS),
//          UNIT=&UNIT,SPACE=(TRK,(3,2),RLSE)
//SORT4CTL DD DSN=&SORT4S,DISP=(NEW,PASS),
//          UNIT=&UNIT,SPACE=(TRK,(1,1),RLSE)
//
/*
/*-----< SORT DA4ERRS RECORDS >-----*/
/*
//SORT4 EXEC PGM=sort,COND=(99,NE,FABADA3)
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSIN DD DSN=&SORT4S,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTIN DD DSN=&DAR4ERRS,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&DAR4S,DISP=(NEW,PASS),
//          UNIT=&UNIT,SPACE=(TRK,(3,2),RLSE)
//
/*
/*-----< FABADA4 - GANARATE ERROR CI REPORT, CI MAP/DUMP REOPRT >-----*/
/*
//FABADA4 EXEC PGM=FABADA4,PARM=' ',COND=(99,NE,FABADA3)
//SYSUDUMP DD SYSOUT=A
//SYSOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//REPORTS DD SYSOUT=A
//SNAPPIT DD SYSOUT=A
//ACBLIB DD DSN=ACBLIB,DISP=SHR
//DARVVSAM DD &VVSAM.DSN=&AREADS,DISP=OLD
//DFSUDUMP DD &IMAGE.DSN=&IMAGEDS,DISP=OLD
//DAR13SI DD DSN=&DA13S,DISP=(OLD,DELETE)
//SORTIN DD DSN=&SDA3CS,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&SDA3CI,DISP=(NEW,DELETE),
//          UNIT=&UNIT,SPACE=(CYL,(&R3CSCYL),RLSE)
//SORT3CS DD DSN=&SORT3CS,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//DAR4ERRS DD DSN=&DAR4S,DISP=(OLD,DELETE)

```

```

//HFPAPARM DD *
//RDOVFFS=40,RBASEFS=35
/*
//HFPFPRINT DD SYSOUT=*
//HFPFPTS DD SYSOUT=*
//IMSACB DD DSN=IMSDEV.FPT.DB.IMS15.ACBLIB,DISP=SHR
//DB22AR0 DD DSN=IMSDEV.FPT.DB.IMS15.MDB22AR0.ADS1,DISP=SHR
//DB22AR1 DD DSN=IMSDEV.FPT.DB.IMS15.MDB22AR1.ADS1,DISP=SHR
//DB22AR2 DD DSN=IMSDEV.FPT.DB.IMS15.MDB22AR2.ADS1,DISP=SHR
//DB22AR3 DD DSN=IMSDEV.FPT.DB.IMS15.MDB22AR3.ADS1,DISP=SHR
//DB22AR4 DD DSN=IMSDEV.FPT.DB.IMS15.MDB22AR4.ADS1,DISP=SHR
//

```

