

JCL/JCS Requirements and Examples

This section describes the job control information required to run ADAINV with BS2000, z/OS, z/VM, and VSE systems and shows examples of each of the job streams.

This chapter covers the following topics:

- Collation with User Exit
- BS2000
- z/OS
- z/VM
- VSE

Collation with User Exit

If a collation user exit is to be used during ADAINV execution, the ADARUN CDXnn parameter must be specified for the utility run.

Used in conjunction with the universal encoding support (UES), the format of the collation descriptor user exit parameter is

ADARUN CDXnn= exit-name

where

nn	is the number of the collation descriptor exit, a two-digit decimal integer in the range 01-08 inclusive.
exit-name	is the name of the user routine that gets control at the collation descriptor exit; the name can be up to 8 characters long.

Only one program may be specified for each collation descriptor exit. Up to 8 collation descriptor exits may be specified (in any order). See the *Adabas DBA Reference* documentation for more information.

BS2000

Data Set	Link Name	Storage	More Information
Associator	DDASSORn	disk	
Intermediate storage	DDTEMPR1	disk	
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	When using large files, the Sort area should be split across two volumes (see Note).
Recovery log (RLOG)	DDRLOGR1	disk	Required when using the recovery log option
ADARUN parameters	SYSDTA/ DDCARD		<i>Operations</i>
ADAINV parameters	SYSDTA/ DDKARTE		
ADARUN messages	SYSOUT/ DDPRINT		<i>Messages and Codes</i>
ADAINV messages	SYSLST/ DDDRUCK		<i>Messages and Codes</i>

Note:

Performance can be improved when sorting large files if the sort data set is split across two volumes. If two data sets are specified, they must both be on the same device type (SORTDEV parameter), and each must be exactly half the size specified with the SORTSIZE parameter.

ADAINV JCL Examples (BS2000)

Couple Files

In SDF Format:

```

/.ADAINV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A I N V COUPLE FIELD (REFLECTIVE)
/REMARK *
/ASS-SYSLST L.INV.COUP
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDTEMPR1,ADAyyyyy.TEMP
/SET-FILE-LINK DDSORTR1,ADAyyyyy.SORT
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADAINV,DB=yyyyy, IDTNAME=ADABAS5B
ADAINV COUPLE FILE=1,3,DESCRIPTOR= AA,AA
ADAINV TEMPSIZE=100,SORTSIZE=50
/LOGOFF SYS-OUTPUT=DEL
    
```

In ISP Format:

```

/.ADAINV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A I N V COUPLE FIELD (REFLECTIVE)
/REMARK *
/SYSFILE SYSLST=L.INV.COUP
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAyyyyyy.ASSOR ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyyy.TEMP ,LINK=DDTEMPR1
/FILE ADAyyyyyy.SORT ,LINK=DDSORTR1
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADAINV,DB=yyyyyy, IDTNAME=ADABAS5B
ADAINV COUPLE FILE=1,3,DESCRIPTOR= AA,AA
ADAINV TEMPSIZE=100, SORTSIZE=50
/LOGOFF NOSPOOL

```

Invert File**In SDF Format:**

```

/.ADAINV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A I N V INVERT FIELD (REFLECTIVE)
/REMARK *
/ASS-SYSLST L.INV.INVE
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAYyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDTEMPR1,ADAYyyyyy.TEMP
/SET-FILE-LINK DDSORTR1,ADAYyyyyy.SORT
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADAINV,DB=yyyyyy, IDTNAME=ADABAS5B
ADAINV INVERT FILE=1
ADAINV TEMPSIZE=100, SORTSIZE=50
ADAINV FIELD= AC
ADAINV SUPDE= S1,UQ=AA(1,3),AD(2,4)
/LOGOFF SYS-OUTPUT=DEL

```

In ISP Format:

```

/.ADAINV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A I N V INVERT FIELD (REFLECTIVE)
/REMARK *
/SYSFILE SYSLST=L.INV.INVE
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAyyyyyy.ASSOR ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyyy.TEMP ,LINK=DDTEMPR1
/FILE ADAyyyyyy.SORT ,LINK=DDSORTR1
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADAINV,DB=yyyyyy, IDTNAME=ADABAS5B
ADAINV INVERT FILE=1
ADAINV TEMPSIZE=100, SORTSIZE=50
ADAINV FIELD= AC
ADAINV SUPDE= S1,UQ=AA(1,3),AD(2,4)
/LOGOFF NOSPOOL