```

//DAR4USER DD DUMMY
//
//**-----< DELETE WORK FILES IN CASE IF FABADA3 GOT RC 99 >-----*
//
//BR141 EXEC PGM=IEFBRI14,COND=(99,NE,FABADA3)
//SORT12 DD DSN=&SORT12,DISP=(OLD,DELETE)
//DA12 DD DSN=&&DA12,DISP=(OLD,DELETE)
//SORTR13 DD DSN=&SORTR13,DISP=(OLD,DELETE)
//RDA13 DD DSN=&&RDA13,DISP=(OLD,DELETE)
//
//**-----< DELETE WORK FILES IN CASE IF SORT4 & FABADA4 FLUSHED >-----*
//
//BR142 EXEC PGM=IEFBRI14,COND=(99,EQ,FABADA3)
//SORT4S DD DSN=&&SORT4S,DISP=(OLD,DELETE)
//DAR4ERRS DD DSN=&&DAR4ERRS,DISP=(OLD,DELETE)
//DAR13S DD DSN=&&DA13S,DISP=(OLD,DELETE)
//SDA3CS DD DSN=&&SDA3CS,DISP=(OLD,DELETE)
//SORT3CS DD DSN=&SORT3CS,DISP=(OLD,DELETE)
//
//**-----< SORT DA12 RECORDS >-----*
//
//SORT12 EXEC PGM=**SORT,COND=((99,EQ,FABADA1),(99,EQ,FABADA3))
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSIN DD DSN=&SORT12,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTIN DD DSN=&&DA12,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&&SDA12,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&R12OCYL),RLSE)
//
//**-----< SORT DA13 RECORDS >-----*
//
//SORTR13 EXEC PGM=**SORT,COND=((99,EQ,FABADA1),(99,EQ,FABADA3))
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSIN DD DSN=&SORTR13,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTIN DD DSN=&&RDA13,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&&SRDA13,DISP=(NEW,PASS),
// UNIT=&A13UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&R13OCYL),RLSE)
//
//**-----< FABADA5 - GENERATE ANALYZER REPORTS >-----*
//
//FABADA5 EXEC PGM=**FABADA5,COND=((99,EQ,FABADA1),(99,EQ,FABADA3))
//SYSPRINT DD SYSOUT=A
//REPORTS DD SYSOUT=A
//UOWRPT DD SYSOUT=A
//UOWEXCP DD SYSOUT=A
//DAR12I DD DSN=&&SDA12,DISP=(OLD,DELETE)
//DAR13I DD DSN=&&SRDA13,DISP=(OLD,PASS)
//
//
// PENDING
//
//**=====
//
//* DEDB TUNING AID IN-STREAM PROCEDURE
//**=====
//FABBTB PROC ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB', ACB LIBRARY
// MEDARI='SRDA13', DATA ANALYSIS RECORDS
// ME3PARAM=L, FABBME3 EXEC PARAM
// RESLIB='IMS.IFJ1.SDFSRESL', RANDOMIZING MODULE
// SORTLIB='SYS1.SORTLIB', SORT LIBRARY
// UNIT='SYSDA', UNIT OF WORK DATA SET
// DAROCYL='3,2', SPACE FOR MEDARO DATA SET
// R12OCYL='3,2', SPACE FOR MEDAR120 DATA SET
// R3OCYL='3,2', SPACE FOR MEDAR30 DATA SET
// SORTCYL='2,2', SPACE FOR SORT WORK
// SRTBLK=6144 BLOCKSIZE FOR SORT FILES
//
//**-----< FABBME1 - REPLACE AREA AND RAP NO'S >-----*
//
//FABBME1 EXEC PGM=**FABBME1
//SYSPRINT DD SYSOUT=C,DCB=LRECL=133
//ACBLIB DD DSN=&ACBLIB,DISP=SHR
//RMODLIB DD DSN=&RESLIB,DISP=SHR
// DD DISP=SHR,DSN=IMS.IFJ1.PGMLIB
// DD DISP=SHR,DSN=IMSDEV.FPT.COMMON.IMS15.PGMLIB
//MEDARI DD DSN=&MEDARI,DISP=OLD
//MESORTCD DD DSN=&&SORTCD,DISP=(NEW,PASS),
// UNIT=&UNIT,SPACE=(TRK,(1,1))
//MEDARO DD DSN=&&ME13,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&DAROCYL),RLSE)
//
//**-----< SORT ME13 RECORDS >-----*
//
//DFSORT EXEC PGM=**SORT
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=*
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))

```