```

z/OS

Data Set	DD Name	Storage	More Information
Associator	DDASSORn	disk	
Intermediate storage	DDTEMPR1	disk	
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	When using large files, the Sort area should be split across two volumes (see Note).
Recovery log (RLOG)	DDRLOGR1	disk	Required when using the recovery log option
ADARUN parameters	DDCARD	reader	<i>Operations</i>
ADAINV parameters	DDKARTE	reader	
ADARUN messages	DDPRINT	printer	<i>Messages and Codes</i>
ADAINV messages	DDDRUCK	printer	<i>Messages and Codes</i>

Note:

Performance can be improved when sorting large files if the sort data set is split across two volumes, but this is difficult to accomplish under OS. Two sort data sets may be specified instead. They must both be on the same device type (SORTDEV parameter), and each must be exactly half the size specified with the SORTSIZE parameter.

*

ADAINV JCL Example (z/OS)**Couple Files**

Refer to ADAINVCO in the JOBS data set for this example.

```
//ADAINVCO JOB
//*
//*      ADAINV:  COUPLE FILES
//*
//INV      EXEC PGM=ADARUN
//STEPLIB DD  DISP=SHR,DSN=ADABAS.ADAvrs.LOAD      <==== ADABAS LOAD
//*
//DDASSOR1 DD  DISP=SHR,DSN=EXAMPLE.DByyyyyy.ASSOR1 <==== ASSO
//DDDATAR1 DD  DISP=SHR,DSN=EXAMPLE.DByyyyyy.DATAR1 <==== DATA

//DDWORKR1 DD  DISP=SHR,DSN=EXAMPLE.DByyyyyy.WORKR1 <==== WORK
//DDTEMPR1 DD  DISP=OLD,DSN=EXAMPLE.DByyyyyy.TEMPR1 <==== TEMP
//DDSORTR1 DD  DISP=OLD,DSN=EXAMPLE.DByyyyyy.SORTR1 <==== SORT
//DDDRUCK DD  SYSOUT=X
//DDPRINT DD  SYSOUT=X
//SYSUDUMP DD  SYSOUT=X
```

```
//DDCARD DD *
ADARUN PROG=ADAINV,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADAINV COUPLE FILE=2,3,DESCRIPTOR='BB,BB'
ADAINV TEMPSIZE=100,SORTSIZE=100
/*
```

Invert File

Refer to ADAINV in the JOBS data set for this example.

```
//ADAINVDE JOB
/*
/* ADAINV: INVERT A FIELD TO A DE
/*
//INV EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.ADAvrs.LOAD <=== ADABAS LOAD
/*
//DDASSOR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.ASSOR1 <===== ASSO
//DDTEMPR1 DD DISP=OLD,DSN=EXAMPLE.DByyyyy.TEMPR1 <===== TEMP
//DDSORTR1 DD DISP=OLD,DSN=EXAMPLE.DByyyyy.SORTR1 <===== SORT
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADAINV,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADAINV INVERT FILE=1
ADAINV FIELD='AC'
ADAINV SUPDE='S1,UQ=AA(1,3),AD(2,4)'
ADAINV TEMPSIZE=100,SORTSIZE=100
/*
```

Data Set	DD Name	Storage	More Information
Associator	DDASSORn	disk	
Intermediate storage	DDTEMPR1	disk	
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	When using large files, the Sort area should be split across two volumes.*
Recovery log (RLOG)	DDRLOGR1	disk	Required when using the recovery log option
ADARUN parameters	DDCARD	disk/ terminal/ reader	<i>Operations</i>
ADAINV parameters	DDKARTE	disk/ terminal/ reader	
ADARUN messages	DDPRINT	disk/ terminal/ printer	<i>Messages and Codes</i>
ADAINV messages	DDDRUCK	disk/ terminal/ printer	<i>Messages and Codes</i>

* Performance can be improved when sorting large files if the sort data set is split across two volumes, but this is difficult to accomplish under CMS. Two sort data sets may be specified instead. They must both be on the same device type (SORTDEV parameter), and each must be exactly half the size specified with the SORTSIZE parameter.