```

//SORTIN DD DSN=&&ME13,DISP=(OLD,DELETE)
//SORTOUT DD DSN=&&SME13,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&DAROCYL),RLSE)
//SYSIN DD DSN=&&SORTCD,DISP=(OLD,DELETE)
//
/*-----< FABBME3 - BUILD AREA MODEL >-----*
//
//FABBME3 EXEC PGM=FABBME3,PARM='&ME3PARM'
//SYSPRINT DD SYSOUT=C,DCB=LRECL=133
//MEDARI DD DSN=&&SME13,DISP=(OLD,DELETE,KEEP)
//MEDARI20 DD DSN=&&DA12,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&R12OCYL),RLSE)
//MEDAR30 DD DSN=&&DA3,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&R3OCYL),RLSE)
//SORT12 DD DSN=&&SORT12,DISP=(NEW,PASS),
// UNIT=&UNIT,SPACE=(TRK,(1,1),RLSE)
//SORT3 DD DSN=&&SORT3,DISP=(NEW,PASS),
// UNIT=&UNIT,SPACE=(TRK,(1,1),RLSE)
//
/*-----< SORT DA12 RECORDS >-----*
//
//SORT12 EXEC PGM=Sort
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=*
//SYSIN DD DSN=&&SORT12,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTIN DD DSN=&&DA12,DISP=(OLD,DELETE,KEEP)
//SORTOUT DD DSN=&&SDA12,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&R12OCYL),RLSE)
//
/*-----< SORT DA3 RECORDS >-----*
//
//SORT3 EXEC PGM=Sort
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SYSOUT DD SYSOUT=*
//SYSIN DD DSN=&&SORT3,DISP=(OLD,DELETE)
//SORTWK01 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK02 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTWK03 DD UNIT=&UNIT,SPACE=(CYL,(&SORTCYL))
//SORTIN DD DSN=&&DA3,DISP=(OLD,DELETE,KEEP)
//SORTOUT DD DSN=&&SDA3,DISP=(NEW,PASS),
// UNIT=&UNIT,DCB=BLKSIZE=&SRTBLK,
// SPACE=(CYL,(&R3OCYL),RLSE)
//
/*-----< FABADA5 - GENERATE ANALYZER REPORTS >-----*
//
//FABADA5 EXEC PGM=FABADA5
//SYSPRINT DD SYSOUT=*,DCB=LRECL=133
//REPORTS DD SYSOUT=C
//UOWRPT DD SYSOUT=C
//UOWEXCP DD SYSOUT=C
//DAR12I DD DSN=&&SDA12,DISP=(OLD,DELETE)
//DAR13I DD DSN=&&SDA3,DISP=(OLD,DELETE)
//REORGCTL DD SYSOUT=*,DCB=BLKSIZE=80
//
// PEND
//
/*=====
//
// DEDB POINTER CHECKER EXECUTION
//=====
//
/*-----< AREA #1 >-----*
//
//FABAPC1 EXEC FABAPC,
// ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB', DSN= OF ACB LI
// A13UNIT='SYSDA', UNIT FOR SRDA13
// UNIT='SYSDA', UNIT FOR WORK DATASET
// SRDA13='&SRDA130', DSN= OF INPUT TO FABBME1
// AREADS='IMSDEV.FPT.DB.IMS15.MDB22AR0.ADS1',
// SORTLIB='SYS1.SORTLIB' SORT LIBRARY
//FABADA1.SYSIN DD *
// DBDNAME=DEDBJN22,AREA=DB22AR0,VSAM,STATS,TYPRUN=MODEL
//
//FABADA3.SYSIN DD *
// STATS
//
//FABADA5.PARMCTL DD *
// RDOVFFS=40,RBASEFS=35
//
//
/*-----< AREA #2 >-----*
//
//FABAPC2 EXEC FABAPC,
// ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB', DSN= OF ACB LI
// A13UNIT='SYSDA', UNIT FOR SRDA13
// UNIT='SYSDA', UNIT FOR WORK DATASET
// SRDA13='&SRDA131', DSN= OF INPUT TO FABBME1
// AREADS='IMSDEV.FPT.DB.IMS15.MDB22AR1.ADS1',
// SORTLIB='SYS1.SORTLIB' SORT LIBRARY
//FABADA1.SYSIN DD *
// DBDNAME=DEDBJN22,AREA=DB22AR1,VSAM,STATS,TYPRUN=MODEL

```