ADAINV JCL Examples (z/VM)

Couple Files

```

DATADEF DDASSOR1 , DSN=ADABASVv . ASSO , VOL=ASSOV1
DATADEF DDTEMPR1 , DSN=ADABASVv . TEMP , VOL=TEMPV1
DATADEF DDSORTR1 , DSN=ADABASVv . SORT , VOL=SORTV1
DATADEF DDPRINT , DSN=ADAINV . DDPRINT , MODE=A
DATADEF DUMP , DUMMY
DATADEF DDDRUCK , DSN=ADAINV . DDDRUCK , MODE=A
DATADEF DDCARD , DSN=RUNINV . CONTROL , MODE=A
DATADEF DDKARTE , DSN=ADAINV . CONTROL , MODE=A
ADARUN
    
```

Contents of RUNINV CONTROL A1:

```
ADARUN PROG=ADAINV , DEVICE=dddd , DB=yyyyy
```

Contents of ADAINV CONTROL A1:

```

ADAINV COUPLE FILE=1 , 3 , DESCRIPTOR=' AA , AA '
ADAINV          TEMPSIZE=100 , SORTSIZE=50
*
    
```

Invert File

```

DATADEF DDASSOR1,DSN=ADABASVv.ASSO,VOL=ASSOV1
DATADEF DDTEMPR1,DSN=ADABASVv.TEMP,VOL=TEMPV1
DATADEF DDSORTR1,DSN=ADABASVv.SORT,VOL=SORTV1
DATADEF DDPRINT,DSN=ADAINV.DDPRINT,MODE=A
DATADEF DUMP,DUMMY

```

```

DATADEF DDDRUCK,DSN=ADAINV.DDDRUCK,MODE=A
DATADEF DDCARD,DSN=RUNINV.CONTROL,MODE=A
DATADEF DDKARTE,DSN=ADAINV.CONTROL,MODE=A
ADARUN

```

Contents of RUNINV CONTROL A1:

```
ADARUN PROG=ADAINV,DEVICE=dddd,DB=yyyyy
```

Contents of ADAINV CONTROL A1:

```

ADAINV INVERT FILE=1
ADAINV      TEMPSIZE=100,ORTSIZE=50
*
ADAINV      FIELD='AC'
ADAINV      SUPDE='S1,UQ=AA(1,3),AD(2,4)'

```

VSE

File	File Name	Storage	Logical Unit	More Information
Associator	ASSORn	disk	*	
Intermediate storage	TEMPR1	disk	*	
Sort area	SORTR1	disk	*	
Recovery log (RLOG)	RLOGR1	disk	*	Required with recovery log (RLOG) option
ADARUN parameters	- CARD CARD	reader tape disk	SYSRDR SYS000 *	
ADAINV parameters	-	reader	SYSIPT	
ADARUN messages	-	printer	SYSLST	Messages and Codes
ADAINV messages	-	printer	SYS009	Messages and Codes

* Any programmer logical unit can be used.

ADAINV JCS Examples (VSE)

See Library and File Procedures for VSE Examples for a description of the VSE procedures (PROCs).

Couple Files

Refer to member ADAINVCO.X for this example.

```
* $$ JOB JNM=ADAINVCO,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADAINVCO
*          COUPLE FILES
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADAINV,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADAINV COUPLE FILE=2,3,DESCRIPTOR='BB,BB'
ADAINV          TEMPSIZE=100,SORTSIZE=100
/*
/&
* $$ EOJ
```

Invert File

Refer to member ADAINV.X for this example.

```
* $$ JOB JNM=ADAINV,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADAINV
*          INVERT A FIELD TO A DESCRIPTOR
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADAINV,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADAINV INVERT FILE=1
ADAINV FIELD='AC'
ADAINV SUPDE='S1,UQ=AA(1,3),AD(2,4)'
ADAINV TEMPSIZE=100,SORTSIZE=100
/*
/&
* $$ EOJ
```