```

/*
//FABADA3.SYSIN DD *
      STATS
/*
//FABADA5.PARMCTL DD *
      RDOVFFS=40,RBASEFS=35
/*
/*
/**-----< AREA #3 >-----*
/*
//FABAPC3 EXEC FABAPC,
//      ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB',      DSNNAME OF ACB LI
//      A13UNIT='SYSDA',                          UNIT FOR SRDA13
//      UNIT='SYSDA',                              UNIT FOR WORK DATASET
//      SRDA13='&SRDA132',                        DSNNAME OF INPUT TO FABBME1
//      AREADS='IMSDEV.FPT.DB.IMS15.MDB22AR2.ADS1',
//      SORTLIB='SYS1.SORTLIB'                    SORT LIBRARY
//FABADA1.SYSIN DD *
      DBDNAME=DEDBJN22,AREA=DB22AR2,VSAM,STATS,TYPRUN=MODEL
/*
//FABADA3.SYSIN DD *
      STATS
/*
//FABADA5.PARMCTL DD *
      RDOVFFS=40,RBASEFS=35
/*
/*
/**-----< AREA #4 >-----*
/*
//FABAPC4 EXEC FABAPC,
//      ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB',      DSNNAME OF ACB LI
//      A13UNIT='SYSDA',                          UNIT FOR SRDA13
//      UNIT='SYSDA',                              UNIT FOR WORK DATASET
//      SRDA13='&SRDA133',                        DSNNAME OF INPUT TO FABBME1
//      AREADS='IMSDEV.FPT.DB.IMS15.MDB22AR3.ADS1',
//      SORTLIB='SYS1.SORTLIB'                    SORT LIBRARY
//FABADA1.SYSIN DD *
      DBDNAME=DEDBJN22,AREA=DB22AR3,VSAM,STATS,TYPRUN=MODEL
/*
//FABADA3.SYSIN DD *
      STATS
/*
//FABADA5.PARMCTL DD *
      RDOVFFS=40,RBASEFS=35
/*
/*
/**-----< AREA #5 >-----*
/*
//FABAPC5 EXEC FABAPC,
//      ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB',      DSNNAME OF ACB LI
//      A13UNIT='SYSDA',                          UNIT FOR SRDA13
//      UNIT='SYSDA',                              UNIT FOR WORK DATASET
//      SRDA13='&SRDA134',                        DSNNAME OF INPUT TO FABBME1
//      AREADS='IMSDEV.FPT.DB.IMS15.MDB22AR4.ADS1',
//      SORTLIB='SYS1.SORTLIB'                    SORT LIBRARY
//FABADA1.SYSIN DD *
      DBDNAME=DEDBJN22,AREA=DB22AR4,VSAM,STATS,TYPRUN=MODEL
/*
//FABADA3.SYSIN DD *
      STATS
/*
//FABADA5.PARMCTL DD *
      RDOVFFS=40,RBASEFS=35
/*
/*
/**=====
/*      DEDB TUNING AID EXECUTION
/*=====
//FABBTA EXEC FABBTA,SRTBLK=6144,                BLOCKSIZE FOR SORT FILES
//      ACBLIB='IMSDEV.FPT.DB.IMS15.ACBLIB',      ACB LIBRARY
//      RESLIB='IMS.IFJ1.SDFSRESL',              RANDOMIZING MODULE
//      SORTLIB='SYS1.SORTLIB'                    SORT LIBRARY
//FABBME1.MEDARI DD DISP=OLD,DSN=&SRDA130
//      DD DISP=OLD,DSN=&SRDA131
//      DD DISP=OLD,DSN=&SRDA132
//      DD DISP=OLD,DSN=&SRDA133
//      DD DISP=OLD,DSN=&SRDA134
//FABBME1.SYSIN DD *
      DBDNAME=DEDBJN22,AREA=ALL,RPT=YES
/*
//FABBME1.SYSPRINT DD SYSOUT=*
/*
//FABBME3.SYSPRINT DD SYSOUT=*
/*
//FABADA5.PARMCTL DD *
      RDOVFFS=40,RBASEFS=35
/*
//FABADA5.SYSPRINT DD SYSOUT=*
//FABADA5.REPORTS DD SYSOUT=*
//FABADA5.UOWRPT DD SYSOUT=*
/*

```

For more FPA Tune JCL examples, see [Examples for the Tune function](#).

7. Migration considerations

7.1 APF authorization

FPA must be run as an APF-authorized program. Except for the data sets that are in the IMSDALIB concatenation, all the load module libraries must be APF-authorized.

7.2 SDFSRESL concatenation

The IMS load module library (SDFSRESL) must be concatenated to JOBLIB or STEPLIB because FPA loads IMS modules.

7.3 Region size requirements

Both the FPA functions and the FPB tools operate in a virtual storage region as z/OS batch job steps. Typically, the region size required to run an FPA function is larger than that for the equivalent FPB tool due to parallel processing, internal sort, data space usage, and other factors.

To estimate the region size required for FPA functions, see the following topics:

- FPA Unload: [Region size requirements for the Unload function](#)
- FPA Reload: [Region size requirements for the Reload function](#)
- FPA Analyze: [Region size requirements for the Analyze function](#)
- FPA Tune: [Region size requirements for the Tune function](#)

7.4 EXCP count discrepancy

FPA functions always use the DFSMS Media Manager for reading from or writing to VSAM area data sets. FPB tools typically use the VSAM access method, except for the FPB Unload function with the ACCESS=FAST option, which uses the DFSMS Media Manager.

The EXCP count for a VSAM area data set recorded in the FPA job log might be greater than the EXCP count recorded in the FPB job log. This is because the system handles reporting differently for the VSAM access method and the Media Manager. For the VSAM access method, the count is based on the total I/O count, and for the Media Manager, the count represents the total number of actual CIs transferred.

Even with greater EXCP count in the job log, FPA functions perform better than FPB tools. It has been confirmed that the actual total I/O count of the Media Manager is significantly lower than that of the VSAM access method.

8. Summary

Because FPB Tools are stabilized and end of support may be announced in the future, to continue receiving support and to use new features, you should start your migration from FPB to FPA soon, with this document as a guide.

If you have any questions during the migration, please open a case to IBM to request our support.